VFA

Asset List Report
By FCI

Reporting Currency: USD

Adjustment Factor: 0%

Institution Name: Northern Kentucky University

Campus Name: Northern Kentucky University CAMPUS=01

Asset	Number	Age	Use	Size	Replacement Value	Cost/ Unit	FCI Cost	FCI	RI Cost	RI	Asset Primary Photo
Asset Type: Building											
NEW POWER PLANT	0381	9	Mechanical	18,489	0	0	0	0.00	0	0.00	No photo available
HERRMANN SCIENCE CENTER	0325	11	Education/ Support & Research	172,605	49,249,276	285	4,921,082	0.10	4,921,082	0.10	No photo available
CERAMICS & SCULPTURE	0305	16	Education/ Support	16,090	4,528,477	281	920,673	0.20	1,069,727	0.24	
CUMBERLAND COMMUNITY	0371	31	Education/ Support	10,851	1,518,956	140	371,999	0.24	377,930	0.25	
WOODCREST APARTMENTS - WILLOW	0375	21	Education/ Support	36,632	8,106,475	221	2,418,660	0.30	2,902,224	0.36	

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Asset	Number	Age	Use	Size	Replacement Value	Cost/ Unit	FCI Cost	FCI	RI Cost	RI	Asset Primary Photo
WOODCREST APARTMENTS - SYCAMORE	0374	21	Education/ Support	22,586	4,890,565	217	1,536,625	0.31	1,853,849	0.38	
MECHANICAL EQUIPMENT	0378	21	Mechanical	1,000	132,763	133	45,083	0.34	45,083	0.34	
BUSINESS-EDUCATION-PSYCHOLOGY CENTER	0350	33	Education/ Support	128,283	39,457,350	308	13,583,041	0.34	17,296,983	0.44	
WOODCREST APARTMENTS - OAK	0373	21	Education/ Support	22,424	4,452,654	199	1,567,011	0.35	1,881,407	0.42	
APPLIED SCIENCE & TECHNOLOGY	0330	24	Education/ Support & Research	110,693	36,628,459	331	13,943,491	0.38	13,982,034	0.38	
STORAGE FACILITY	0312	31	Storage	20,560	4,632,365	225	1,769,867	0.38	1,769,867	0.38	

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Asset	Number	Age	Use	Size	Replacement Value	Cost/ Unit	FCI Cost	FCI	RI Cost	RI	Asset Primary Photo
NORSE HALL	0376	21	Education/ Support	69,721	17,915,149	257	6,847,432	0.38	6,854,343	0.38	
MAINTENANCE BUILDING	0310	38	General Maintenance	15,392	4,112,433	267	1,580,150	0.38	1,580,150	0.38	
STEELY LIBRARY	0290	38	Education/ Support	141,567	49,556,715	350	20,653,680	0.42	20,682,691	0.42	
KENTUCKY HALL	0370	31	Education/ Support	27,565	5,841,204	212	2,574,719	0.44	2,587,278	0.44	
REGENTS HALL	0140	41	Recreation and Sport	28,726	10,371,545	361	4,716,430	0.45	4,716,430	0.45	
HONORS HOUSE	0170	45	Education/ Support	6,678	1,689,488	253	781,585	0.46	781,585	0.46	

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Asset	Number	Age	Use	Size	Replacement Value	Cost/ Unit	FCI Cost	FCI	RI Cost	RI	Asset Primary Photo
COMMONWEALTH HALL	0372	31	Education/ Support	36,584	7,550,344	206	3,539,176	0.47	3,583,961	0.47	
FINE ARTS CENTER	0320	36	Education/ Support	159,584	54,608,875	342	25,988,363	0.48	39,963,245	0.73	
CENTRAL (OLD) POWER PLANT	0301	37	Mechanical	20,618	7,493,198	363	3,779,712	0.50	3,779,712	0.50	
ALBRIGHT HEALTH CENTER	0145	29	Recreation and Sport	136,324	41,458,081	304	20,913,373	0.50	44,464,445	1.07	
NUNN HALL	0130	41	Education/ Support & Research	113,027	39,713,027	351	20,586,904	0.52	20,618,456	0.52	
LANDRUM ACADEMIC CENTER	0300	37	Education/ Support & Research	100,500	35,051,420	349	18,191,308	0.52	26,929,080	0.77	

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Asset	Number	Age	Use	Size	Replacement Value	Cost/ Unit	FCI Cost	FCI	RI Cost	RI	Asset Primary Photo
FOUNDERS HALL (Old Science Building)	0150	39	Education/ Support & Research	125,296	40,932,901	327	21,280,333	0.52	44,135,231	1.08	
UNIVERSITY CENTER	0340	36	Food Service	102,720	35,712,442	348	18,846,306	0.53	18,879,424	0.53	
LUCAS ADMINISTRATIVE CENTER	0360	32	Education/ Support	108,238	39,387,374	364	20,864,019	0.53	20,919,927	0.53	
NORSE COMMONS	0377	21	Food Service	25,315	23,714,064	937	15,623,703	0.66	15,625,881	0.66	
			Subtotal for Building	**1,778,068**	**568,705,601**	**320**	**247,844,726**	**0.44**	**322,202,026**	**0.57**	
Asset Type: Parking Lots											
MAIN CAMPUS PARKING LOTS	Lots	18		1,750,000	0	0	0	0.00	0	0.00	
			Subtotal for Parking Lots	**1,750,000**	**0**	**0**	**0**		**0**		
Campus Name: Northern Kentucky University					**568,705,601**		**247,844,726**	**0.44**	**322,202,026**	**0.57**	

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Institution Name: Northern Kentucky University	**568,705,601**	**247,844,726**	**0.44**	**322,202,026**	**0.57**
Summary	**568,705,601**	**247,844,726**	**0.44**	**322,202,026**	**0.57**

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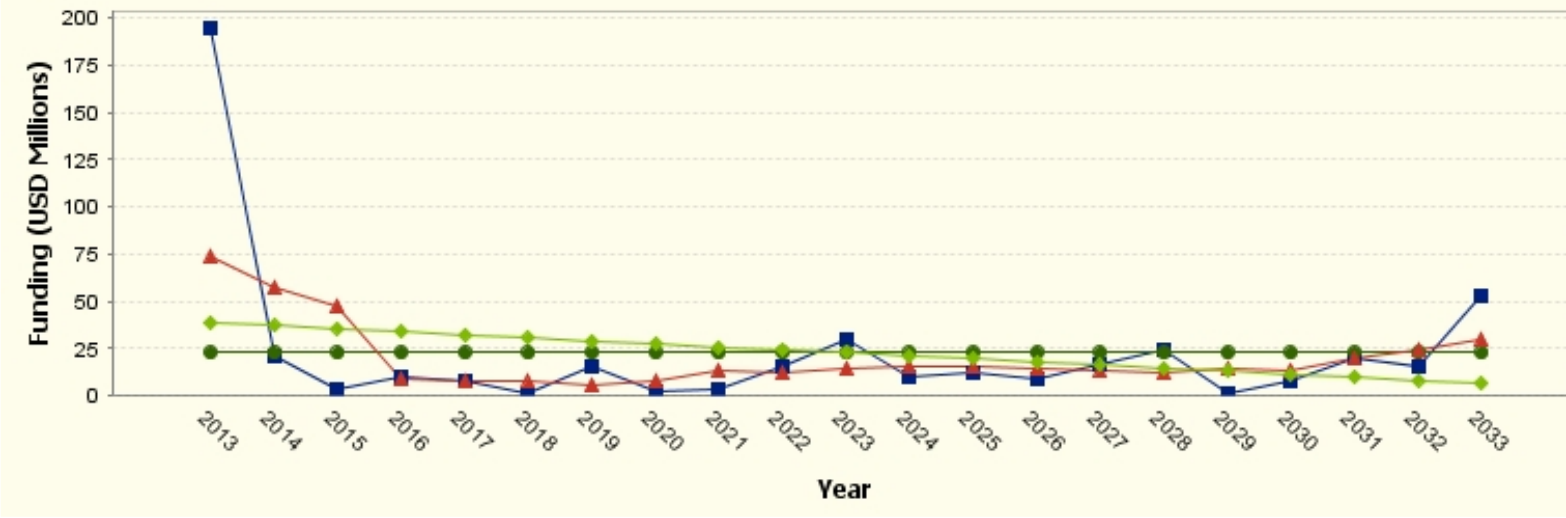
Facility Renewal Forecast



- Annual
- Moving average (5 yr)
- Trend based
- Average

All costs in USD.

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Year	Annual	Average	Moving average (5 yr)	Trend based
2013	194,383,647	22,719,696	73,304,410	38,769,547
2014	21,562,879	22,719,696	57,397,984	37,164,562
2015	3,966,704	22,719,696	47,508,537	35,559,577
2016	9,678,707	22,719,696	8,908,085	33,954,592
2017	7,950,747	22,719,696	7,769,976	32,349,607
2018	1,381,389	22,719,696	7,359,693	30,744,621
2019	15,872,333	22,719,696	6,158,314	29,139,636
2020	1,915,286	22,719,696	7,753,134	27,534,651
2021	3,671,815	22,719,696	13,505,052	25,929,666
2022	15,924,846	22,719,696	12,262,414	24,324,681
2023	30,140,980	22,719,696	14,266,064	22,719,696
2024	9,659,143	22,719,696	15,403,780	21,114,711
2025	11,933,537	22,719,696	15,634,725	19,509,726
2026	9,360,394	22,719,696	14,568,633	17,904,741
2027	17,079,571	22,719,696	12,829,695	16,299,755
2028	24,810,520	22,719,696	12,084,842	14,694,770
2029	964,452	22,719,696	14,145,887	13,089,785
2030	8,209,273	22,719,696	13,871,784	11,484,800
2031	19,665,617	22,719,696	19,564,223	9,879,815
2032	15,709,059	22,719,696	24,214,166	8,274,830
2033	53,272,715	22,719,696	29,549,130	6,669,845

All costs in USD.

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Forecast Parameters

Institution	Northern Kentucky University
Campus	Northern Kentucky University CAMPUS=01
Asset	All
Systems	All
Years	20
Inflation	0.00%
Cost curve	Spiky 0
Fiscal Year Start Date (mm/dd)	1/1

All costs in USD.All dates are displayed in mm/dd/yyyy format

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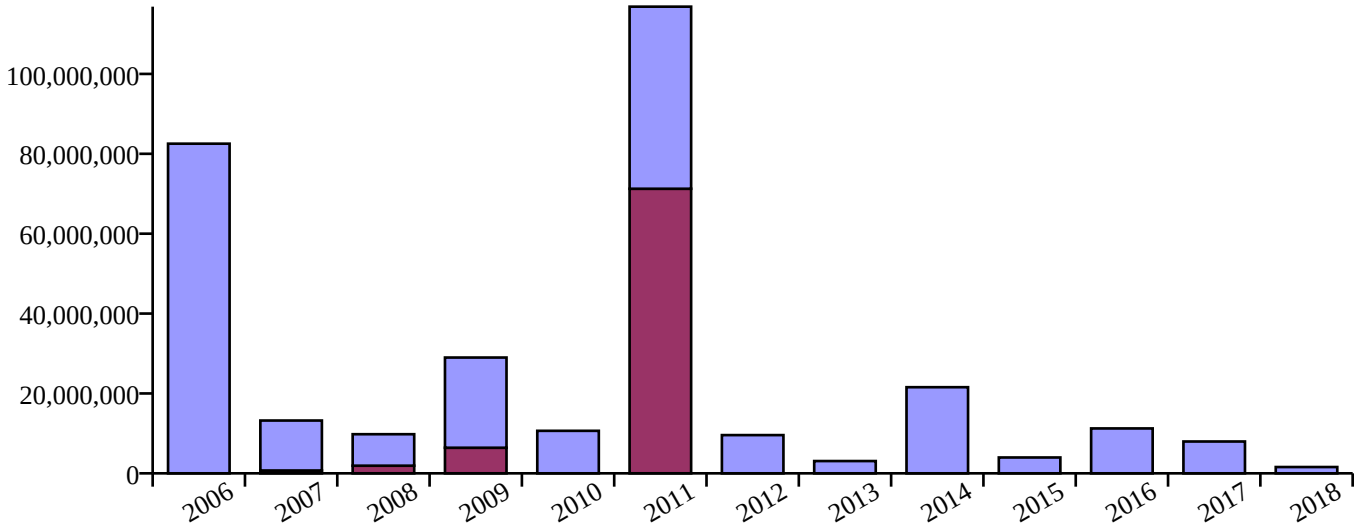
Institution:
Northern Kentucky University

Campus:
Northern Kentucky University CAMPUS=01

Asset Name:
All Assets



Year	Renewal	Requirements	Total
2006	82,532,969	0	82,532,969
2007	12,508,785	709,813	13,218,598
2008	7,881,480	1,911,454	9,792,934
2009	22,583,394	6,405,918	28,989,312
2010	10,643,249	0	10,643,249
2011	45,588,845	71,249,831	116,838,676
2012	9,570,461	0	9,570,461
2013	3,074,462	0	3,074,462
2014	21,562,880	0	21,562,880
2015	3,966,704	0	3,966,704
2016	11,240,808	0	11,240,808
2017	7,968,334	0	7,968,334
2018	1,576,582	0	1,576,582
Total	**240,698,952**	**80,277,016**	**320,975,968**

All costs in USD. Inflation Rate=0.00%

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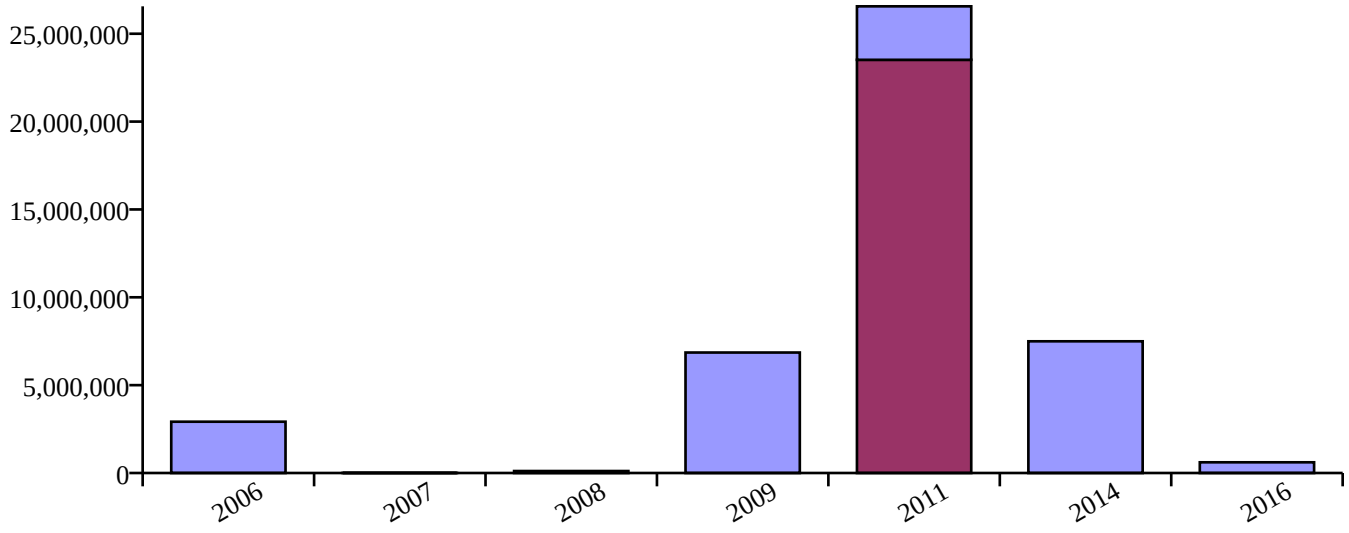
Institution: Northern Kentucky University
Campus: Northern Kentucky University CAMPUS=01
Asset Name: ALBRIGHT HEALTH CENTER
Asset Number: 0145

Address 1	-	**Address 2**	-
City	Highland Heights	**State**	Kentucky
Country	UNITED STATES OF AMERICA	**ZIP**	41076

Replacement Value 41,458,081
Size 136,324



Name	Year	Renewal	Requirements	Total
D2010-Plumbing Fixtures	2006	40,684	-	40,684
D5020-Lighting and Branch Wiring	2006	928,520	-	928,520
D5020-Lighting and Branch Wiring	2006	928,520	-	928,520
D5030-Communications and Security	2006	816,746	-	816,746
D5092-Emergency Light and Power Systems	2006	77,756	-	77,756
D5092-Emergency Light and Power Systems	2006	126,877	-	126,877
	Subtotal	**2,919,103**	**0**	**2,919,103**
Electrical Equipment: Dedicated Space Required	2007	-	470	470
Mechanical Equipment: Dedicated Space Required	2007	-	177	177
Fire Rated Doors: Mechanical Room Doors Not Rated	2007	-	3,549	3,549
	Subtotal	**0**	**4,196**	**4,196**

All costs in USD. Inflation Rate=0.00%

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Distribution Systems: Aged Chilled Water Circulation Pumps	2008	-	61,225	61,225
Distribution Systems: Aged Hot Water Circulation Pumps	2008	-	50,936	50,936
	Subtotal	**0**	**112,161**	**112,161**
D3040-Distribution Systems	2009	1,384,238	-	1,384,238
D3040-Distribution Systems	2009	522,473	-	522,473
D3040-Distribution Systems	2009	3,445,775	-	3,445,775
D3040-Distribution Systems	2009	259,090	-	259,090
C1030-Fittings	2009	206,729	-	206,729
C3020-Floor Finishes	2009	517,266	-	517,266
B30-Roofing	2009	520,926	-	520,926
	Subtotal	**6,856,496**	**0**	**6,856,496**
D2020-Domestic Water Distribution	2011	192,190	-	192,190
D5030-Communications and Security	2011	433,316	-	433,316
C3010-Wall Finishes	2011	363,304	-	363,304
C3020-Floor Finishes	2011	855,090	-	855,090
C3020-Floor Finishes	2011	237,519	-	237,519
C3020-Floor Finishes	2011	95,591	-	95,591
C3030-Ceiling Finishes	2011	513,000	-	513,000
C3020-Floor Finishes	2011	196,085	-	196,085
C3020-Floor Finishes	2011	157,932	-	157,932
Fit for Continued Use	2011	-	23,515,890	23,515,890
	Subtotal	**3,044,026**	**23,515,890**	**26,559,916**
D2020-Domestic Water Distribution	2014	421,732	-	421,732
D3040-Distribution Systems	2014	2,880,941	-	2,880,941
D5010-Electrical Service and Distribution	2014	1,724,070	-	1,724,070
D5010-Electrical Service and Distribution	2014	101,761	-	101,761
D5010-Electrical Service and Distribution	2014	1,612,825	-	1,612,825
B2020-Exterior Windows	2014	373,356	-	373,356
B2030-Exterior Doors	2014	380,685	-	380,685
	Subtotal	**7,495,370**	**0**	**7,495,370**
D3060-Controls and Instrumentation	2016	92,681	-	92,681
D5092-Emergency Light and Power Systems	2016	126,877	-	126,877
C3010-Wall Finishes	2016	389,340	-	389,340
	Subtotal	**608,898**	**0**	**608,898**
	Total	**20,923,894**	**23,632,247**	**44,556,141**

All costs in USD. Inflation Rate=0.00%

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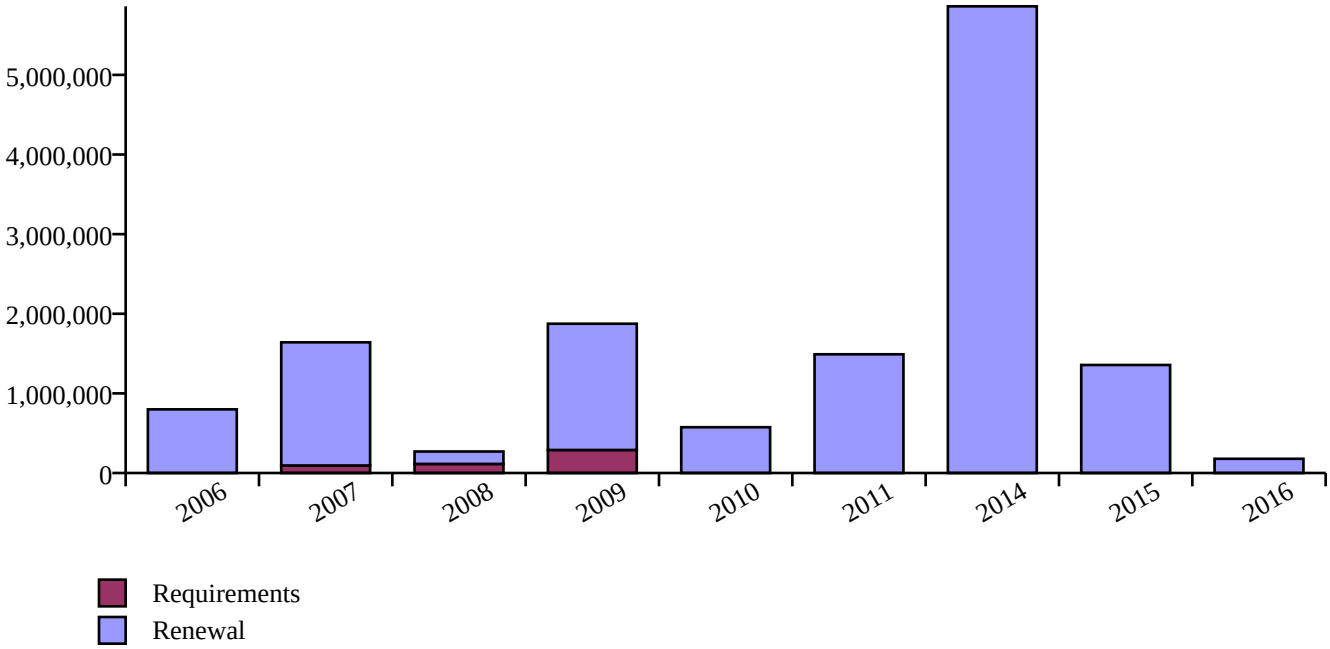
Institution: Northern Kentucky University
Campus: Northern Kentucky University CAMPUS=01
Asset Name: APPLIED SCIENCE & TECHNOLOGY
Asset Number: 0330

Address 1	-	**Address 2**	-
City	Highland Heights	**State**	Kentucky
Country	UNITED STATES OF AMERICA	**ZIP**	41099

Replacement Value 36,628,459
Size 110,693



Name	Year	Renewal	Requirements	Total
D2010-Plumbing Fixtures	2006	33,035	-	33,035
D5030-Communications and Security	2006	663,185	-	663,185
D5092-Emergency Light and Power Systems	2006	103,022	-	103,022
	Subtotal	**799,242**	**0**	**799,242**
D3040-Distribution Systems	2007	1,123,980	-	1,123,980
B30-Roofing	2007	422,984	-	422,984
Ductwork: Damaged Duct & Dampers	2007	-	93,371	93,371
Stairs: Correct Fire Enclosure Stair B	2007	-	762	762
	Subtotal	**1,546,964**	**94,133**	**1,641,097**
D2020-Domestic Water Distribution	2008	156,055	-	156,055
Distribution Systems: Aged Hot Water Circulation Pumps	2008	-	50,936	50,936
Distribution Systems: Aged Chilled Water Circulation Pumps	2008	-	56,521	56,521
Substructure: Cracked Grade Beams	2008	-	6,281	6,281

All costs in USD. Inflation Rate=0.00%

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	Subtotal	**156,055**	**113,738**	**269,793**
D5020-Lighting and Branch Wiring	2009	753,944	-	753,944
D5020-Lighting and Branch Wiring	2009	753,944	-	753,944
D5092-Emergency Light and Power Systems	2009	77,756	-	77,756
HVAC System: Clean and Balance	2009	-	231,453	231,453
Floor Finishes: Failing Terrazzo	2009	-	57,602	57,602
	Subtotal	**1,585,644**	**289,055**	**1,874,699**
C3020-Floor Finishes	2010	574,740	-	574,740
	Subtotal	**574,740**	**0**	**574,740**
D5030-Communications and Security	2011	351,846	-	351,846
C3010-Wall Finishes	2011	467,503	-	467,503
C3030-Ceiling Finishes	2011	671,585	-	671,585
	Subtotal	**1,490,934**	**0**	**1,490,934**
D3040-Distribution Systems	2014	424,240	-	424,240
D3040-Distribution Systems	2014	2,797,917	-	2,797,917
D3040-Distribution Systems	2014	210,377	-	210,377
D5010-Electrical Service and Distribution	2014	82,628	-	82,628
D5010-Electrical Service and Distribution	2014	1,309,589	-	1,309,589
C1030-Fittings	2014	167,860	-	167,860
C3010-Wall Finishes	2014	193,035	-	193,035
C3020-Floor Finishes	2014	180,163	-	180,163
C3030-Ceiling Finishes	2014	32,854	-	32,854
C3020-Floor Finishes	2014	462,425	-	462,425
	Subtotal	**5,861,089**	**0**	**5,861,089**
D10-Conveying	2015	1,080,260	-	1,080,260
C3020-Floor Finishes	2015	276,381	-	276,381
	Subtotal	**1,356,641**	**0**	**1,356,641**
D3060-Controls and Instrumentation	2016	75,255	-	75,255
D5092-Emergency Light and Power Systems	2016	103,022	-	103,022
	Subtotal	**178,278**	**0**	**178,278**
	Total	**13,549,587**	**496,926**	**14,046,513**

All costs in USD. Inflation Rate=0.00%

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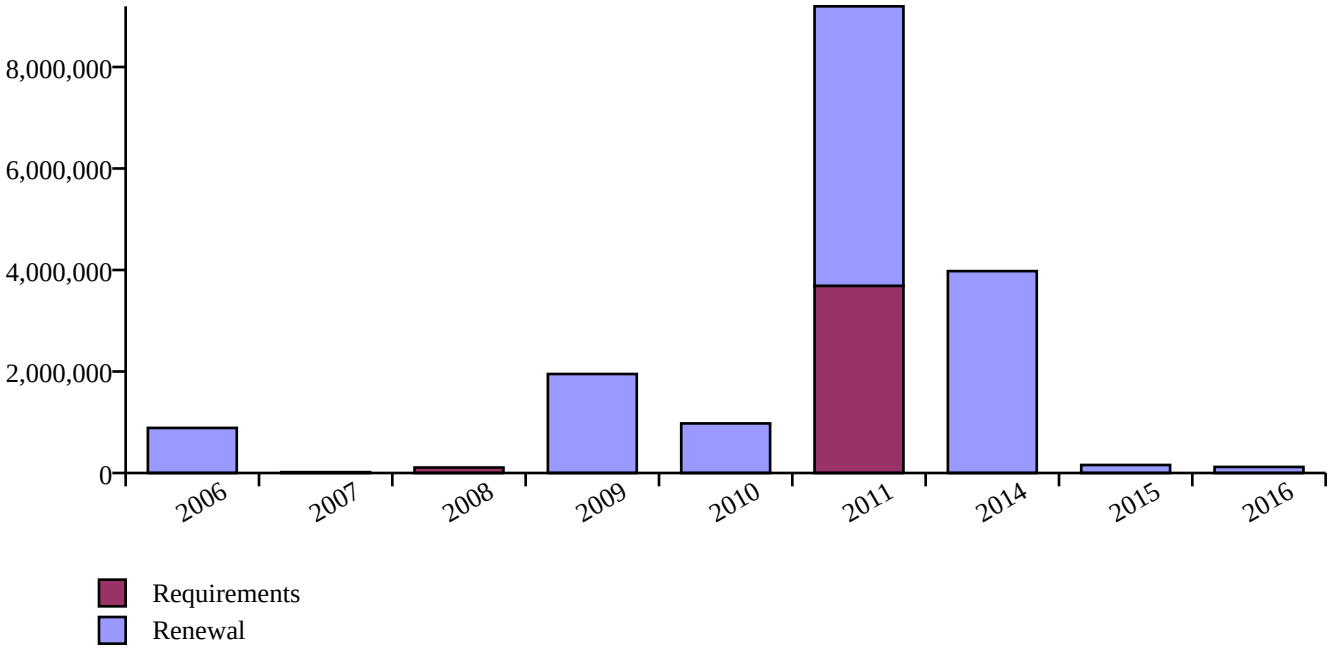
Institution:	Northern Kentucky University	**Asset Name:**	BUSINESS-EDUCATION-PSYCHOLOGY CENTER
Campus:	Northern Kentucky University CAMPUS=01	**Asset Number:**	0350
Address 1	-	**Address 2**	-
City	Highland Heights	**State**	Kentucky
Country	UNITED STATES OF AMERICA	**ZIP**	41099
Replacement Value	39,457,350	**Size**	128,283



Name	Year	Renewal	Requirements	Total
D5030-Communications and Security	2006	768,571	-	768,571
D5092-Emergency Light and Power Systems	2006	119,394	-	119,394
	Subtotal	**887,964**	**0**	**887,964**
Air Handlers: Provide Additional Duct Smoke Detectors:	2007	-	16,602	16,602
	Subtotal	**0**	**16,602**	**16,602**
Distribution Systems: Aged Chilled Water Circulation Pumps	2008	-	56,765	56,765
Distribution Systems: Aged Hot Water Circulation Pumps	2008	-	50,936	50,936
	Subtotal	**0**	**107,701**	**107,701**
D2010-Plumbing Fixtures	2009	38,284	-	38,284

All costs in USD. Inflation Rate=0.00%

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D3060-Controls and Instrumentation	2009	87,214	-	87,214
D5020-Lighting and Branch Wiring	2009	873,752	-	873,752
D5020-Lighting and Branch Wiring	2009	873,752	-	873,752
D5092-Emergency Light and Power Systems	2009	77,756	-	77,756
	Subtotal	**1,950,757**	**0**	**1,950,757**
C3020-Floor Finishes	2010	977,058	-	977,058
	Subtotal	**977,058**	**0**	**977,058**
D3040-Distribution Systems	2011	1,302,589	-	1,302,589
D5030-Communications and Security	2011	407,757	-	407,757
B2020-Exterior Windows	2011	1,389,009	-	1,389,009
B2030-Exterior Doors	2011	413,789	-	413,789
C1030-Fittings	2011	194,535	-	194,535
C3010-Wall Finishes	2011	1,046,958	-	1,046,958
C3030-Ceiling Finishes	2011	752,400	-	752,400
Fit for Continued Use	2011	-	3,688,136	3,688,136
	Subtotal	**5,507,036**	**3,688,136**	**9,195,172**
D3040-Distribution Systems	2014	491,655	-	491,655
D3040-Distribution Systems	2014	3,242,528	-	3,242,528
D3040-Distribution Systems	2014	243,808	-	243,808
	Subtotal	**3,977,991**	**0**	**3,977,991**
C3020-Floor Finishes	2015	157,932	-	157,932
	Subtotal	**157,932**	**0**	**157,932**
D5092-Emergency Light and Power Systems	2016	119,394	-	119,394
	Subtotal	**119,394**	**0**	**119,394**
	Total	**13,578,132**	**3,812,439**	**17,390,571**

All costs in USD. Inflation Rate=0.00%

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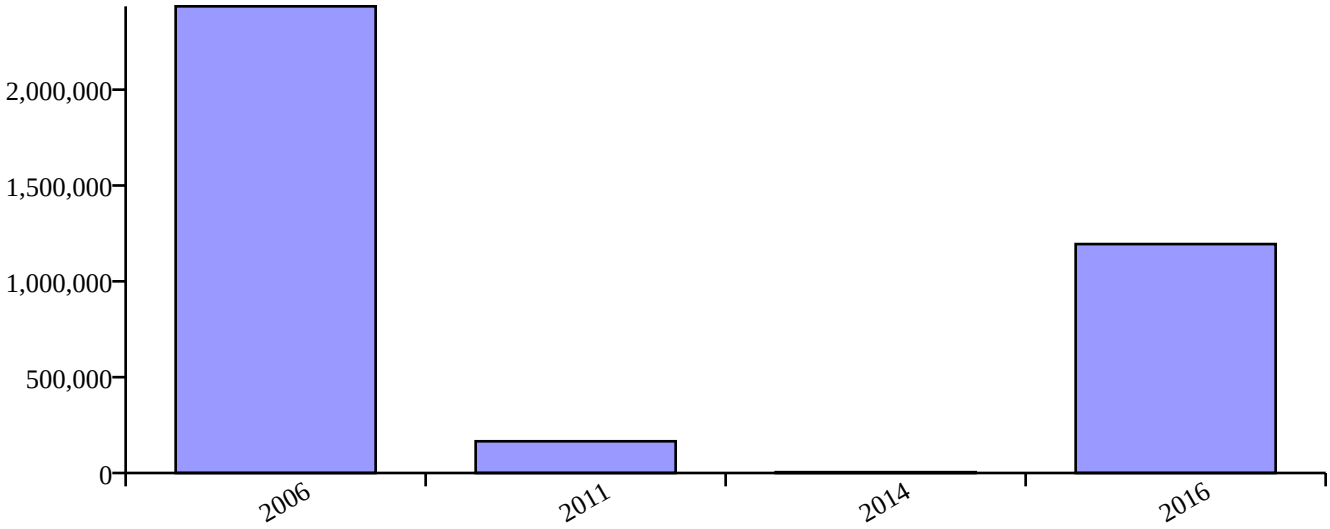
Institution: Northern Kentucky University
Campus: Northern Kentucky University CAMPUS=01
Asset Name: CENTRAL (OLD) POWER PLANT
Asset Number: 0301

Address 1	-	**Address 2**	-
City	Highland Heights	**State**	Kentucky
Country	UNITED STATES OF AMERICA	**ZIP**	41099

Replacement Value 7,493,198
Size 20,618



Requirements
Renewal

Name	Year	Renewal	Requirements	Total
D2020-Domestic Water Distribution	2006	63,784	-	63,784
D3040-Distribution Systems	2006	79,020	-	79,020
D3040-Distribution Systems	2006	521,148	-	521,148
D3040-Distribution Systems	2006	435,721	-	435,721
D3040-Distribution Systems	2006	39,186	-	39,186
D5010-Electrical Service and Distribution	2006	260,753	-	260,753
D5020-Lighting and Branch Wiring	2006	140,432	-	140,432
D5020-Lighting and Branch Wiring	2006	140,432	-	140,432
D5030-Communications and Security	2006	123,527	-	123,527
D5092-Emergency Light and Power Systems	2006	77,513	-	77,513
D5092-Emergency Light and Power Systems	2006	19,189	-	19,189
D5010-Electrical Service and Distribution	2006	501,041	-	501,041
D5010-Electrical Service and Distribution	2006	32,980	-	32,980
	Subtotal	**2,434,725**	**0**	**2,434,725**
B2030-Exterior Doors	2011	165,515	-	165,515
	Subtotal	**165,515**	**0**	**165,515**

All costs in USD. Inflation Rate=0.00%

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C3020-Floor Finishes	2014	4,318	-	4,318
	Subtotal	**4,318**	**0**	**4,318**
D5092-Emergency Light and Power Systems	2016	19,189	-	19,189
B30-Roofing	2016	1,175,153	-	1,175,153
	Subtotal	**1,194,343**	**0**	**1,194,343**
	Total	**3,798,901**	**0**	**3,798,901**

All costs in USD. Inflation Rate=0.00%

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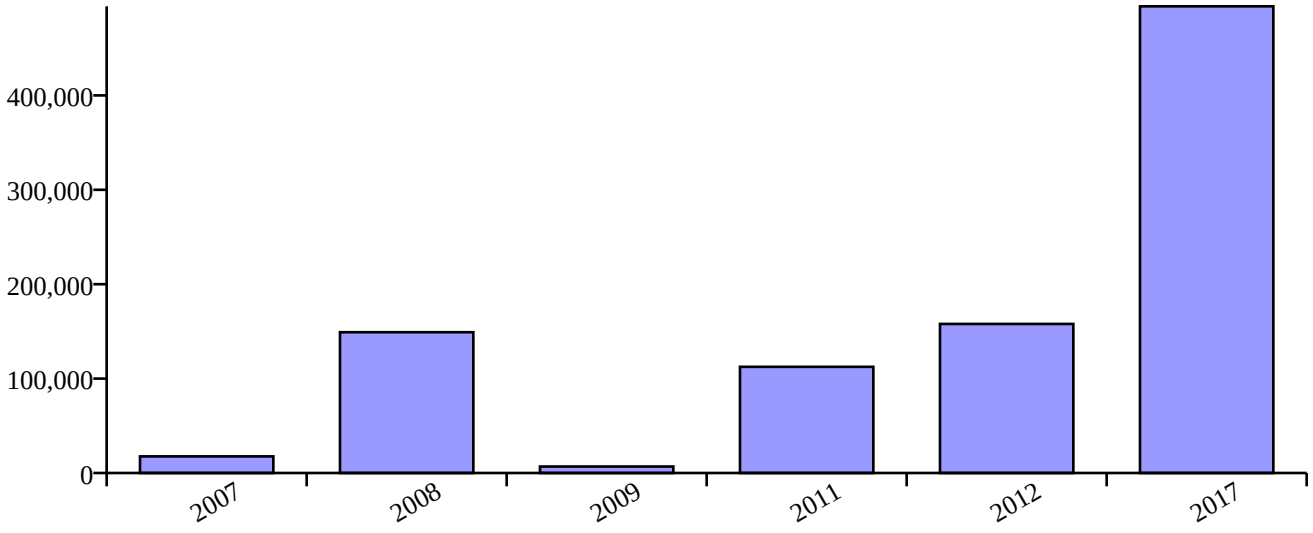
Institution: Northern Kentucky University
Campus: Northern Kentucky University CAMPUS=01
Asset Name: CERAMICS & SCULPTURE
Asset Number: 0305

Address 1	50 Campbell Drive	**Address 2**	-
City	Highland Heights	**State**	Kentucky
Country	UNITED STATES OF AMERICA	**ZIP**	41099

Replacement Value 4,528,477
Size 16,090



Name	Year	Renewal	Requirements	Total
D5092-Emergency Light and Power Systems	2007	17,587	-	17,587
	Subtotal	**17,587**	**0**	**17,587**
B30-Roofing	2008	149,117	-	149,117
	Subtotal	**149,117**	**0**	**149,117**
C3030-Ceiling Finishes	2009	6,840	-	6,840
	Subtotal	**6,840**	**0**	**6,840**
D5030-Communications and Security	2011	51,143	-	51,143
D5092-Emergency Light and Power Systems	2011	14,975	-	14,975
C3010-Wall Finishes	2011	46,350	-	46,350
	Subtotal	**112,468**	**0**	**112,468**
D2020-Domestic Water Distribution	2012	22,684	-	22,684

All costs in USD. Inflation Rate=0.00%

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D5030-Communications and Security	2012	96,399	-	96,399
D3050-Terminal and Package Units	2012	38,816	-	38,816
	Subtotal	**157,898**	**0**	**157,898**
D2010-Plumbing Fixtures	2017	4,802	-	4,802
D3060-Controls and Instrumentation	2017	10,939	-	10,939
D5020-Lighting and Branch Wiring	2017	109,591	-	109,591
D5020-Lighting and Branch Wiring	2017	109,591	-	109,591
D3050-Terminal and Package Units	2017	125,833	-	125,833
D3050-Terminal and Package Units	2017	29,968	-	29,968
D3050-Terminal and Package Units	2017	86,039	-	86,039
D5092-Emergency Light and Power Systems	2017	17,587	-	17,587
	Subtotal	**494,349**	**0**	**494,349**
	Total	**938,260**	**0**	**938,260**

All costs in USD. Inflation Rate=0.00%

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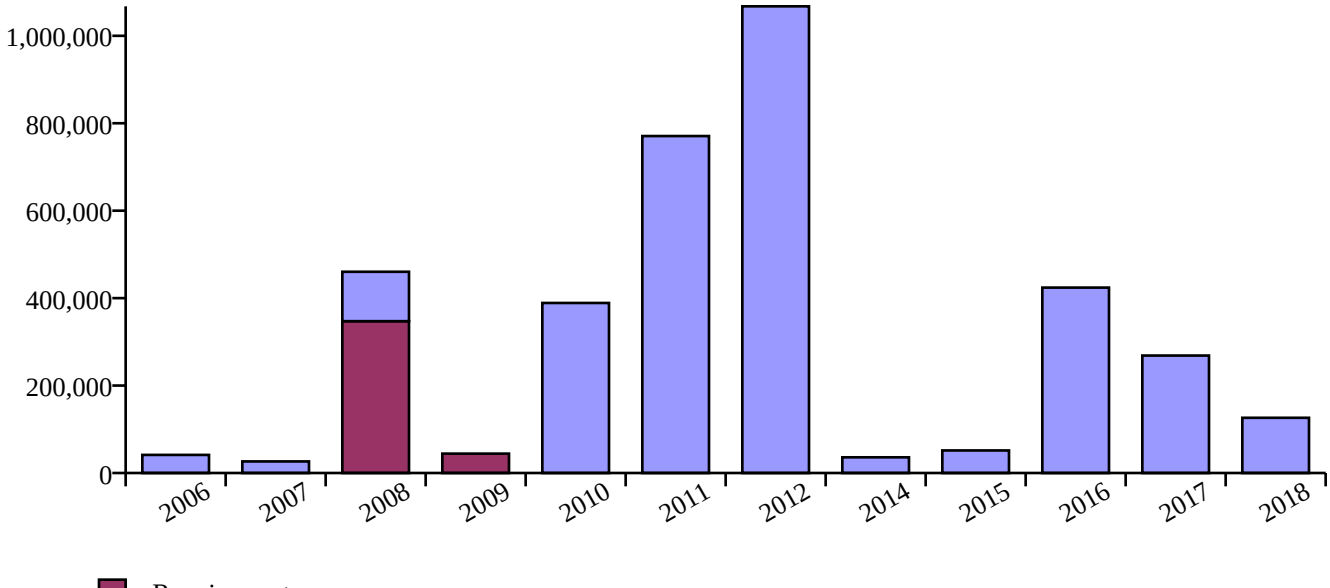
Institution: Northern Kentucky University
Campus: Northern Kentucky University CAMPUS=01
Asset Name: COMMONWEALTH HALL
Asset Number: 0372

Address 1	20 Campbell Drive	**Address 2**	-
City	Highland Heights	**State**	Kentucky
Country	UNITED STATES OF AMERICA	**ZIP**	41076

Replacement Value 7,550,344
Size 36,584



Name	Year	Renewal	Requirements	Total
C3020-Floor Finishes	2006	10,161	-	10,161
C3020-Floor Finishes	2006	25,156	-	25,156
C3020-Floor Finishes	2006	4,857	-	4,857
C20-Stairs	2006	1,220	-	1,220
	Subtotal	**41,393**	**0**	**41,393**
C3010-Wall Finishes	2007	26,456	-	26,456
	Subtotal	**26,456**	**0**	**26,456**
C3020-Floor Finishes	2008	113,041	-	113,041
Emergency Light and battery pack-aged	2008	-	10,589	10,589
Emergency exit Lights -replace	2008	-	3,183	3,183
Replace aged Fire Alarm Panel	2008	-	2,983	2,983
Replace perimeter HW/CW Units	2008	-	330,491	330,491
	Subtotal	**113,041**	**347,246**	**460,287**

All costs in USD. Inflation Rate=0.00%

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Carpet: Damaged, Worn	2009	-	15,750	15,750
Exterior Doors: Corroded	2009	-	989	989
Interior Doors: Marked, Damaged	2009	-	5,697	5,697
Aluminum Windows: End of Rated Life	2009	-	10,067	10,067
Ceramic Wall Tile: Damaged	2009	-	1,106	1,106
Lighting and Branch wiring- replace T-12 lighting	2009	-	10,697	10,697
	Subtotal	**0**	**44,306**	**44,306**
C3010-Wall Finishes	2010	298,574	-	298,574
D3060-Controls and Instrumentation	2010	90,357	-	90,357
	Subtotal	**388,931**	**0**	**388,931**
B2020-Exterior Windows	2011	396,131	-	396,131
C3020-Floor Finishes	2011	113,041	-	113,041
C3020-Floor Finishes	2011	2,375	-	2,375
D5030-Communications and Security	2011	219,183	-	219,183
D5092-Emergency Light and Power Systems	2011	39,987	-	39,987
	Subtotal	**770,716**	**0**	**770,716**
C3020-Floor Finishes	2012	140,109	-	140,109
C1030-Fittings	2012	47,170	-	47,170
D2010-Plumbing Fixtures	2012	22,698	-	22,698
D2010-Plumbing Fixtures	2012	103,974	-	103,974
D2020-Domestic Water Distribution	2012	113,176	-	113,176
D5010-Electrical Service and Distribution	2012	462,673	-	462,673
D5010-Electrical Service and Distribution	2012	27,309	-	27,309
D5030-Communications and Security	2012	116,285	-	116,285
D5092-Emergency Light and Power Systems	2012	34,049	-	34,049
	Subtotal	**1,067,443**	**0**	**1,067,443**
B2030-Exterior Doors	2014	25,231	-	25,231
B2030-Exterior Doors	2014	10,624	-	10,624
	Subtotal	**35,855**	**0**	**35,855**
D2020-Domestic Water Distribution	2015	51,576	-	51,576
	Subtotal	**51,576**	**0**	**51,576**
C3030-Ceiling Finishes	2016	110,475	-	110,475
C3020-Floor Finishes	2016	25,156	-	25,156
C1030-Fittings	2016	20,830	-	20,830
C3020-Floor Finishes	2016	2,428	-	2,428
C3020-Floor Finishes	2016	5,080	-	5,080
D2010-Plumbing Fixtures	2016	10,918	-	10,918
D5020-Lighting and Branch Wiring	2016	249,178	-	249,178
	Subtotal	**424,066**	**0**	**424,066**
D40-Fire Protection	2017	268,639	-	268,639

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	Subtotal	**268,639**	**0**	**268,639**
C3020-Floor Finishes	2018	113,041	-	113,041
C3010-Wall Finishes	2018	13,222	-	13,222
	Subtotal	**126,263**	**0**	**126,263**
	Total	**3,314,379**	**391,552**	**3,705,931**

All costs in USD. Inflation Rate=0.00%

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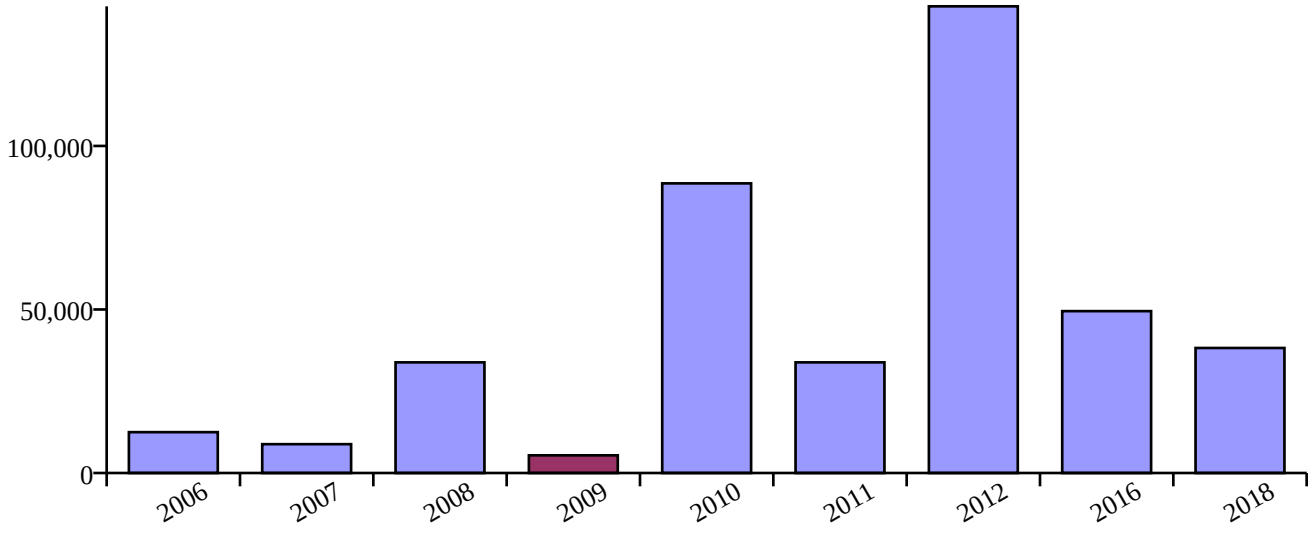
Institution: Northern Kentucky University
Campus: Northern Kentucky University CAMPUS=01
Asset Name: CUMBERLAND COMMUNITY
Asset Number: 0371

Address 1	20 Campbell Drive	**Address 2**	-
City	Highland Heights	**State**	Kentucky
Country	UNITED STATES OF AMERICA	**ZIP**	41706

Replacement Value 1,518,956
Size 10,851



Name	Year	Renewal	Requirements	Total
C3020-Floor Finishes	2006	7,493	-	7,493
C3020-Floor Finishes	2006	3,387	-	3,387
C3020-Floor Finishes	2006	1,607	-	1,607
	Subtotal	**12,487**	**0**	**12,487**
C3010-Wall Finishes	2007	8,811	-	8,811
	Subtotal	**8,811**	**0**	**8,811**
C3020-Floor Finishes	2008	33,827	-	33,827
	Subtotal	**33,827**	**0**	**33,827**
Aluminum Windows: End of Rated Life	2009	-	2,517	2,517
Exterior Doors: Corroded	2009	-	989	989
Interior Doors: Marked, Damaged	2009	-	1,899	1,899
	Subtotal	**0**	**5,405**	**5,405**

All costs in USD. Inflation Rate=0.00%

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C3010-Wall Finishes	2010	88,558	-	88,558
	Subtotal	**88,558**	**0**	**88,558**
C3020-Floor Finishes	2011	33,827	-	33,827
	Subtotal	**33,827**	**0**	**33,827**
B2020-Exterior Windows	2012	117,483	-	117,483
B2030-Exterior Doors	2012	11,214	-	11,214
C1030-Fittings	2012	13,991	-	13,991
	Subtotal	**142,688**	**0**	**142,688**
C3020-Floor Finishes	2016	7,493	-	7,493
C3030-Ceiling Finishes	2016	33,143	-	33,143
C1030-Fittings	2016	6,249	-	6,249
C3020-Floor Finishes	2016	1,693	-	1,693
C3020-Floor Finishes	2016	913	-	913
	Subtotal	**49,491**	**0**	**49,491**
C3020-Floor Finishes	2018	33,827	-	33,827
C3010-Wall Finishes	2018	4,400	-	4,400
	Subtotal	**38,226**	**0**	**38,226**
	Total	**407,914**	**5,405**	**413,319**

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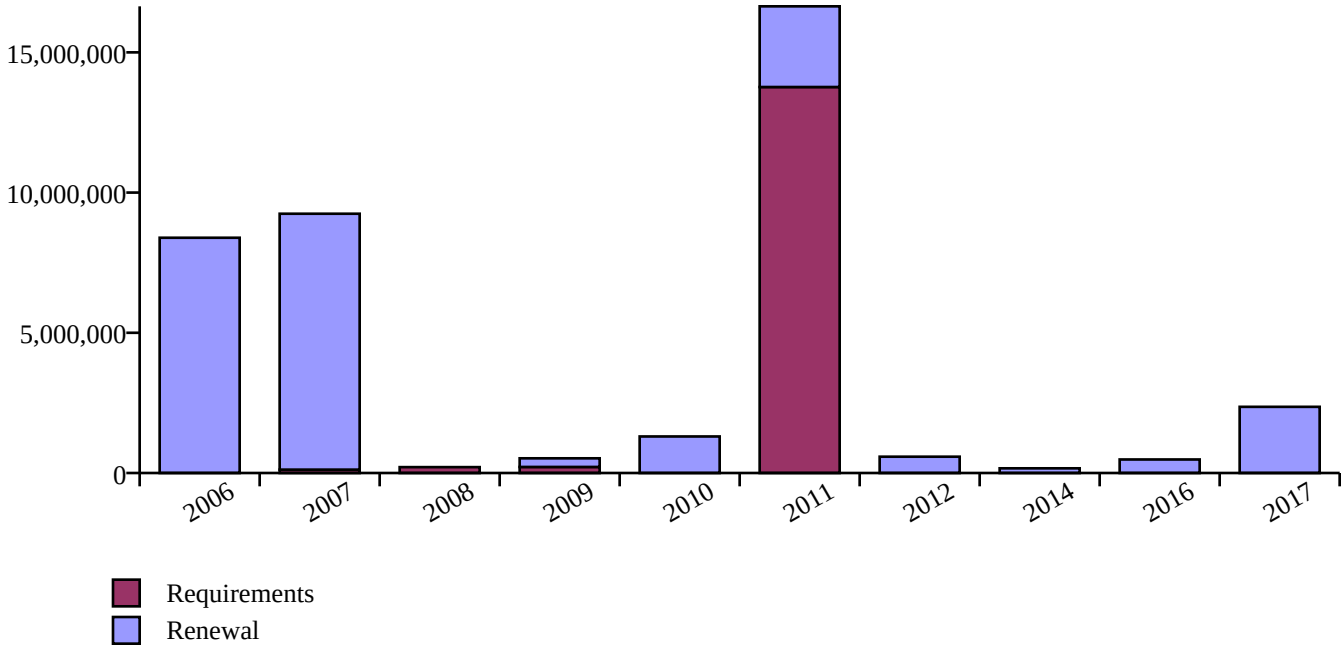
Institution: Northern Kentucky University
Campus: Northern Kentucky University CAMPUS=01
Asset Name: FINE ARTS CENTER
Asset Number: 0320

Address 1	-	**Address 2**	-
City	Highland Heights	**State**	Kentucky
Country	UNITED STATES OF AMERICA	**ZIP**	41099

Replacement Value 54,608,875
Size 159,584



Name	Year	Renewal	Requirements	Total
D2010-Plumbing Fixtures	2006	47,625	-	47,625
D3040-Distribution Systems	2006	1,620,421	-	1,620,421
D3040-Distribution Systems	2006	611,618	-	611,618
D3040-Distribution Systems	2006	303,297	-	303,297
D5020-Lighting and Branch Wiring	2006	1,086,947	-	1,086,947
D5020-Lighting and Branch Wiring	2006	1,086,947	-	1,086,947
D5030-Communications and Security	2006	956,102	-	956,102
D5092-Emergency Light and Power Systems	2006	148,526	-	148,526
D3040-Distribution Systems	2006	2,527,636	-	2,527,636
	Subtotal	**8,389,120**	**0**	**8,389,120**
D3040-Distribution Systems	2007	3,372,495	-	3,372,495
D5010-Electrical Service and Distribution	2007	2,018,236	-	2,018,236
D5010-Electrical Service and Distribution	2007	119,124	-	119,124
D5010-Electrical Service and Distribution	2007	1,888,010	-	1,888,010
B2020-Exterior Windows	2007	1,727,892	-	1,727,892
Ductwork: Damaged Duct & Dampers	2007	-	99,842	99,842

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Electrical Panel Boards: Aged Not used as per Code	2007	-	19,953	19,953
	Subtotal	**9,125,757**	**119,795**	**9,245,552**
Distribution Systems: Aged Chilled Water Circulation Pumps	2008	-	46,455	46,455
Distribution Systems: Aged Hot Water Circulation Pumps	2008	-	51,777	51,777
Roof: EPDM Leaking	2008	-	110,687	110,687
	Subtotal	**0**	**208,919**	**208,919**
B2030-Exterior Doors	2009	148,964	-	148,964
C1030-Fittings	2009	159,227	-	159,227
HVAC System: Clean and Balance	2009	-	215,403	215,403
	Subtotal	**308,191**	**215,403**	**523,594**
C3010-Wall Finishes	2010	1,302,415	-	1,302,415
	Subtotal	**1,302,415**	**0**	**1,302,415**
D2020-Domestic Water Distribution	2011	493,689	-	493,689
D5030-Communications and Security	2011	507,250	-	507,250
C3020-Floor Finishes	2011	355,347	-	355,347
C3020-Floor Finishes	2011	493,449	-	493,449
C3020-Floor Finishes	2011	95,591	-	95,591
C3030-Ceiling Finishes	2011	932,189	-	932,189
Fit for Continued Use	2011	-	13,764,120	13,764,120
	Subtotal	**2,877,515**	**13,764,120**	**16,641,635**
D10-Conveying	2012	581,337	-	581,337
	Subtotal	**581,337**	**0**	**581,337**
B30-Roofing	2014	166,819	-	166,819
	Subtotal	**166,819**	**0**	**166,819**
D2020-Domestic Water Distribution	2016	224,981	-	224,981
D3060-Controls and Instrumentation	2016	108,494	-	108,494
D5092-Emergency Light and Power Systems	2016	148,526	-	148,526
	Subtotal	**482,001**	**0**	**482,001**
D3040-Distribution Systems	2017	1,506,067	-	1,506,067
C1030-Fittings	2017	257,852	-	257,852
C3020-Floor Finishes	2017	513,054	-	513,054
C1030-Fittings	2017	82,647	-	82,647
	Subtotal	**2,359,619**	**0**	**2,359,619**
	Total	**25,592,772**	**14,308,237**	**39,901,009**

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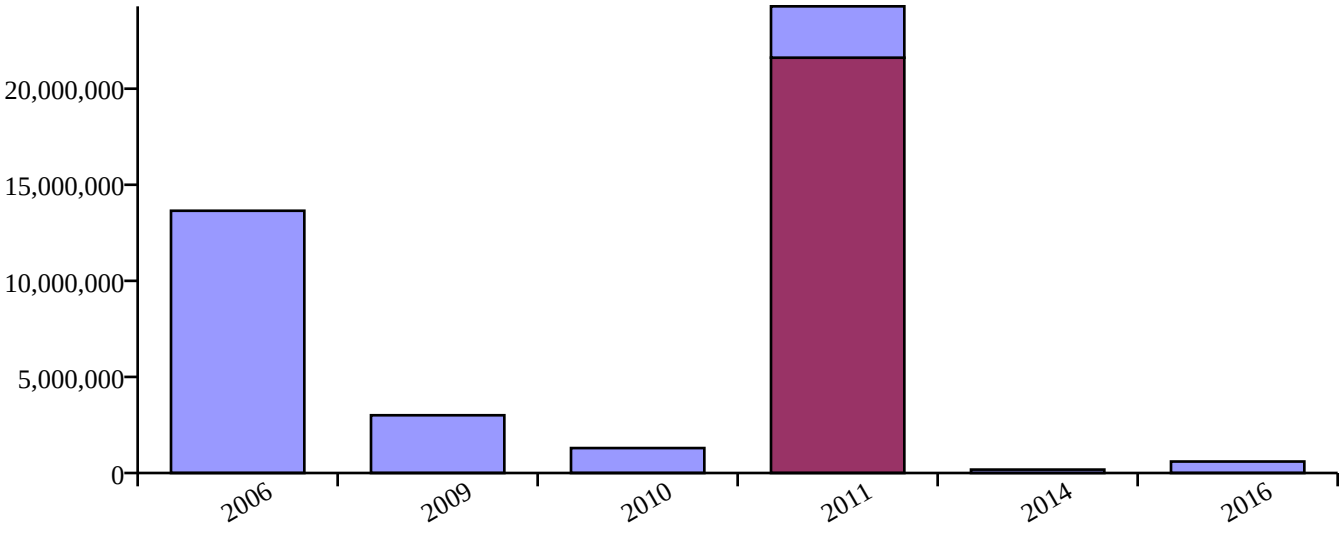
Institution: Northern Kentucky University
Campus: Northern Kentucky University CAMPUS=01
Asset Name: FOUNDERS HALL (Old Science Building)
Asset Number: 0150

Address 1	-	**Address 2**	-
City	Highland Heights	**State**	Kentucky
Country	UNITED STATES OF AMERICA	**ZIP**	41099

Replacement Value 40,932,901
Size 125,296



Name	Year	Renewal	Requirements	Total
D2010-Plumbing Fixtures	2006	37,393	-	37,393
D2020-Domestic Water Distribution	2006	387,616	-	387,616
D3040-Distribution Systems	2006	1,272,259	-	1,272,259
D3040-Distribution Systems	2006	3,167,027	-	3,167,027
D3040-Distribution Systems	2006	2,647,886	-	2,647,886
D3040-Distribution Systems	2006	238,131	-	238,131
D3060-Controls and Instrumentation	2006	85,183	-	85,183
D5010-Electrical Service and Distribution	2006	1,584,600	-	1,584,600
D5010-Electrical Service and Distribution	2006	93,529	-	93,529
D5010-Electrical Service and Distribution	2006	1,482,355	-	1,482,355
D5020-Lighting and Branch Wiring	2006	853,407	-	853,407
D5020-Lighting and Branch Wiring	2006	853,407	-	853,407
D5030-Communications and Security	2006	750,675	-	750,675
D5092-Emergency Light and Power Systems	2006	77,756	-	77,756
D5092-Emergency Light and Power Systems	2006	116,614	-	116,614
	Subtotal	**13,647,838**	**0**	**13,647,838**
C1030-Fittings	2009	307,693	-	307,693

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B2020-Exterior Windows	2009	2,697,622	-	2,697,622
	Subtotal	**3,005,315**	**0**	**3,005,315**
C3020-Floor Finishes	2010	7,897	-	7,897
C3010-Wall Finishes	2010	529,176	-	529,176
C3030-Ceiling Finishes	2010	760,184	-	760,184
	Subtotal	**1,297,257**	**0**	**1,297,257**
D5030-Communications and Security	2011	398,263	-	398,263
C1030-Fittings	2011	190,005	-	190,005
B2030-Exterior Doors	2011	215,170	-	215,170
C3020-Floor Finishes	2011	477,954	-	477,954
C3020-Floor Finishes	2011	1,149,480	-	1,149,480
C3010-Wall Finishes	2011	242,203	-	242,203
Fit for Continued Use	2011	-	21,613,560	21,613,560
	Subtotal	**2,673,075**	**21,613,560**	**24,286,635**
D2020-Domestic Water Distribution	2014	176,642	-	176,642
	Subtotal	**176,642**	**0**	**176,642**
D3040-Distribution Systems	2016	480,207	-	480,207
D5092-Emergency Light and Power Systems	2016	116,614	-	116,614
	Subtotal	**596,820**	**0**	**596,820**
	Total	**21,396,947**	**21,613,560**	**43,010,507**

All costs in USD. Inflation Rate=0.00%

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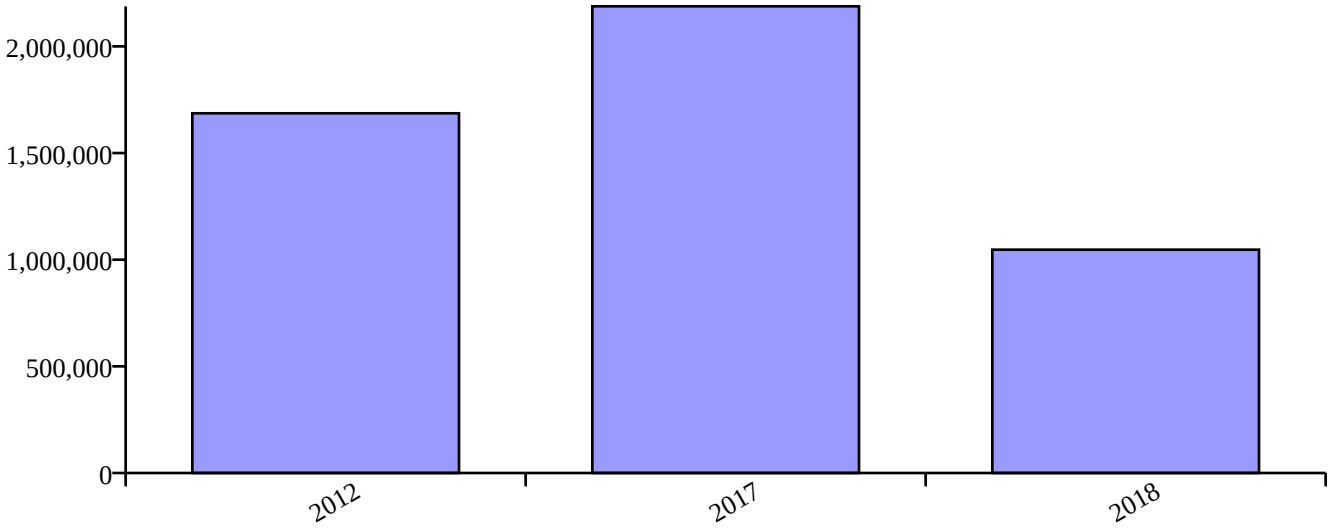
Institution: Northern Kentucky University
Campus: Northern Kentucky University CAMPUS=01
Asset Name: HERRMANN SCIENCE CENTER
Asset Number: 0325

Address 1	-	**Address 2**	-
City	Highland Heights	**State**	Kentucky
Country	UNITED STATES OF AMERICA	**ZIP**	41099

Replacement Value 49,249,276
Size 172,605



Name	Year	Renewal	Requirements	Total
D5030-Communications and Security	2012	548,638	-	548,638
D5092-Emergency Light and Power Systems	2012	160,644	-	160,644
C3020-Floor Finishes	2012	977,058	-	977,058
	Subtotal	**1,686,340**	**0**	**1,686,340**
D2020-Domestic Water Distribution	2017	243,338	-	243,338
D5030-Communications and Security	2017	1,034,113	-	1,034,113
C3020-Floor Finishes	2017	157,932	-	157,932
C3030-Ceiling Finishes	2017	752,400	-	752,400
	Subtotal	**2,187,784**	**0**	**2,187,784**
C3010-Wall Finishes	2018	1,046,958	-	1,046,958
	Subtotal	**1,046,958**	**0**	**1,046,958**
	Total	**4,921,082**	**0**	**4,921,082**

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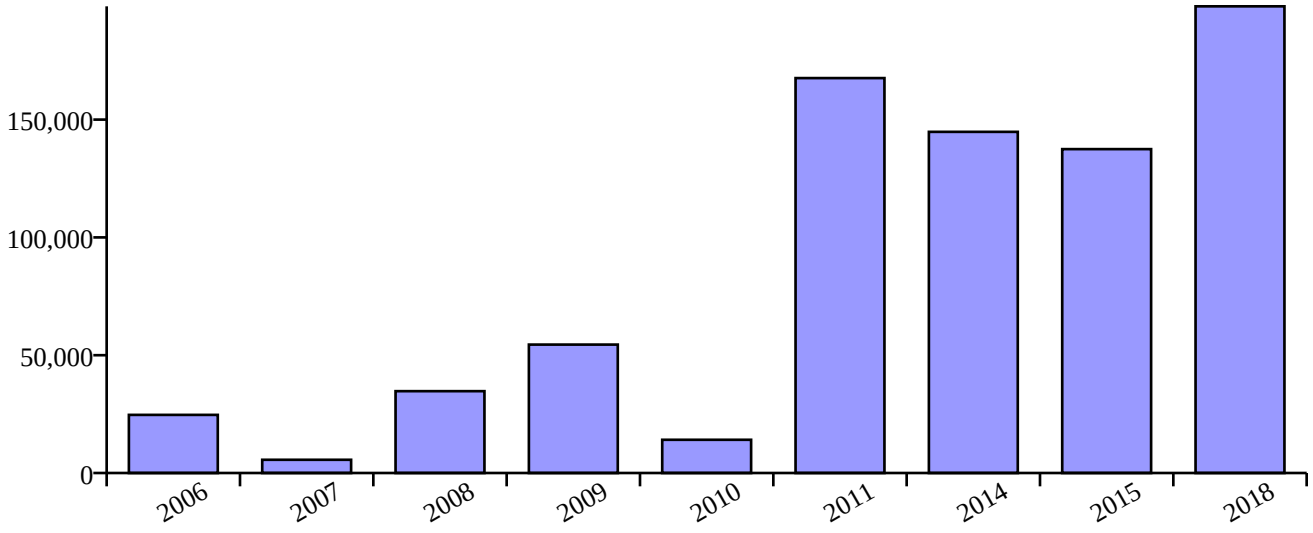
Institution: Northern Kentucky University
Campus: Northern Kentucky University CAMPUS=01
Asset Name: HONORS HOUSE
Asset Number: 0170

Address 1	-	**Address 2**	-
City	Highland Heights	**State**	Kentucky
Country	UNITED STATES OF AMERICA	**ZIP**	41099

Replacement Value 1,689,488
Size 6,678



Name	Year	Renewal	Requirements	Total
D3040-Distribution Systems	2006	24,670	-	24,670
	Subtotal	**24,670**	**0**	**24,670**
D2020-Domestic Water Distribution	2007	5,611	-	5,611
	Subtotal	**5,611**	**0**	**5,611**
B2020-Exterior Windows	2008	34,733	-	34,733
	Subtotal	**34,733**	**0**	**34,733**
C3010-Wall Finishes	2009	54,502	-	54,502
	Subtotal	**54,502**	**0**	**54,502**
D5030-Communications and Security	2010	14,100	-	14,100
	Subtotal	**14,100**	**0**	**14,100**

All costs in USD. Inflation Rate=0.00%

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D2020-Domestic Water Distribution	2011	20,659	-	20,659
C1030-Fittings	2011	7,581	-	7,581
E-Equipment and Furnishings	2011	15,380	-	15,380
B2030-Exterior Doors	2011	41,764	-	41,764
C3010-Wall Finishes	2011	4,844	-	4,844
C3020-Floor Finishes	2011	27,275	-	27,275
C3020-Floor Finishes	2011	7,917	-	7,917
C3020-Floor Finishes	2011	22,990	-	22,990
C3020-Floor Finishes	2011	2,941	-	2,941
C3030-Ceiling Finishes	2011	16,268	-	16,268
	Subtotal	**167,619**	**0**	**167,619**
D5020-Lighting and Branch Wiring	2014	29,631	-	29,631
D5092-Emergency Light and Power Systems	2014	6,215	-	6,215
D5092-Emergency Light and Power Systems	2014	7,299	-	7,299
D5020-Lighting and Branch Wiring	2014	37,072	-	37,072
C3020-Floor Finishes	2014	25,577	-	25,577
C3030-Ceiling Finishes	2014	39,009	-	39,009
	Subtotal	**144,803**	**0**	**144,803**
D5030-Communications and Security	2015	29,208	-	29,208
D3050-Terminal and Package Units	2015	44,885	-	44,885
D3050-Terminal and Package Units	2015	37,960	-	37,960
D3050-Terminal and Package Units	2015	25,416	-	25,416
	Subtotal	**137,468**	**0**	**137,468**
D20-Plumbing	2018	129,972	-	129,972
C1010-Partitions	2018	27,540	-	27,540
C1020-Interior Doors	2018	40,567	-	40,567
	Subtotal	**198,079**	**0**	**198,079**
	Total	**781,585**	**0**	**781,585**

All costs in USD. Inflation Rate=0.00%

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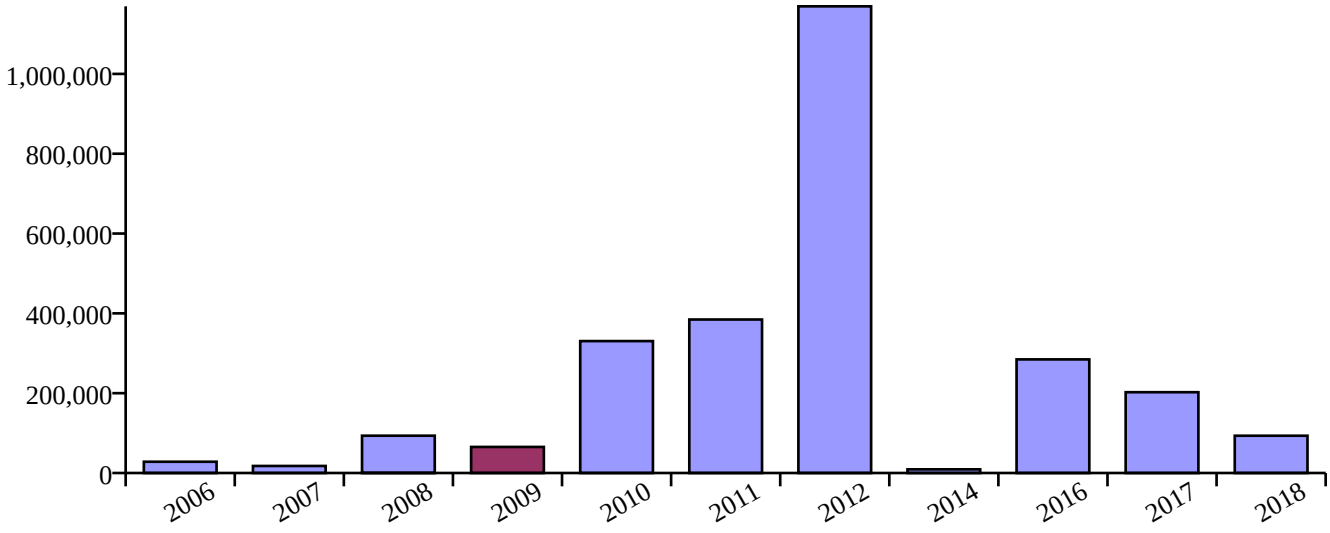
Institution: Northern Kentucky University
Campus: Northern Kentucky University CAMPUS=01
Asset Name: KENTUCKY HALL
Asset Number: 0370

Address 1	20 Campbell Drive	**Address 2**	-
City	Highland Heights	**State**	Kentucky
Country	UNITED STATES OF AMERICA	**ZIP**	41076

Replacement Value 5,841,204
Size 27,565



Name	Year	Renewal	Requirements	Total
C3020-Floor Finishes	2006	18,198	-	18,198
C3020-Floor Finishes	2006	6,774	-	6,774
C3020-Floor Finishes	2006	3,232	-	3,232
	Subtotal	**28,203**	**0**	**28,203**
C3010-Wall Finishes	2007	17,634	-	17,634
	Subtotal	**17,634**	**0**	**17,634**
C3020-Floor Finishes	2008	84,566	-	84,566
D2010-Plumbing Fixtures	2008	8,226	-	8,226
Exterior Concrete Steps: Damaged	2008	-	649	649
	Subtotal	**92,793**	**649**	**93,442**
Aluminum Windows: End of Rated Life	2009	-	5,034	5,034
Ceramic Wall Tile: Damaged	2009	-	1,106	1,106
Interior Doors: Marked, Damaged	2009	-	3,798	3,798

All costs in USD. Inflation Rate=0.00%

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Vinyl Windows: Poor Condition	2009	-	55,369	55,369
	Subtotal	**0**	**65,307**	**65,307**
C3010-Wall Finishes	2010	224,966	-	224,966
C3020-Floor Finishes	2010	105,570	-	105,570
	Subtotal	**330,536**	**0**	**330,536**
B2020-Exterior Windows	2011	298,436	-	298,436
C3020-Floor Finishes	2011	1,583	-	1,583
C3020-Floor Finishes	2011	84,566	-	84,566
	Subtotal	**384,586**	**0**	**384,586**
B2030-Exterior Doors	2012	10,624	-	10,624
B2030-Exterior Doors	2012	25,231	-	25,231
B2020-Exterior Windows	2012	116,355	-	116,355
C1030-Fittings	2012	35,542	-	35,542
D2010-Plumbing Fixtures	2012	74,153	-	74,153
D2010-Plumbing Fixtures	2012	3,718	-	3,718
D2020-Domestic Water Distribution	2012	85,275	-	85,275
D3040-Distribution Systems	2012	17,463	-	17,463
D3040-Distribution Systems	2012	249,358	-	249,358
D3060-Controls and Instrumentation	2012	59,690	-	59,690
D5010-Electrical Service and Distribution	2012	348,611	-	348,611
D5010-Electrical Service and Distribution	2012	66,934	-	66,934
D5010-Electrical Service and Distribution	2012	20,576	-	20,576
D5092-Emergency Light and Power Systems	2012	25,655	-	25,655
D5092-Emergency Light and Power Systems	2012	30,129	-	30,129
	Subtotal	**1,169,314**	**0**	**1,169,314**
C3020-Floor Finishes	2014	9,152	-	9,152
	Subtotal	**9,152**	**0**	**9,152**
C3020-Floor Finishes	2016	18,198	-	18,198
C3030-Ceiling Finishes	2016	80,647	-	80,647
C1030-Fittings	2016	15,622	-	15,622
C3020-Floor Finishes	2016	3,387	-	3,387
C3020-Floor Finishes	2016	1,625	-	1,625
D5030-Communications and Security	2016	165,148	-	165,148
	Subtotal	**284,627**	**0**	**284,627**
D40-Fire Protection	2017	202,412	-	202,412
	Subtotal	**202,412**	**0**	**202,412**
C3020-Floor Finishes	2018	84,566	-	84,566
C3010-Wall Finishes	2018	8,811	-	8,811
	Subtotal	**93,378**	**0**	**93,378**

All costs in USD. Inflation Rate=0.00%

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	Total	**2,612,633**	**65,956**	**2,678,589**

All costs in USD. Inflation Rate=0.00%

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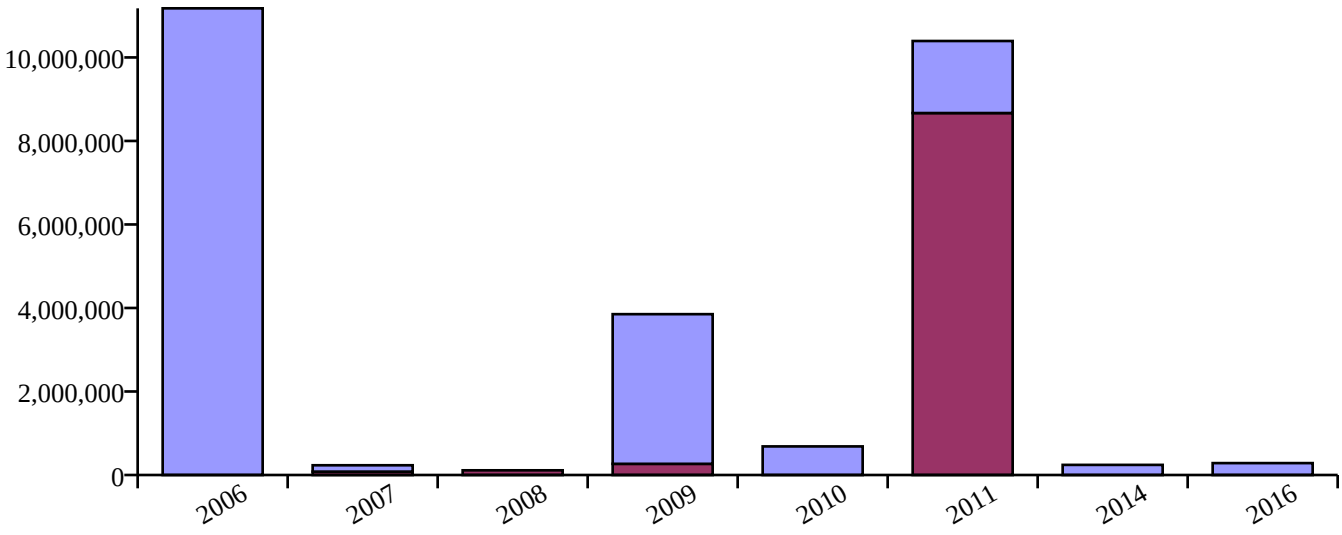
Institution: Northern Kentucky University
Campus: Northern Kentucky University CAMPUS=01
Asset Name: LANDRUM ACADEMIC CENTER
Asset Number: 0300

Address 1	-	**Address 2**	-
City	Highland Heights	**State**	Kentucky
Country	UNITED STATES OF AMERICA	**ZIP**	41099

Replacement Value 35,051,420
Size 100,500



Name	Year	Renewal	Requirements	Total
D10-Conveying	2006	581,337	-	581,337
D2010-Plumbing Fixtures	2006	29,993	-	29,993
D2020-Domestic Water Distribution	2006	310,907	-	310,907
D3040-Distribution Systems	2006	1,020,480	-	1,020,480
D3040-Distribution Systems	2006	385,174	-	385,174
D3040-Distribution Systems	2006	2,540,275	-	2,540,275
D3040-Distribution Systems	2006	2,123,871	-	2,123,871
D3040-Distribution Systems	2006	191,005	-	191,005
D5010-Electrical Service and Distribution	2006	1,271,009	-	1,271,009
D5010-Electrical Service and Distribution	2006	75,020	-	75,020
D5010-Electrical Service and Distribution	2006	1,188,998	-	1,188,998
D5020-Lighting and Branch Wiring	2006	684,518	-	684,518
D5030-Communications and Security	2006	602,117	-	602,117
D5092-Emergency Light and Power Systems	2006	77,756	-	77,756
D5092-Emergency Light and Power Systems	2006	93,536	-	93,536
	Subtotal	**11,175,994**	**0**	**11,175,994**
C1030-Fittings	2007	152,403	-	152,403

All costs in USD. Inflation Rate=0.00%

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Ductwork: Damaged Duct & Dampers	2007	-	80,273	80,273
Electrical Equipment: Dedicated Space Required	2007	-	470	470
	Subtotal	**152,403**	**80,743**	**233,146**
Distribution Systems: Aged Chilled Water Circulation Pumps	2008	-	61,225	61,225
Distribution Systems: Aged Hot Water Circulation Pumps	2008	-	50,936	50,936
	Subtotal	**0**	**112,161**	**112,161**
B2020-Exterior Windows	2009	2,163,722	-	2,163,722
C3020-Floor Finishes	2009	804,636	-	804,636
C3030-Ceiling Finishes	2009	615,600	-	615,600
HVAC System: Clean and Balance	2009	-	208,896	208,896
Exterior Walls: Repair Concrete	2009	-	33,745	33,745
Wall Finishes: Repair Ceramic Tile	2009	-	24,940	24,940
	Subtotal	**3,583,958**	**267,581**	**3,851,539**
D5020-Lighting and Branch Wiring	2010	684,518	-	684,518
	Subtotal	**684,518**	**0**	**684,518**
D5030-Communications and Security	2011	319,447	-	319,447
D40-Fire Protection	2011	849,193	-	849,193
B2030-Exterior Doors	2011	132,412	-	132,412
C3010-Wall Finishes	2011	424,453	-	424,453
Fit for Continued Use	2011	-	8,668,125	8,668,125
	Subtotal	**1,725,505**	**8,668,125**	**10,393,630**
C3010-Wall Finishes	2014	242,203	-	242,203
	Subtotal	**242,203**	**0**	**242,203**
D5092-Emergency Light and Power Systems	2016	93,536	-	93,536
C3020-Floor Finishes	2016	191,182	-	191,182
	Subtotal	**284,717**	**0**	**284,717**
	Total	**17,849,299**	**9,128,610**	**26,977,909**

All costs in USD. Inflation Rate=0.00%

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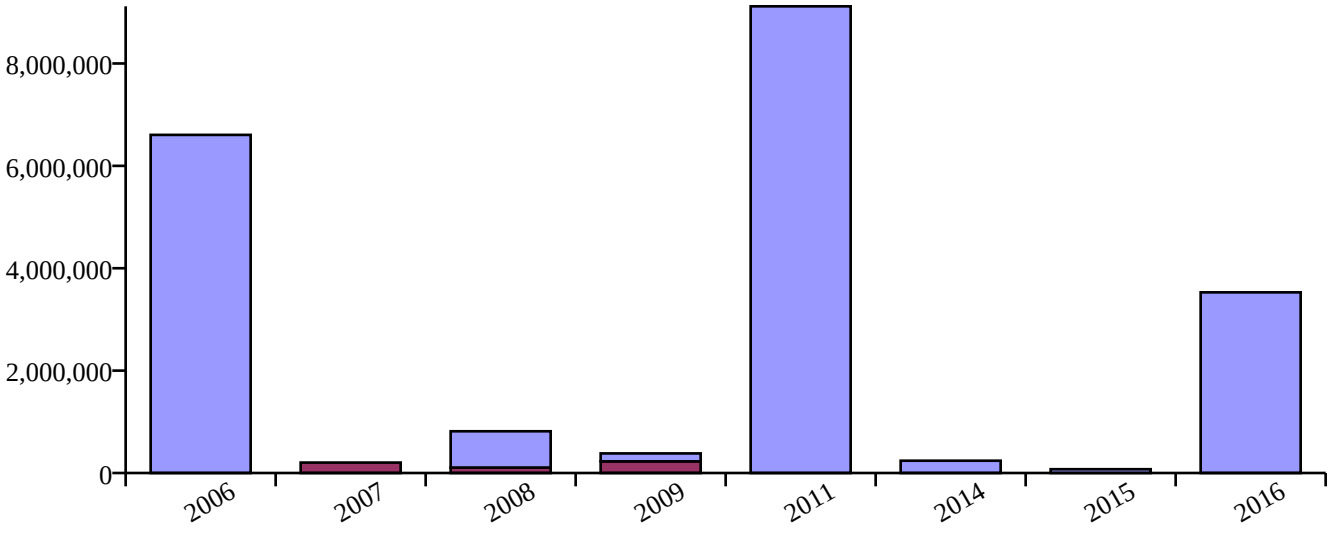
Institution: Northern Kentucky University
Campus: Northern Kentucky University CAMPUS=01
Asset Name: LUCAS ADMINISTRATIVE CENTER
Asset Number: 0360

Address 1	-	**Address 2**	-
City	Highland Heights	**State**	Kentucky
Country	UNITED STATES OF AMERICA	**ZIP**	41099

Replacement Value 39,387,374
Size 108,238



Name	Year	Renewal	Requirements	Total
D2010-Plumbing Fixtures	2006	32,302	-	32,302
D2020-Domestic Water Distribution	2006	152,594	-	152,594
D3040-Distribution Systems	2006	1,099,052	-	1,099,052
D3040-Distribution Systems	2006	414,831	-	414,831
D3040-Distribution Systems	2006	2,735,863	-	2,735,863
D3040-Distribution Systems	2006	205,712	-	205,712
D40-Fire Protection	2006	311,725	-	311,725
D5020-Lighting and Branch Wiring	2006	737,223	-	737,223
D5020-Lighting and Branch Wiring	2006	737,223	-	737,223
D5092-Emergency Light and Power Systems	2006	77,756	-	77,756
D5092-Emergency Light and Power Systems	2006	100,738	-	100,738
	Subtotal	**6,605,017**	**0**	**6,605,017**
Ductwork: Damaged Duct & Dampers	2007	-	138,978	138,978
HVAC: High Rise Stair Shaft Not Pressurized Not Compliant	2007	-	64,465	64,465
	Subtotal	**0**	**203,443**	**203,443**

All costs in USD. Inflation Rate=0.00%

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D10-Conveying	2008	708,933	-	708,933
Distribution Systems: Aged Chilled Water Circulation Pumps	2008	-	56,521	56,521
Distribution Systems: Aged Hot Water Circulation Pumps	2008	-	49,717	49,717
	Subtotal	**708,933**	**106,238**	**815,171**
B30-Roofing	2009	155,101	-	155,101
HVAC System: Clean and Balance	2009	-	227,401	227,401
	Subtotal	**155,101**	**227,401**	**382,502**
D2020-Domestic Water Distribution	2011	334,845	-	334,845
D3040-Distribution Systems	2011	2,287,398	-	2,287,398
D5010-Electrical Service and Distribution	2011	1,368,870	-	1,368,870
D5010-Electrical Service and Distribution	2011	80,796	-	80,796
D5010-Electrical Service and Distribution	2011	1,280,545	-	1,280,545
D5030-Communications and Security	2011	344,043	-	344,043
C1030-Fittings	2011	164,138	-	164,138
C3010-Wall Finishes	2011	157,432	-	157,432
C3010-Wall Finishes	2011	883,364	-	883,364
C3020-Floor Finishes	2011	31,586	-	31,586
C3020-Floor Finishes	2011	977,058	-	977,058
C3020-Floor Finishes	2011	111,523	-	111,523
C3030-Ceiling Finishes	2011	632,255	-	632,255
C3020-Floor Finishes	2011	462,425	-	462,425
	Subtotal	**9,116,278**	**0**	**9,116,278**
B2030-Exterior Doors	2014	132,412	-	132,412
B2030-Exterior Doors	2014	107,474	-	107,474
	Subtotal	**239,886**	**0**	**239,886**
D3060-Controls and Instrumentation	2015	73,586	-	73,586
	Subtotal	**73,586**	**0**	**73,586**
D5030-Communications and Security	2016	648,477	-	648,477
D5092-Emergency Light and Power Systems	2016	100,738	-	100,738
B2020-Exterior Windows	2016	1,555,650	-	1,555,650
D40-Fire Protection	2016	1,224,009	-	1,224,009
	Subtotal	**3,528,873**	**0**	**3,528,873**
	Total	**20,427,675**	**537,082**	**20,964,757**

All costs in USD. Inflation Rate=0.00%

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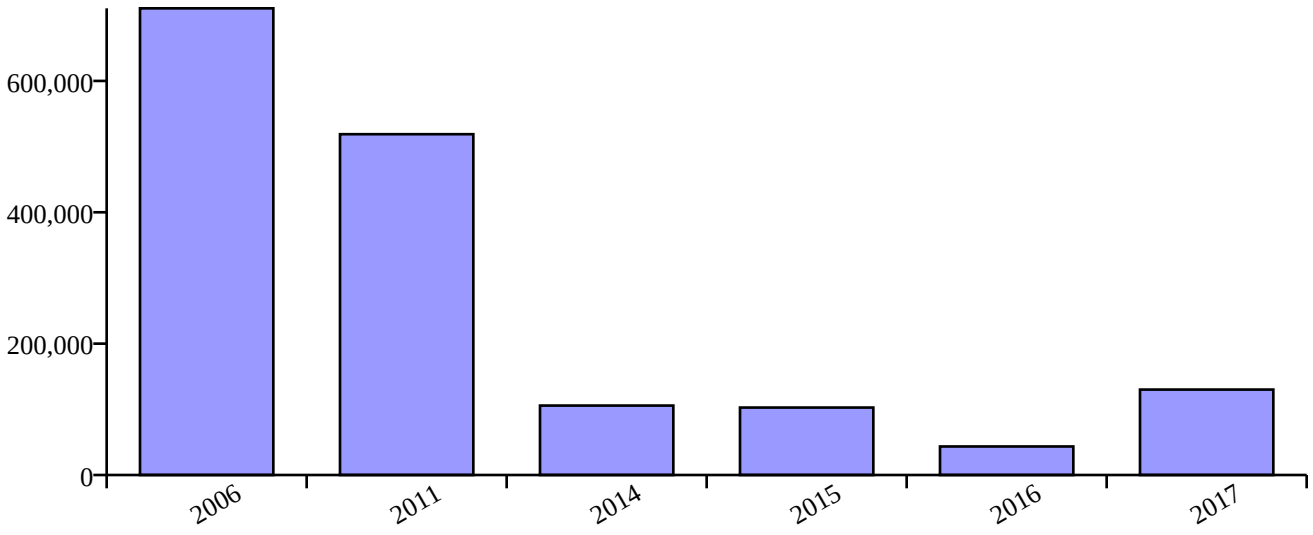
Institution: Northern Kentucky University
Campus: Northern Kentucky University CAMPUS=01
Asset Name: MAINTENANCE BUILDING
Asset Number: 0310

Address 1	-	**Address 2**	-
City	Highland Heights	**State**	Kentucky
Country	UNITED STATES OF AMERICA	**ZIP**	41099

Replacement Value 4,112,433
Size 15,392



Name	Year	Renewal	Requirements	Total
D2010-Plumbing Fixtures	2006	4,594	-	4,594
D2020-Domestic Water Distribution	2006	47,617	-	47,617
D3040-Distribution Systems	2006	29,253	-	29,253
D5010-Electrical Service and Distribution	2006	194,660	-	194,660
D5010-Electrical Service and Distribution	2006	11,490	-	11,490
D5010-Electrical Service and Distribution	2006	182,100	-	182,100
D5020-Lighting and Branch Wiring	2006	104,837	-	104,837
D5020-Lighting and Branch Wiring	2006	104,837	-	104,837
D5092-Emergency Light and Power Systems	2006	14,325	-	14,325
D5092-Emergency Light and Power Systems	2006	16,824	-	16,824
	Subtotal	**710,536**	**0**	**710,536**
D5030-Communications and Security	2011	48,925	-	48,925
B2030-Exterior Doors	2011	198,618	-	198,618
B30-Roofing	2011	176,449	-	176,449
B2020-Exterior Windows	2011	87,307	-	87,307
C1030-Fittings	2011	7,582	-	7,582
	Subtotal	**518,882**	**0**	**518,882**

All costs in USD. Inflation Rate=0.00%

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D2020-Domestic Water Distribution	2014	21,700	-	21,700
C3010-Wall Finishes	2014	66,744	-	66,744
C3020-Floor Finishes	2014	17,271	-	17,271
	Subtotal	**105,715**	**0**	**105,715**
D3060-Controls and Instrumentation	2015	10,464	-	10,464
D5030-Communications and Security	2015	92,217	-	92,217
	Subtotal	**102,681**	**0**	**102,681**
D5092-Emergency Light and Power Systems	2016	14,325	-	14,325
D5092-Emergency Light and Power Systems	2016	16,824	-	16,824
C1030-Fittings	2016	12,279	-	12,279
	Subtotal	**43,428**	**0**	**43,428**
D40-Fire Protection	2017	130,057	-	130,057
	Subtotal	**130,057**	**0**	**130,057**
	Total	**1,611,300**	**0**	**1,611,300**

All costs in USD. Inflation Rate=0.00%

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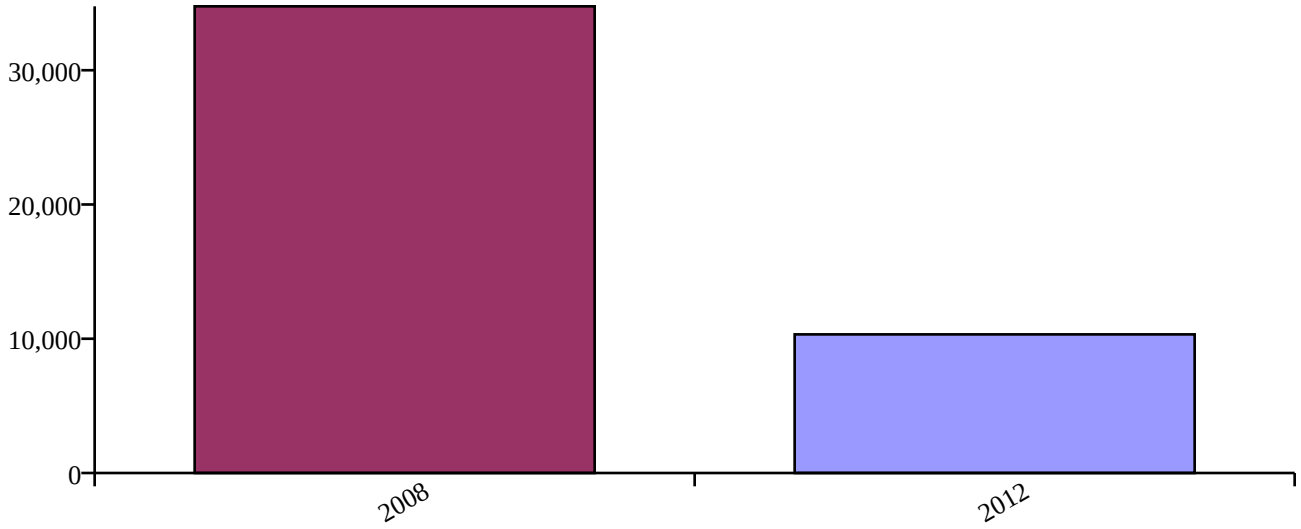
Institution: Northern Kentucky University
Campus: Northern Kentucky University CAMPUS=01
Asset Name: MECHANICAL EQUIPMENT
Asset Number: 0378

Address 1	-	**Address 2**	-
City	Highland Heights	**State**	Kentucky
Country	UNITED STATES OF AMERICA	**ZIP**	41076

Replacement Value 132,763
Size 1,000



Name	Year	Renewal	Requirements	Total
Domestic Hot Water: Replace Boiler	2008	-	34,759	34,759
	Subtotal	**0**	**34,759**	**34,759**
B30-Roofing	2012	10,325	-	10,325
	Subtotal	**10,325**	**0**	**10,325**
	Total	**10,325**	**34,759**	**45,084**

All costs in USD. Inflation Rate=0.00%

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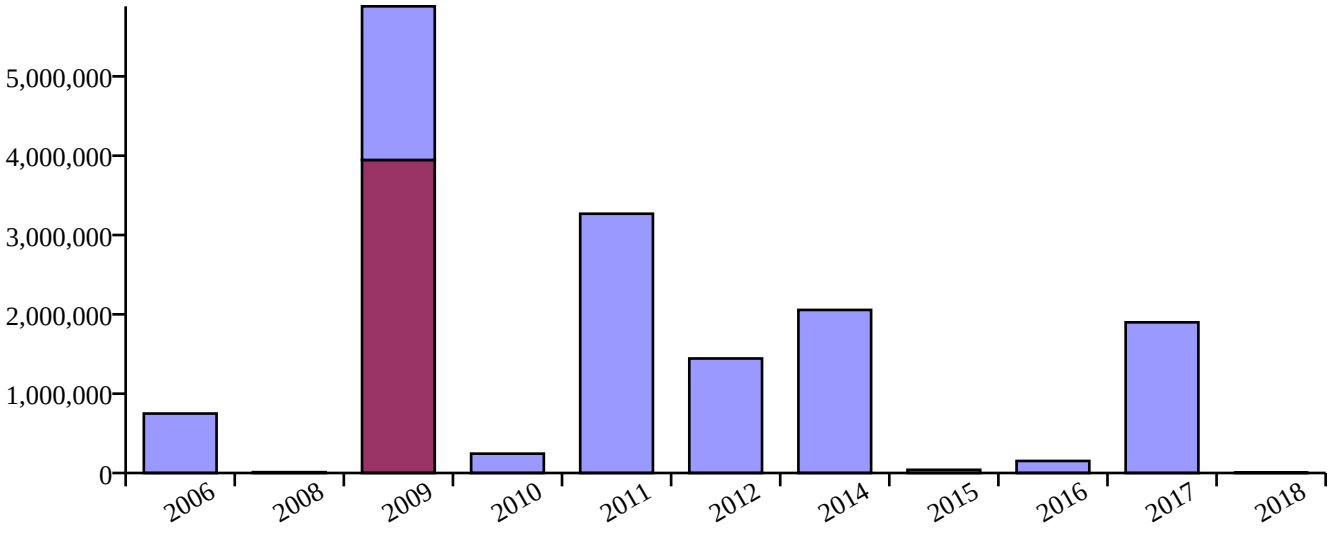
Institution: Northern Kentucky University
Campus: Northern Kentucky University CAMPUS=01
Asset Name: NORSE COMMONS
Asset Number: 0377

Address 1	15 Campbell Drive	**Address 2**	-
City	Highland Heights	**State**	Kentucky
Country	UNITED STATES OF AMERICA	**ZIP**	41076

Replacement Value 23,714,064
Size 25,315



Name	Year	Renewal	Requirements	Total
C3030-Ceiling Finishes	2006	94,248	-	94,248
C3020-Floor Finishes	2006	5,955	-	5,955
C1030-Fittings	2006	43,943	-	43,943
D2010-Plumbing Fixtures	2006	7,555	-	7,555
D5020-Lighting and Branch Wiring	2006	172,424	-	172,424
D5020-Lighting and Branch Wiring	2006	172,424	-	172,424
D5030-Communications and Security	2006	151,668	-	151,668
D5092-Emergency Light and Power Systems	2006	77,756	-	77,756
D5092-Emergency Light and Power Systems	2006	23,561	-	23,561
	Subtotal	**749,532**	**0**	**749,532**
Cold Storage Compressors	2008	-	10,400	10,400
	Subtotal	**0**	**10,400**	**10,400**
C3020-Floor Finishes	2009	48,959	-	48,959
Ceramic Tile: Worn, Damaged	2009	-	3,933,067	3,933,067
Plaster Veneer: Damaged	2009	-	2,178	2,178

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Replace pneumatic HVAC Controls	2009	-	10,811	10,811
D3040-Distribution Systems	2009	257,049	-	257,049
D3040-Distribution Systems	2009	97,022	-	97,022
D3040-Distribution Systems	2009	639,871	-	639,871
D3040-Distribution Systems	2009	48,112	-	48,112
C1030-Fittings	2009	38,389	-	38,389
C3020-Floor Finishes	2009	517,266	-	517,266
B30-Roofing	2009	290,203	-	290,203
	Subtotal	**1,936,872**	**3,946,056**	**5,882,928**
C3010-Wall Finishes	2010	185,585	-	185,585
C3020-Floor Finishes	2010	58,212	-	58,212
	Subtotal	**243,797**	**0**	**243,797**
D5030-Communications and Security	2011	141,510	-	141,510
D5030-Communications and Security	2011	151,668	-	151,668
D5092-Emergency Light and Power Systems	2011	27,670	-	27,670
D5092-Emergency Light and Power Systems	2011	23,561	-	23,561
D2020-Domestic Water Distribution	2011	35,689	-	35,689
D5030-Communications and Security	2011	80,466	-	80,466
C3010-Wall Finishes	2011	363,304	-	363,304
C3010-Wall Finishes	2011	389,340	-	389,340
C3020-Floor Finishes	2011	855,090	-	855,090
C3020-Floor Finishes	2011	237,519	-	237,519
C3020-Floor Finishes	2011	95,591	-	95,591
C3030-Ceiling Finishes	2011	513,000	-	513,000
C3020-Floor Finishes	2011	196,085	-	196,085
C3020-Floor Finishes	2011	157,932	-	157,932
	Subtotal	**3,268,424**	**0**	**3,268,424**
C1030-Fittings	2012	32,640	-	32,640
D2010-Plumbing Fixtures	2012	7,555	-	7,555
D3030-Cooling Generating Systems	2012	239,396	-	239,396
D3040-Distribution Systems	2012	294,312	-	294,312
D3040-Distribution Systems	2012	529,524	-	529,524
D40-Fire Protection	2012	11,291	-	11,291
D5020-Lighting and Branch Wiring	2012	172,424	-	172,424
D5030-Communications and Security	2012	75,915	-	75,915
D5030-Communications and Security	2012	80,466	-	80,466
	Subtotal	**1,443,522**	**0**	**1,443,522**
C3020-Floor Finishes	2014	49,745	-	49,745
D2020-Domestic Water Distribution	2014	78,315	-	78,315
D3040-Distribution Systems	2014	534,983	-	534,983
D5010-Electrical Service and Distribution	2014	320,155	-	320,155
D5010-Electrical Service and Distribution	2014	18,897	-	18,897
D5010-Electrical Service and Distribution	2014	299,497	-	299,497
B2020-Exterior Windows	2014	373,356	-	373,356
B2030-Exterior Doors	2014	380,685	-	380,685
	Subtotal	**2,055,633**	**0**	**2,055,633**

All costs in USD. Inflation Rate=0.00%

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C3020-Floor Finishes	2015	40,142	-	40,142
	Subtotal	**40,142**	**0**	**40,142**
C3030-Ceiling Finishes	2016	94,248	-	94,248
C3020-Floor Finishes	2016	5,955	-	5,955
C3020-Floor Finishes	2016	10,955	-	10,955
D3060-Controls and Instrumentation	2016	17,211	-	17,211
D5092-Emergency Light and Power Systems	2016	23,561	-	23,561
	Subtotal	**151,930**	**0**	**151,930**
D3040-Distribution Systems	2017	639,871	-	639,871
D3040-Distribution Systems	2017	48,112	-	48,112
D3040-Distribution Systems	2017	856,229	-	856,229
E-Equipment and Furnishings	2017	286,675	-	286,675
E-Equipment and Furnishings	2017	68,607	-	68,607
	Subtotal	**1,899,495**	**0**	**1,899,495**
C3030-Ceiling Finishes	2018	3,843	-	3,843
	Subtotal	**3,843**	**0**	**3,843**
	Total	**11,793,189**	**3,956,456**	**15,749,645**

All costs in USD. Inflation Rate=0.00%

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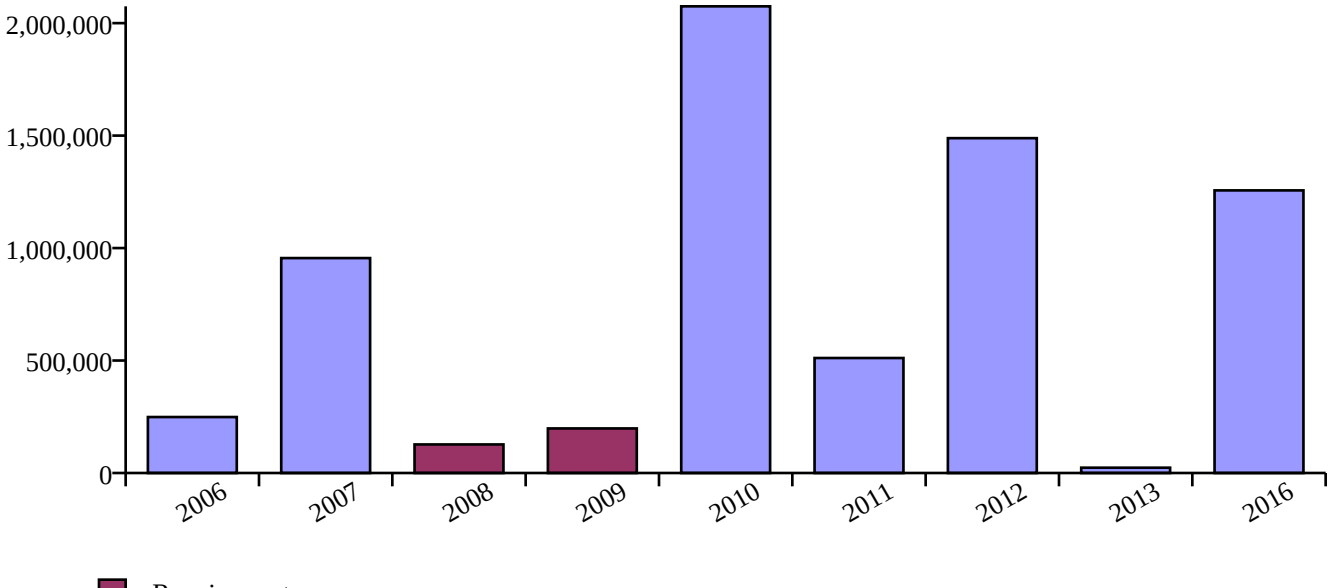
Institution: Northern Kentucky University
Campus: Northern Kentucky University CAMPUS=01
Asset Name: NORSE HALL
Asset Number: 0376

Address 1	10 Campbell Drive	**Address 2**	-
City	Highland Heights	**State**	Kentucky
Country	UNITED STATES OF AMERICA	**ZIP**	41076

Replacement Value 17,915,149
Size 69,721



Name	Year	Renewal	Requirements	Total
C3010-Wall Finishes	2006	248,800	-	248,800
	Subtotal	**248,800**	**0**	**248,800**
C3020-Floor Finishes	2007	144,887	-	144,887
D3040-Distribution Systems	2007	810,575	-	810,575
	Subtotal	**955,461**	**0**	**955,461**
Shower Tiles: Leaking	2008	-	126,922	126,922
	Subtotal	**0**	**126,922**	**126,922**
Exterior Doors: Corroded	2009	-	24,717	24,717
Interior Doors: Marked, Damaged	2009	-	12,533	12,533
Vinyl Sheet Flooring: End of Life	2009	-	160,837	160,837
	Subtotal	**0**	**198,087**	**198,087**

All costs in USD. Inflation Rate=0.00%

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C3010-Wall Finishes	2010	569,015	-	569,015
C3020-Floor Finishes	2010	545,935	-	545,935
D3040-Distribution Systems	2010	959,744	-	959,744
	Subtotal	**2,074,694**	**0**	**2,074,694**
B30-Roofing	2011	188,428	-	188,428
D2020-Domestic Water Distribution	2011	36,241	-	36,241
D5030-Communications and Security	2011	221,613	-	221,613
D5092-Emergency Light and Power Systems	2011	64,890	-	64,890
	Subtotal	**511,172**	**0**	**511,172**
E-Equipment and Furnishings	2012	163,505	-	163,505
D3040-Distribution Systems	2012	368,384	-	368,384
D3060-Controls and Instrumentation	2012	172,201	-	172,201
D5020-Lighting and Branch Wiring	2012	474,879	-	474,879
D5030-Communications and Security	2012	309,619	-	309,619
	Subtotal	**1,488,588**	**0**	**1,488,588**
C3020-Floor Finishes	2013	23,578	-	23,578
	Subtotal	**23,578**	**0**	**23,578**
B2030-Exterior Doors	2016	386,878	-	386,878
C3030-Ceiling Finishes	2016	91,800	-	91,800
C3030-Ceiling Finishes	2016	231,998	-	231,998
C3010-Wall Finishes	2016	49,760	-	49,760
C3030-Ceiling Finishes	2016	41,981	-	41,981
D2020-Domestic Water Distribution	2016	36,241	-	36,241
D5030-Communications and Security	2016	417,713	-	417,713
	Subtotal	**1,256,370**	**0**	**1,256,370**
	Total	**6,558,663**	**325,009**	**6,883,672**

All costs in USD. Inflation Rate=0.00%

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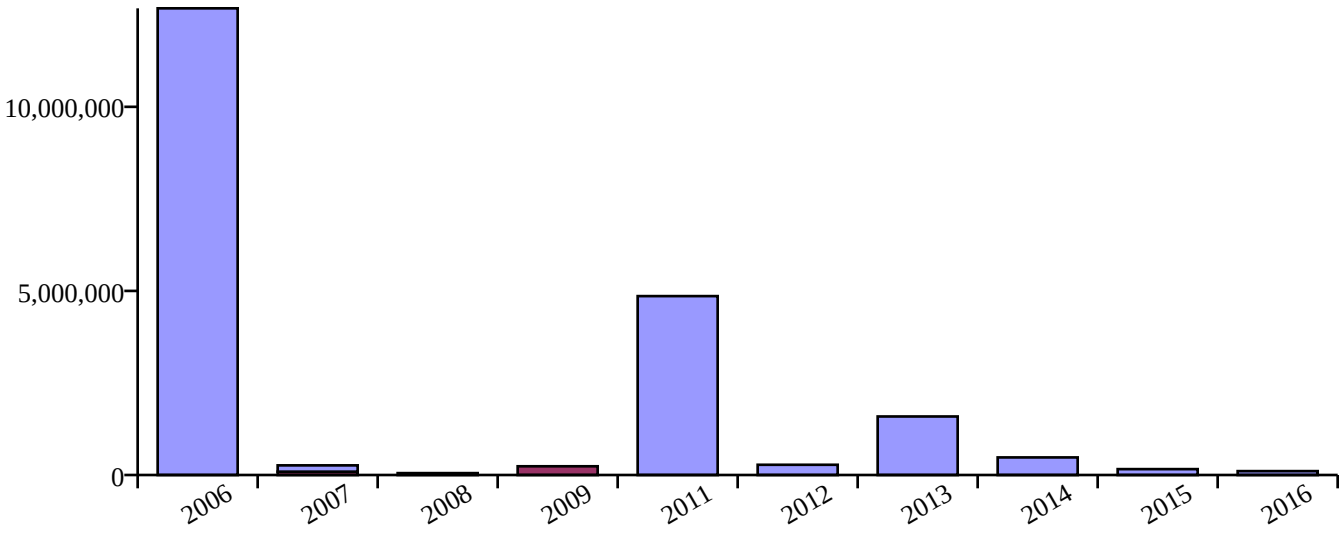
Institution: Northern Kentucky University
Campus: Northern Kentucky University CAMPUS=01
Asset Name: NUNN HALL
Asset Number: 0130

Address 1	-	**Address 2**	-
City	Highland Heights	**State**	Kentucky
Country	UNITED STATES OF AMERICA	**ZIP**	41099

Replacement Value 39,713,027
Size 113,027



Name	Year	Renewal	Requirements	Total
D2010-Plumbing Fixtures	2006	33,731	-	33,731
D2020-Domestic Water Distribution	2006	349,661	-	349,661
D3040-Distribution Systems	2006	2,388,604	-	2,388,604
D3040-Distribution Systems	2006	214,813	-	214,813
D5010-Electrical Service and Distribution	2006	1,429,436	-	1,429,436
D5010-Electrical Service and Distribution	2006	1,337,203	-	1,337,203
D5010-Electrical Service and Distribution	2006	84,371	-	84,371
D5020-Lighting and Branch Wiring	2006	769,841	-	769,841
D5020-Lighting and Branch Wiring	2006	769,841	-	769,841
D5030-Communications and Security	2006	677,169	-	677,169
D5092-Emergency Light and Power Systems	2006	105,195	-	105,195
D3040-Distribution Systems	2006	1,147,680	-	1,147,680
D3040-Distribution Systems	2006	433,185	-	433,185
D3040-Distribution Systems	2006	2,856,912	-	2,856,912
D5092-Emergency Light and Power Systems	2006	77,756	-	77,756
	Subtotal	**12,675,397**	**0**	**12,675,397**
C1030-Fittings	2007	171,400	-	171,400

All costs in USD. Inflation Rate=0.00%

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Ductwork: Damaged Duct & Dampers	2007	-	90,257	90,257
	Subtotal	**171,400**	**90,257**	**261,657**
Distribution Systems: Aged Hot Water Circulation Pumps	2008	-	50,936	50,936
	Subtotal	**0**	**50,936**	**50,936**
HVAC System: Clean and Balance	2009	-	236,686	236,686
	Subtotal	**0**	**236,686**	**236,686**
B2020-Exterior Windows	2011	2,433,534	-	2,433,534
B2030-Exterior Doors	2011	148,964	-	148,964
C3010-Wall Finishes	2011	217,982	-	217,982
C3020-Floor Finishes	2011	71,069	-	71,069
C3020-Floor Finishes	2011	1,034,532	-	1,034,532
C3020-Floor Finishes	2011	254,909	-	254,909
C3030-Ceiling Finishes	2011	697,680	-	697,680
	Subtotal	**4,858,671**	**0**	**4,858,671**
C1030-Fittings	2012	277,564	-	277,564
	Subtotal	**277,564**	**0**	**277,564**
D5030-Communications and Security	2013	1,589,288	-	1,589,288
	Subtotal	**1,589,288**	**0**	**1,589,288**
C3010-Wall Finishes	2014	477,361	-	477,361
	Subtotal	**477,361**	**0**	**477,361**
D2020-Domestic Water Distribution	2015	159,345	-	159,345
	Subtotal	**159,345**	**0**	**159,345**
D5092-Emergency Light and Power Systems	2016	105,195	-	105,195
	Subtotal	**105,195**	**0**	**105,195**
	Total	**20,314,219**	**377,879**	**20,692,098**

All costs in USD. Inflation Rate=0.00%

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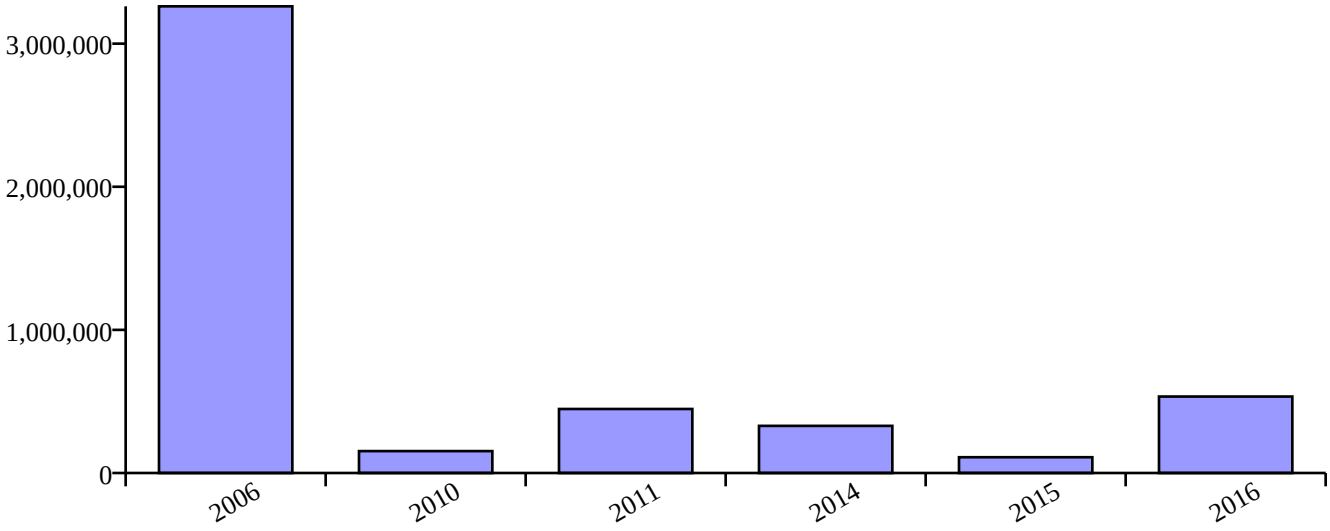
Institution: Northern Kentucky University
Campus: Northern Kentucky University CAMPUS=01
Asset Name: REGENTS HALL
Asset Number: 0140

Address 1	-	**Address 2**	-
City	Highland Heights	**State**	Kentucky
Country	UNITED STATES OF AMERICA	**ZIP**	41099

Replacement Value 10,371,545
Size 28,726



Name	Year	Renewal	Requirements	Total
D2010-Plumbing Fixtures	2006	8,573	-	8,573
D2020-Domestic Water Distribution	2006	88,867	-	88,867
D3040-Distribution Systems	2006	54,595	-	54,595
D3040-Distribution Systems	2006	607,068	-	607,068
D3040-Distribution Systems	2006	726,089	-	726,089
D3040-Distribution Systems	2006	291,685	-	291,685
D5010-Electrical Service and Distribution	2006	339,852	-	339,852
D5010-Electrical Service and Distribution	2006	363,294	-	363,294
D5010-Electrical Service and Distribution	2006	21,443	-	21,443
D5020-Lighting and Branch Wiring	2006	195,656	-	195,656
D5020-Lighting and Branch Wiring	2006	195,656	-	195,656
D5030-Communications and Security	2006	172,104	-	172,104
D5030-Communications and Security	2006	91,308	-	91,308
D5092-Emergency Light and Power Systems	2006	26,735	-	26,735
D5092-Emergency Light and Power Systems	2006	77,756	-	77,756
	Subtotal	**3,260,680**	**0**	**3,260,680**
C3010-Wall Finishes	2010	59,009	-	59,009

All costs in USD. Inflation Rate=0.00%

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C3020-Floor Finishes	2010	35,982	-	35,982
C3030-Ceiling Finishes	2010	57,962	-	57,962
	Subtotal	**152,953**	**0**	**152,953**
B2020-Exterior Windows	2011	149,342	-	149,342
B2030-Exterior Doors	2011	297,928	-	297,928
	Subtotal	**447,270**	**0**	**447,270**
B30-Roofing	2014	329,306	-	329,306
	Subtotal	**329,306**	**0**	**329,306**
D3040-Distribution Systems	2015	110,095	-	110,095
	Subtotal	**110,095**	**0**	**110,095**
D5030-Communications and Security	2016	91,308	-	91,308
D5092-Emergency Light and Power Systems	2016	26,735	-	26,735
B2010-Exterior Walls	2016	68,046	-	68,046
C3010-Wall Finishes	2016	24,220	-	24,220
C3020-Floor Finishes	2016	95,591	-	95,591
C3020-Floor Finishes	2016	228,269	-	228,269
	Subtotal	**534,169**	**0**	**534,169**
	Total	**4,834,473**	**0**	**4,834,473**

All costs in USD. Inflation Rate=0.00%

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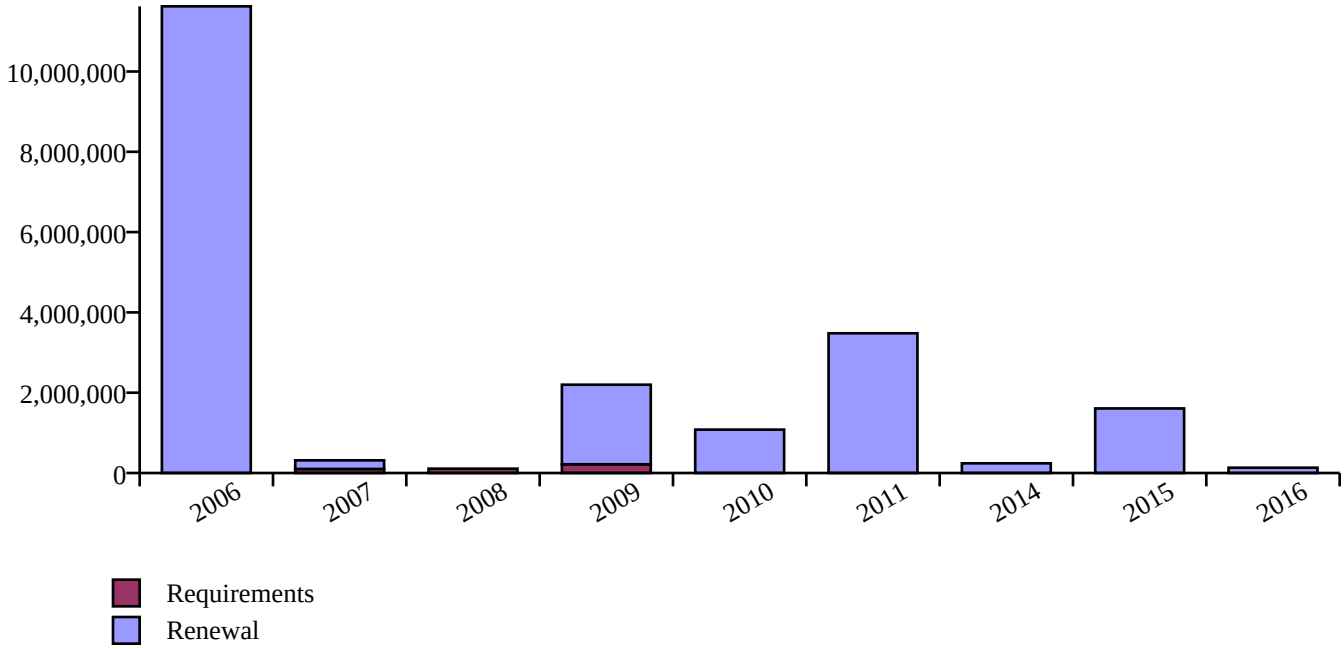
Institution: Northern Kentucky University
Campus: Northern Kentucky University CAMPUS=01
Asset Name: STEELY LIBRARY
Asset Number: 0290

Address 1	-	**Address 2**	-
City	Highland Heights	**State**	Kentucky
Country	UNITED STATES OF AMERICA	**ZIP**	41099

Replacement Value 49,556,715
Size 141,567



Name	Year	Renewal	Requirements	Total
D2010-Plumbing Fixtures	2006	42,248	-	42,248
D3040-Distribution Systems	2006	1,437,476	-	1,437,476
D3040-Distribution Systems	2006	542,567	-	542,567
D3040-Distribution Systems	2006	2,527,636	-	2,527,636
D3040-Distribution Systems	2006	2,991,741	-	2,991,741
D3040-Distribution Systems	2006	269,055	-	269,055
D5010-Electrical Service and Distribution	2006	1,790,377	-	1,790,377
D5020-Lighting and Branch Wiring	2006	964,231	-	964,231
D5030-Communications and Security	2006	848,158	-	848,158
D5092-Emergency Light and Power Systems	2006	77,756	-	77,756
D5092-Emergency Light and Power Systems	2006	131,757	-	131,757
	Subtotal	**11,623,002**	**0**	**11,623,002**
C1030-Fittings	2007	214,679	-	214,679
Ductwork: Damaged Duct and Dampers	2007	-	99,842	99,842
Electrical Equipment: Dedicated Space Required	2007	-	802	802
	Subtotal	**214,679**	**100,644**	**315,323**

All costs in USD. Inflation Rate=0.00%

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Distribution Systems: Aged Chilled Water Circulation Pumps	2008	-	56,765	56,765
Distribution Systems: Aged Hot Water Circulation Pumps	2008	-	50,936	50,936
	Subtotal	**0**	**107,701**	**107,701**
C3010-Wall Finishes	2009	1,155,372	-	1,155,372
C3030-Ceiling Finishes	2009	826,942	-	826,942
HVAC System: Clean and Balance	2009	-	216,574	216,574
	Subtotal	**1,982,314**	**216,574**	**2,198,888**
D10-Conveying	2010	1,080,260	-	1,080,260
	Subtotal	**1,080,260**	**0**	**1,080,260**
D2020-Domestic Water Distribution	2011	437,952	-	437,952
D5030-Communications and Security	2011	449,981	-	449,981
B2030-Exterior Doors	2011	115,861	-	115,861
C3010-Wall Finishes	2011	242,203	-	242,203
C3020-Floor Finishes	2011	63,727	-	63,727
C3020-Floor Finishes	2011	78,966	-	78,966
C3020-Floor Finishes	2011	1,264,428	-	1,264,428
C3030-Ceiling Finishes	2011	826,942	-	826,942
	Subtotal	**3,480,060**	**0**	**3,480,060**
B30-Roofing	2014	240,738	-	240,738
	Subtotal	**240,738**	**0**	**240,738**
D2020-Domestic Water Distribution	2015	199,581	-	199,581
D3060-Controls and Instrumentation	2015	96,245	-	96,245
D5020-Lighting and Branch Wiring	2015	964,231	-	964,231
C1030-Fittings	2015	347,650	-	347,650
	Subtotal	**1,607,708**	**0**	**1,607,708**
D5092-Emergency Light and Power Systems	2016	131,757	-	131,757
	Subtotal	**131,757**	**0**	**131,757**
	Total	**20,360,519**	**424,919**	**20,785,438**

All costs in USD. Inflation Rate=0.00%

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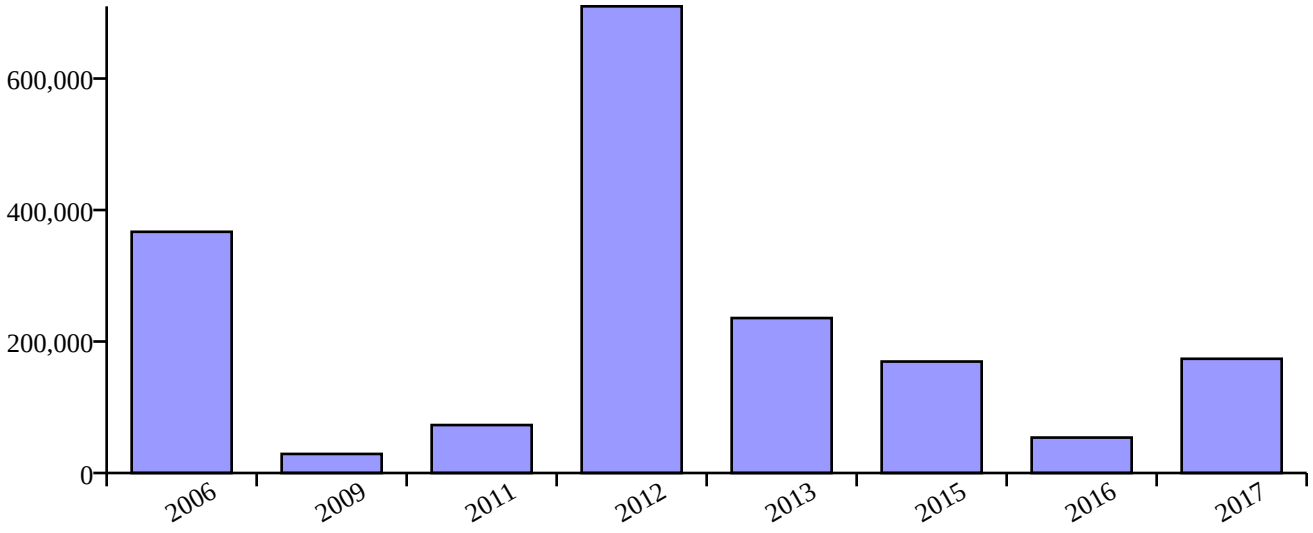
Institution: Northern Kentucky University
Campus: Northern Kentucky University CAMPUS=01
Asset Name: STORAGE FACILITY
Asset Number: 0312

Address 1	-	**Address 2**	-
City	Highland Heights	**State**	Kentucky
Country	UNITED STATES OF AMERICA	**ZIP**	41099

Replacement Value 4,632,365
Size 20,560



Name	Year	Renewal	Requirements	Total
D2010-Plumbing Fixtures	2006	6,136	-	6,136
D3040-Distribution Systems	2006	39,075	-	39,075
D5020-Lighting and Branch Wiring	2006	140,037	-	140,037
D5020-Lighting and Branch Wiring	2006	140,037	-	140,037
D5092-Emergency Light and Power Systems	2006	19,135	-	19,135
D5092-Emergency Light and Power Systems	2006	22,473	-	22,473
	Subtotal	**366,893**	**0**	**366,893**
D2020-Domestic Water Distribution	2009	28,985	-	28,985
	Subtotal	**28,985**	**0**	**28,985**
D5030-Communications and Security	2011	65,352	-	65,352
C1030-Fittings	2011	7,582	-	7,582
	Subtotal	**72,934**	**0**	**72,934**
D2020-Domestic Water Distribution	2012	63,604	-	63,604

All costs in USD. Inflation Rate=0.00%

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D5010-Electrical Service and Distribution	2012	243,242	-	243,242
D5010-Electrical Service and Distribution	2012	260,019	-	260,019
B2030-Exterior Doors	2012	99,309	-	99,309
B2020-Exterior Windows	2012	43,654	-	43,654
	Subtotal	**709,828**	**0**	**709,828**
B30-Roofing	2013	235,694	-	235,694
	Subtotal	**235,694**	**0**	**235,694**
D5030-Communications and Security	2015	123,179	-	123,179
C3010-Wall Finishes	2015	46,350	-	46,350
	Subtotal	**169,529**	**0**	**169,529**
D5092-Emergency Light and Power Systems	2016	19,135	-	19,135
D5092-Emergency Light and Power Systems	2016	22,473	-	22,473
C1030-Fittings	2016	12,279	-	12,279
	Subtotal	**53,886**	**0**	**53,886**
D40-Fire Protection	2017	173,725	-	173,725
	Subtotal	**173,725**	**0**	**173,725**
	Total	**1,811,475**	**0**	**1,811,475**

All costs in USD. Inflation Rate=0.00%

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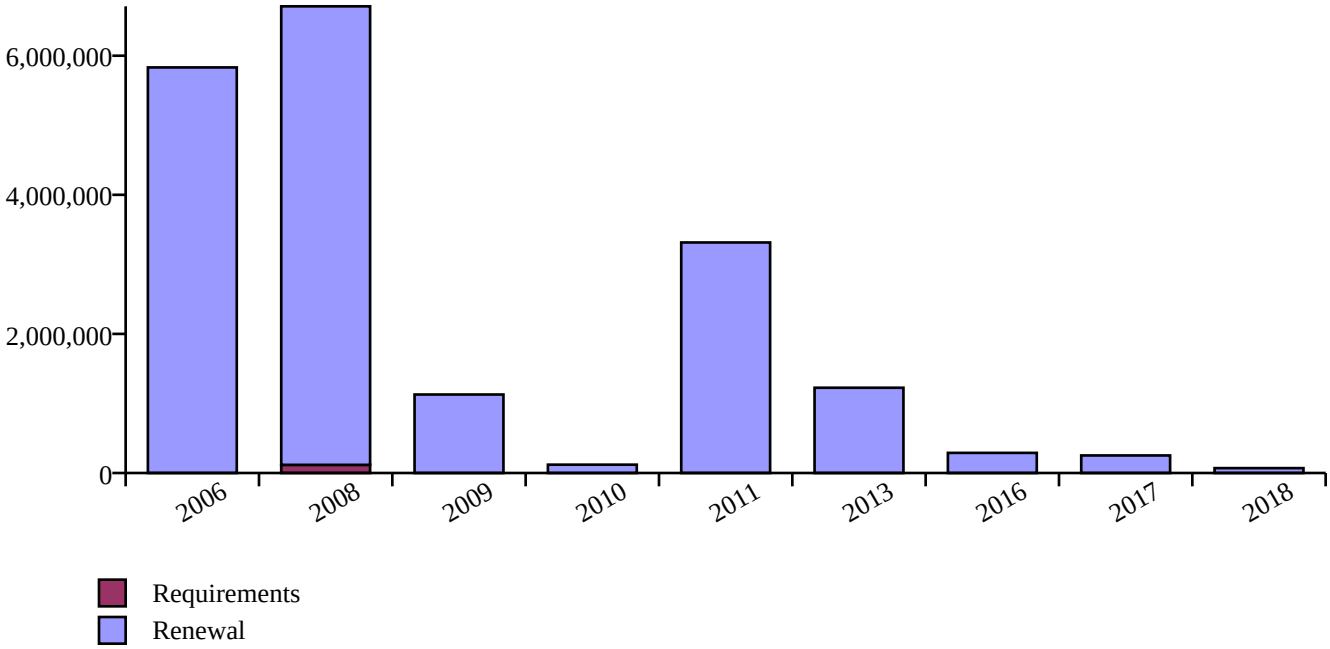
Institution: Northern Kentucky University
Campus: Northern Kentucky University CAMPUS=01
Asset Name: UNIVERSITY CENTER
Asset Number: 0340

Address 1	-	**Address 2**	-
City	Highland Heights	**State**	Kentucky
Country	UNITED STATES OF AMERICA	**ZIP**	41099

Replacement Value 35,712,442
Size 102,720



Name	Year	Renewal	Requirements	Total
D2010-Plumbing Fixtures	2006	30,655	-	30,655
D3040-Distribution Systems	2006	1,043,022	-	1,043,022
D3040-Distribution Systems	2006	393,683	-	393,683
D3040-Distribution Systems	2006	2,596,388	-	2,596,388
D3040-Distribution Systems	2006	195,224	-	195,224
D5020-Lighting and Branch Wiring	2006	699,639	-	699,639
D5020-Lighting and Branch Wiring	2006	699,639	-	699,639
D5092-Emergency Light and Power Systems	2006	77,756	-	77,756
D5092-Emergency Light and Power Systems	2006	95,602	-	95,602
	Subtotal	**5,831,608**	**0**	**5,831,608**
D2020-Domestic Water Distribution	2008	317,775	-	317,775
D2020-Domestic Water Distribution	2008	144,815	-	144,815
D3040-Distribution Systems	2008	2,170,786	-	2,170,786
D5010-Electrical Service and Distribution	2008	1,299,085	-	1,299,085
D5010-Electrical Service and Distribution	2008	164,307	-	164,307
D5010-Electrical Service and Distribution	2008	2,496,214	-	2,496,214

All costs in USD. Inflation Rate=0.00%

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Distribution Systems: Aged Chilled Water Circulation Pumps	2008	-	60,632	60,632
Distribution Systems: Aged Hot Water Circulation Pumps	2008	-	56,507	56,507
	Subtotal	**6,592,982**	**117,139**	**6,710,121**
D5030-Communications and Security	2009	615,417	-	615,417
C3030-Ceiling Finishes	2009	513,000	-	513,000
	Subtotal	**1,128,417**	**0**	**1,128,417**
C3020-Floor Finishes	2010	119,713	-	119,713
	Subtotal	**119,713**	**0**	**119,713**
D5030-Communications and Security	2011	326,503	-	326,503
B2020-Exterior Windows	2011	871,164	-	871,164
B2030-Exterior Doors	2011	463,443	-	463,443
C1030-Fittings	2011	155,770	-	155,770
C3010-Wall Finishes	2011	194,670	-	194,670
C3020-Floor Finishes	2011	318,636	-	318,636
C3020-Floor Finishes	2011	689,688	-	689,688
B30-Roofing	2011	91,194	-	91,194
C3020-Floor Finishes	2011	79,173	-	79,173
B2020-Exterior Windows	2011	124,452	-	124,452
	Subtotal	**3,314,693**	**0**	**3,314,693**
D10-Conveying	2013	270,065	-	270,065
D40-Fire Protection	2013	867,951	-	867,951
D10-Conveying	2013	87,888	-	87,888
	Subtotal	**1,225,904**	**0**	**1,225,904**
D5092-Emergency Light and Power Systems	2016	95,602	-	95,602
C3010-Wall Finishes	2016	193,762	-	193,762
	Subtotal	**289,364**	**0**	**289,364**
C1030-Fittings	2017	252,253	-	252,253
	Subtotal	**252,253**	**0**	**252,253**
D3060-Controls and Instrumentation	2018	69,835	-	69,835
	Subtotal	**69,835**	**0**	**69,835**
	Total	**18,824,769**	**117,139**	**18,941,908**

All costs in USD. Inflation Rate=0.00%

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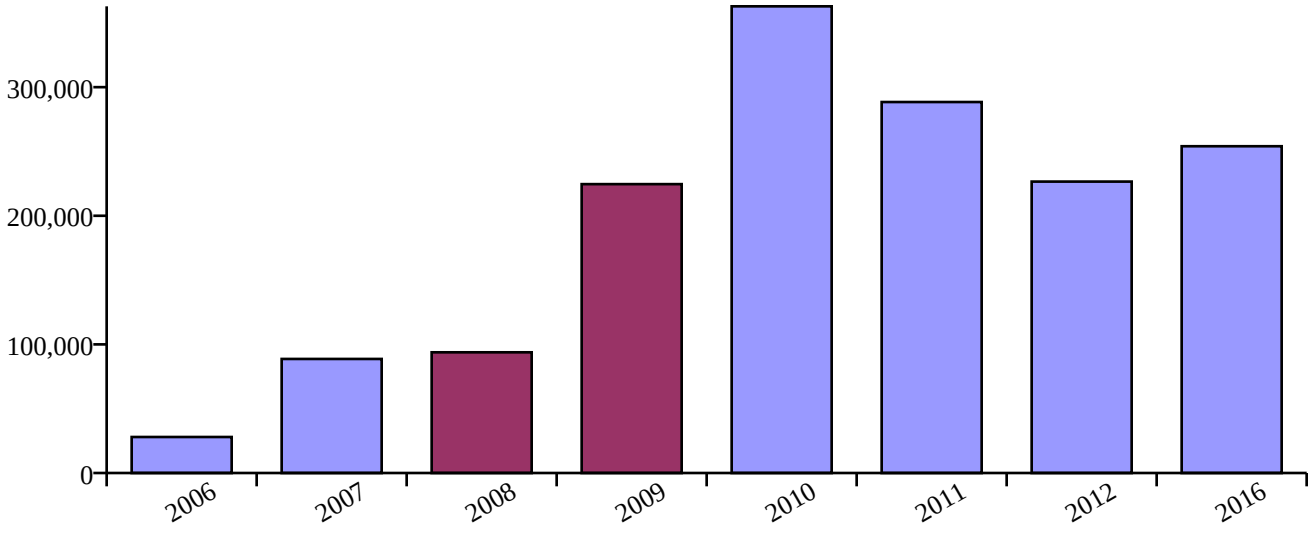
Institution: Northern Kentucky University
Campus: Northern Kentucky University CAMPUS=01
Asset Name: WOODCREST APARTMENTS - OAK
Asset Number: 0373

Address 1	10 Campbell Drive	**Address 2**	-
City	Highland Heights	**State**	Kentucky
Country	UNITED STATES OF AMERICA	**ZIP**	41076

Replacement Value 4,452,654
Size 22,424



Name	Year	Renewal	Requirements	Total
C3010-Wall Finishes	2006	27,990	-	27,990
	Subtotal	**27,990**	**0**	**27,990**
C3020-Floor Finishes	2007	88,674	-	88,674
	Subtotal	**88,674**	**0**	**88,674**
Shower Tiles: Leaking	2008	-	93,834	93,834
	Subtotal	**0**	**93,834**	**93,834**
Exterior Doors: Corroded	2009	-	7,910	7,910
Foundation Footings: Possibly Displaced	2009	-	87,607	87,607
Interior Doors: Marked, Damaged	2009	-	4,178	4,178
Vinyl Sheet Flooring: End of Life	2009	-	76,583	76,583
Distribution Systems: Replace perimeter Units	2009	-	48,316	48,316
	Subtotal	**0**	**224,594**	**224,594**

All costs in USD. Inflation Rate=0.00%

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C3010-Wall Finishes	2010	183,008	-	183,008
C3020-Floor Finishes	2010	179,837	-	179,837
	Subtotal	**362,846**	**0**	**362,846**
B30-Roofing	2011	61,949	-	61,949
D5030-Communications and Security	2011	134,347	-	134,347
D5030-Communications and Security	2011	71,276	-	71,276
D5092-Emergency Light and Power Systems	2011	20,870	-	20,870
	Subtotal	**288,442**	**0**	**288,442**
E-Equipment and Furnishings	2012	73,841	-	73,841
D5020-Lighting and Branch Wiring	2012	152,733	-	152,733
	Subtotal	**226,574**	**0**	**226,574**
B2030-Exterior Doors	2016	128,959	-	128,959
C3030-Ceiling Finishes	2016	88,380	-	88,380
C3030-Ceiling Finishes	2016	36,720	-	36,720
	Subtotal	**254,059**	**0**	**254,059**
	Total	**1,248,585**	**318,428**	**1,567,013**

All costs in USD. Inflation Rate=0.00%

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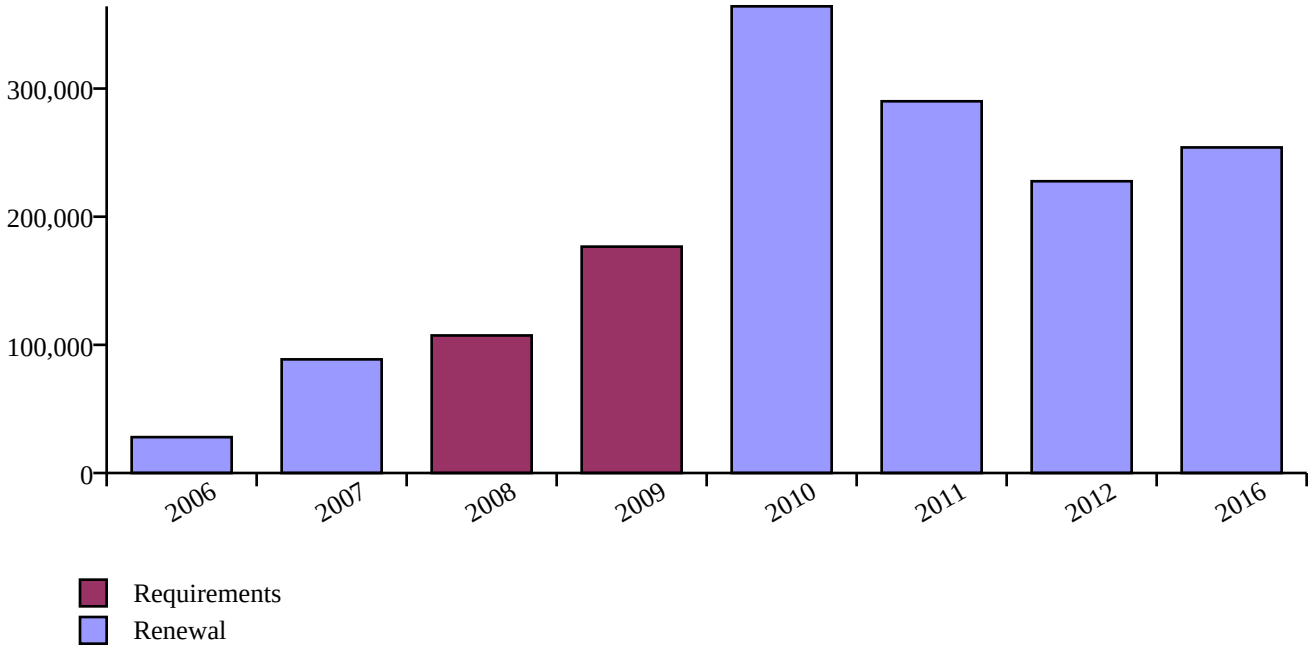
Institution:	Northern Kentucky University	**Asset Name:**	WOODCREST APARTMENTS - SYCAMORE
Campus:	Northern Kentucky University CAMPUS=01	**Asset Number:**	0374

Address 1	10 Campbell Drive	**Address 2**	-
City	Highland Heights	**State**	Kentucky
Country	UNITED STATES OF AMERICA	**ZIP**	41076

Replacement Value	4,890,565	**Size**	22,586



Name	Year	Renewal	Requirements	Total
C3010-Wall Finishes	2006	27,990	-	27,990
	Subtotal	**27,990**	**0**	**27,990**
C3020-Floor Finishes	2007	88,674	-	88,674
	Subtotal	**88,674**	**0**	**88,674**
Shower Tiles: Leaking	2008	-	93,834	93,834
Perimeter HW/CW Service	2008	-	13,503	13,503
	Subtotal	**0**	**107,337**	**107,337**
Exterior Doors: Corroded	2009	-	7,910	7,910
Foundation Footings: Possibly Displaced	2009	-	87,607	87,607
Interior Doors: Marked, Damaged	2009	-	3,798	3,798
Vinyl Sheet Flooring: End of Life	2009	-	77,326	77,326
	Subtotal	**0**	**176,641**	**176,641**

All costs in USD. Inflation Rate=0.00%

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C3010-Wall Finishes	2010	184,332	-	184,332
C3020-Floor Finishes	2010	179,837	-	179,837
	Subtotal	**364,169**	**0**	**364,169**
B30-Roofing	2011	61,949	-	61,949
D5030-Communications and Security	2011	135,318	-	135,318
D5030-Communications and Security	2011	71,791	-	71,791
D5092-Emergency Light and Power Systems	2011	21,021	-	21,021
	Subtotal	**290,079**	**0**	**290,079**
E-Equipment and Furnishings	2012	73,841	-	73,841
D5020-Lighting and Branch Wiring	2012	153,836	-	153,836
	Subtotal	**227,677**	**0**	**227,677**
B2030-Exterior Doors	2016	128,959	-	128,959
C3030-Ceiling Finishes	2016	88,380	-	88,380
C3030-Ceiling Finishes	2016	36,720	-	36,720
	Subtotal	**254,059**	**0**	**254,059**
	Total	**1,252,648**	**283,978**	**1,536,626**

All costs in USD. Inflation Rate=0.00%

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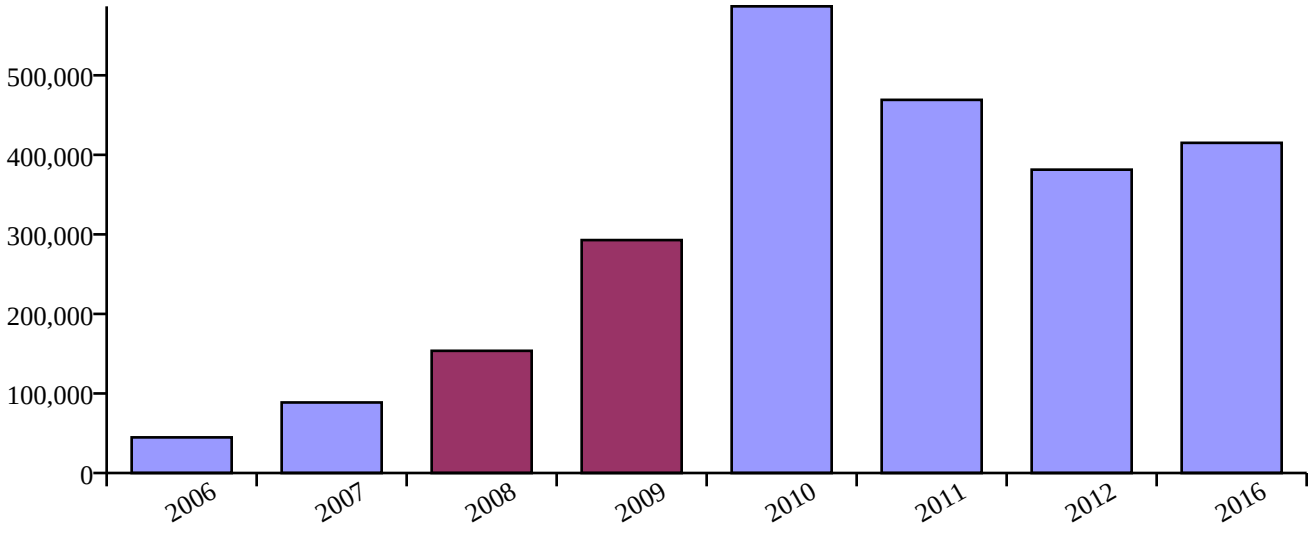
Institution: Northern Kentucky University
Campus: Northern Kentucky University CAMPUS=01
Asset Name: WOODCREST APARTMENTS - WILLOW
Asset Number: 0375

Address 1	10 Campbell Drive	**Address 2**	-
City	Highland Heights	**State**	Kentucky
Country	UNITED STATES OF AMERICA	**ZIP**	41076

Replacement Value 8,106,475
Size 36,632



Name	Year	Renewal	Requirements	Total
C3010-Wall Finishes	2006	44,784	-	44,784
	Subtotal	**44,784**	**0**	**44,784**
C3020-Floor Finishes	2007	88,674	-	88,674
	Subtotal	**88,674**	**0**	**88,674**
Shower Tiles: Leaking	2008	-	153,613	153,613
	Subtotal	**0**	**153,613**	**153,613**
Exterior Doors: Corroded	2009	-	12,853	12,853
Foundation Footings: Possibly Displaced	2009	-	136,288	136,288
Interior Doors: Marked, Damaged	2009	-	6,457	6,457
Vinyl Sheet Flooring: End of Life	2009	-	123,721	123,721
Perimeter Units HW/CW Service	2009	-	13,503	13,503
	Subtotal	**0**	**292,822**	**292,822**

All costs in USD. Inflation Rate=0.00%

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C3010-Wall Finishes	2010	298,965	-	298,965
C3020-Floor Finishes	2010	287,740	-	287,740
	Subtotal	**586,705**	**0**	**586,705**
B30-Roofing	2011	99,118	-	99,118
D5030-Communications and Security	2011	219,470	-	219,470
D5030-Communications and Security	2011	116,438	-	116,438
D5092-Emergency Light and Power Systems	2011	34,094	-	34,094
	Subtotal	**469,119**	**0**	**469,119**
E-Equipment and Furnishings	2012	131,859	-	131,859
D5020-Lighting and Branch Wiring	2012	249,505	-	249,505
	Subtotal	**381,364**	**0**	**381,364**
B2030-Exterior Doors	2016	204,653	-	204,653
C3030-Ceiling Finishes	2016	136,989	-	136,989
C3030-Ceiling Finishes	2016	73,440	-	73,440
	Subtotal	**415,082**	**0**	**415,082**
	Total	**1,985,728**	**446,435**	**2,432,163**

All costs in USD. Inflation Rate=0.00%

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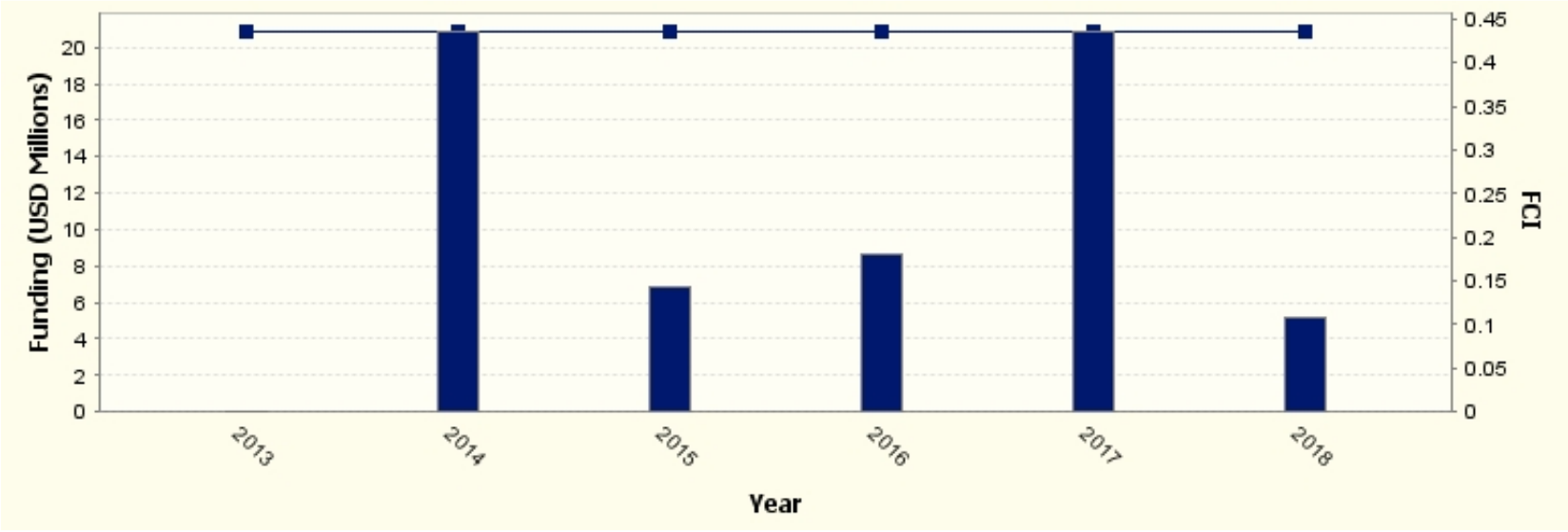
Funding/FCI Report



Funding-Maintain - FCI

FCI-Maintain - FCI

Cost Curve Applied: Spiky 0

Note: All cost curves other than Spiky 0 will result in a change to the starting FCI that is displayed. For a full description of all Forecast Parameters applied to this funding scenario, see the final page of this report.

All costs in USD.

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Maintain - FCI

Cost Curve Applied: Spiky 0

Year	Replacement Cost	Renewal Cost	Backlog Deterioration	Total New Liability	New Backlog Total	Net Plant Value	Funding	Funding Reserve	FCI
2013	568,705,608	238,887,823	0	247,844,723	247,844,723	320,860,885	0	0	0.4358
2014	568,705,608	15,872,333	4,956,894	20,829,227	247,844,723	320,860,885	20,829,227	0	0.4358
2015	568,705,608	1,915,286	4,956,894	6,872,180	247,844,723	320,860,885	6,872,180	0	0.4358
2016	568,705,608	3,671,815	4,956,894	8,628,709	247,844,723	320,860,885	8,628,709	0	0.4358
2017	568,705,608	15,924,846	4,956,894	20,881,741	247,844,723	320,860,885	20,881,741	0	0.4358
2018	568,705,608	206,347	4,956,894	5,163,241	247,844,723	320,860,885	5,163,241	0	0.4358

All costs in USD.

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Forecast Parameters

Institution	Northern Kentucky University
Campus	Northern Kentucky University CAMPUS=01
Asset	All
Systems	All
Priority	All
Requirement Category	All
Years	5
Inflation	0.00%
Backlog Deterioration	2%
Renewal Option	Annual
Cost curve	Spiky 0
Fiscal Year Start Date (mm/dd)	1/1
FCI Setting	FCI

* About Cost Curves:

Cost curve are models of how renewal costs may occur over time. In the Spiky 0 forecast, all renewal costs are projected to occur entirely in the System Renewal Year. In all other cost curve forecasts, renewal costs are projected to occur over multiple years, including years before and after the System Renewal Year. As a result, the starting Facilities Condition Index (FCI) that is displayed will not be the current FCI, because the model will apply funding prior to the current year.

For detailed information about cost curves, see "About Cost Curves" in the Funding Module section of the VFA.facility User Manual.

All costs in USD.All dates are displayed in mm/dd/yyyy format

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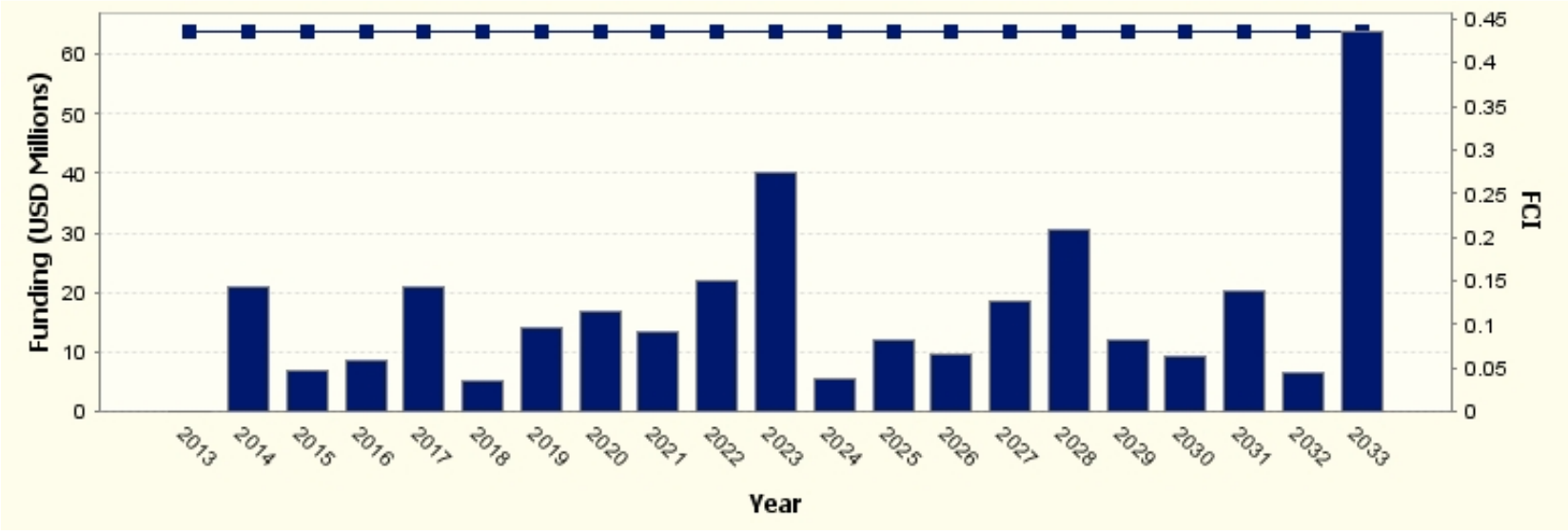
Funding/FCI Report



Funding-Maintain - FCI

FCI-Maintain - FCI

Cost Curve Applied: Spiky 0

Note: All cost curves other than Spiky 0 will result in a change to the starting FCI that is displayed. For a full description of all Forecast Parameters applied to this funding scenario, see the final page of this report.

All costs in USD.

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Maintain - FCI

Cost Curve Applied: Spiky 0

Year	Replacement Cost	Renewal Cost	Backlog Deterioration	Total New Liability	New Backlog Total	Net Plant Value	Funding	Funding Reserve	FCI
2013	568,705,608	238,887,823	0	247,844,723	247,844,723	320,860,885	0	0	0.4358
2014	568,705,608	15,872,333	4,956,894	20,829,227	247,844,723	320,860,885	20,829,227	0	0.4358
2015	568,705,608	1,915,286	4,956,894	6,872,180	247,844,723	320,860,885	6,872,180	0	0.4358
2016	568,705,608	3,671,815	4,956,894	8,628,709	247,844,723	320,860,885	8,628,709	0	0.4358
2017	568,705,608	15,924,846	4,956,894	20,881,741	247,844,723	320,860,885	20,881,741	0	0.4358
2018	568,705,608	206,347	4,956,894	5,163,241	247,844,723	320,860,885	5,163,241	0	0.4358
2019	568,705,608	9,079,935	4,956,894	14,036,829	247,844,723	320,860,885	14,036,829	0	0.4358
2020	568,705,608	11,766,261	4,956,894	16,723,155	247,844,723	320,860,885	16,723,155	0	0.4358
2021	568,705,608	8,388,193	4,956,894	13,345,087	247,844,723	320,860,885	13,345,087	0	0.4358
2022	568,705,608	17,079,571	4,956,894	22,036,465	247,844,723	320,860,885	22,036,465	0	0.4358
2023	568,705,608	35,358,753	4,956,894	40,315,648	247,844,723	320,860,885	40,315,648	0	0.4358
2024	568,705,608	701,525	4,956,894	5,658,419	247,844,723	320,860,885	5,658,419	0	0.4358
2025	568,705,608	7,092,377	4,956,894	12,049,271	247,844,723	320,860,885	12,049,271	0	0.4358
2026	568,705,608	4,832,484	4,956,894	9,789,378	247,844,723	320,860,885	9,789,378	0	0.4358
2027	568,705,608	13,521,275	4,956,894	18,478,169	247,844,723	320,860,885	18,478,169	0	0.4358
2028	568,705,608	25,582,392	4,956,894	30,539,287	247,844,723	320,860,885	30,539,287	0	0.4358
2029	568,705,608	7,030,713	4,956,894	11,987,607	247,844,723	320,860,885	11,987,607	0	0.4358
2030	568,705,608	4,248,040	4,956,894	9,204,934	247,844,723	320,860,885	9,204,934	0	0.4358
2031	568,705,608	15,365,286	4,956,894	20,322,181	247,844,723	320,860,885	20,322,181	0	0.4358
2032	568,705,608	1,491,609	4,956,894	6,448,503	247,844,723	320,860,885	6,448,503	0	0.4358
2033	568,705,608	58,924,345	4,956,894	63,881,240	247,844,723	320,860,885	63,881,240	0	0.4358

All costs in USD.

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Forecast Parameters

Institution	Northern Kentucky University
Campus	Northern Kentucky University CAMPUS=01
Asset	All
Systems	All
Priority	All
Requirement Category	All
Years	20
Inflation	0.00%
Backlog Deterioration	2%
Renewal Option	Annual
Cost curve	Spiky 0
Fiscal Year Start Date (mm/dd)	1/1
FCI Setting	FCI

* About Cost Curves:

Cost curve are models of how renewal costs may occur over time. In the Spiky 0 forecast, all renewal costs are projected to occur entirely in the System Renewal Year. In all other cost curve forecasts, renewal costs are projected to occur over multiple years, including years before and after the System Renewal Year. As a result, the starting Facilities Condition Index (FCI) that is displayed will not be the current FCI, because the model will apply funding prior to the current year.

For detailed information about cost curves, see "About Cost Curves" in the Funding Module section of the VFA.facility User Manual.

All costs in USD.All dates are displayed in mm/dd/yyyy format

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Bldg Number	Bldg Code	Bldg Name	ASF	GSF	Construction Year	Replacement Cost
0130	NH	LOUIE B. NUNN HALL	66,338	113,451	1972	$ 42,154,369
0140	RH	REGENTS HALL	14,901	28,726	1972	10,974,655
0145	HC	A. D. ALBRIGHT HEALTH CENTER	137,361	227,706	1984	72,865,920
0150	FH	FOUNDERS HALL	59,437	124,250	1974	43,328,572
0170	HR	HONORS HOUSE	4,713	6,678	1968	1,786,883
0290	SL	W. FRANK STEELY LIBRARY	97,380	141,567	1975	52,569,939
0300	LA	CHARLES O. LANDRUM ACADEMIC CENTER	59,115	100,500	1976	37,280,940
0301	PA	OLD POWER PLANT	1,385	20,618	1976	7,929,523
0305	CS	CERAMICS & SCULPTURE STUDIOS	12,892	16,090	1997	4,790,601
0310	MA	MAINTENANCE BUILDING	12,275	15,392	1976	4,350,884
0312	ZB	STORAGE FACILITY	18,276	20,560	1982	4,901,444
0320	FA	FINE ARTS CENTER	78,783	159,584	1977	57,931,807
0325	SC	DOROTHY WESTERMAN HERRMANN SCIENCE CENTER	86,171	175,131	2002	73,584,698
0330	BC	BUSINESS ACADEMIC CENTER	56,102	110,693	1989	38,762,093
0340	UC	UNIVERSITY CENTER	52,049	102,720	1977	37,793,741
0350	MP	MATHEMATICS-EDUCATION-PSYCHOLOGY CENTER	75,245	128,283	1980	41,769,465

0360	AC	KENNETH R. LUCAS ADMINISTRATIVE CENTER	63,807	108,405	1981	41,695,164
		Total	**896,230**	**1,600,354**		**$ 574,470,698**

NON- Asset Preservation Eligible

0370	KY	KENTUCKY HALL	19,742	27,565	1982	6,481,259
0371	CU	CUMBERLAND COMMUNITY	7,642	10,851	1982	1,616,356
0372	CW	COMMONWEALTH HALL	25,505	36,584	1982	8,035,494
0373	OA	WOODCREST APARTMENTS-OAK	14,980	22,424	1992	4,733,353
0374	SY	WOODCREST APARTMENTS-SYCAMORE	15,517	22,656	1992	5,196,213
0375	WI	WOODCREST APARTMENTS-WILLOW	24,406	36,632	1992	8,611,633
0376	NO	NORSE HALL	49,241	69,721	1992	19,124,646
0377	NC	NORSE COMMONS	16,721	25,315	1992	9,542,225
0378	ME	MECHANICAL EQUIPMENT (WOODCREST)	0	731	1992	426,318

Bldg Number	Bldg Code	Bldg Name	ASF	GSF
0131	GH	GRIFFIN HALL	64,804	133,600
0282	CA	CAMPBELL HALL	20,781	46,203
0283	I1	SMALL BUSINESS INCUBATOR BLDG #1	8,434	9,953
0284	I2	SMALL BUSINESS INCUBATOR BLDG #2	7,552	9,396
0316	MS	ROADS & GROUNDS STORAGE BINS	1,935	2,420
0341	SU	JAMES C. AND RACHEL M. VOTRUBA STUDENT UNION	62,284	144,000
0367	IM	INTRAMURAL FIELD	-	1
0381	PP	NEW POWER PLANT	1,272	19,666
0384	WC	WELCOME CENTER	2,678	7,411
0390	BB	BB&T ARENA	126,770	243,000
0501	BW	BROWN BUILDING	2	8,586
0505	CV	HIGHLAND HEIGHTS CIVIC CENTER	1,092	19,037
0506	KT	JOHNS HILL ROAD MAINTENANCE STORAGE BUILDING	1,241	1,341
0507	KU	JOHNS HILL ROAD SALT BINS	927	1,009
0508	KX	JOHNS HILL ROAD GREENHOUSE	2,249	2,271
		Total	**302,021**	**446,322**

NON- Asset Preservation Eligible

0138	TC	TENNIS COURTS	-	1
0146	SD	BILL AKER BASEBALL COMPLEX AT FRIENDSHIP FIELD	659	767
0249	SF	SOFTBALL PRESS BOX/ SEATING DECK	82	88
0335	G1	UNIVERSITY DRIVE PARKING GARAGE #1	100,157	109,468
0336	G2	KENTON DRIVE GARAGE #1	231,103	241,275

0379	US	UNIVERSITY SUITES	80,314	123,410
0383	G3	WELCOME CENTER GARAGE	208,415	226,601
0392	SS	SOCCER STADIUM	5,817	13,077
0500	CH	CALLAHAN HALL	87,895	150,792
0503	NT	NORTHERN TERRACE	45,930	77,338

Construction Year	Replacement Cost
2011	54,343,837
1976	9,009,585
1989	353,235
1989	353,235
1989	24,000
2008	51,158,215
2013	1,904,623
2004	17,287,693
2008	4,128,137
2008	87,570,684
1970	1,500,000
1978	4,290,056
1995	80,000
1979	45,000
1979	125,000
	$ 232,173,300

2006	699,998
1989	31,300
1999	520,000
2000	6,074,417
2005	11,529,224

2003	20,139,284
2008	14,105,070
2010	8,036,783
1962	35,323,530
1969	16,901,209

Facility Condition Assessment & Space Study Project

KRS 164 / M-05468008

Final Report

Submitted by:

VFA, Inc.

266 Summer St.

Boston, MA 02210-1112

(800) 693-3132

February, 2007

v.120407

Paulien & Associates

NCHEMS

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Kentucky Postsecondary Education System
Northern Kentucky University
Facility Condition Assessment & Space Study

February, 2007
v.120407

TABLE OF CONTENTS

Note on Figure and Table Headings: Figures and Tables are numbered sequentially as if both illustrations were part of the same list. i.e. Figure 1.3 may be followed by Table 1.4, without there being a Table 1.3.

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Part II. F.

Northern Kentucky University

Highland Heights, Kentucky
James C. Votruba, President
Kenneth Ramey Vice President for Administration
Larry Blake, Asst Vice President, Facilities Mngt

Section 1. Introduction

The Kentucky Council on Postsecondary Education (CPE) contracted with Vanderweil Facility Advisors, Inc. (VFA) to assess the condition, space adequacy and space capacity of selected facilities at Kentucky's nine public higher education institutions during the summer and fall of 2006. The studies are intended to inform both the Council and the institutions as the basis for a 15-year capital plan that would help address the following important questions:

- What is the condition of each institution's facilities? What system renewals are due for those facilities, both deferred renewals due today and future renewals due within the next 15 years?
- Is the current space (in selected buildings) fit for continued use? If not, how much would it cost to upgrade those buildings?
- Does each institution have enough space, now and to meet enrollment projections for the year 2020? If not, how much will it cost to add the needed space?
- How do Kentucky facilities compare to other postsecondary educational portfolios?
- Is there evidence to indicate why the predicted capital reinvestment is needed?
- What recommendations does the project team have as KPES creates a 15 year capital plan for facilities?

Summary of Findings Figures:

Figure 1.1: NKU 15-Year System Renewal Needs

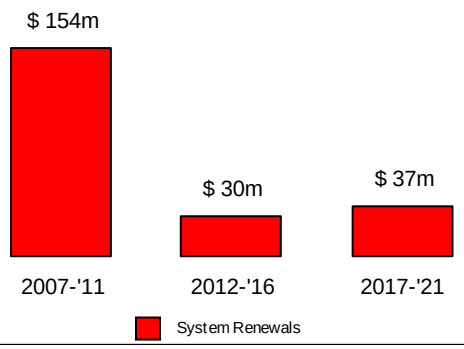


Figure 1.2: NKU 15-Year Space Adequacy + Capacity Needs

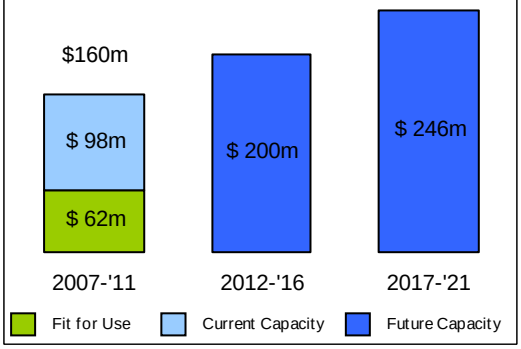
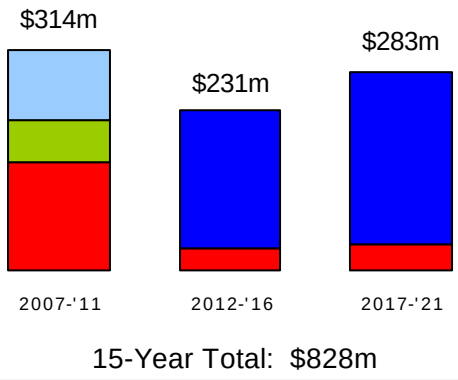


Figure 1.3: NKU 15-Year Blended Needs



LEGEND: Colors in Figure 1.3 correspond to labels in Figures 1.1 & 1.2. Figure 1.3 summarizes the annual needs presented in Figure 6.4.

Attributions:
All sections of this report are by Peter Scanlon, Thomas Bart and Joseph Maggiore of VFA, Inc., unless otherwise noted under the Section heading.

Table 1.4: Percentage of Institutional Portfolios Included in Study

Institution	Institution's Portfolio* Total # of Buildings	Institution's Portfolio* Gross SF	Condition Study by VFA** Total # of Buildings		Condition Study by VFA** Gross SF		Space Adequacy Study by Paulien Total # of Buildings		Space Adequacy Study by Paulien Gross SF	
Eastern Kentucky University	190	4,626,458	55	(29%)	2,829,774	(61%)	10	(5%)	867,593	(19%)
KCTCS	284	6,138,142	198	(70%)	5,740,720	(94%)	8	(3%)	509,813	(8%)
Kentucky State University	54	1,223,473	37	(69%)	726,963	(59%)	7	(13%)	148,841	(12%)
Morehead State University	112	2,718,050	39	(35%)	1,556,012	(57%)	11	(10%)	813,450	(30%)
Murray State University	169	3,710,171	48	(28%)	2,453,372	(66%)	3	(2%)	203,667	(5%)
Northern Kentucky University	109	2,440,541	17	(16%)	1,373,838	(56%)	5	(5%)	649,987	(27%)
University of Kentucky	908	14,884,891	167	(18%)	8,700,858	(58%)	51	(6%)	3,564,946	(24%)
University of Louisville	136	7,889,007	107	(79%)	4,513,765	(57%)	36	(26%)	2,469,961	(31%)
Western Kentucky University **	54	4,266,565	40	(74%)	1,860,621	(44%)	10	(19%)	809,809	(19%)
Total	2,016	47,897,298	708	(35%)	29,755,923	(62%)	141	(7%)	10,038,067	(21%)

*Source: Fall 2005 Building Data Base submission.
**Space assessed by VFA is Education and General Space.
***Revised to include WKU housing facilities.

Summary of Findings:

- The present study examined only a portion of Northern Kentucky University's (NKU) portfolio (17 of 109 buildings (16%) for condition study and 5 of 109 buildings (5%) for space study). The results of the present study most likely understate the amount of capital investment needed.
- NKU facilities included in the study require $154 million in system renewals during 2007-2011, and $67 million more between 2012 and 2022, totaling $221 million in system renewals over 15 years. (Figure 1.1 and Section 4.)
- NKU facilities included in the space fit-for-continued use study require $62 million between 2007 and 2011 to bring them up to current educational adequacy standards. (Figure 1.2 and Section 5.)
- NKU facilities require $98 million between 2007 and 2011, to meet current enrollment needs, and an additional $446 million over the following 10 years to meet future enrollment projections. (Figure 1.2 and Section 5.)
- For facilities included in the study, the total 15-year capital investment required to address condition, adequacy and capacity is $828 million. (Figure 1.3 and Section 6.)
- Northern Kentucky University compares unfavorably (38% 5-year Facility Condition Index) to the benchmark higher education instutitution's portfolio (18% 5-year FCI). (Section 4.)
- The condition of facilities NKU is generally consistent with the age and construction methods of the facilities. While NKU is relatively a younger campus than other KPES institutions, there are still many major system renewals due because most NKU buildings were built 20-30 years ago, and as would be expected, many systems are at the end (or beyond the end) of their expected useful life. (Section 4.)
- The project team recommends CPE and NKU address all three needs (condition, adequacy and capacity) with blended investments to address them simultaneously, staged over 15 years. (Section 6.)
- Funding options for NKU to consider vary according to the type of facility: The "cleanest" approach to funding the backlog of deferred renewals would be a state bond issue paid from general operating revenues, together with a requirement that each institution spend an amount equal to the GASB recommended depreciation amount. New construction of auxilary facilities is most often funded with long term debt supported by student direct use charges. The predominant funders of general academic facilities—classrooms, labs, offices, and libraries—are state and local governments (direct appropriations or debt) and private donors (outright gifts). The primary funders of research facilities are state and federal governments and private donors (either individuals or philanthropic organizations). (Table 1.5 below, and Section 7.)

Table 1.5 below (a copy of Table 7.3 in Section 7) is presented as a worksheet for KPES.

Here, the subtotals of the "Strategic Funding" scenario suggested in Section 6.8 are shown in the "Amount Needed, from 2006 Study" column. (The total amount needed, $805m, is less than the $828m shown in Figure 1.3 because the recommended "strategic funding" leaves a small, usually acceptable (10%), portion of the deferred renewals undone.)

KPES and NKU policy makers can use Table 1.5 as a framework to allocate the Amounts Needed across the most likely sources of funds to create KPES' 15 Year Funding Plan.

If KPES and NKU choose to suppliment this study with additional information, any additional capital investments identified would need to be included.

TABLE 1.5
NKU Funding Patterns Worksheet for Higher Education Facilities

USES		SOURCES					
	Amount Needed, from 2006 Study	Students	State	Local Govt.	Federal Govt.	Donors	Institutional Funds
Renewal and Renovation							
• Condition/End of Life	$199m		Approp./debt				Approp./debt
• Space Adequacy	$62m		Approp./debt				Approp./debt
New Construction							
• Auxiliary	n/a						
2006 Capacity							
• Academic facilities	$97m	Fees	Approp./debt	Debt		Gifts	Lease/ purchase
• Research facilities	$0.5m		Approp./debt		Grants	Gifts	
2020 Capacity							
• Academic facilities	$443m	Fees	Approp./debt	Debt		Gifts	Lease/ purchase
• Research facilities	$3m		Approp./debt		Grants	Gifts	
TOTAL	$805m						

Figure 1.5 is a copy of Figure 7.3 in Section 7.

Section 2. Project Overview: Methodologies, Data, Outcome & Limitations

The nine institutions included in the study were:

- Eastern Kentucky University
- Kentucky Community & Technical College System
- Kentucky State University
- Morehead State University
- Murray State University
- Northern Kentucky University
- University of Kentucky
- University of Louisville
- Western Kentucky University

The study includes selected buildings identified by CPE as education and general space on each institution's campus. In total, VFA performed a Level 1 Lifecycle Condition Assessment (LCA) of 17 assets at NKU comprising 1.36 million square feet (16% of 109 buildings; 56% of square footage in portfolio). Nearly 1.1 million square feet (44%) of institutional space was NOT included in the condition study. Also, VFA's project partner Paulien & Associates was asked to examine the space adequacy of 5 education and general buildings selected from various campuses (only 5% of 109 buildings in the portfolio), and evaluate the space capacity of each institution vs. current and future student populations.

The number of buildings and amount of space not included in the present study means the results of the study most likely understate the amount of capital investment needed at NKU.

Methodologies

In the Level 1 Lifecycle Condition Assessments, VFA facility experts profiled each asset's major building systems to assess the capital renewals required now and in the future. A renewal of a building system is defined as an investment required at the end of the system's useful life, to prolong, or renew, its service in the facility — for example, re-roofing a worn out old roof. "Deferred Renewals" are renewals that, based on the age of the facility, were due in the past, but have not yet been completed.

Each building's system lifecycle assessment included establishing a replacement value of each system, comparing the system's expected (industry standard) useful lifespan to its observed remaining life, and estimating the cost to renew that system when replacement is due. Replacement values (adjusted to reflect local market conditions) of each asset's component systems were then added together to establish an asset's replacement value, and the cost of system renewals due within the coming five years was summed. The ratio of these 5-year renewal costs divided by the replacement value of their asset(s) establishes an index, called a Facility Condition Index, which can be used to compare the relative condition of assets. Lower FCIs indicate an asset requires little renewal investment; buildings with higher FCIs are in worse shape. Lower FCIs are better.

$$FCI = \frac{[\text{Sum of 5-year Renewals}]}{[\text{Replacement Value of Asset(s)}]}$$

The LCA process and methodology is supported by the expert opinions of facilities engineers and architects, along with VFA's web-based capital planning software application, VFA.facility. Condition data about each facility were collected during an on-site visual inspection and through a series of interviews and feedback cycles with facility managers at the institution. Detailed cost estimates for the replacement value and renewal cost of each system were developed using the VFA.facility software application, which has the widely accepted R.S. Means construction cost estimating database embedded within it. R.S. Means estimates, already localized by a city cost index by Means, were further adjusted (up) to match the historical project cost experiences represented by a cross section of Kentucky public postsecondary institutions. For consistency between campuses, the same adjustment factors were made across all institutions. Expected useful lifespans for individual building systems were based on Building Owners & Managers Association (BOMA) standards and verified though consultation with CPE and APPA (formerly the Association of Physical Plant Administrators). A detailed account of these sources and adjustment factors is presented in Appendix A2.

Selected buildings that were less than five years old were assumed in "good" condition (because of their young age). Their future system renewal needs were included in the condition study by modelling system types and renewals based on construction records and interviews with university facilility managers. This produced data compatable with the Level 1 (and Level 2) assessments. No physical walk through or visual inspection was conducted on these buildings. (As expected, due to their young age, many 5-year-old-or-less buildings had no renewals due within the coming five years, and hence an FCI = 0.)

Each asset greater than five years old was assumed to have a backlog of systems that were at or beyond their expected useful life. In determining the backlog, all capital renewals due in 2006 or previous years were defined as "deferred capital renewals." Renewals due in 2007 or beyond were treated as future capital renewals.

It is worth noting that the Level 1 Lifecycle Condition Assessment process does not include identifying "deferred maintenance" deficiencies. These facility needs, while often rising to the level of requiring capital investment to address, would each require less than replacing each deficiency's entire system. (Replacements of entire systems are called renewals, and are included in Level 1 LCAs.) Identifying and estimating the cost of deferred maintenance requirements is a service available through VFA's Level 2 Detailed Facility Condition Assessments.

In the Space Adequacy or Fit-for-Continued-Use portion of the study, buildings selected by CPE and the institution were visually inspected for compliance with 9 metrics of the facility's educational adequacy. Where gaps were identified, recommended corrective actions were developed, including cost estimates for those actions. Cost estimates were based on historical averages for similar upgrades at higher education institutions nationwide, and adjusted to coincide with the replacement values for similar building types estimated in the VFA condition study.

The Space Capacity portion of the study addresses the need for additional educational and general (E&G) space to meet the needs of the student and staff population, both now and into the future, based on enrollment data and projections provided by CPE.

Detailed methodologies explaining both the condition assessment and the space study are presented in Appendices A2 (Condition) and A4 (Space).

Data

Detailed records of each building in the study are presented in the appendices:

Appendix A3. Facility Condition Data Reports
- Asset List Report
- Asset Detail Report(s)
- System Renewal Report, by Year
- System Renewal Crosstab Report

Appendix A5. Space Study Data Reports
- Building Space Fit-for-Continued-Use Profiles
- Space Capacity Detailed Report

Complete electronic records of each asset are available for licensed users of VFA.facility, VFA's capital planning and management software system. VFA.facility software offers the flexibility to investigate, analyze and model the capital needs for each institution, and for the Kentucky postsecondary education system as a whole.

Outcomes

KPES' and NKU's goal is to gain a complete picture of Kentucky's public higher education facility capital needs over the coming 15 years.

To that end, this study presents some valuable pieces of that picture, though not yet a complete picture:

Condition:	Major system renewal needs for 26 assets, or 1.5 million square feet of space (64% of portfolio square footage)
Space Adequacy:	"Fit-for-continued-use" ratings, and cost estimates for upgrades, for 5 buildings (5% of portfolio number of bldgs).
Space Capacity:	Capacity projections and cost estimates for NKU's education and general use

space needs, now and to meet 2020 enrollment goals.

Funding Source Options: A summary of options for funding higher education capital needs, presented at a statewide level. Funding options are most efficiently approached across Kentucky's postsecondary education portfolio, and are not broken down by insitution within this report.

Section 6 of this report presents the 15 year capital needs outlook for each portion of the study. The 15-year plan also presents models for how NKU might want to invest in those needs, based on various spending patterns and strategic priorities. The spend alternatives are included to demonstrate how a truly complete picture of Kentucky's public higher education capital plan might be constructed.

However, as mentioned in the Limitations section below, the outcome of the present study does not present a 100% complete picture of the whole. Each portion of the study is valuable on its own, but the condition, space adequacy and space capacity needs portions each examined only a specific group of each instutition's facilities. Further, the Space Capacity projections, while updated from the Paulien 1999 model (revised by Paulien in 2001), may not be aligned with other strategic initiatives underway or planned at individual institutions.

Section 6 includes the consultants' team suggestions for further work to align goals and construct a more complete picture of Kentucky's public higher education facility capital needs.

In the condition assessment portion of the study, VFA found the amount of system renewals required by the great majority of NKU's facilities to be consistent with the age and use of each facility, and many buildings to be surviving (for the time being) past their expected useful lifespans. And while there are examples of major capital investment in new facilities, the amount of investment in the existing building stock has not met these buildings' aging needs.

Limitations

It is important to note a few limitations to the VFA | Paulien portions of the study:

- **Assessed only selected buildings** – 17 of NKU's facilities (16% of the number of buildings), comprising 1.36 million gross square feet (56% of gross square footage), were included in the condition assessment. Further study or modeling of the remaining assets would be required to gain a 100% complete picture of the condition or capital needs of the institutions.
- **Assessed for budgeting purposes –** The survey outcomes are intended for planning and budgeting purposes; they are not intended to provide construction specification-grade information about an asset. Outcomes for condition needs, space adequacy needs and space capacity needs may be added together to ascertain a more rounded picture of an institution's needs (in fact, the project team encourages such a blended view of capital investments for each asset/campus), however because such a limited portion of most institutions' portfolio was studied, the "blended" picture is far from complete.
- **Assessed for system renewals only** – The Level 1 LCA services provided under this contract included profiling the type, condition and renewal needs of each building and its major systems. The condition assessment does NOT provide a detailed list of requirements for each building. (This service is available through VFA's Level 2 Detailed Facility Condition Assessment.) Thus, while projecting system renewals over 15 years, the forecast does not account for sub-component needs related to a system unless they collectively contribute to general system failure. These are sometimes called "deficiencies" or "requirements," are usually concentrated in the next 1-5 years, and again, are not included in this report.

  Also not included in the study is any assessment of the day-to-day facilities operations. The study specifically and intentionally focused on the level of investment needed for major system renewals only. The study collected no data and draws no conclusions about how institutions are

budgeting to address daily operations and maintenance of their facilities.

- **Space Study only for selected Education and General buildings –** The Space Study included 5 buildings at NKU. This represents only 5% of the total number of buildings (and 27% of gross square footage). The space adequacy study is intended to summarize the adequacy of the study buildings only. Since the buildings surveyed were not chosen to serve as a statistical sample of the overall university's space adequacy, extrapolation of the space adequacy results to model all adequacy needs for each institution is not recommended.
- **Space capacity projections include Education & General Space only** – The Space Capacity Study accounted for the education and general space at each institution, the institution's current enrollment, and the 2020 enrollment projections. Needs for residential and related enterprise space such as agriculture were not included. As noted, further survey or advisory services are available from the VFA | Paulien team to help fill in any gaps in the information that are deemed of high importance.

Section 3: Study Overview: Project Organization & Implementation

Organization

In April, 2006, the Council on Postsecondary Education contracted with VFA, Inc. of Boston, MA, as prime contractor, to conduct the overall facility condition and space adequacy | needs study. VFA provided overall project management as well as facility condition assessment services and capital planning software for the project. VFA teamed with higher education space planning experts Paulien & Associates of Denver, CO, to provide the Space Adequacy / Fit-for-Continued-Use and Space Capacity portions of the study. And, as a subcontractor to Paulien, the National Center for Higher Education Management Systems, of Boulder, CO, provided an analysis of funding sources KPES may want to consider when deciding how to implement the 15 year capital plans.

A project organization chart is shown in Figure 3.1

Figure 3.1 Project Organizational Chart

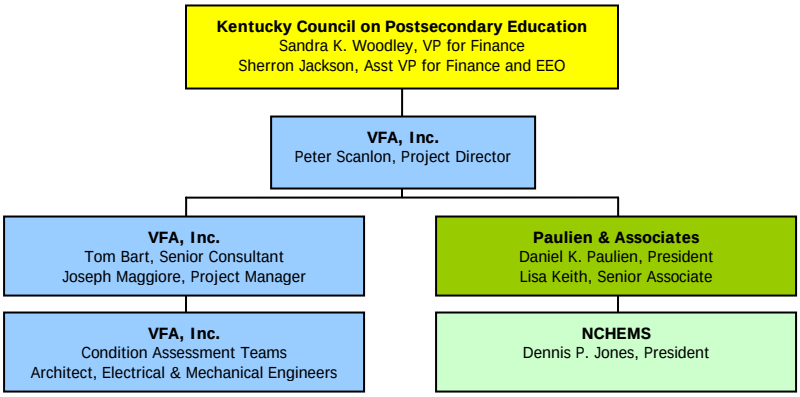
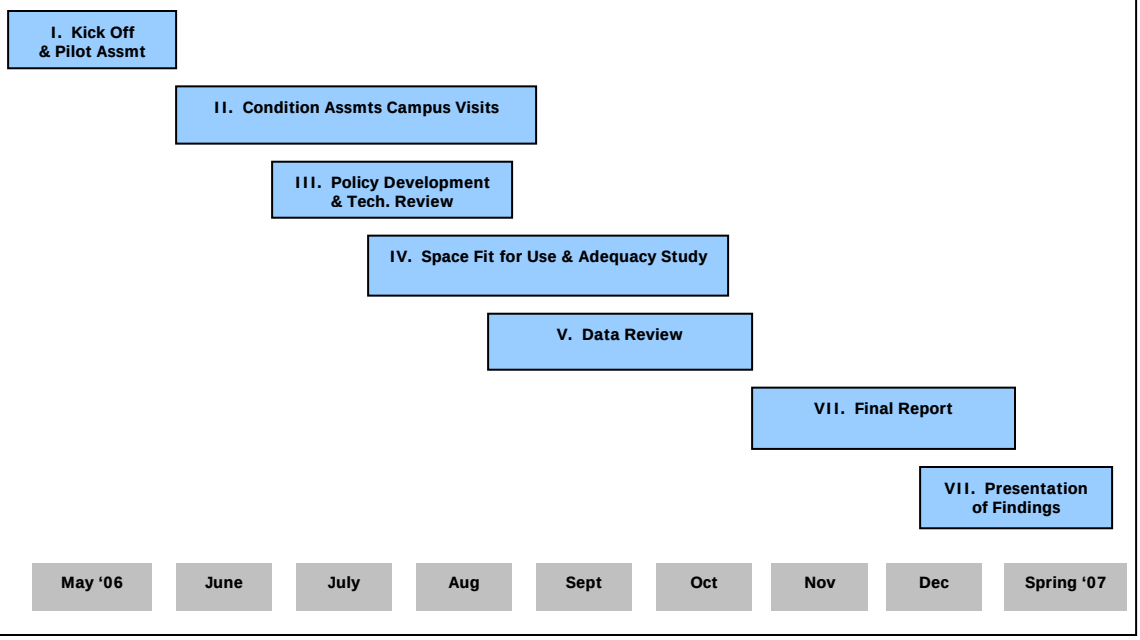


Figure 3.2: Project Schedule



Implementation

The study proceded under a fast track schedule during which 27 million square feet, and 700+ assets, were assessed statewide during five months of 2006. Figure 3.2 illustrates the major portions of the project schedule.

Phase I: Kick Off & Pilot Assessment

The project kicked off in early May 2006 at a planning meeting hosted by Kentucky State University and attended by representatives of the Council, each of the public postsecondary education institutions, and the VFA | Paulien project team. The overall project schedule and methodology were presented, and a pilot assessment was conducted.

For the pilot assessment, a team of VFA assessors conducted a Level 1 Life Cycle Assessment of 2 facilities on the KSU campus. Representatives from each institution joined the VFA team to familiarize themselves with the Level 1 LCA process. During a debriefing session at the conclusion of the visual inspections, questions about the process, standards and schedule were answered.

In the weeks following the kick-off meeting, VFA developed sample data and reports based on the KSU pilot buildings. The reports were submitted to the Council and institutional representatives, who approved the data content and format that would be used for the subsequent Level 1 LCAs on their respective campuses.

Phase II: Campus Visits

During the summer and fall of 2006, assessment teams from VFA and Paulien visited selected buildings at each institution.

Data generated in the Facility Condition Assessment portion of the study was collected by teams of VFA assessors – typically architects, electrical and mechanical engineers and/or facility managers – during a visual inspection of each asset. The detailed project assessment schedule is included in Appendix A1.

During the visual inspection, VFA assessors interviewed key facility managers at the institution, profiled the type, age, condition and renewal actions due for each major system of each building/infrastructure asset. Assessors also took digital photos, which are included in the reports and stored in the project database.

Upon completion of the field visit, the assessment teams began the data and cost estimating portion of the work, when they developed detailed cost estimates of each building system, the time remaining in each system's useful life, and the likely cost of renewing the system at the end of its useful life.

The replacement values of each system were totaled for each asset to derive a current replacement value (CRV) for that asset. CRVs presented in the data are intended to represent the construction cost of replacing the building (or system), with a similarly functioning building/system, in 2007 dollars. The CRVs do not include any "upgrades" of particular systems unless current building methods make the upgrade equal or less expensive.

Phase III: Policy Development and Technical Review

The project team worked closely with the Council to develop policies that would guide the submission, review and possible adjustment of the data. Guiding pricincipals that shaped these policies included goals of:

- Accuracy: data should reflect actual conditions for each facility, as closely as possible given methodologies used for each portion of the study, providing a reliable record of the portfolio today.
- Consistency: similar standards, reference information and adjustment factors should apply uniformly to all institutions statewide, ensuring fair and equitable treatment across the postsecondary system.
- Transparency: all data sources, cost estimating and adjustment processes should be easy to reference, understand and track, providing maximum transparency to the information underlying the study's conclusions.

The process of reviewing and refining the data (Phase V, below) followed these principals as closely as possible.

Phase IV: Evaluation of Space Adequacy & Capacity

The Space Adequacy and Capacity portion of the study was led by Paulien & Associates. A detailed explanation of Paulien's methodology is included as Appendix A4.

Space Adequacy | Fit-for-Continued-Use Study

CPE and the institutions identified a specific set of education and general facilities for evaluation in the space adequacy study. The facility selection process was developed by CPE and was the same for each campus. Selection criteria for inclusion in the space adequacy study included: (a) research facilities, (b) constructed before 1965, (c) identified by the institution as being unfit for continued use, or (d) identified as being in too deteriorated condition to support programs currently housed in the space.

The key areas evaluated include:

- *Does the building serve the program's current and future needs either by design or retrofit?*
- *How do the spaces in the building fit today's expectations and/or can the building be reasonably renovated to meet those expectations?*
- *Is the building's physical condition adequate to meet program needs and today's expectations (including life safety issues) and how major of a conversion or renovation is needed?*
- *Where applicable, are research laboratories of acceptable, flexible dimensions and up-to-date equipment to sustain on-going use as modern research facilities?*

Multiple rooms in each building were reviewed. The goal was to examine a sampling of the best, worst, and norm for the building. Classrooms, laboratories, offices, special use spaces, and bathrooms are examples of spaces reviewed. Mechanical and structural spaces were typically not included.

At the end of each day's assessments, the team discussed each building and collectively determined each building's criteria rating and recommended action.

Building Design

When evaluating the buildings in the space adequacy study, there were several conditions examined on a case-by-case basis. These conditions contributed to the recommended action

for each building. Where possible these types of issues are included in the comment section of each building's evaluation. In general, it is important for a facility to promote and serve the activities and programs it houses as well as support the mission and overall master plan of the institution. It is entirely possible that a building was designed for and adequately serves the programs it houses yet be physically located in the wrong precinct of a campus or be a smaller single story building in a prime location that would be better served by a larger, multi-story building.

Some of the buildings were specifically designed for the programs contained in them or for the functions they serve, yet the building may now be overcrowded due to the institution's/ program's growth or the physical design is antiquated for today's standards or the construction materials do not allow for an cost-effective or efficient renovation. Certain buildings are on the historical registry. Many of these older facilities are best suited for administrative offices and not instructional programs. If the building does not meet ADA requirements then the additional constraint is that the administrative function should not be one that is high profile which generates a lot of people traffic.

Space Adequacy Assessment

The consultants reviewed nine criteria and rated each building on a one to four scale as follows: 1 = Unsatisfactory; 2 = Somewhat Unsatisfactory; 3 = Somewhat Satisfactory; 4 = Very Satisfactory; 0 = Not Applicable. An average rating was calculated based upon the criteria that were applicable to the building. The nine criteria are:

1. *Room Capacities*
2. *Functionality*
3. *Suitability to Purpose*
4. *Flexibility of Space for Different Learning Styles*
5. *Gathering Space*
6. *Multi-Media Technology*
7. *Computers and Connectivity*
8. *Instructional Laboratories / Lab Equipment*
9. *Research Laboratories / Lab Equipment*

Physical Condition

Each building's physical condition was reviewed in general terms. Areas of observation included, but were not limited to: ADA accessibility, roof leakage, asbestos related materials, air quality/condition issues, electrical and lighting issues, window glazing, elevator presence and condition, type of construction, and general maintenance of the building.

Buildings were then categorized into four major groups to more easily quantify the estimated renovation costs for the adequacy study.

The four categories used ($25/sf, $50/sf, $75/sf, $150/sf) provide budgetary guidance which should fall within a plus or minus 20% range of actual costs. The dollar value selected (as part of the space study estimates) includes all costs, both soft and hard. Categories carrying $25/sf and $50/sf renovation costs were termed "minor" --- indicating they could likely be occupied during renovation (mostly finishes, slight reconfigurations). Categories carrying $75/sf and $150/sf were termed "major" renovations – indicating the need to move all occupants out during renovation. Also, when we refer to a renovation as "major" we are attaching a sense of urgency to the need.

How were the four cost ranges determined and what documentation from the construction industry was used? Until recently, all construction estimates and contracts were guided by the Construction Specifications Institute Format (CSI) and the 16 divisions therein:

Division 1 General Conditions
Division 2 Site Work
Division 3 Concrete
Division 4 Masonry
Division 5 Metals
Division 6 Wood & Plastics
Division 7 Thermal & Moisture Protection
Division 8 Doors & Windows
Division 9 Finishes
Division 10 Specialties
Division 11 Equipment
Division 12 Furnishings
Division 13 Special Construction
Division 14 Conveying Systems
Division 15 Mechanical
Division 16 Electrical

The CSI format has been in use for 75 years or so, and is well suited for use in estimating the renovation costs. CSI has revised the format recently, but this traditional version was used. Each of the Divisions above has several subheadings--- for example, Division 9 - Finishes

has 14 subheadings among which are Painting, Tile, Carpet, Acoustical Treatment, etc. Division 15 - Mechanical has 12 subheadings among which are Plumbing, Fire Protection, Air Distribution, etc. Therefore, ALL pieces of a building are given in the CSI format. In a simple but lengthy process, an experienced construction estimator could assign square foot values to all the nearly 200 subheadings and have the information necessary for a reasonably accurate renovation cost. Paulien's construction consultant, Wayne Elwell, used his experience to provide values for most of the subheadings necessary for budgetary purposes. These incremental pieces, for example, $15/sf for a new HVAC system, $12/sf for an updated electrical system, $4/sf for new paint, etc., all contribute to the number that fits one of the four categories.

Space Needs Study

The Finance Unit from CPE provided a Fall 2004 facilities inventory, staff full time equivalents, and research expenditure data for each of the institutions. The Council also provided enrollment, staffing and research expenditure projections for year 2020.

The Space Model used in the current study was based on the 1999 Space Needs Model developed for CPE by Paulien & Associates, updated by Paulien in 2001, and again updated during this study per the consultant's recommendations to reflect changing use standards and the physical limitations of certain Kentucky buildings.

The existing assignable square footage (ASF) used in the model reflects educational and general (E&G) state supported space only. It does not include hospital space, farms, and locations (remote locations and service centers) off the main campus. This is important as the student and staff full-time equivalents (FTE) include all students and staff for an institution. The Kentucky postsecondary education system provided a dataset of the spaces to be included in the model. It was the consultants' understanding that the non E&G spaces were removed. As the study progressed, the consultants found parking garages, leased space, farm space, and other spaces that typically should have been excluded in the model were actually included at individual institutions. Where possible, the consultants excluded these spaces. Council staff was informed of these anomalies, and agreed that these adjustments should be made. In future applications of the space model, the consultants encourage the Council and the institutions to review the spaces carefully so that each institution is being measured appropriately against the model.

Phase V: Institutional Review of Data

As campus visits were ending during the summer of 2006, ten representatives of the Council and institutions were trained on the capital planning software, VFA.facility. These facility managers and planners then reviewed draft condition data developed by VFA. Current Replacement Values for each asset and system definitions and scopes were reviewed by representatives of each institution. Where gaps in cost or scope were identified by the institutions, and supported by historical or industry standard data, VFA adjusted the data. A list of adjustments is included as Appendix A6.

Some cost adjustments were statewide and necessitated comparison of Kentucky data to national norms, as defined by APPA, or a compilation of historical data from Kentucky insitutions. In these cases, VFA carefully compared the scope and costs, and where necessary, considered specific adjustments. The Council had final approval on which adjustment factors would be applied statewide, and which could be applied specifically to each institution's data.

Phase VI: Final Report

A draft of the Final Report was assembled and produced for the Council during December 2006. Each institution received a copy of Part I, the Council-level Executive Summary, plus the portions of Part II applicable to their insitution.

Comments from the Council and the institutions on a draft of the report were incorporated in the Final Report.

Phase VII: Presentation of Findings

At the time of this writing, the consultants' team of VFA | Paulien | NCHEMS plans to present the findings of the study to the Council during the spring of 2007.

Section 4. Facility Condition Assessment

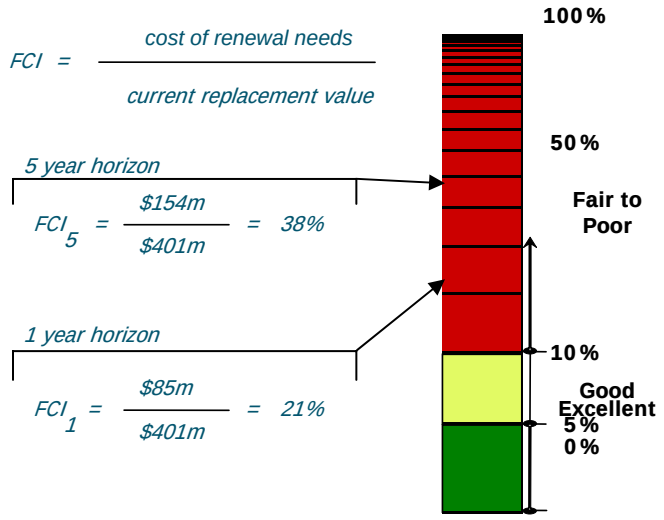
How do Northern Kentucky University's facilities compare?

At NKU, for the 17 facilities assessed, the estimated cost of system renewals currently due (1-YR Renewal Cost) is $85 million, and the estimated cost of renewals due within the next 5 years (5-YR Renewal Cost) is $154 million. (Note: present 2007 dollars are used in all reported numbers. Inflation factor considered = zero.)

The facilities assessed have a current replacement value of $401 million, so the Facility Condition Index (cost of renewals, divided by current replacement cost) for the portfolio is 21% for a 1-year horizon, and 38% for a 5-year horizon. Based on International Facility Managers Association standards, both the 1-year and 5-year FCIs would be considered "fair" to "poor" rankings.

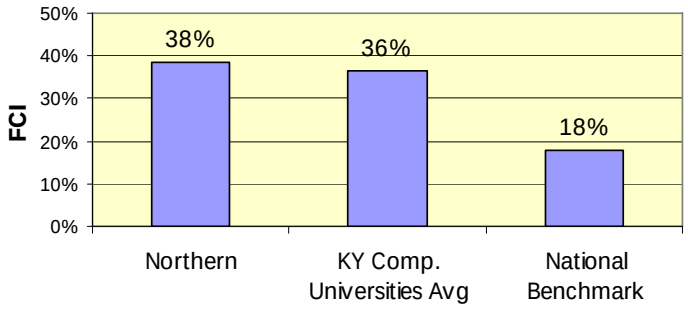
Compared to other higher education portfolios evaluated by the consultants' team over the past 5 years, NKU's is in worse condition (38% NKU 5-year FCI vs. 18% benchmark 5-year FCI) but is on par with the condition of facilities at other Kentucky comprehensive universities.

Figure 4.1: Northern Kentucky University Facility Condition Index



Condition ratings based on International Facilities Managers Association standards.

Figure 4.2: NKU 5-Year FCI Comparison



What are the most urgent facility condition needs?

This Executive Summary highlights the capital renewal needs of NKU assets. More detailed information is available in Appendix A3 or in KPES' VFA.facility database (http://kcpe.vfafacility.com).

Of the assessed assets, NKU as a whole has 1 facility in "Satisfactory" condition, 4 requiring "Remodeling A" work, 11 requiring "Remodeling B" work, and 1 requiring "Remodeling C" work. Based on condition alone, none of the assessed assets required Demolition or Termination.

Figure 4.4 ranks the the facilities assessed at NKU by their 5-year Facility Condition Index. Hankins Hall on the Covington campus is relatively the facility in worst condition, followed by Founders Hall, Landrum Academic Center, University Center and Nunn Hall.

To see which systems across the NKU portfolio require the most renewal work, Table 4.5 lists the 5-year facility renewal needs by major system type. Distribution Systems, Electrical Service & Distribution, Lighting and Branch Wiring and Communications and Security are the systems requiring the most immediate large scale investment.

A complete list of all facilities assessed, showing renewal needs by year, is included in Appendix A3 in the System Renewal Crosstab Report.

Figure 4.3: SUMMARY OF NKU BUIDLINGS BY CONDITION CODE

APPA CONDITION CODE	MIN FCI	# Bldgs	5-YR RENEWAL COSTS
1 - Satisfactory	0%*	1	$ 261,000
2 - Remodeling A	0%	4	14,571,000
3 - Remodeling B	25%	11	131,539,000
4 - Remodeling C	50%	1	7,751,000
5 – Demolition		0	0
6 - Termination		0	0
		17	$ 154,123,000

*No single need > $40k

A list detailing specific system renewals (and in which asset they are located) for years 2007 through 2022, is provided in Appendix A3, as the System Renewal Report.

The tables and reports included in this document represent only a small fraction of the ways the facility condition data can be sorted, organized, subtotaled and analyzed. More detailed (or differently organized) data is available in the VFA.facility software for data export and further detailed exploration.

Condition Study vs. Space Study Recommendations:
VFA's condition assessment (Section 4) and Paulien's space study (Section 5) evaluated facilities based on different criteria, and in some cases different recommendations are shown for the same building. This is entirely appropriate, given the different questions posed to each team. For example: VFA was asked to evaulate the condition of facilities based on their current use only, not considering the appropriateness or cost of adapting a building to a new use, while Paulien's space study specifically addressed the possibility of adaptive re-use for buildings. Also, VFA did not categorize any asset in 'Demolition' despite a small number of buildings having very high FCIs. (Assets with FCIs over 75% are sometimes considered good candidates for replacement.) The space study in Section 5 incorporated different standards for evaluating buildings, and may have reached different conclusions.

Table 4.4: Northern Kentucky University Facilites, Ranked by 5-Year FCI
Includes facilities part of CPE Lifecycle Assessment study only

Institution: Campus	Asset Name	Asset Replacement Value	5YR FCI Cost	5YR FCI ↓	5-YR Building Condition Code
Northern Kentucky University					
NKU:02	Hankins Hall (Covington)	13,249,000	7,751,000	59%	4. Remodeling C
NKU:01	Founders Hall	35,572,000	18,122,000	51%	3. Remodeling B
NKU:01	Landrum Academic Center	30,607,000	15,170,000	50%	3. Remodeling B
NKU:01	University Center	31,028,000	14,756,000	48%	3. Remodeling B
NKU:01	Nunn Hall	34,608,000	15,795,000	46%	3. Remodeling B
NKU:01	Lucas Administrative Ctr	34,231,000	14,402,000	42%	3. Remodeling B
NKU:01	Fine Arts Center	47,561,000	19,176,000	40%	3. Remodeling B
NKU:01	Regents Hall	9,010,000	3,354,000	37%	3. Remodeling B
NKU:01	Steely Library	43,159,000	15,965,000	37%	3. Remodeling B
NKU:01	Central (Old) Power Plant	6,510,000	2,259,000	35%	3. Remodeling B
NKU:01	Albright Health Center	36,020,000	11,473,000	32%	3. Remodeling B
NKU:01	Maintenance Building	3,572,000	1,068,000	30%	3. Remodeling B
NKU:01	Business-Ed-Psychology Ctr	34,292,000	8,571,000	25%	2. Remodeling A
NKU:01	Honors House	1,467,000	261,000	18%	1. Satisfactory
NKU:01	Applied Science & Tech	31,823,000	5,344,000	17%	2. Remodeling A
NKU:01	Storage Facility	4,024,000	407,000	10%	2. Remodeling A
NKU:01	Ceramics & Sculpture	3,933,000	248,000	6%	2. Remodeling A

Note: subtotals in this table may vary from other totals due to rounding. Base data stored at kcpe.vfafacility.com database.

Table 4.5: NKU Building Systems Ranked by 2007 Dollar Value Renewal Needs

(figures in millions of dollars)

> $10 million

> $1 million

SYSTEM NAME	2007 + backlog ↓	2008	2009	2010	2011	5-YR TOTAL	15-YR TOTAL
Distribution Systems	45.705	1.886	4.875	0.834	3.119	56.419	75.364
Electrical Service and Distribution	15.000	3.440	0.000	0.000	2.372	20.812	30.278
Lighting and Branch Wiring	11.719	0.000	2.826	0.594	0.000	15.139	17.486
Communications and Security	5.724	0.000	0.534	0.012	4.492	10.763	24.443
Emergency Light and Power Systems	1.860	0.000	0.135	0.000	0.215	2.211	3.701
Domestic Water Distribution	1.609	0.538	0.025	0.000	1.317	3.489	6.048
Exterior Windows	1.501	1.317	4.223	0.000	4.995	12.035	18.108
Roofing	0.895	0.129	0.587	0.192	0.589	2.393	5.028
Conveying	0.505	0.616	0.000	0.938	0.000	2.059	4.120
Fittings	0.504	0.136	0.585	0.000	0.629	1.855	3.582
Floor Finishes	0.432	0.372	1.191	2.668	8.673	13.336	24.741
Plumbing Fixtures	0.403	0.007	0.034	0.000	0.000	0.444	0.653
Wall Finishes	0.350	0.000	1.044	3.798	4.350	9.542	18.371
Cooling Generating Systems	0.333	0.000	0.000	0.000	0.000	0.333	0.679
Fire Protection	0.269	0.000	0.000	0.000	0.738	1.008	5.116
Ceiling Finishes	0.082	0.119	1.711	0.713	4.395	7.020	8.104
Controls and Instrumentation	0.074	0.000	0.075	0.079	0.023	0.251	0.993
Stairs	0.001	0.000	0.000	0.000	0.000	0.001	0.009
Plumbing	0.000	0.000	0.000	0.875	0.000	0.875	0.988
Other Plumbing Systems	0.000	0.000	0.000	0.000	0.000	0.000	0.037
Exterior Walls	0.000	0.000	0.000	0.000	0.000	0.000	0.059
Equipment and Furnishings	0.000	0.000	0.000	0.000	0.013	0.013	0.707
Partitions	0.000	0.000	0.000	0.066	0.000	0.066	0.588
Exterior Doors	0.000	0.173	0.129	0.000	1.905	2.207	3.953
Heat Generating Systems	0.000	0.000	0.000	0.000	0.210	0.210	0.434
Terminal and Package Units	0.000	0.000	0.000	0.000	0.000	0.000	0.415
Interior Doors	0.000	0.000	0.000	0.211	0.000	0.211	0.247
Totals	86.967	8.733	17.975	10.982	38.036	162.694	254.253

Note: subtotals in this table may vary from other totals due to rounding. Base data stored at kcpe.vfafacility.com database.

Section 5. Space Study
Evaluation of Adequacy and Fit for Continued Use

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OVERVIEW

Paulien & Associates, Inc. as part of the VFA team, reviewed selected buildings for educational adequacy and fit for continued use as well as reviewed and applied the KCPE Space Needs Model. The details of this process and methodology are included in the overall KCPE study.

The buildings included in the educational adequacy and fit for continued use study were selected by Council staff and the institution representatives. The outcome of this portion of the overall analyses does not represent an institutional summary – only the outcome for the buildings assessed.

2020 Projections

	Fall 2004	2020	Percent Increase
Student FTE	10,959	20,447	87%
Faculty/Staff FTE requiring Office Space	1,291	2,838	120%
Research Expenditures	$790,000	$1,474,136	87%

The student enrollment, faculty and staff, and research expenditure projections were provided by the Council for use in this study. The only space intended to be included in the Space Needs Model is Educational and General (E&G) space. Therefore all of the assignable square footage (asf) from a particular building may not be included. The Council provided a dataset of the spaces to be included in the model. It was the consultants' understanding that the non E&G spaces were removed. However at individual institutions parking garages, barns, and farm spaces were included. Where possible, the consultants excluded these spaces. Council staff was informed of these anomalies, and agreed that these adjustments should be made.

FIT FOR CONTINUED USE

This campus was developed in the early 1970s, therefore it does not have the old facilities seen at the other comprehensive campuses. However, since many of its facilities were built during the early years of development of the campus, they have now reached a point where they need significant work. In addition, the campus enrollment has grown and the amount of space has not kept up. When compared to the other comprehensives, Northern Kentucky University has much less space per student. While they would not need all the spaces at the other campuses, it appears that in many of their buildings they are tight compared to modern academic expectations. The consultants note that NKU has done an extensive job of providing furniture in public parts of buildings for socializing. NKU representatives point out that in many cases this is because rooms originally designed as lounges had to be converted to instructional or office spaces.

Among the buildings reviewed, the Business Education building does not provide the type of identity that business schools currently want.

Similarly in the Fine Arts Center the art studios and the music practice rooms are tight. The art gallery and the performance areas appear to be of quite good quality. There are primarily space quantity issues in this building but there are HVAC and upkeep issues.

In the Landrum Academic Center the building seems very heavily utilized and many of the informal gathering areas are right outside the elevators and are heavily utilized. The language lab facility is not up-to-date and the infrastructure should have major upgrading.

Founders Hall will be more easily adaptable to non-science uses than older science buildings which the consultants assessed at other comprehensive universities. There is however a very noisy HVAC system that needs attention and the programmatic/system renovation that has been requested is needed to adequately convert this facility to alternate uses.

The Albright Health Center has very tight spaces for the nursing program. It is isolated from the rest of the academic facilities. The nursing labs do not have modern equipment and mannequins that are now expected as part of nursing school instruction. The auto-tutorial lab is also not up to current quality. The swimming and fitness areas seem undersized. There is a need for an exercise science instructional laboratory and the locker rooms are inadequate. The consultants wonder why diving equipment is still in place at a four foot end of the pool even if it is covered with a canvas that says "Do Not Dive." Recreation buildings now are often signature buildings. This facility does not provide that type of advantage to Northern Kentucky University.

Summary of Evaluation of Adequacy and Fit for Continued Use Outcomes

Building Name / No.	ASF in Space Model	Building Age	Rating	Recommended Action	Gross Sq. Ft.
A. D. Albright Healt • 0145	93,314	22	1.9	Minor Renovation and Partially Assign to a New Use	136,324
Business-Education-P • 0350	72,074	26	2.3	Minor Renovation and Partially Assign to a New Use	128,283
Charles O. Landrum A • 0300	61,272	30	2.5	Major Renovation	100,500
Fine Arts Center • 0320	85,879	29	2.8	Major Renovation	159,584
Founders Hall • 0150	45,636	32	2.1	Major Renovation and Partially Assign to a New Use	125,296
Total ASF	**358,175**	**Total ASF in Space Model:** 917,163			**649,987**
No. of Buildings Assessed: 5		***Total ASF as a Percent of Total ASF in Space Model:*** *39%*			
Average		**28**	**2.3**	***Most Recommended Action:*** *Major Renovation*	

Rating Scale: Unsatisfactory = 1; Somewhat Unsatisfactory = 2; Somewhat Satisfactory = 3; Very Satisfactory = 4

Estimated Renovation Costs

Building Name / No.	Gross Sq. Ft.	Renovation Type	Renovation Costs
A. D. Albright Healt • 0145	136,324	Category 4, Major	$20,448,600
Business-Education-P • 0350	128,283	Category 1, Minor	$3,207,075
Charles O. Landrum A • 0300	100,500	Category 3, Major	$7,537,500
Fine Arts Center • 0320	159,584	Category 3, Major	$11,968,800
Founders Hall • 0150	125,296	Category 4, Major	$18,794,400
Total GSF Assessed	**649,987**		**$61,956,375**
No. of Buildings Assessed: 5			

Renovation Costs per GSF: Category 1, Minor - $25; Category 2, Minor - $50; Category 3, Major - $75; Category 4, Major - $150; Demolition - $20 or $30

SPACE NEEDS MODEL

The Fall 2004 application of the space needs model shows a deficit in every category except office space. This 22% deficit equates to a need of approximately 326,000 GSF. The largest need is in physical education and recreation space (82,000 ASF). Other categories with significant needs include teaching laboratories, special use and general use space, classroom space, and support space.

At the 2020 projections every space category shows significant needs. The approximate need for 1,150,000 ASF (a 125% deficit) represents a need for doubling the amount of NKU's existing E&G space.

Space Needs Model Application

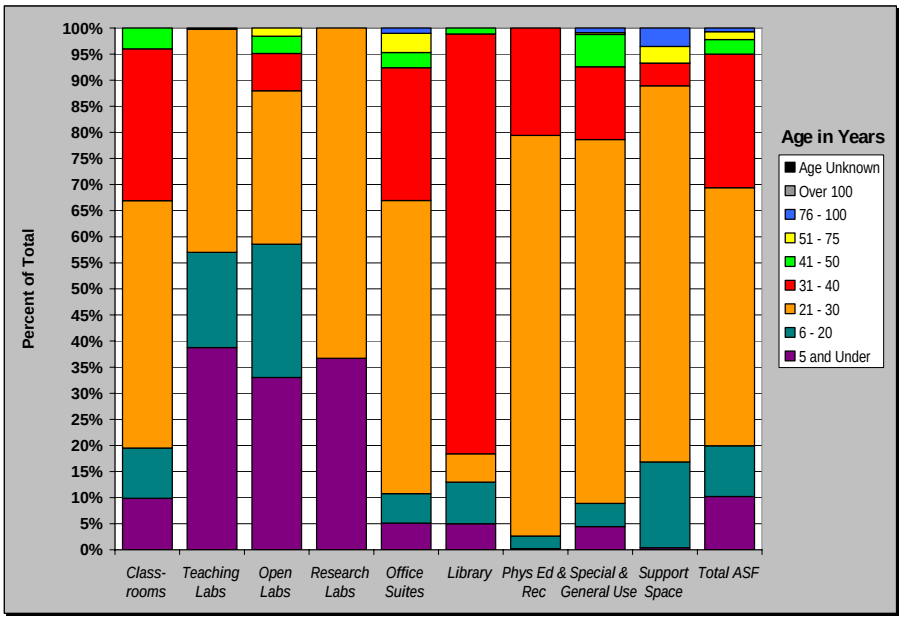
		Fall 2004 *Student FTE = 10,959* *Staffing FTE = 1,291* *Research Expenditures = $790,000*			2020 *Student FTE = 20,447* *Staffing FTE = 2,838* *Research Expenditures = $1,474,136*		
Space Category	**Existing ASF**	**Guideline ASF**	**Surplus/ (Deficit)**	**Percent Surplus/ (Deficit)**	**Guideline ASF**	**Surplus/ (Deficit)**	**Percent Surplus/ (Deficit)**
Classrooms & Service *12 ASF/Student FTE*	106,446	131,508	(25,062)	(24%)	245,364	(138,918)	(131%)
Teaching Laboratories *10 ASF/Student FTE*	67,381	109,590	(42,209)	(63%)	204,470	(137,089)	(203%)
Open Laboratories *8 ASF/Student FTE*	87,455	87,672	(217)	0%	163,576	(76,121)	(87%)
Research Laboratories *700 ASF/$100,000 R&D Expenditures*	4,635	5,530	(895)	(19%)	10,319	(5,684)	(123%)
Office Suites *195 ASF/Staff FTE*	255,833	251,745	4,088	2%	553,410	(297,577)	(116%)
Library *No Standard*	121,900	121,900	0	0%	121,900	0	0%
Physical Education & Recreation *12.10 ASF for 100% Undergraduate Student FTE, 25% of Graduate FTE, and 15% of Staffing FTE (75,000 ASF minimum)*	44,468	126,417	(81,949)	(184%)	236,642	(192,174)	(432%)
Special Use & General Use Space *18 ASF/Student FTE*	156,402	197,262	(40,860)	(26%)	368,046	(211,644)	(135%)
Support Space *8 ASF/Student FTE plus 4 ASF/Student FTE if land grant mission*	72,643	87,672	(15,029)	(21%)	163,576	(90,933)	(125%)
TOTAL	**917,163**	**1,119,296**	**(202,133)**	**(22%)**	**2,067,303**	**(1,150,140)**	**(125%)**

ASF = Assignable Square Feet

EXISTING E&G SPACE

Age of Existing E&G Facilities

Because NKU is a relatively young campus, 70% of its space is 30 years or less. Even though over 80% of the library space is shown in the 31 to 40 year category, the library is only one year older than the majority of space on campus.



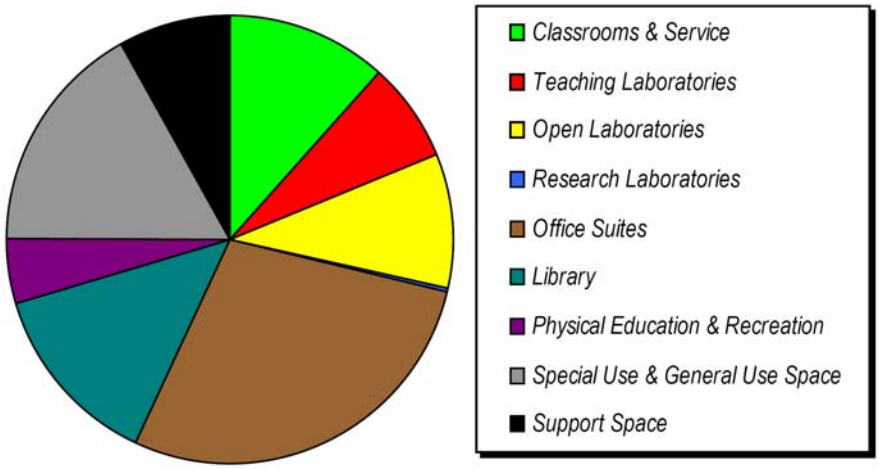
Comparison of Existing E&G Space to KCPE Comprehensive Universities Average

NKU has 84 ASF per Student FTE which is approximately 40% less than the KCPE Comprehensive University average and one of the lowest amounts of space per student of the KCPE comprehensive universities. Every space category is lower than the KCPE average for comprehensive universities. Most notable is the 4 ASF per student FTE in physical education and recreation space – approximately 25% of the average. In addition to the physical education and recreation space category, classroom, teaching laboratory, and office space set the low range of the KCPE average for comprehensive universities.

	Existing E&G Facilities		KCPE Comprehensive Universities	
Space Category	ASF per Student FTE	% of Total	Average ASF per Student FTE	Range of ASF
Classrooms & Service	10	12%	16	*10 - 21*
Teaching Laboratories	6	7%	12	*6 - 25*
Open Laboratories	8	10%	9	*4 - 15*
Research Laboratories	0	1%	3	*.29 - 8*
Office Suites	23	28%	35	*23 - 61*
Library	11	13%	11	*7 - 20*
Physical Education & Recreation	4	5%	20	*4 - 59*
Special Use & General Use Space	14	17%	19	*7 - 32*
Support Space	7	8%	10	*3 - 18*
TOTAL	**84**	**100%**	**134**	**83 - 255**

Distribution of Existing E&G Space by Space Category

Twenty-nine (29%) of NKU's space is instructional space (classrooms and all instructional laboratory categories). Office space is about 28% of the space included in the model. Another 17% of its space is in the special use and general use space category.



NOTE: The percentages are found in the "Percent of Total" column in the table above.

Section 6:
15 Year Capital Plan

The 15-year Capital Plan presented in this section incorporates all three portions of the study – condition, space adequacy & space capacity. Condition and space funding needs are presented separately first, and then aggregated together to show the total funding needed for the university facilities included in the study. In addition, two views of the spending pattern are shown:

- **Actual** – with spending assumed to vary to meet the annual dollar amount predicted by the forecasts each year;
- **Strategic** – with spending aligned to meet strategic goals recommended by the consultants for each five year period of the 15-year plan. The strategic goals and timeframes can be adjusted to match priorities set by the Council and the institutions.

Table 6.1: NKU 15-year Actual Capital Needs

Data supports Figures 6.2 through 6.4. Note: In 2007 dollars, Inflation factor set to 0%.

Funding Year	Condition Needs	Space - Adequacy	Space - Current Capacity	Space - Future Capacity	Total Funding
2007	$ 85,360,199	$ 61,956,000	$ 98,095,000	$ -	$ 245,411,199
2008	8,525,120	-	-	-	8,525,120
2009	17,932,341	-	-	-	17,932,341
2010	6,945,254	-	-	-	6,945,254
2011	35,352,801	-	-	-	35,352,801
2012	1,697,324	-	-	36,449,000	38,146,324
2013	2,646,332	-	-	38,271,000	40,917,332
2014	16,492,626	-	-	40,093,000	56,585,626
2015	3,365,105	-	-	41,916,000	45,281,105
2016	6,074,305	-	-	43,738,000	49,812,305
2017	4,458,835	-	-	45,561,000	50,019,835
2018	486,433	-	-	47,383,000	47,869,433
2019	15,303,754	-	-	49,206,000	64,509,754
2020	5,096,264	-	-	51,028,000	56,124,264
2021	11,782,956	-	-	52,850,000	64,632,956
Total	$ 221,519,649	$ 61,956,000	$ 98,095,000	$ 446,495,000	$ 828,065,649

ENDING FCI = 0%

Actual Needs

The "actual needs" summarized here depict the amount of capital investment estimated to be needed in each of the next fifteen years based on the consultant team's professional opinion of when each need would come due. The needs are broken out by three reasons that investment might be required: (a) to address system renewals that are driven by poor physical condition (orange for first year, red in later years), (b) to address space adequacy issues preventing a facility from being utilized in its highest and best use by current educational standards (green), and (c) to grow space capacity to meet current (light blue) and future (dark blue) enrollment projections.

Based on condition alone, Northern Kentucky University's Lifecycle Condition Assessments identified $85 million in deferred capital renewals due in or before 2007, and $154 million by 2011, creating a starting 5-Year FCI of 38% (next 5-year renewal needs / current replacement value).

Spending that amount would reduce the FCI to zero and bring all assessed facilities into excellent condition. Maintaining an FCI level = 0% forecasts needing an additional $67 million in capital renewals over the following 10 years, for a 15-year total capital renewal need of $221 million. (Note: All in 2007 dollars; Inflation factor = 0%.)

If the University funded the capital renewals in the exact years each renewal is forecast to be due, the investment pattern would look like Figure 6.2.

The Space Study identified $62 million needed to make selected buidlings fit-for-continued-use, plus $98 million needed for E&G buildings to meet current enrollment capacity, and $446 million needed for E&G buildings to meet the 2020 enrollment projections. Figure 6.3 shows capital investments based on space needs, including investment in future capacity starting in the second 5-year period, and growing modestly over the following 10 years until all space capacity needs are met by 2021.

When aggregated together, the condition + space needs of the University look like the spend pattern shown in Figure 6.4, totalling $828 million (in 2007 dollars, inflation = 0%).

Figure 6.2: Northern Kentucky University
15 Year Facilities Capital Plan
Actual Renewal Costs for Assessed Facilities

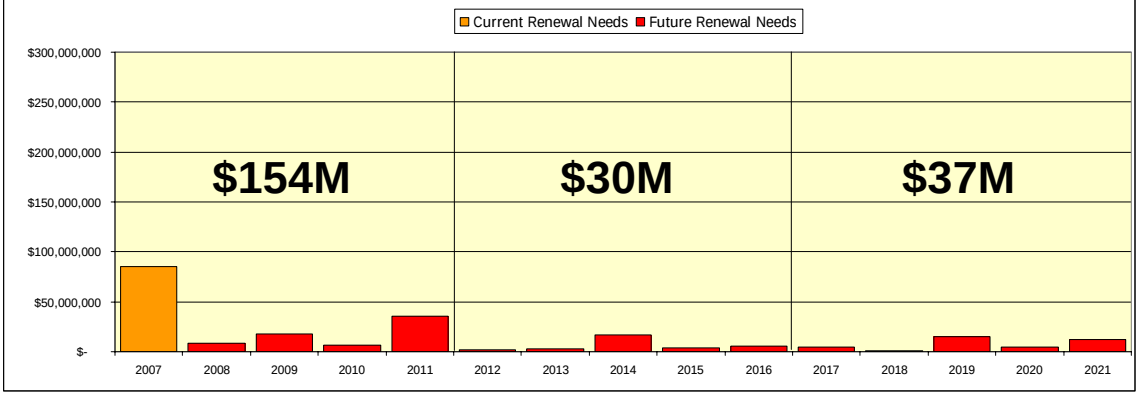


Figure 6.3: Northern Kentucky University
15 Year Facilities Capital Plan
Actual Space Needs

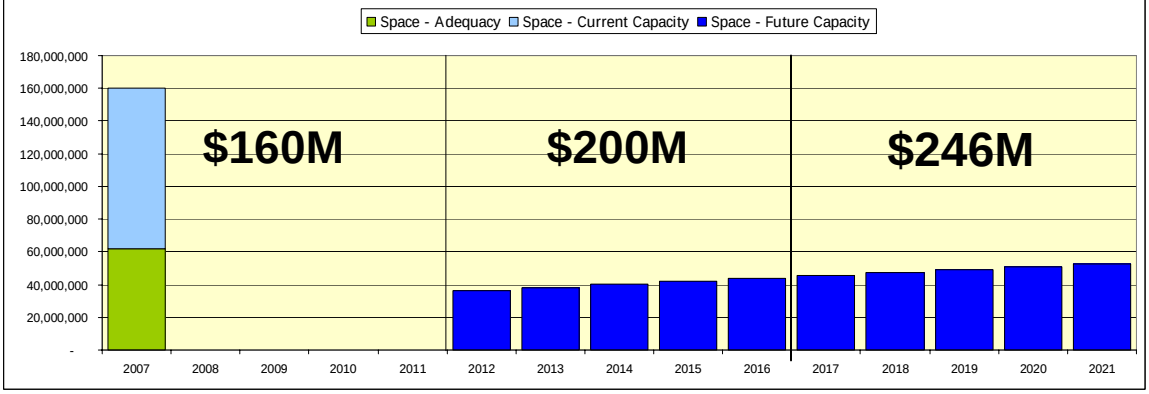
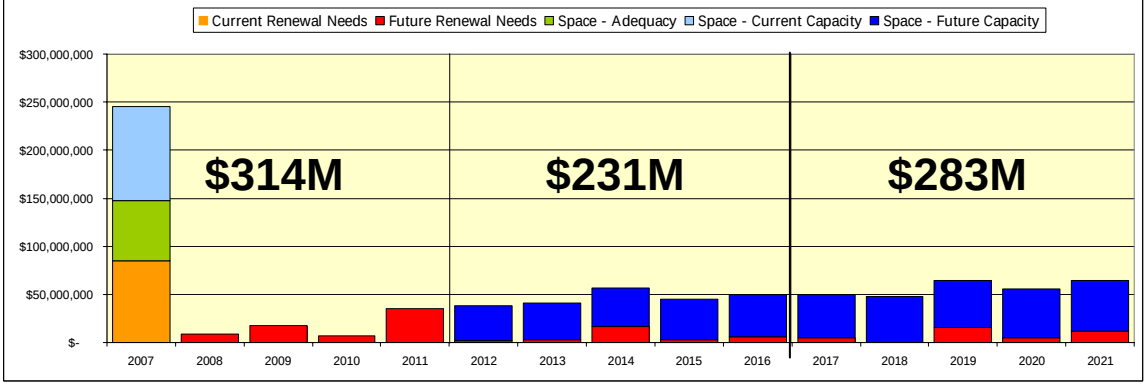


Figure 6.4: Northern Kentucky University
15 Year Facilities Capital Plan
Aggregated Space + Renewal Costs



Funding to Meet Strategic Goals

The consultants' team believes the spending pattern depicted in Figure 6.4 to be difficult to achieve – it is unlikely KPES and the institutions could mobilize the financial, facility planning and project management resources necessary to make such a high level of investment in year 1 of a 15 year plan.

Table 6.5: NKU 15-year Strategic Capital Investments
Data supports Figures 6.6 through 6.8. Note: In 2007 dollars, Inflation factor set to 0%.

Funding Year	Condition Needs	Space - Adequacy	Space - Current Capacity	Space - Future Capacity	Total Funding
2007	$ 76,824,179	$ 12,391,000	$ -	$ -	$ 89,215,179
2008	7,672,608	12,391,000	22,813,000	-	42,876,608
2009	16,139,107	12,391,000	23,953,000	-	52,483,107
2010	6,250,729	12,391,000	25,094,000	-	43,735,729
2011	31,817,521	12,391,000	26,235,000	-	70,443,521
2012	1,527,592	-	-	36,449,000	37,976,592
2013	2,381,699	-	-	38,271,000	40,652,699
2014	14,843,383	-	-	40,093,000	54,936,383
2015	3,028,595	-	-	41,916,000	44,944,595
2016	5,466,875	-	-	43,738,000	49,204,875
2017	4,012,952	-	-	45,561,000	49,573,952
2018	437,790	-	-	47,383,000	47,820,790
2019	13,773,379	-	-	49,206,000	62,979,379
2020	4,586,638	-	-	51,028,000	55,614,638
2021	10,604,660	-	-	52,850,000	63,454,660
	$ 199,367,684	$ 61,955,000	$ 98,095,000	$ 446,495,000	$ 805,912,684

ENDING 1-Year FCI = 10%

Further, while the 2007 backlog of deferred capital renewals, space adequacy and space capacity needs are real today, the dates for future renewals and capacity investments are only forecasts – the exact year each is required can be adjusted if aligned with careful maintenance practices and space use assignments. Thus, spreading the investment out is a reasonable, and practical, goal.

To best manage the capital investment, NKU should establish some high level programmatic goals for capital investments. The goals should represent a 'blended' approach to address all three causes for facilities investments: condition, adequacy and capacity. The consultants propose the following strategic capital funding goals:

1. **Fit-for-Use in 5 Years:**
   Bring all facilities up to Fit-for-Continued-Use standards within the first 5 years. (Table 6.5, green column, with spending averaged over 5 years.)

2. **All "Good" Condition within 10 Years:**
   Reduce the backlog of deferred capital renewals to 10% (all buildings in "good" condition) over the first 10 years, and maintain a 10% FCI thereafter. (Table 6.5 red column. Note this is less than "Actual Needs" shown in Table 6.1 because the investment is spread out over more years (rather than invest immediately when predicted the need with come due), and maintaining 10% FCI is a reasonable goal. (Maintaining 0% FCI is not reasonable.)

3. **Invest Regularly to Build Capacity:**
   Invest regularly to build space capacity, addressing current capacity needs over first 5 years (light blue) then, starting in year 6 (dark blue) growing with enrollment through year 15.

Table 6.8 summarizes the investment pattern required to meet the proposed strategic goals. (Note that the total spent for Condition is less than in Table 6.4, because Goal 2 allows for carrying forward 10% of the current replacement value in renewals.)

To meet the proposed strategic goals, the System's 15-year capital investment would be $801 million (in 2007 dollars, inflation = 0%).

Establishing funding needs that align with priorities this way will enable NKU to better access various funding sources, which are frequently targeted at specific initiatives or available at more favorable terms when pooled with similarly grouped needs from multiple Kentucky public postsecondary education institutions. Section 7 includes a more detailed discussion of funding sources potentially available to KPES and NKU.

Figure 6.6: Northern Kentucky University
15 Year Facilities Capital Plan
Strategic Investment in Renewal Costs

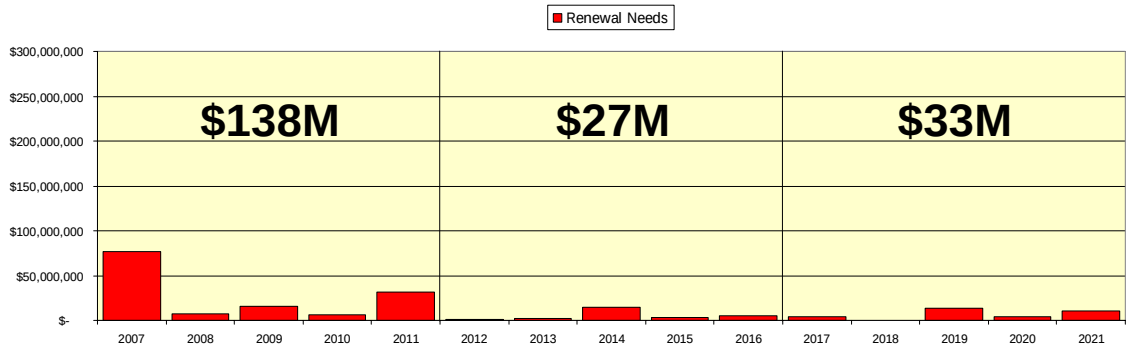


Figure 6.7: Northern Kentucky University
15 Year Facilities Capital Plan
Strategic Investment in Space Needs

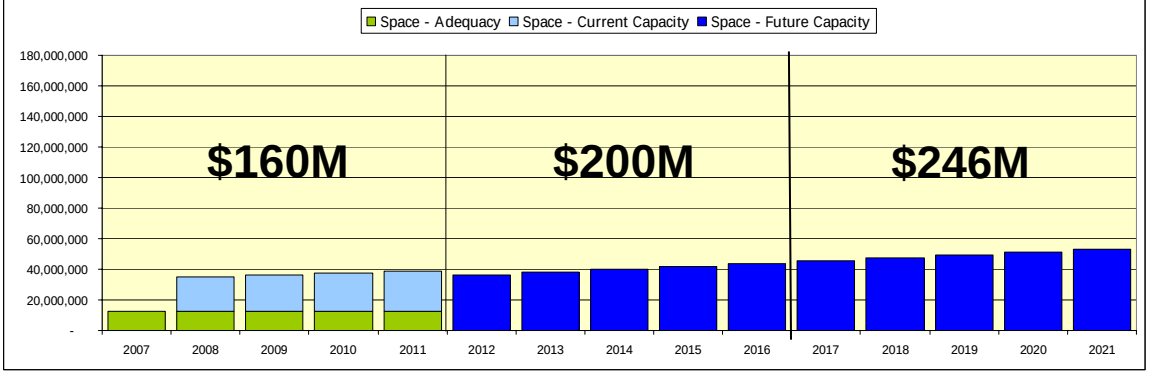
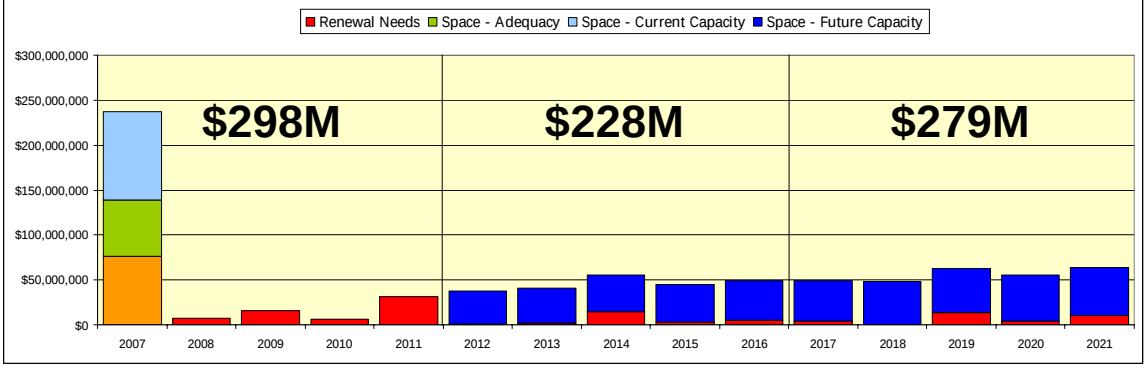


Figure 6.8: Northern Kentucky University
15 Year Facilities Capital Plan
Strategic Investment in Aggregated Space + Renewal Costs



Section 7:
Financing of Physical Facilities

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INTRODUCTION

Physical plant represents the primary asset of most institutions of higher education. Many facilities were built in response to the enrollment growth of the baby-boom generation. These buildings are now of an age where they need either replacement or considerable renovation if they are to meet current needs. In addition, programmatic additions and mission changes (such as increased emphasis on research) create needs for additional facilities even under conditions of enrollment stability. These factors, and likely others, create ongoing requirements for financial resources that can be devoted to either replacement, renewal, or expansion of an institution's stock of physical assets.

This need for resources comes at a time when state governments, the primary source of capital funding for public institutions, are under considerable pressure to reduce tax burdens and/or to fund competing programs. This requires institutions to look further afield for sources of funds for capital projects. This brief white paper explores the array of alternatives and some of the financing mechanisms that are commonly employed. The paper employs a simple conceptual schema with three components:

- Potential Sources of Revenue
- Uses of Revenues
- Financing Mechanisms

The schema is shown diagrammatically in Table 7.1.

This schema reflects the realities that:

- Institutions have multiple sources that can be tapped for capital projects.
- Different sources are often aligned with different uses (the specifics in this regard will be explored later in the paper).
- There are different kinds of uses (renewal vs. new, auxiliary facilities versus general academics). Different finance mechanisms are often used with the financing of these different kinds of facilities.

Each of these dimensions will be explored in more detail in subsequent sections of this paper.

TABLE 7.1
The Dimensions of Financing Alternatives

USES	SOURCES					
	Students	State	Local Govt.	Federal Govt.	Donors	Institutional Funds
Renewal and Renovation New Construction • Auxiliaries • General Academic • Research	MECHANISMS					

THE ALTERNATIVE SOURCES OF FINANCING AND THE ASSOCIATED MECHANISMS

Colleges and universities obtain financing for facilities from a variety of sources. Chief among them are the following:

A. Students

Students have traditionally been a source of funding for certain college and university facilities, particularly those where there is a direct relationship between a funding stream and a provided service. The classic example is funding for dormitories and dining halls. In this case, room and board charges are almost always established in a way that allows the institution to repay bonds issued to pay for construction and/or to accumulate a reserve fund sufficient to pay the necessary costs of renewal and renovation.

Closely related are fees levied on all students for purposes of paying for construction of facilities. Typically such fees are used to pay for construction and renewal of facilities such as student unions and student recreation buildings. It is rare that such fees are collected for the purpose of constructing new academic buildings (and never research facilities). While the practice of using student fees to construct academic space is still not common, it is a practice that is gaining adherents. There are recent examples in which students have voted increases in fees in order to pay for badly needed campus instructional space. In the few instances to date in which students have paid for academic facilities at public institutions, the situations were unique, typically ones in which state funds were not available for a critically needed building. Student funding of a new Law School facility at the University of Colorado—needed to meet accreditation requirements at a time of state revenue declines—is a good illustration. This very nascent movement represents further recognition that students—not the state—are the dependable source of institutional revenues. This is explicitly the case regarding operating funds in the several states in which tuition revenues exceed state appropriations. With this precedent in place, there is no reason to believe that the practice will not evolve on the capital side as well.

It should be noted that funds obtained from students are acquired in ways (and at a rate) that make their use consistent with repayment of bonded indebtedness rather than up-front payment for construction or renovation.

B. State Governments

States have historically been—and continue to be—the primary provider of funds for the construction (and reconstruction) of academic buildings on college campuses. While institutions are always seeking to diversify sources of funds for capital projects, very few public institutions get to the point where states become the junior partner in such ventures. This situation is unlikely to change. Buildings are very tangible; legislators know quite precisely what they are getting when they appropriate funds for campus construction. Capital appropriations have at least two other attractive features:

1. They create (construction) jobs for blue-collar workers and thus spread the benefits across a wider swath of the citizenry.

2. They do not obligate the legislature to ongoing payments in the same way as do increases in appropriations for operating purposes. This feature explains why it is often easier to get funds for capital (one-time) expenditures than for increases in the operating budget.

The mechanisms used by states to provide funds for capital constructions vary over a relatively narrow range. On one side are states that adhere to a pay-as-you-go philosophy and appropriate funds in a lump sum to pay for construction (although the payment may be split with payment for planning being covered in one year's appropriation and actual construction in another). Other states are more prone to issue bonds to pay for campus capital projects. Some states (North Carolina, New Jersey) issue general obligation bonds that are backed by the full faith and credit of the state; the states, not the institutions, are responsible for repaying the debt. In other states, legislatures establish ground rules (and sometimes devices for pooling borrowing in the search for better rates) that let institutions borrow up to some predetermined limit. In such cases, institutions often must pledge tuition as collateral for the debt. While

the state is not directly responsible for the debt, there is recognition that, in case of institutional default, the obligation will likely end up on the legislative doorstep. With this in mind, the state's authorization to issue debt instruments is typically coupled with inclusion of repayment amounts in the operating budgets requested by, and appropriated to, the institutions.

C. Local Governments

In the main, only community colleges that have their own taxing authority have been in a position to acquire and use local tax revenues to pay for capital construction projects. The norm is a situation in which the state establishes an upper limit on the tax rate (almost always a real property mill levy) that can be imposed without a referendum approving an override. Given the nature of the revenue stream, these tax revenues are most frequently used to repay debt rather than being accumulated and utilized in a pay-as-you-go manner.

Recently, there has been a break in the tradition of local tax revenues being confined to use by community colleges having their own taxing authority. The City of Phoenix has successfully passed a tax referendum that will provide local tax support for the construction of a downtown campus for Arizona State University. As local governments increasingly recognize the value of institutions of higher education as "anchor tenants" in their downtown redevelopment efforts, there will likely be opportunities for such arrangements in other urban areas.

D. The Federal Government

In the 1960s, the federal government—through the Higher Education Facilities Act—was a major funder of academic facilities on college campuses. Those days are long since past. Now federal funds for capital projects are limited to facilities that are:

1. In direct support of a federal priority. This translates almost completely into support for the construction of special-purpose research facilities that will house activities of a very select nature (for example, research into different issues related to bio-terrorism).

2. Constructed as a result of Congressional earmarking. These appropriations can cover any type of facilities and are dependent solely on relationships with a Member in a position to "bring home the bacon" to an institution in his/her state or district. Since the level and nature of earmarking is causing considerable consternation in some quarters, this may be a funding mechanism that has reached its high-water mark.

E. Private Donors

For some public institutions—specifically those with large (and affluent) alumni bases and effective fund-raising offices—private donors have been, and will continue to be, important sources of financing for capital projects. Such support is typically found at major research universities; comprehensive universities and community colleges are much less likely to obtain major funding from such sources. Very few public institutions have an alumni base—and a history of success in tapping that alumni base for academic building support—to make this source a reliable one for most institutions. It takes a rare combination of a rich alum and common ground between donor and institutional need to bring such funding to fruition. Even when such funds are provided, they are much more likely to be focused on facilities normally not priorities of the state. Most donors would consider general academic buildings at public institutions to be a state responsibility.

Donors with the ability to provide substantial amounts of funds for capital projects will typically provide:

1. All the funding for a building, or

2. Funds that match those from another (type of) contributor—usually the state or federal government.

In almost all cases, they are interested in having naming rights for the building—they want either themselves or someone of their choosing to have their names inscribed in stone on the campus. This particular interest on the part of donors means that money from this source is rarely available for renewal and renovation projects; naming rights for existing buildings have long since been granted.

Accepting funds from private donors can create problems as well as benefits. It is not unheard of

for donors to provide funds for a building that is not a campus priority—or may not even be on the institution's radar screen. Institutions are hard-pressed to say "no" in such circumstances, but saying "yes" may cause friction within the institution and with the state over issues of funding the maintenance and operations of the building and the programs it is designed to house. Further, the gift may be for a priority project but come with complicating strings attached. A major gift for construction of a sports facility at the University of North Dakota came with the stipulation that the "Fighting Sioux" label on the sports teams be retained, a requirement that has put the University in a difficult position vis-à-vis the NCAA.

F. Institution's Own Funds

There are circumstances in which institutions can, and do, use undesignated general fund revenues to renovate or acquire academic buildings. This is particularly the case regarding renovation projects that are required but unfunded by other sources, specifically state governments. However, there are also instances in which campuses acquire new academic buildings using their own resources. Two instruments are favored under such circumstances:

1. Bonded indebtedness in which the "full faith and credit" of the institution lies behind the securities. This is little different from state bonds that must be repaid by institutions with the exception that there is less tacit understanding that state appropriations are made with repayment in mind. Another variation on this theme is the circumstance in which universities designate indirect cost reimbursement funds to pay off indebtedness on research facilities. Even in situations where this arrangement is utilized, special permissions may be requested from the state—or such arrangements may be included in the broader financing plan for major construction projects. This was the case for the financing of the new Health Science complex at the University of Colorado.

2. Lease-purchase arrangements in which the institution enters into a long-term lease arrangement with an owner with a provision that title transfers to the institution at some specified point in the future. This mechanism is easier to arrange for residential space since the owner can find an alternative use should the institution renege on its obligations. The more specialized the space, the more difficult it is to make a lease/purchase work—it is easier, for example, with general office space than with science laboratories.

Regardless of the instrument, these arrangements require a regulatory environment that allows institutions to engage in such practices. Such is not often the case; most states insist on prior approval that may or may not be granted under the premise that such actions are indirect means of obligating the state to future payments. The rules around this practice vary substantially from sate to state. They also require institutions to accept the responsibility of making the associated payments an annual budget priority—taking funds "off the top" of the annual budget—in the face of vagaries in funding streams for general institutional operations.

Perhaps the least constrained environment for use of institutional funds to repay borrowing for construction of academic buildings is in Arizona, where the state formulaically establishes a ceiling on borrowing and allows institutions to manage their own borrowing portfolios within the limits established.

MECHANISMS

In one way or another, all of the frequently used mechanisms were discussed in the prior section. This section serves to summarize the bits and pieces in a more orderly fashion. In reality there are only two generic mechanisms for supporting capital projects—outright purchase or acquisition through payments over time. The equivalent is paying cash or borrowing and repaying the loan.

The former is straightforward; the institution accumulates resources and pays for the capital project when the funds are accumulated. The funders who are in a position to support such an approach are state governments, the federal government, and private donors.

The case in which institutions essentially borrow funds and pay them off over time is only slightly more complicated. The basic instruments are either debt or lease/purchase arrangements.

There are numerous variations around the former:

- Whose obligation is it—the state or the institution?
- What is the nature of the collateral—full faith and credit or specific revenue streams (housing revenues, tuition, indirect cost recovery)?
- What is the recourse in case of default?
- What is the specific nature of the instrument—revenue bonds, tax anticipation notes, etc.?

While these are highly technical differences, the basics are fundamentally the same.

State practices vary enormously in this arena. Some states believe strongly in pay-as-you-go funding for capital construction and pay for most construction out of general fund appropriations for specific construction projects. Others rely heavily on state bond issues where the proceeds are utilized for campus construction projects and annual payments are made by the state. Massive bond issues in North Carolina and California are examples. Finally, there are states like Arizona that allow institutions to borrow (up to a limit) with repayment coming from the institutions' operating funds. Typically the state appropriations to institutions are structured with these repayment obligations in mind. The latter arrangement provides institutions with the most freedom; it also carries the most risk.

USES

As indicated in Table 1, there is but a limited number of different kinds of capital projects:

- Renewal and renovation projects
- New construction projects
  - Auxiliaries
  - General Academic
  - Research

The relationships between revenue sources and uses were noted in several instances in Section II but will be treated more systematically here.

A. Renewal and Renovation

In most states renewal and renovation projects take their place alongside new construction projects and get prioritized in competition with them. Projects dealing specifically with safety concerns frequently migrate to the top of the priority list while others slip to the bottom—a new building is much more attractive to funders than replacing steam lines or replacing the electrical system in Old Main.

The funders for such projects are predominantly the states, local taxing authorities (typically only for community colleges), and the institutions themselves, with the states being the primary source. They tend to use the same approaches—direct funding or debt—regardless of the type of project. One can make a very good case for shifting responsibility for renovation and renewal projects entirely to the institutions, leaving the state's capital projects appropriations to cover new construction projects. The rationale goes as follows:

1. The state (or some other funder) paid for the facility in the first instance; at that point it becomes the institution's responsibility. The state should not have to pay multiple times for the same facility.
2. Sound management practices would call for depreciation accounts (1½-2% of replacement value) that accumulate funds for renewal purposes. GASB accounting rules now require recognition of depreciation expense. Unfortunately such rules did not take effect until well into the useful lives of most buildings. The new rules help to avoid further accumulation of deferred maintenance liabilities. They do little to reduce the level of deferred maintenance that had occurred prior to the GASB reforms.
3. Use of set-aside funds puts establishment of priorities in the hands of the institutions where, many would argue, it rightfully belongs. Legislatures are not in a position to establish interinstitutional priorities for such projects.

4. Legislatures are much better equipped—and much more interested—in establishing priorities for new buildings.

The state of Missouri follows this policy (at least it did a few years ago). Under this policy the institution was obliged to spend the equivalent of the depreciation expense amount on renewal and renovation projects. The institutions selected the projects; their only obligation to the state was an accountability requirement indicating that the required funds had, indeed, been allocated to renewal projects.

In reality, institutions typically find ways to use their own funds only when needs become dire and funds are not forthcoming from the state (or any other source).

Sound practice with regard to funding renewal and renovation would have the following features:

- An explicit, system-wide determination of levels of deferred maintenance on each campus.

- A multi-year plan for the elimination (or significant reduction) of this backlog. This plan should be established as separate from financing for new facilities. The "cleanest" approach would be a state bond issue paid from general operating revenues and intended to remove R&R from the agenda as a state obligation.

- A requirement that an amount equal to GASB depreciation amounts be spent each year out of institutional operating funds on renewal and renovation projects. The institutions should make the selection of projects to be so funded. The accountability requirement should be that a) the institution has an annually updated list of R&R priorities, and b) funds in the amount of prior year's deprecation amount are expended on the highest priority items.

  Such a process, if implemented, would result in elimination of past accumulations of deferred maintenance and make the institutions, not the state, responsible for ensuring that deferrals do not accumulate in the future. Such a policy would also create disincentives for institutions to acquire additional facilities of marginal benefit or to hang onto facilities that might better be removed from the inventory. Finally, it would keep the focus of the capital process on new facilities—a focus consistent with legislators' interests and policy determinations and eliminate the confounding of policy decisions (new facilities) with ongoing operational decisions at the campus level. Kentucky would do well to consider such a policy.

B. New Construction Projects

1. Auxiliary Facilities

   Construction of auxiliary facilities—residential and dining facilities—is almost always funded by students through direct use charges (room and board fees). If such use charges are insufficient, institutional funds are tapped as a last resort to fill the gap.

   Construction of facilities such as student unions and recreation facilities are also typically paid for by students although the mechanism is almost always a broadly applied student fee rather than a use charge. For these types of facilities, private donors often contribute as part of a larger capital campaign. In some instances, states contribute directly to construction of such facilities.

   In virtually all projects supported by student charges or fees, the instrument used is some form of long-term debt.

2. General Academic Facilities

   The predominant funders of general academic facilities—classrooms, labs, offices, and libraries—are state and local governments and private donors. In rare instances students (through an imposed fee) and institutions themselves contribute. The federal government will participate only in the case of Congressional earmarks.

   The instruments most likely to be used by the state are direct appropriations for construction of the building or debt instruments that are repaid by the state either directly or indirectly through annual appropriations to the

institutions. Conceptually, the most satisfying approach is likely to be one similar to Arizona, where the state establishes a borrowing cap for each institution and empowers the institution to borrow in its own name. This avoids much of the competition for funds borrowed through a centralized state pool. A compromise is to establish borrowing limits for each institution but bundle the bond offerings each year as a way of securing better rates than can be negotiated by each institution acting independently.

Donor contributions most often come in the form of outright gifts.

3. Research Facilities

The primary funders of research facilities are state and federal governments and private donors (either individuals or philanthropic organizations). Funds from the latter two providers most frequently come in the form of lump-sum contributions. Funds from states follow the same pattern as funding for other academic facilities—in some states it is direct, pay-as-you-go appropriation. In other states, funds are provided through issuance and repayment of debt instruments. States fund research facilities in much the same way as they fund other academic facilities. Pay-as-you-go states maintain this practice for research facilities. States that borrow for general academic space also borrow for research facilities. To the extent that there are variations, they take the form of:

a. The state providing a challenge grant that leverages the capacity of the institution to generate funds from private sources.

b. Comprehensive financing plans for truly large undertakings such as the multi-billion dollar Health Services Campus at the University of Colorado.

SUMMARY

Reverting to Table 7.1 and filling in the blanks, primary funding patterns for higher education facilities are predominantly as indicated in Table 7.2.

While there are exceptions in almost all instances, the summary in Table 7.2 represents the weight of practice.

TABLE 7.2
Primary Funding Patterns for Higher Education Facilities

USES	SOURCES					
	Students	State	Local Govt.	Federal Govt.	Donors	Institutional Funds
Renewal and Renovation	—	Approp./debt	—	—	—	Approp./debt
New Construction						
• Auxiliary						
– Residential/dining	Use charges	—	—	—	—	—
– Recreation	Fees	Approp./debt	—	—	Gifts	—
• Academic facilities	Fees	Approp./debt	Debt	—	Gifts	Lease/purchase
• Research facilities	—	Approp./debt	—	Grants	Gifts	—

Table 7.3 below is presented as a worksheet for NKU.

Here, the subtotals of the "Strategic Funding" scenario suggested in Section 6.8 are shown in the "Amount Needed, from 2006 Study" column.

KPES and NKU policy makers can use Table 7.3 as a framework to allocate the Amounts Needed across the most likely sources of funds to create NKU's 15 Year Funding Plan.

If NKU chooses to suppliment this study with additional information, any additional capital investments identified would need to be included.

TABLE 7.3
NKU Funding Patterns Worksheet for Higher Education Facilities

USES		SOURCES					
	Amount Needed, from 2006 Study	Students	State	Local Govt.	Federal Govt.	Donors	Institutional Funds
Renewal and Renovation							
• Condition/End of Life	$199m		Approp./debt				Approp./debt
• Space Adequacy	$62m		Approp./debt				Approp./debt
New Construction							
• Auxiliary	n/a						
2006 Capacity							
• Academic facilities	$97m	Fees	Approp./debt	Debt		Gifts	Lease/ purchase
• Research facilities	$0.5m		Approp./debt		Grants	Gifts	
2020 Capacity							
• Academic facilities	$443m	Fees	Approp./debt	Debt		Gifts	Lease/ purchase
• Research facilities	$3m		Approp./debt		Grants	Gifts	
• TOTAL	$805m						

Section 8:
Recommended Next Steps

The VFA | Paulien | NCHEMS team recommends KPES and NKU work closely together to align each institution's capital needs with its strategic priorities for the coming 15 years. The following steps should be considered to help complete the picture that this study has started to paint, and well position the Commonwealth's public postsecondary education system as a national leader in stewardship of its facilities:

1. **Establish strategic goals for the 15-year capital plan**, possibly broken down into three 5-year periods. The strategic goals may go beyond those considered or recommended in this study, such as a new emphasis on building research capacity, a residential campus or other programmatic goals specific to the institutions.

2. **Complete the data** so that the 15-year plan includes ALL assets. There are various ways to establish or estimate the investments needed to address condition and space needs for the facilities not yet studied, including more facility condition assessments, further sampling and extrapolating condition or space results of similar buildings, or pure modeling based on age and use profiles of buildings yet to be studied.

3. **Integrate all capital planning data into central records** for each asset, and maintain those records to reflect recent changes (improvements or degradations). Records should be stored in capital planning and management software that makes strategic planning, spend management, and progress tracking easy.

4. **Fund according to needs –** as established in this and subsequent studies. "Needs based funding" can serve as a defensible, transparent way to allocate funds while addressing any past capital investment inequalities among the institutions, or on any particular campus. Funding allocated by percent of student population or annual increases to historical distributions tend to perpetuate past inefficiencies.

5. **Pool institutional capital needs** with similar needs from other Kentucky postecondary education institutions, to facilitate better sources and financial terms for those funds. For example, to consider one possible funding source, the Legislature might fund (from appropriations or another source) all roof projects statewide in one budget cycle, or issue a bond for building new research facilities across multiple institutions.

It is the consultants' strong belief that the Kentucky Postsecondary System and Northern Kentucky University have already made a wise investment in their facilities through this study, which should serve as the basis for well-informed capital decisions that will help NKU and the Commonwealth achieve their 15 year goals.

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Asset Detail

Dorm Buildings

Institution: Northern Kentucky University
Campus: Northern Kentucky University CAMPUS=01

Asset Name: COMMONWEALTH HALL
Asset Number: 372

STATISTICS

FCI Requirements Cost:	0	**FCI:**	0.26

Current Replacement Value	6,597,472	**Address 1**	20 Campbell Drive
Size	36,584 SF	**Address 2**	-
Year Constructed	1982	**City**	Highland Heights
Year Renovated	-	**State/Province/Region**	Kentucky
Commission Date	-	**Zip/Postal Code**	41076
Decommission Date	-	**Architect**	Fisk Rinehart Keltch Meyer, Inc.
Ownership	-	**Historical Category**	None
Floors	3	**Construction Type**	IBC - Type 3A
Type	Building	**Use**	Education/Support
1-YR Building Condition Code	1. Satisfactory	**2006 Space Study?**	NO
5-YR Building Condition Code	2. Remodeling A	**Fit For Contined Use Cost**	
Fit For Continued Use Cost per SF	-		

PHOTO

Commonwealth Hall Signature Shot

Commonwealth Hall Signature Shot

Commonwealth Hall
5-yr FCI:
32%

ASSET DESCRIPTION

Architectural Description:

The "Commonwealth Hall" building (or building #372) on the NKU Campus is a dormitory building composed of three wings of three floors each, connected by a centrally located commons space. The typical floor in each wing has a central corridor with rooms on each side, 11 rooms per floor. The building was built in 1982. Commonwealth Hall is located near the middle of the Residential Village, which also includes Norse Hall, Norse Commons, Kentucky Hall, Cumberland Hall, University Suites, and the Woodcrest Apartments.

Commonwealth Hall contains approximately 36,584 gross square feet of space composed of dorm rooms, commons space, a few utility spaces, and a mechanical room on the first floor. The bathrooms on the first floors of the dorm wings are marginally handicapped accessible.

All costs in USD.

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The structure of the building is concrete slab with concrete foundation and no basement, though parts of the first floors are partially below grade with foundation walls usually extending to the second floors. Above the cast in place concrete are exterior walls of CMU and wood frame with interior partitions and floors of wood frame. The exterior is clad for the most part in E.I.F.S. panels with aluminum framed window units. Areas of vinyl siding were added about 5 years ago, covering the original wood siding at the Commons area.

Vertical circulation is steel pan and concrete stairs inside CMU stairwells serving all levels at each end of all dormitory wings. The roofing material is asphalt shingle which was apparently replaced about five years ago.

Interior finishes are carpet and linoleum on floors, painted GWB on walls and ceiling, with ceramic tile throughout the bathrooms. Exterior doors are metal in metal frames with rated metal doors and frames to each dorm room.

Parking for Kentucky Hall is available in lots P and Q, which contain Accessible parking spaces. The parking lots are connected to the site by concrete walkways which are marginally handicapped accessible.

HVAC

The building is conditioned by a single TRAIN chilled water 2 pipe system and fan coil units in each apartment.

Hot water is generated by a two gas or oil-fired Ajax boiler rated at 400 MBH. water is returned by a 1/2HP simplex pump, . Heating equipment is located in the mechanical building.

Chilled water is generated by two 25-ton Refrigeration Systems water-cooled DX compressors. The chillers use refrigerant R-22, but the machine room is not monitored for refrigerant leaks. Circulation of condenser water to the cooling tower is by a 5 HP pump. The 28 ton capacity Marley cross flow cooling tower has a 2 HP fan, and is located adjacent to the west side of the building. Neither the condenser water nor the boiler appears to have automatic chemical treatment systems.

The HVAC system for the building is controlled pneumatically, with compressed air supplied by a 3/4 HP simplex unit with a 30-gallon storage tank.

PLUMBING

Natural gas is supplied to the building by a 2-inch line that enters the building at the mechanical building, with distribution by black steel pipe. Domestic water is supplied to the building by a 4-inch line that does not have backflow prevention. Domestic hot water is generated by an 80 gallon AO Smith electric water heater with a 1/6 HP recirculation pump. Distribution is by copper piping. Drinking water is provided by two Sunroc pedestal DX water coolers that are not UFAS compliant. The sixteen examining rooms each have a stainless steel cabinet lavatory, while the laboratory has a stainless steel two well sink and an emergency eyewash stations. Process water and the domestic water heater have reduced pressure backflow preventers.

FIRE PROTECTION

The building does have an automatic fire sprinkler system. ABC type handheld extinguishers are located throughout the building.

ELECTRICAL

ELECTRICAL SERVICE AND DISTRIBUTION

Power is supplied to the building by the site power system via a liquid filled, sealed and locked, 225kVA pad-mounted transformer located outside the building that feeds an 800A main disconnect switch located in the mechanical building. This feeds the panel adjacent to the switch that is rated at 800Amps, 208Y/120 Volt, three phase, four wire, switch and fuse main distribution panel. From this main distribution panel general power distribution is handled through electric panels distributed throughout the building and a motor control center located in mechanical room.

EMERGENCY LIGHT AND POWER

There is no emergency lighting as these are apartment units.

LIGHTING

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The majority of lighting in the building is made up of two by four foot flourescent, one by four foot or two by four foot fluorescent lamp fixtures equipped with energy inefficient T-12 fluorescent lamps and magnetic ballasts. Restrooms are equipped with incandescent vanity lighting fixtures above the mirrors.

Exterior lighting is made up of a mix of ceiling mounted HID fixtures and flourscent fixtures at the stair wells.

FIRE ALARM

The building is equipped with a local fire alarm system consisting of pull stations and bells. There are aged smoke detectors present and the system is connected to the local fire department.

COMMUNICATION

The building is equipped with a telecommunication system distributed to individual desktops and work areas via a backbone located in a room in the center of the building. The room houses a rack system with hubs/router, fiber, telephone punch down blocks, etc.

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REPLACEMENT VALUE

System	System Name	Cost
A-Substructure	Foundation Wall and Footings - no Basement	49,754
A-Substructure	Structural Slab on Grade - Non Industrial	77,441
B10-Superstructure	Multi Floor Superstructure - Low Cost	642,708
B2010-Exterior Walls	CMU Block Walls	36,325
B2010-Exterior Walls	Concrete Walls	69,982
B2010-Exterior Walls	EIFS Wall Panels - Economy	259,747
B2010-Exterior Walls	Wood Walls	176,342
B2010-Exterior Walls	Wood Walls	12,439
B2020-Exterior Windows	Aluminum Windows	275,286
B2030-Exterior Doors	Door Assembly 4 - Moderate Size and Cost	7,384
B2030-Exterior Doors	Door Assembly 5 - Average	17,535
B30-Roofing	Asphalt Shingled Roofing	87,039
C1010-Partitions	GWB 2HR Rated Walls	108,367
C1010-Partitions	GWB Walls - Standard	293,998
C1010-Partitions	Plaster Walls - Thin Coat	57,816
C1020-Interior Doors	Swinging Doors - Average	255,527
C1030-Fittings	Restroom Accessories - Economy	32,781
C1030-Fittings	Toilet Partitions - Economy	14,476
C1030-Fittings	Toilet Partitions - Economy	7,238
C20-Stairs	Exterior Concrete Stairs	1,059
C20-Stairs	Stairs - Average	153,992
C3010-Wall Finishes	Ceramic Tiles - Economy	18,410
C3010-Wall Finishes	Ceramic Tiles - Economy	9,201
C3010-Wall Finishes	Painted Finish - Average	206,393
C3020-Floor Finishes	Carpeting 4 - Economy	78,465
C3020-Floor Finishes	Carpeting 4 - Economy	78,465
C3020-Floor Finishes	Carpeting 4 - Economy	17,461
C3020-Floor Finishes	Ceramic Tile	8,820
C3020-Floor Finishes	Ceramic Tile	4,410
C3020-Floor Finishes	Ceramic Tile - Economy	3,375
C3020-Floor Finishes	Ceramic Tile - Economy	1,688
C3020-Floor Finishes	VCT 4 - Average	97,345
C3020-Floor Finishes	Vinyl Sheet Goods	1,650

All costs in USD.

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System	System Name	Cost
C3030-Ceiling Finishes	Plaster Veneer over GWB	153,360
D20-Plumbing	Sanitary Waste System - Low End	68,737
D2010-Plumbing Fixtures	Drinking Fountains	7,588
D2010-Plumbing Fixtures	Kitchenette Cab Counter Sink	15,774
D2010-Plumbing Fixtures	Restroom Fixtures 7 - Standard Density	72,259
D2020-Domestic Water Distribution	Domestic Water Dist Complete - Average	87,391
D2020-Domestic Water Distribution	Water Heater - Gas Fired	35,844
D3040-Distribution Systems	Perimeter Units - HW/Steam/CW	388,899
D3060-Controls and Instrumentation	HVAC Controls - Electric	62,796
D40-Fire Protection	Wet Sprinkler System w/Pump - Lt Hazard	207,182
D5010-Electrical Service and Distribution	Distribution - Average Capacity	321,540
D5010-Electrical Service and Distribution	Switchgear - Average Duty	18,979
D5020-Lighting and Branch Wiring	Lighting Fixtures - Average Density	173,143
D5030-Communications and Security	Fire Alarm System - Average Density	152,313
D5030-Communications and Security	Telephone System - Average Density	94,826
D5092-Emergency Light and Power Systems	Emergency Battery Pack Lights	27,774
D5092-Emergency Light and Power Systems	Exit Signs - Average Density	23,653
Subtotal		**5,074,977**

Overhead Cost

Description	Cost
Equipment and Furnishings (+ 25%)	1,268,745
Site Remediation (+ 5%)	253,749
Subtotal	**1,522,494**

Total Replacement Value	6,597,471

All costs in USD.

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RENEWAL EVENTS

Renewal costs include 0% inflation rate

System	System Name	Renewal FY	Renewal Cost
D40-Fire Protection	Wet Sprinkler System w/Pump - Lt Hazard	2017	232,949
D2020-Domestic Water Distribution	Water Heater - Gas Fired	2015	44,815
C3020-Floor Finishes	Vinyl Sheet Goods	2011	2,063
C3020-Floor Finishes	VCT 4 - Average	2012	121,761
C1030-Fittings	Toilet Partitions - Economy	2016	18,000
D5030-Communications and Security	Telephone System - Average Density	2012	100,675
		2022	100,675
D5010-Electrical Service and Distribution	Switchgear - Average Duty	2012	23,780
D2010-Plumbing Fixtures	Restroom Fixtures 7 - Standard Density	2012	90,545
C1030-Fittings	Restroom Accessories - Economy	2012	41,157
C3030-Ceiling Finishes	Plaster Veneer over GWB	2016	95,781
C3010-Wall Finishes	Painted Finish - Average	2010	257,669
		2020	257,669
D5020-Lighting and Branch Wiring	Lighting Fixtures - Average Density	2016	216,303
D2010-Plumbing Fixtures	Kitchenette Cab Counter Sink	2012	19,664
D3060-Controls and Instrumentation	HVAC Controls - Electric	2010	78,656
D5030-Communications and Security	Fire Alarm System - Average Density	2011	190,237
		2021	190,237
C20-Stairs	Exterior Concrete Stairs	2007	1,059
D5092-Emergency Light and Power Systems	Exit Signs - Average Density	2012	29,725
D5092-Emergency Light and Power Systems	Emergency Battery Pack Lights	2011	34,755
		2021	34,755
D2010-Plumbing Fixtures	Drinking Fountains	2016	9,603
B2030-Exterior Doors	Door Assembly 5 - Average	2014	21,919
B2030-Exterior Doors	Door Assembly 4 - Moderate Size and Cost	2014	9,229
D2020-Domestic Water Distribution	Domestic Water Dist Complete - Average	2012	98,365
D5010-Electrical Service and Distribution	Distribution - Average Capacity	2012	401,967
C3010-Wall Finishes	Ceramic Tiles - Economy	2018	11,500
C3010-Wall Finishes	Ceramic Tiles - Economy	2007	23,009
C3020-Floor Finishes	Ceramic Tile - Economy	2016	2,110
C3020-Floor Finishes	Ceramic Tile - Economy	2007	4,219

All costs in USD.

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System	System Name	Renewal FY	Renewal Cost
C3020-Floor Finishes	Ceramic Tile	2016	4,411
C3020-Floor Finishes	Ceramic Tile	2007	8,822
C3020-Floor Finishes	Carpeting 4 - Economy	2007	21,826
		2017	21,826
C3020-Floor Finishes	Carpeting 4 - Economy	2008	98,076
		2018	98,076
C3020-Floor Finishes	Carpeting 4 - Economy	2011	98,076
		2021	98,076
B30-Roofing	Asphalt Shingled Roofing	2021	108,770
B2020-Exterior Windows	Aluminum Windows	2011	344,122

All costs in USD.

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Institution: Northern Kentucky University
Campus: Northern Kentucky University CAMPUS=01

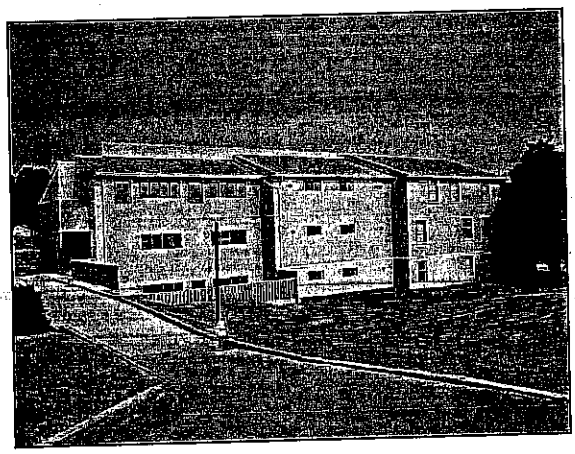
Asset Name: CUMBERLAND COMMUNITY
Asset Number: 371

STATISTICS

FCI Requirements Cost:	0	FCI:	0.17

Current Replacement Value	1,326,766	**Address 1**	20 Campbell Drive
Size	10,851 SF	**Address 2**	-
Year Constructed	1982	**City**	Highland Heights
Year Renovated	-	**State/Province/Region**	Kentucky
Commission Date	-	**Zip/Postal Code**	41706
Decommission Date	-	**Architect**	Fisk Rinehart Keltch Meyer, Inc.
Ownership	-	**Historical Category**	None
Floors	3	**Construction Type**	IBC - Type 3A
Type	Building	**Use**	Education/Support
1-YR Building Condition Code	1. Satisfactory	**2006 Space Study?**	NO
5-YR Building Condition Code	2. Remodeling A	**Fit For Contined Use Cost**	-
Fit For Continued Use Cost per SF	-		

PHOTO



Cumberland Hall Signature Shot

Cumberland Hall Signature Shot

FCI = 20.9%

ASSET DESCRIPTION

Architectural Description:

The "Cumberland Community" building (or building #371) on the NKU Campus is a dormitory building composed of three floors containing 10,851 gross square feet of space. It is actually the disconnected third wing of the nearby Kentucky Hall and is built identically to the other two wings. The building description of Kentucky Hall is as follows:

The "Kentucky Hall" building (or building #370) on the NKU Campus is a dormitory building composed of two wings of three floors each, connected by a centrally located commons space. A third wing of the same design, built concurrently, is detached from Kentucky Hall and named Cumberland Hall. The typical floor in each wing has a central corridor with rooms on each side, 11 rooms per floor. The building was built in 1982. Kentucky Hall is located in the middle of the Residential Village, which also includes Norse Hall, Norse Commons, Commonwealth Hall, Cumberland Hall, University Suites, and the Woodcrest Apartments.

All costs in USD.

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Kentucky Hall contains approximately 27,565 gross square feet of space which is composed of dorm rooms, commons space, a few utility spaces, and a Residence Hall Director's Suite. The bathrooms on the first floors of the dorm wings are marginally handicapped accessible.

The structure of the building is concrete slab with concrete foundation and no basement, though parts of the first floors are partially below grade with foundation walls extending to the second floors. Above the cast in place concrete are exterior walls of CMU and wood frame with interior partitions and floors of wood frame. The exterior is clad for the most part in E.I.F.S. panels with aluminum framed window units. In two wings the double-hung aluminum window units were replaced with vinyl units (roughly 2/3 of total).

Areas of vinyl siding were added about 5 years ago, covering the original wood siding at the Commons area and Director's Suite. Vertical circulation is steel pan and concrete stairs inside CMU stairwells serving all levels at each end of all dormitory wings. The roofing material is asphalt shingle which was apparently replaced about five years ago.

Interior finishes are carpet and linoleum on floors, painted GWB on walls and ceiling, with ceramic tile throughout the bathrooms. Exterior doors are metal in metal frames with rated metal doors and frames to each dorm room. The Director's Suite has wood doors. Hardware is 95% lever type.

Parking for Kentucky Hall is available in lots P, Q, and F, which contain Accessible parking spaces. The parking lots are connected to the site by concrete walkways which are marginally handicapped accessible.

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REPLACEMENT VALUE

System	System Name	Cost
A-Substructure	Foundation Wall and Footings - no Basement	27,086
A-Substructure	Structural Slab on Grade - Non Industrial	22,969
B10-Superstructure	Multi Floor Superstructure - Low Cost	190,630
B2010-Exterior Walls	CMU Block Walls	11,624
B2010-Exterior Walls	Concrete Walls	21,077
B2010-Exterior Walls	EIFS Wall Panels - Economy	86,881
B2010-Exterior Walls	Wood Walls	52,903
B2020-Exterior Windows	Aluminum Windows	81,643
B2030-Exterior Doors	Door Assembly 5 - Average	7,793
B30-Roofing	Asphalt Shingled Roofing	25,635
C1010-Partitions	GWB 2HR Rated Walls	32,510
C1010-Partitions	GWB Walls - Standard	88,199
C1010-Partitions	Plaster Walls - Thin Coat	17,345
C1020-Interior Doors	Swinging Doors - Average	115,934
C1030-Fittings	Restroom Accessories - Economy	9,723
C1030-Fittings	Toilet Partitions - Economy	4,343
C1030-Fittings	Toilet Partitions - Economy	2,171
C20-Stairs	Stairs - Average	47,382
C3010-Wall Finishes	Ceramic Tiles - Economy	6,131
C3010-Wall Finishes	Ceramic Tiles - Economy	3,062
C3010-Wall Finishes	Painted Finish - Average	61,217
C3020-Floor Finishes	Carpeting 4 - Economy	5,201
C3020-Floor Finishes	Carpeting 4 - Economy	23,480
C3020-Floor Finishes	Carpeting 4 - Economy	23,480
C3020-Floor Finishes	Ceramic Tile	2,940
C3020-Floor Finishes	Ceramic Tile	1,470
C3020-Floor Finishes	Ceramic Tile - Economy	1,117
C3020-Floor Finishes	Ceramic Tile - Economy	634
C3030-Ceiling Finishes	Plaster Veneer over GWB	46,008
Subtotal		**1,020,588**

Overhead Cost

Description	Cost
Equipment and Furnishings (+ 25%)	255,147

All costs in USD.

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Description	Cost
Site Remediation (+ 5%)	51,029
Subtotal	**306,176**
Total Replacement Value	1,326,764

All costs in USD.

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RENEWAL EVENTS

Renewal costs include 0% inflation rate

System	System Name	Renewal FY	Renewal Cost
C1030-Fittings	Toilet Partitions - Economy	2016	5,400
C1030-Fittings	Restroom Accessories - Economy	2012	12,207
C3030-Ceiling Finishes	Plaster Veneer over GWB	2016	28,734
C3010-Wall Finishes	Painted Finish - Average	2010	76,426
		2020	76,426
B2030-Exterior Doors	Door Assembly 5 - Average	2012	9,742
C3010-Wall Finishes	Ceramic Tiles - Economy	2018	3,827
C3010-Wall Finishes	Ceramic Tiles - Economy	2007	7,663
C3020-Floor Finishes	Ceramic Tile - Economy	2016	793
C3020-Floor Finishes	Ceramic Tile - Economy	2007	1,396
C3020-Floor Finishes	Ceramic Tile	2016	1,470
C3020-Floor Finishes	Ceramic Tile	2007	2,941
C3020-Floor Finishes	Carpeting 4 - Economy	2008	29,349
		2018	29,349
C3020-Floor Finishes	Carpeting 4 - Economy	2011	29,349
		2021	29,349
C3020-Floor Finishes	Carpeting 4 - Economy	2007	6,501
		2017	6,501
B30-Roofing	Asphalt Shingled Roofing	2021	32,035
B2020-Exterior Windows	Aluminum Windows	2012	102,058

All costs in USD.

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Institution: Northern Kentucky University
Campus: Northern Kentucky University CAMPUS=01

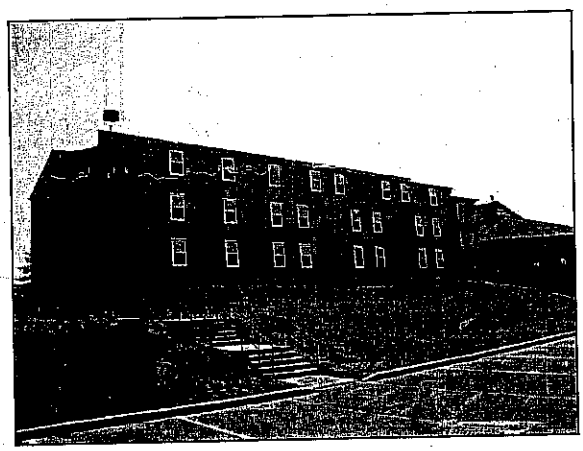
Asset Name: KENTUCKY HALL
Asset Number: 370

STATISTICS

FCI Requirements Cost:	0	**FCI:**	0.30

Current Replacement Value	5,320,849	**Address 1**	20 Campbell Drive
Size	27,565 SF	**Address 2**	-
Year Constructed	1982	**City**	Highland Heights
Year Renovated	-	**State/Province/Region**	Kentucky
Commission Date	-	**Zip/Postal Code**	41076
Decommission Date	-	**Architect**	Fisk Rinehart Keltch Meyer, Inc.
Ownership	-	**Historical Category**	None
Floors	3	**Construction Type**	IBC - Type 3A
Type	Building	**Use**	Education/Support
1-YR Building Condition Code	1. Satisfactory	**2006 Space Study?**	NO
5-YR Building Condition Code	2. Remodeling A	**Fit For Contined Use Cost**	
Fit For Continued Use Cost per SF	-		

PHOTO



Kentucky Hall Signature Shot

Kentucky Hall Signature Shot

Kentucky Hall
5-yr FCI:
37%

ASSET DESCRIPTION

Architectural Description:

The "Kentucky Hall" building (or building #370) on the NKU Campus is a dormitory building composed of two wings of three floors each, connected by a centrally located commons space. A third wing of the same design, built concurrently, is detached from Kentucky Hall and named Cumberland Hall. The typical floor in each wing has a central corridor with rooms on each side, 11 rooms per floor. The building was built in 1982. Kentucky Hall is located in the middle of the Residential Village, which also includes Norse Hall, Norse Commons, Commonwealth Hall, Cumberland Hall, University Suites, and the Woodcrest Apartments.

Kentucky Hall contains approximately 27,565 gross square feet of space which is composed of dorm rooms, commons space, a few utility spaces, and a Residence Hall Director's Suite. The bathrooms on the first floors of the dorm wings are marginally handicapped accessible.

All costs in USD.

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The structure of the building is concrete slab with concrete foundation and no basement, though parts of the first floors are partially below grade with foundation walls extending to the second floors. Above the cast in place concrete are exterior walls of CMU and wood frame with interior partitions and floors of wood frame. The exterior is clad for the most part in E.I.F.S. panels with aluminum framed window units. In two wings the double-hung aluminum window units were replaced with vinyl units (roughly 2/3 of total).

Areas of vinyl siding were added about 5 years ago, covering the original wood siding at the Commons area and Director's Suite. Vertical circulation is steel pan and concrete stairs inside CMU stairwells serving all levels at each end of all dormitory wings. The roofing material is asphalt shingle which was apparently replaced about five years ago.

Interior finishes are carpet and linoleum on floors, painted GWB on walls and ceiling, with ceramic tile throughout the bathrooms. Exterior doors are metal in metal frames with rated metal doors and frames to each dorm room. The Director's Suite has wood doors. Hardware is 95% lever type.

Parking for Kentucky Hall is available in lots P, Q, and F, which contain Accessible parking spaces. The parking lots are connected to the site by concrete walkways which are marginally handicapped accessible.

HVAC

The building is conditioned by a single TRAIN chilled water 2 pipe system and fan coil units in each appartment.

Hot water is generated by a two gas or oil-fired Ajax boiler rated at 400 MBH. water is returned by a 1/2HP simplex pump, . Heating equipment is located in the mechanical building.

Chilled water is generated by two 25-ton Refrigeration Systems water-cooled DX compressors. The chillers use refrigerant R-22, but the machine room is not monitored for refrigerant leaks. Circulation of condenser water to the cooling tower is by a 5 HP pump. The 28 ton capacity Marley cross flow cooling tower has a 2 HP fan, and is located adjacent to the west side of the building. Neither the condenser water nor the boiler appears to have automatic chemical treatment systems.

The HVAC system for the building is controlled pneumatically, with compressed air supplied by a 3/4 HP simplex unit with a 30-gallon storage tank.

PLUMBING

Natural gas is supplied to the building by a 2-inch line that enters the building at the mechanical building, with distribution by black steel pipe. Domestic water is supplied to the building by a 4-inch line that does not have backflow prevention. Domestic hot water is generated by an 80 gallon AO Smith electric water heater with a 1/6 HP recirculation pump. Distribution is by copper piping. Drinking water is provided by two Sunroc pedestal DX water coolers that are not UFAS compliant. The sixteen examining rooms each have a stainless steel cabinet lavatory, while the laboratory has a stainless steel two well sink and an emergency eyewash stations. Process water and the domestic water heater have reduced pressure backflow preventers.

FIRE PROTECTION

The building does have an automatic fire sprinkler system. ABC type handheld extinguishers are located throughout the building.

ELECTRICAL

ELECTRICAL SERVICE AND DISTRIBUTION

Power is supplied to the building by the site power system via a liquid filled, sealed and locked, 225kVA pad-mounted transformer located outside the building that feeds an 800A main disconnect switch located in the mechanical building. This feeds the panel adjacent to the switch that is rated at 800Amps, 208Y/120 Volt, three phase, four wire, switch and fuse main distribution panel. From this main distribution panel general power distribution is handled through electric panels distributed throughout the building and a motor control center located in mechanical room.

EMERGENCY LIGHT AND POWER

There is no emergency lighting as these are apartment units.

LIGHTING

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The majority of lighting in the building is made up of two by four foot flourescent, one by four foot or two by four foot fluorescent lamp fixtures equipped with energy inefficient T-12 fluorescent lamps and magnetic ballasts. Restrooms are equipped with incandescent vanity lighting fixtures above the mirrors.

Exterior lighting is made up of a mix of ceiling mounted HID fixtures and flourscent fixtures at the stair wells.

FIRE ALARM

The building is equipped with a local fire alarm system consisting of pull stations and bells. There are aged smoke detectors present and the system is connected to the local fire department.

COMMUNICATION

The building is equipped with a telecommunication system distributed to individual desktops and work areas via a backbone located in a room in the center of the building. The room houses a rack system with hubs/router, fiber, telephone punch down blocks, etc.

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REPLACEMENT VALUE

System	System Name	Cost
A-Substructure	Foundation Wall and Footings - no Basement	43,182
A-Substructure	Structural Slab on Grade - Non Industrial	58,350
B10-Superstructure	Multi Floor Superstructure - Low Cost	484,262
B2010-Exterior Walls	CMU Block Walls	24,120
B2010-Exterior Walls	Concrete Walls	46,435
B2010-Exterior Walls	EIFS Wall Panels - Economy	173,045
B2010-Exterior Walls	Wood Walls	132,257
B2010-Exterior Walls	Wood Walls	24,877
B2020-Exterior Windows	Aluminum Windows	207,394
B2020-Exterior Windows	Vinyl Windows	80,850
B2030-Exterior Doors	Door Assembly 4 - Moderate Size and Cost	7,384
B2030-Exterior Doors	Door Assembly 5 - Average	17,535
B30-Roofing	Asphalt Shingled Roofing	65,280
C1010-Partitions	GWB 2HR Rated Walls	72,494
C1010-Partitions	GWB Walls - Standard	198,511
C1010-Partitions	Plaster Walls - Thin Coat	38,966
C1020-Interior Doors	Swinging Doors - Average	167,985
C1030-Fittings	Restroom Accessories - Economy	24,700
C1030-Fittings	Toilet Partitions - Economy	10,857
C1030-Fittings	Toilet Partitions - Economy	5,429
C20-Stairs	Exterior Concrete Stairs	8,226
C20-Stairs	Stairs - Average	118,456
C3010-Wall Finishes	Ceramic Tiles - Economy	12,271
C3010-Wall Finishes	Ceramic Tiles - Economy	6,131
C3010-Wall Finishes	Painted Finish - Average	155,511
C3020-Floor Finishes	Carpeting 4 - Economy	12,632
C3020-Floor Finishes	Carpeting 4 - Economy	58,700
C3020-Floor Finishes	Carpeting 4 - Economy	58,700
C3020-Floor Finishes	Ceramic Tile	7,948
C3020-Floor Finishes	Ceramic Tile	5,880
C3020-Floor Finishes	Ceramic Tile	2,940
C3020-Floor Finishes	Ceramic Tile - Economy	2,246
C3020-Floor Finishes	Ceramic Tile - Economy	1,129

All costs in USD.

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System	System Name	Cost
C3020-Floor Finishes	VCT 4 - Average	73,348
C3020-Floor Finishes	Vinyl Sheet Goods	1,100
C3030-Ceiling Finishes	Plaster Veneer over GWB	111,953
D20-Plumbing	Sanitary Waste System - Low End	51,791
D2010-Plumbing Fixtures	Drinking Fountains	5,717
D2010-Plumbing Fixtures	Restroom Fixtures 8 - Std Density - Economy	51,535
D2010-Plumbing Fixtures	Service/Utility Sinks	2,584
D2020-Domestic Water Distribution	Domestic Water Dist Complete - Average	65,846
D2020-Domestic Water Distribution	Water Heater - Electric	43,118
D3020-Heat Generating Systems	Boiler HW - Gas/Oil Fired - Economy	179,440
D3030-Cooling Generating Systems	Chiller Reciprocating and Cooling Tower	181,160
D3040-Distribution Systems	Exhaust - General Building	13,484
D3040-Distribution Systems	Four Pipe Perimeter Units - Add for	192,558
D3060-Controls and Instrumentation	DDC System - Economy	41,483
D40-Fire Protection	Wet Sprinkler System w/Pump - Lt Hazard	156,106
D5010-Electrical Service and Distribution	Distribution - Average Capacity	242,272
D5010-Electrical Service and Distribution	Feeder for Average Service	46,513
D5010-Electrical Service and Distribution	Switchgear - Average Duty	14,300
D5020-Lighting and Branch Wiring	Lighting Fixtures - Average Density	130,458
D5030-Communications and Security	Fire Alarm System - Average Density	114,763
D5092-Emergency Light and Power Systems	Emergency Battery Pack Lights	20,927
D5092-Emergency Light and Power Systems	Exit Signs - Average Density	17,822
Subtotal		**4,092,961**

Overhead Cost

Description	Cost
Equipment and Furnishings (+ 25%)	1,023,240
Site Remediation (+ 5%)	204,648
Subtotal	**1,227,888**
Total Replacement Value	5,320,849

All costs in USD.

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RENEWAL EVENTS

Renewal costs include 0% inflation rate

System	System Name	Renewal FY	Renewal Cost
D40-Fire Protection	Wet Sprinkler System w/Pump - Lt Hazard	2017	175,520
D2020-Domestic Water Distribution	Water Heater - Electric	2016	53,752
B2020-Exterior Windows	Vinyl Windows	2012	101,070
C3020-Floor Finishes	Vinyl Sheet Goods	2011	1,375
C3020-Floor Finishes	VCT 4 - Average	2010	91,745
C1030-Fittings	Toilet Partitions - Economy	2016	13,500
D5010-Electrical Service and Distribution	Switchgear - Average Duty	2012	17,917
D2010-Plumbing Fixtures	Service/Utility Sinks	2012	3,216
D2010-Plumbing Fixtures	Restroom Fixtures 8 - Std Density - Economy	2012	64,433
C1030-Fittings	Restroom Accessories - Economy	2012	31,011
C3030-Ceiling Finishes	Plaster Veneer over GWB	2016	69,920
C3010-Wall Finishes	Painted Finish - Average	2010	194,146
		2020	194,146
D3040-Distribution Systems	Four Pipe Perimeter Units - Add for	2012	216,764
D5030-Communications and Security	Fire Alarm System - Average Density	2016	143,338
D5010-Electrical Service and Distribution	Feeder for Average Service	2012	58,231
C20-Stairs	Exterior Concrete Stairs	2021	8,226
D5092-Emergency Light and Power Systems	Exit Signs - Average Density	2012	22,397
		2022	22,397
D3040-Distribution Systems	Exhaust - General Building	2012	15,195
D5092-Emergency Light and Power Systems	Emergency Battery Pack Lights	2022	26,187
D2010-Plumbing Fixtures	Drinking Fountains	2008	7,236
B2030-Exterior Doors	Door Assembly 5 - Average	2012	21,919
B2030-Exterior Doors	Door Assembly 4 - Moderate Size and Cost	2012	9,229
D2020-Domestic Water Distribution	Domestic Water Dist Complete - Average	2012	74,115
D5010-Electrical Service and Distribution	Distribution - Average Capacity	2012	302,870
D3060-Controls and Instrumentation	DDC System - Economy	2012	51,684
D3030-Cooling Generating Systems	Chiller Reciprocating and Cooling Tower	2022	226,378
C3010-Wall Finishes	Ceramic Tiles - Economy	2018	7,663
C3010-Wall Finishes	Ceramic Tiles - Economy	2007	15,336
C3020-Floor Finishes	Ceramic Tile - Economy	2016	1,412

All costs in USD.

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System	System Name	Renewal FY	Renewal Cost
C3020-Floor Finishes	Ceramic Tile - Economy	2007	2,808
C3020-Floor Finishes	Ceramic Tile	2016	2,941
C3020-Floor Finishes	Ceramic Tile	2007	5,882
C3020-Floor Finishes	Ceramic Tile	2014	7,952
C3020-Floor Finishes	Carpeting 4 - Economy	2008	73,371
		2018	73,371
C3020-Floor Finishes	Carpeting 4 - Economy	2011	73,371
		2021	73,371
C3020-Floor Finishes	Carpeting 4 - Economy	2007	15,789
		2017	15,789
D3020-Heat Generating Systems	Boiler HW - Gas/Oil Fired - Economy	2012	224,310
B30-Roofing	Asphalt Shingled Roofing	2021	81,578
B2020-Exterior Windows	Aluminum Windows	2011	259,254

All costs in USD.

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Institution: Northern Kentucky University
Campus: Northern Kentucky University CAMPUS=01

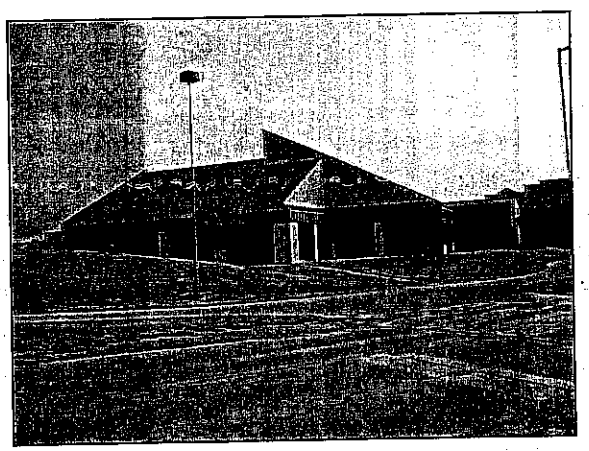
Asset Name: NORSE COMMONS
Asset Number: 377

STATISTICS

FCI Requirements Cost:	0	**FCI:**	0.23

Current Replacement Value	7,833,548	**Address 1**	15 Campbell Drive
Size	25,315 SF	**Address 2**	-
Year Constructed	1992	**City**	Highland Heights
Year Renovated	-	**State/Province/Region**	Kentucky
Commission Date	-	**Zip/Postal Code**	41076
Decommission Date	-	**Architect**	Miller / Player & Associates
Ownership	Client Owned	**Historical Category**	None
Floors	1	**Construction Type**	IBC - Type 2A
Type	Building	**Use**	Food Service
1-YR Building Condition Code	2. Remodeling A	**2006 Space Study?**	NO
5-YR Building Condition Code	2. Remodeling A	**Fit For Confined Use Cost**	
Fit For Continued Use Cost per SF	-		

PHOTO



Norse Commons Signature Shot

Norse Commons Signature Shot

Norse Commons
5-yr FCI:
27%

ASSET DESCRIPTION

Architectural Description:

The "Norse Commons" building (or building 377) on the NKU Campus is a 25,315 square foot facility which houses a 300 seat dining facility with kitchen, the residential life offices, a convenience store, an exercise room, laundry room and reading room. There is also a mechanical room.

The building was built in 1992. Norse Commons is located on the south side of the Residential Village, which also includes Norse Hall, Norse Commons, Commonwealth Hall, Kentucky Hall, Cumberland Hall, University Suites, and the Woodcrest Apartments.

The substructure consists of concrete slab on grade with column footings. The superstructure is steel frame with an EPDM membrane roof over insulation on steel decking on steel joists. There are some areas of metal roof as well, similar in construction to metal roof elsewhere in the Residential Village. The exterior walls are metal stud framing clad in E.I.F.S. panels with large areas of aluminum framed window units. The interior partitions are metal stud

All costs in USD.

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walls with GWB for the most part.

Interior finishes are predominately paint on walls, ACT system for ceilings almost everywhere, and a combination of VCT, ceramic tile, and carpet on floors.

The building has one interior courtyard and a skylight in the lobby, as well as clerestory lighting in some of the dining areas.

Exterior doors are aluminum and glass in aluminum frames with rated metal doors and frames to the utility spaces. Interior doors are predominately metal in metal frames.

Parking for Norse Commons is available in lots M and E, which contain Accessible parking spaces. The parking lots are connected to the site by concrete walkways which are marginally handicapped accessible.

Cooling is generated by two 25-ton Refrigeration Systems which utilize water-cooled DX compressors. The chillers use refrigerant R-22, and should be monitored for refrigerant leaks. At this time however the mechanical building does not appear to be monitored. A 28 ton capacity Marley cross flow cooling tower handles the circulation requirements of the compressors. The tower is located adjacent to the west side of the building and has a 2 HP fan along with a 5 HP circulation pump. The distribution system sends chilled water through an underground 4 pipe system which supports the individual fan coil units located in Norse Hall. Most of the fan coil units were manufactured by Trane.

Heating is generated by a pair of gas or oil-fired, Ajax boiler rated at 400 Mbtu/hr each. Hot water is then delivered using the same underground distributed system as the chilled water loop. A single 1/2HP simplex pump is used to circulate the water throughout the building.

Neither the condenser water nor the boiler appears to have automatic chemical treatment systems.

PLUMBING

Domestic water is supplied to the building by a 4-inch line that does not have backflow prevention. Domestic hot water is generated by an 80 gallon AO Smith electric water heater with a 1/6 HP recirculation pump. Distribution is by copper piping. Drinking water is provided by two Sunroc pedestal DX water coolers that are not UFAS compliant.

FIRE PROTECTION

The building is equipped with a wet type fire suppression (sprinkler) system. The 4" service complete with a Siamese connection at the fire truck route is equipped with both flow and tamper alarms. ABC type handheld extinguishers are located throughout the building.

ELECTRICAL

ELECTRICAL SERVICE AND DISTRIBUTION

Most of the electrical equipment which supports this residential village complex is located within the free standing Mechanical Equipment building list as BD no 378. The equipment within that structure consists of the following.

Power is supplied to the building by the site power system via a liquid filled, sealed and locked, 225kVA pad-mounted transformer located outside the building that feeds an 800A main disconnect switch located in the mechanical building. This feeds the panel adjacent to the switch that is rated at 800Amps, 208Y/120 Volt, three phase, four wire, switch and fuse main distribution panel. From this main distribution panel general power distribution is handled through secondary panels, motor control center and the electric panels distributed throughout residential village complex.

EMERGENCY LIGHT AND POWER

Emergency lighting is not required as these are apartment units.

LIGHTING

The majority of lighting within this building is made up of either two by four or one by four foot fluorescent lamp fixtures equipped with the older T-12 fluorescent lamps equipped with magnetic ballasts. Restrooms are equipped with incandescent vanity lighting fixtures above the mirrors.

Exterior lighting is made up of a mix of ceiling mounted HID fixtures and fluorescent type fixtures at the stair wells.

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FIRE ALARM

The building is equipped with a local fire alarm system consisting of pull stations and bells. There are smoke detectors present and the system is monitored by the University's Department of Public Safety. This department is staffed and manned as a 24x7 operation.

COMMUNICATION

The building is equipped with a telecommunication system distributed to individual desktops and work areas via a backbone located in a room within the center of the building. The room houses a rack system complete with hubs/router, Cad 5 fiber, telephone punch down blocks, etc.

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REPLACEMENT VALUE

System	System Name	Cost
A-Substructure	Foundation Wall and Footings - no Basement	29,363
A-Substructure	Structural Slab on Grade - Non Industrial	160,760
B10-Superstructure	Single Story Superstructure - Low Cost	110,819
B2010-Exterior Walls	E.I.F.S. on Metal Stud Walls	163,938
B2020-Exterior Windows	Aluminum Windows	529,297
B2030-Exterior Doors	Door Assembly 3 - High Size and Cost	37,905
B2030-Exterior Doors	Door Assembly 4 - Moderate Size and Cost	18,784
B2030-Exterior Doors	Door Assembly 5 - Average	7,793
B30-Roofing	Adhered Membrane Single Ply	153,989
B30-Roofing	Metal Roofing - High End	99,403
C1010-Partitions	GWB 2HR Rated Walls	55,118
C1010-Partitions	GWB Walls - Standard	214,593
C1010-Partitions	Plaster Walls - Thin Coat	8,316
C1010-Partitions	Window/Storefront Partitions - Economy	21,227
C1020-Interior Doors	Swinging Doors - Economy	50,314
C1030-Fittings	Restroom Accessories - Economy	22,684
C1030-Fittings	Toilet Partitions - Economy	30,539
C20-Stairs	Exterior Concrete Stairs	3,960
C3010-Wall Finishes	Painted Finish - Average	128,288
C3020-Floor Finishes	Carpeting 4 - Economy	27,864
C3020-Floor Finishes	Ceramic Tile	43,180
C3020-Floor Finishes	Ceramic Tile	50,530
C3020-Floor Finishes	Ceramic Tile - Economy	7,613
C3020-Floor Finishes	VCT 4 - Average	34,016
C3020-Floor Finishes	VCT 5 - Economy	4,130
C3030-Ceiling Finishes	ACT System - Economy	65,261
C3030-Ceiling Finishes	GWB Taped and Finished	5,342
D20-Plumbing	Rain Water Drainage - Average	1,101
D20-Plumbing	Roof Drains and Sump Pump	24,042
D20-Plumbing	Sanitary Waste System - Low End	47,564
D2010-Plumbing Fixtures	Drinking Fountains	5,250
D2010-Plumbing Fixtures	Emergency Eyewash and Shower	2,613

All costs in USD.

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System	System Name	Cost
D2010-Plumbing Fixtures	Restroom Fixtures 8 - Std Density - Economy	47,328
D2010-Plumbing Fixtures	Service/Utility Sinks	7,119
D2020-Domestic Water Distribution	Domestic Water Dist Complete - Average	60,472
D3020-Heat Generating Systems	Boiler HW - Gas/Oil - High End	219,724
D3020-Heat Generating Systems	Boiler HW - Gas/Oil Fired - Economy	164,793
D3030-Cooling Generating Systems	Chiller Reciprocating and Cooling Tower	166,373
D3040-Distribution Systems	Air VAV with Central AHU	444,693
D3040-Distribution Systems	Distribution Piping - Steam	73,409
D3040-Distribution Systems	Exhaust - General Building	37,150
D3040-Distribution Systems	Exhaust - Kitchen	204,538
D3040-Distribution Systems	Exhaust System - High Velocity	408,935
D3040-Distribution Systems	Fume Hood and Exhaust	595,055
D3060-Controls and Instrumentation	HVAC Pneumatic Controls - Average	117,359
D40-Fire Protection	Carbon Dioxide System 75 Lb.	7,847
D40-Fire Protection	Fire Extinguishers	887
D40-Fire Protection	Wet Sprinkler System w/Pump - Lt Hazard	143,364
D5010-Electrical Service and Distribution	Distribution System - Heavy Capacity	303,067
D5010-Electrical Service and Distribution	Feeder for Heavy Service	105,713
D5010-Electrical Service and Distribution	Switchgear - Heavy Duty	18,761
D5020-Lighting and Branch Wiring	Lighting Fixtures - Average Density	119,810
D5030-Communications and Security	Clock System - Average Building	98,336
D5030-Communications and Security	Fire Alarm System - Average Density	105,396
D5030-Communications and Security	LAN System - Economy	61,971
D5030-Communications and Security	Telephone System - Average Density	65,616
D5092-Emergency Light and Power Systems	Emergency Battery Pack Lights	19,219
D5092-Emergency Light and Power Systems	Exit Signs - Average Density	16,367
E-Equipment and Furnishings	Food Service Counters - High End	199,230
E-Equipment and Furnishings	Kitchen Equipment - Average	47,680
Subtotal		**6,025,808**

Overhead Cost

Description	Cost
Equipment and Furnishings (+ 25%)	1,506,452
Site Remediation (+ 5%)	301,290

All costs in USD.

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Description	Cost
Subtotal	**1,807,742**
Total Replacement Value	7,833,550

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RENEWAL EVENTS

Renewal costs include 0% inflation rate

System	System Name	Renewal FY	Renewal Cost
C3020-Floor Finishes	VCT 5 - Economy	2007	5,160
		2017	5,160
C3020-Floor Finishes	VCT 4 - Average	2009	42,548
C1030-Fittings	Toilet Partitions - Economy	2007	38,289
D5030-Communications and Security	Telephone System - Average Density	2012	69,664
		2022	69,664
D5010-Electrical Service and Distribution	Switchgear - Heavy Duty	2022	23,416
D2010-Plumbing Fixtures	Service/Utility Sinks	2022	8,860
D2010-Plumbing Fixtures	Restroom Fixtures 8 - Std Density - Economy	2022	59,174
C1030-Fittings	Restroom Accessories - Economy	2012	28,479
C3010-Wall Finishes	Painted Finish - Average	2010	160,160
		2020	160,160
D5020-Lighting and Branch Wiring	Lighting Fixtures - Average Density	2012	149,675
D5030-Communications and Security	LAN System - Economy	2012	65,898
E-Equipment and Furnishings	Kitchen Equipment - Average	2017	59,600
C3030-Ceiling Finishes	GWB Taped and Finished	2018	3,338
D3040-Distribution Systems	Fume Hood and Exhaust	2017	743,945
E-Equipment and Furnishings	Food Service Counters - High End	2017	249,038
D40-Fire Protection	Fire Extinguishers	2022	1,266
D5030-Communications and Security	Fire Alarm System - Average Density	2011	131,638
		2021	131,638
D5010-Electrical Service and Distribution	Feeder for Heavy Service	2022	132,271
D5092-Emergency Light and Power Systems	Exit Signs - Average Density	2011	20,568
		2021	20,568
D3040-Distribution Systems	Exhaust System - High Velocity	2012	459,942
D3040-Distribution Systems	Exhaust - Kitchen	2012	255,682
D3040-Distribution Systems	Exhaust - General Building	2017	41,865
D2010-Plumbing Fixtures	Emergency Eyewash and Shower	2022	3,164
D5092-Emergency Light and Power Systems	Emergency Battery Pack Lights	2011	24,049
		2021	24,049
D2010-Plumbing Fixtures	Drinking Fountains	2012	6,645
B2030-Exterior Doors	Door Assembly 5 - Average	2021	9,742
B2030-Exterior Doors	Door Assembly 4 - Moderate Size and Cost	2021	23,480

All costs in USD.

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System	System Name	Renewal FY	Renewal Cost
B2030-Exterior Doors	Door Assembly 3 - High Size and Cost	2021	47,381
D2020-Domestic Water Distribution	Domestic Water Dist Complete - Average	2022	68,066
D5010-Electrical Service and Distribution	Distribution System - Heavy Capacity	2022	378,776
D3040-Distribution Systems	Distribution Piping - Steam	2022	91,767
D5030-Communications and Security	Clock System - Average Building	2011	122,778
		2021	122,778
D3030-Cooling Generating Systems	Chiller Reciprocating and Cooling Tower	2012	207,899
C3020-Floor Finishes	Ceramic Tile - Economy	2016	9,518
C3020-Floor Finishes	Ceramic Tile	2010	50,545
C3020-Floor Finishes	Ceramic Tile	2014	43,193
C3020-Floor Finishes	Carpeting 4 - Economy	2015	34,828
D40-Fire Protection	Carbon Dioxide System 75 Lb.	2012	9,809
D3020-Heat Generating Systems	Boiler HW - Gas/Oil Fired - Economy	2022	206,001
D3020-Heat Generating Systems	Boiler HW - Gas/Oil - High End	2022	274,668
B2020-Exterior Windows	Aluminum Windows	2021	661,649
D3040-Distribution Systems	Air VAV with Central AHU	2017	555,981
B30-Roofing	Adhered Membrane Single Ply	2010	192,425
C3030-Ceiling Finishes	ACT System - Economy	2007	81,675
		2017	81,675

All costs in USD.

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Institution: Northern Kentucky University
Campus: Northern Kentucky University CAMPUS=01

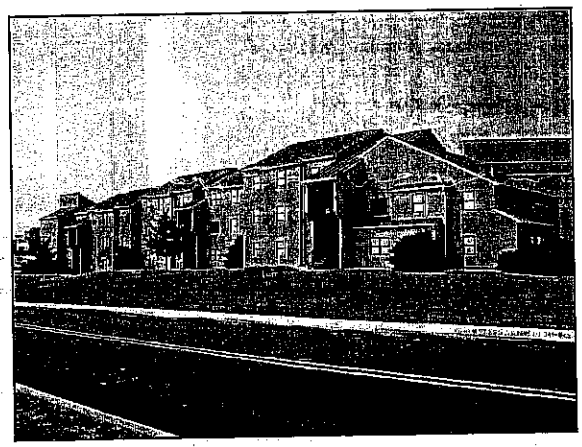
Asset Name: NORSE HALL
Asset Number: 376

STATISTICS

FCI Requirements Cost:	0	**FCI:**	0.24

Current Replacement Value	15,700,878	**Address 1**	10 Campbell Drive
Size	69,721 SF	**Address 2**	-
Year Constructed	1992	**City**	Highland Heights
Year Renovated	-	**State/Province/Region**	Kentucky
Commission Date	-	**Zip/Postal Code**	41076
Decommission Date	-	**Architect**	Miller / Player & Associates
Ownership	Client Owned	**Historical Category**	None
Floors	3	**Construction Type**	IBC - Type 3A
Type	Building	**Use**	Education/Support
1-YR Building Condition Code	2. Remodeling A	**2006 Space Study?**	NO
5-YR Building Condition Code	2. Remodeling A	**Fit For Contined Use Cost**	
Fit For Continued Use Cost per SF	-		

PHOTO



Norse Hall Signature Shot

Norse Hall Signature Shot

Norse Hall
5-yr FCI:
29%

ASSET DESCRIPTION

ARCHITECTURAL

The "Norse Hall" building (building #376) the NKU Campus is a three wing apartment style dormitory building. It was built in 1992 and is located at the Eastern edge of the Residential Village, which also includes Norse Commons, Kentucky Hall, Commonwealth Hall, Cumberland Hall, The Woodcrest Apartments, and the University Suites.

Norse Hall contains approximately 69,721 gross square feet of space on three floors, comprised mostly of two bedroom apartments with a few efficiencies, and a few utility spaces. There are handicapped accessible units on the first floors of two of the wings.

The structure of the building is slab on grade with concrete foundation. Above grade the structure is concrete block and wood frame exterior walls with interior wood frame partitions and floors. The exterior is clad in E.I.F.S. panels with aluminum framed window units.

All costs in USD.

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Vertical circulation is exterior steel stairs inside breezeways which serve all floors. Each apartment unit has its own entry off of the breezeways. The roofing material is asphalt shingle with areas of metal roofing over the breezeways.

Interior finishes are carpet and linoleum on floors, painted GWB on walls and ceiling, with ceramic tile in shower stalls. The CT is being replaced piecemeal with one-piece vinyl shower unit inserts. Exterior doors are metal in metal frames with wood doors in metal frames on the interior. Hardware is lever type.

Parking for Norse Hall is available in lots E and F, which contain Accessible parking spaces. The parking lots are connected to the site by concrete walkways. The walkways are marginally handicapped accessible.

HVAC

Most of the mechanical equipment which supports this residential village complex is located within the Mechanical Equipment room list as Norse Commons. The equipment within that structure consists of the following.

Cooling is generated by two 25-ton Refrigeration Systems which utilize water-cooled DX compressors. The chillers use refrigerant R-22, and should be monitored for refrigerant leaks. At this time however the mechanical building does not appear to be monitored. A 28 ton capacity Marley cross flow cooling tower handles the circulation requirements of the compressors. The tower is located adjacent to the west side of the building and has a 2 HP fan along with a 5 HP circulation pump. The distribution system sends chilled water through an underground 4 pipe system which supports the individual fan coil units located in Norse Hall. Most of the fan coil units were manufactured by Trane.

Heating is generated by a pair of gas or oil-fired, Ajax boiler rated at 400 Mbtu/hr each. Hot water is then delivered using the same underground distributed system as the chilled water loop. A single 1/2HP simplex pump is used to circulate the water throughout the building.

Neither the condenser water nor the boiler appears to have automatic chemical treatment systems.

PLUMBING

Domestic water is supplied to the building by a 4-inch line that does not have backflow prevention. Domestic hot water is generated by an 80 gallon AO Smith electric water heater with a 1/6 HP recirculation pump. Distribution is by copper piping. Drinking water is provided by two Sunroc pedestal DX water coolers that are not UFAS compliant.

FIRE PROTECTION

The building is equipped with a wet type fire suppression (sprinkler) system. The 4" service complete with a Siamese connection at the fire truck route is equipped with both flow and tamper alarms. ABC type handheld extinguishers are located throughout the building.

ELECTRICAL

ELECTRICAL SERVICE AND DISTRIBUTION

Most of the electrical equipment which supports this residential village complex is located within the free standing Mechanical Equipment building list as BD no 378. The equipment within that structure consists of the following.

Power is supplied to the building by the site power system via a liquid filled, sealed and locked, 225kVA pad-mounted transformer located outside the building that feeds an 800A main disconnect switch located in the mechanical building. This feeds the panel adjacent to the switch that is rated at 800Amps, 208Y/120 Volt, three phase, four wire, switch and fuse main distribution panel. From this main distribution panel general power distribution is handled through secondary panels, motor control center and the electric panels distributed throughout residential village complex.

EMERGENCY LIGHT AND POWER

Emergency lighting is not required as these are apartment units.

LIGHTING

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The majority of lighting within this building is made up of either two by four or one by four foot fluorescent lamp fixtures equipped with the older T-12 fluorescent lamps equipped with magnetic ballasts. Restrooms are equipped with incandescent vanity lighting fixtures above the mirrors.

Exterior lighting is made up of a mix of ceiling mounted HID fixtures and fluorescent type fixtures at the stair wells.

FIRE ALARM

The building is equipped with a local fire alarm system consisting of pull stations and bells. There are smoke detectors present and the system is monitored by the University's Department of Public Safety. This department is staffed and manned as a 24x7 operation.

COMMUNICATION

The building is equipped with a telecommunication system distributed to individual desktops and work areas via a backbone located in a room within the center of the building. The room houses a rack system complete with hubs/router, Cad 5 fiber, telephone punch down blocks, etc.

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REPLACEMENT VALUE

System	System Name	Cost
A-Substructure	Foundation Wall and Footings - no Basement	28,132
A-Substructure	Structural Slab on Grade - Non Industrial	147,585
B10-Superstructure	Multi Floor Superstructure - Low Cost	1,224,859
B2010-Exterior Walls	EIFS Wall Panels - Economy	625,185
B2010-Exterior Walls	Stud Walls	473,412
B2020-Exterior Windows	Aluminum Windows	524,627
B2030-Exterior Doors	Door Assembly 5 - Average	268,868
B30-Roofing	Asphalt Shingled Roofing	130,559
B30-Roofing	Metal Roofing - High End	125,911
C1010-Partitions	GWB 2HR Rated Walls	219,814
C1010-Partitions	GWB 2HR Rated Walls	35,784
C1010-Partitions	GWB Walls - Standard	413,285
C1010-Partitions	GWB Walls - Standard	398,394
C1020-Interior Doors	Swinging Doors - Economy	968,105
C20-Stairs	Stairs - Economy	412,849
C3010-Wall Finishes	Ceramic Tiles - Economy	173,010
C3010-Wall Finishes	Ceramic Tiles - Economy	34,602
C3010-Wall Finishes	Painted Finish - Average	393,338
C3020-Floor Finishes	Carpeting 4 - Economy	378,950
C3020-Floor Finishes	Vinyl Sheet Goods	100,665
C3020-Floor Finishes	Vinyl Sheet Goods	16,381
C3030-Ceiling Finishes	Plaster Veneer over GWB	322,056
C3030-Ceiling Finishes	Plaster Veneer over GWB	58,277
C3030-Ceiling Finishes	Vinyl Paneled System	63,720
D20-Plumbing	Rain Water Drainage - Average	1,055
D20-Plumbing	Sanitary Waste System - Low End	130,998
D2010-Plumbing Fixtures	Kitchenette Cab Counter Sink	30,062
D2010-Plumbing Fixtures	Restroom Fixtures 8 - Std Density - Economy	130,348
D2020-Domestic Water Distribution	Backflow Prevention for Dos Water	25,186
D2020-Domestic Water Distribution	Domestic Water Dist Complete - Average	166,547
D3040-Distribution Systems	Exhaust - Kitchen	563,326
D3040-Distribution Systems	Exhaust - Restroom	256,002
D3040-Distribution Systems	Perimeter Units - HW/Steam/CW	741,156

All costs in USD.

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System	System Name	Cost
D3060-Controls and Instrumentation	HVAC Controls - Electric	119,675
D40-Fire Protection	Wet Sprinkler System w/Pump - Lt Hazard	394,843
D5010-Electrical Service and Distribution	Distribution - Average Capacity	612,785
D5010-Electrical Service and Distribution	Feeder for Average Service	117,646
D5010-Electrical Service and Distribution	Switchgear - Average Duty	36,169
D5020-Lighting and Branch Wiring	Lighting Fixtures - Average Density	329,973
D5030-Communications and Security	Fire Alarm System - Average Density	290,275
D5030-Communications and Security	LAN System - Medium	253,757
D5030-Communications and Security	Telephone System - Average Density	180,717
D5092-Emergency Light and Power Systems	Exit Signs - Average Density	45,078
E-Equipment and Furnishings	Kitchen Cabinets - Average	113,636
Subtotal		**12,077,602**

Overhead Cost

Description	Cost
Equipment and Furnishings (+ 25%)	3,019,400
Site Remediation (+ 5%)	603,880
Subtotal	**3,623,280**

Total Replacement Value	15,700,882

All costs in USD.

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RENEWAL EVENTS

Renewal costs include 0% inflation rate

System	System Name	Renewal FY	Renewal Cost
C3020-Floor Finishes	Vinyl Sheet Goods	2013	20,474
C3020-Floor Finishes	Vinyl Sheet Goods	2007	125,813
		2022	125,813
C3030-Ceiling Finishes	Vinyl Paneled System	2016	79,625
D5030-Communications and Security	Telephone System - Average Density	2011	191,863
		2021	191,863
D5010-Electrical Service and Distribution	Switchgear - Average Duty	2022	45,319
D2010-Plumbing Fixtures	Restroom Fixtures 8 - Std Density - Economy	2022	162,973
C3030-Ceiling Finishes	Plaster Veneer over GWB	2016	36,397
C3030-Ceiling Finishes	Plaster Veneer over GWB	2016	201,141
D3040-Distribution Systems	Perimeter Units - HW/Steam/CW	2010	833,776
C3010-Wall Finishes	Painted Finish - Average	2010	491,059
		2020	491,059
D5020-Lighting and Branch Wiring	Lighting Fixtures - Average Density	2012	412,225
D5030-Communications and Security	LAN System - Medium	2012	269,646
D2010-Plumbing Fixtures	Kitchenette Cab Counter Sink	2022	37,475
E-Equipment and Furnishings	Kitchen Cabinets - Average	2012	142,042
D3060-Controls and Instrumentation	HVAC Controls - Electric	2012	149,900
D5030-Communications and Security	Fire Alarm System - Average Density	2016	362,549
D5010-Electrical Service and Distribution	Feeder for Average Service	2022	147,286
D5092-Emergency Light and Power Systems	Exit Signs - Average Density	2011	56,648
		2021	56,648
D3040-Distribution Systems	Exhaust - Restroom	2012	319,845
D3040-Distribution Systems	Exhaust - Kitchen	2007	704,182
		2022	704,182
B2030-Exterior Doors	Door Assembly 5 - Average	2016	336,085
D2020-Domestic Water Distribution	Domestic Water Dist Complete - Average	2022	187,462
D5010-Electrical Service and Distribution	Distribution - Average Capacity	2022	766,059
C3010-Wall Finishes	Ceramic Tiles - Economy	2016	43,240
C3010-Wall Finishes	Ceramic Tiles - Economy	2007	216,200
C3020-Floor Finishes	Carpeting 4 - Economy	2010	473,663
		2020	473,663
D2020-Domestic Water Distribution	Backflow Prevention for Dos Water	2011	31,483

All costs in USD.

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System	System Name	Renewal FY	Renewal Cost
		2016	31,483
		2021	31,483
B30-Roofing	Asphalt Shingled Roofing	2011	163,155
B2020-Exterior Windows	Aluminum Windows	2021	655,810

All costs in USD.

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Institution: Northern Kentucky University
Campus: Northern Kentucky University CAMPUS=01

Asset Name: WOODCREST APARTMENTS - OAK
Asset Number: 373

STATISTICS

FCI Requirements Cost:	0	**FCI:**	0.18

Current Replacement Value	3,885,543	**Address 1**	10 Campbell Drive
Size	22,424 SF	**Address 2**	-
Year Constructed	1992	**City**	Highland Heights
Year Renovated	-	**State/Province/Region**	Kentucky
Commission Date	-	**Zip/Postal Code**	41076
Decommission Date	-	**Architect**	Miller / Player & Associates
Ownership	Client Owned	**Historical Category**	None
Floors	4	**Construction Type**	IBC - Type 3A
Type	Building	**Use**	Education/Support
1-YR Building Condition Code	2. Remodeling A	**2006 Space Study?**	NO
5-YR Building Condition Code	2. Remodeling A	**Fit For Contined Use Cost**	
Fit For Continued Use Cost per SF	-		

PHOTO

Woodcrest - Oak Signature Shot

Woodcrest - Oak Signature Shot

Woodcrest - Oak
5-yr FCI:
22%

ASSET DESCRIPTION

Architectural Description:

The "Oak" building (or building #373) the NKU Campus is one of three apartment style dormitory buildings in the Woodcrest Apartments complex. All three buildings were built in 1992 with minor additions to the stairwells in 2002. The Woodcrest Apartments are located at the western edge of the Residential Village, which also includes Norse Hall, Norse Commons, Kentucky Hall, Commonwealth Hall, Cumberland Hall, and the University Suites.

The Oak Building contains approximately 22,424 gross square feet of space on four levels, which is comprised of apartments of one, two, and three bedroom units as well as efficiency units, and a few utility spaces. Most of the units are one and three bedrooms, and there are three handicapped accessible units on the first floor.

All costs in USD.

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The structure of the building is wood frame supported by concrete piers. There is a partial crawlspace under the first floor. The exterior is clad in E.I.F.S. panels over wood sheathing, with aluminum framed window units.

Vertical circulation is exterior steel stairs inside breezeways which serve all floors. Each apartment unit has its own entry off of the breezeways. The roofing material is asphalt shingle with areas of metal roofing over the breezeways.

Interior finishes are carpet and linoleum on floors, painted GWB on walls and ceiling, with ceramic tile in shower stalls. The CT is being replaced piecemeal with one-piece vinyl shower unit inserts. Exterior doors are metal in metal frames with wood doors in metal frames on the interior. Hardware is lever type.

Parking for the Woodcrest apartments is available in lots P and Q, which contain Accessible parking spaces. The parking lots are connected to the site by concrete walkways. The walkways are marinally handicapped accessible.

HVAC

The building is conditioned by a single TRAIN chilled water 2 pipe system and fan coil units in each appartment.

Hot water is generated by a two gas or oil-fired Ajax boiler rated at 400 MBH. water is returned by a 1/2HP simplex pump, . Heating equipment is located in the mechanical building.

Chilled water is generated by two 25-ton Refrigeration Systems water-cooled DX compressors. The chillers use refrigerant R-22, but the machine room is not monitored for refrigerant leaks. Circulation of condenser water to the cooling tower is by a 5 HP pump. The 28 ton capacity Marley cross flow cooling tower has a 2 HP fan, and is located adjacent to the west side of the building. Neither the condenser water nor the boiler appears to have automatic chemical treatment systems.

The HVAC system for the building is controlled pneumatically, with compressed air supplied by a 3/4 HP simplex unit with a 30-gallon storage tank.

PLUMBING

Natural gas is supplied to the building by a 2-inch line that enters the building at the mechanical building, with distribution by black steel pipe. Domestic water is supplied to the building by a 4-inch line that does not have backflow prevention. Domestic hot water is generated by an 80 gallon AO Smith electric water heater with a 1/6 HP recirculation pump. Distribution is by copper piping. Drinking water is provided by two Sunroc pedestal DX water coolers that are not UFAS compliant. The sixteen examining rooms each have a stainless steel cabinet lavatory, while the laboratory has a stainless steel two well sink and an emergency eyewash stations. Process water and the domestic water heater have reduced pressure backflow preventers.

FIRE PROTECTION

The building does have an automatic fire sprinkler system. ABC type handheld extinguishers are located throughout the building.

ELECTRICAL

ELECTRICAL SERVICE AND DISTRIBUTION

Power is supplied to the building by the site power system via a liquid filled, sealed and locked, 225kVA pad-mounted transformer located outside the building that feeds an 800A main disconnect switch located in the mechanical building. This feeds the panel adjacent to the switch that is rated at 800Amps, 208Y/120 Volt, three phase, four wire, switch and fuse main distribution panel. From this main distribution panel general power distribution is handled through electric panels distributed throughout the building and a motor control center located in mechanical room.

EMERGENCY LIGHT AND POWER

There is no emergency lighting as these are apartment units.

LIGHTING

The majority of lighting in the building is made up of two by four foot flourescent, one by four foot or two by four foot fluorescent lamp fixtures equipped with energy inefficient T-12 fluorescent lamps and magnetic ballasts. Restrooms are equipped with incandescent vanity lighting fixtures above the

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mirrors.

Exterior lighting is made up of a mix of ceiling mounted HID fixtures and flourscent fixtures at the stair wells.

FIRE ALARM

The building is equipped with a local fire alarm system consisting of pull stations and bells. There are aged smoke detectors present and the system is connected to the local fire department.

COMMUNICATION

The building is equipped with a telecommunication system distributed to individual desktops and work areas via a backbone located in a room in the center of the building. The room houses a rack system with hubs/router, fiber, telephone punch down blocks, etc.

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REPLACEMENT VALUE

System	System Name	Cost
A-Substructure	Foundation Wall and Footings - no Basement	18,416
B10-Superstructure	Multi Floor Superstructure - Low Cost	393,945
B2010-Exterior Walls	EIFS Wall Panels - Economy	206,006
B2010-Exterior Walls	Stud Walls	155,995
B2020-Exterior Windows	Aluminum Windows	168,735
B2030-Exterior Doors	Door Assembly 5 - Average	89,623
B30-Roofing	Asphalt Shingled Roofing	42,924
B30-Roofing	Metal Roofing - High End	39,761
C1010-Partitions	GWB 2HR Rated Walls	84,078
C1010-Partitions	GWB Walls - Standard	169,614
C1020-Interior Doors	Swinging Doors - Economy	319,232
C20-Stairs	Stairs - Economy	112,595
C3010-Wall Finishes	Ceramic Tiles - Economy	19,464
C3010-Wall Finishes	Painted Finish - Average	126,507
C3020-Floor Finishes	Carpeting 4 - Economy	124,831
C3020-Floor Finishes	Vinyl Sheet Goods	61,609
C3030-Ceiling Finishes	Plaster Veneer over GWB	122,688
C3030-Ceiling Finishes	Vinyl Paneled System	25,488
D20-Plumbing	Rain Water Drainage - Average	9,128
D20-Plumbing	Sanitary Waste System - Low End	42,132
D2010-Plumbing Fixtures	Kitchenette Cab Counter Sink	9,669
D2010-Plumbing Fixtures	Restroom Fixtures 4 - High Density - Medium Quality	96,612
D2020-Domestic Water Distribution	Domestic Water Dist Complete - High End	64,689
D3040-Distribution Systems	Perimeter Units - HW/Steam/CW	3,383
D40-Fire Protection	Fire Extinguishers	786
D40-Fire Protection	Wet Sprinkler System w/Pump - Lt Hazard	126,991
D5010-Electrical Service and Distribution	Feeder for Moderate Service	18,919
D5010-Electrical Service and Distribution	Switchgear - Average Duty	11,633
D5020-Lighting and Branch Wiring	Lighting Fixtures - Average Density	106,127
D5030-Communications and Security	Fire Alarm System - Average Density	93,360
D5030-Communications and Security	Telephone System - Average Density	58,123
D5092-Emergency Light and Power Systems	Exit Signs - Average Density	14,498

All costs in USD.

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System	System Name	Cost
E-Equipment and Furnishings	Kitchen Cabinets - Average	51,319
Subtotal		**2,988,880**

Overhead Cost

Description	Cost
Equipment and Furnishings (+ 25%)	747,220
Site Remediation (+ 5%)	149,444
Subtotal	**896,664**
Total Replacement Value	3,885,544

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RENEWAL EVENTS

Renewal costs include 0% inflation rate

System	System Name	Renewal FY	Renewal Cost
C3020-Floor Finishes	Vinyl Sheet Goods	2007	77,000
		2022	77,000
C3030-Ceiling Finishes	Vinyl Paneled System	2016	31,850
D5030-Communications and Security	Telephone System - Average Density	2011	61,708
		2021	61,708
D5010-Electrical Service and Distribution	Switchgear - Average Duty	2022	14,576
D2010-Plumbing Fixtures	Restroom Fixtures 4 - High Density - Medium Quality	2022	120,809
C3030-Ceiling Finishes	Plaster Veneer over GWB	2016	76,625
D3040-Distribution Systems	Perimeter Units - HW/Steam/CW	2020	3,805
C3010-Wall Finishes	Painted Finish - Average	2010	157,936
		2020	157,936
D5020-Lighting and Branch Wiring	Lighting Fixtures - Average Density	2012	132,582
D2010-Plumbing Fixtures	Kitchenette Cab Counter Sink	2022	12,053
E-Equipment and Furnishings	Kitchen Cabinets - Average	2012	64,148
D40-Fire Protection	Fire Extinguishers	2022	1,121
D5030-Communications and Security	Fire Alarm System - Average Density	2011	116,605
		2021	116,605
D5010-Electrical Service and Distribution	Feeder for Moderate Service	2022	23,545
D5092-Emergency Light and Power Systems	Exit Signs - Average Density	2021	18,220
B2030-Exterior Doors	Door Assembly 5 - Average	2016	112,028
D2020-Domestic Water Distribution	Domestic Water Dist Complete - High End	2022	72,654
C3010-Wall Finishes	Ceramic Tiles - Economy	2007	24,323
C3020-Floor Finishes	Carpeting 4 - Economy	2010	156,030
		2020	156,030
B30-Roofing	Asphalt Shingled Roofing	2011	53,640
B2020-Exterior Windows	Aluminum Windows	2021	210,927

All costs in USD.

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Institution: Northern Kentucky University
Campus: Northern Kentucky University CAMPUS=01

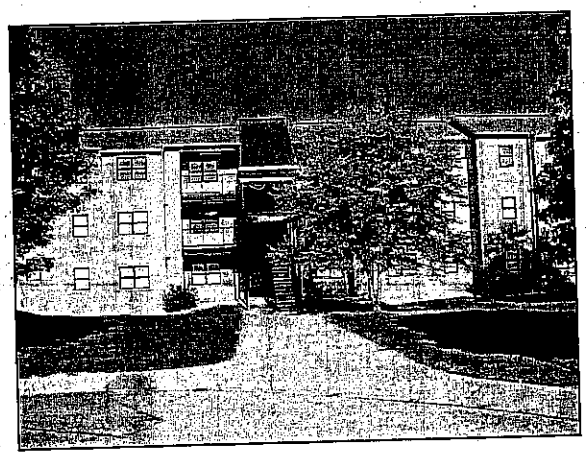
Asset Name: WOODCREST APARTMENTS - SYCAMORE
Asset Number: 374

STATISTICS

FCI Requirements Cost:	0	**FCI:**	0.16

Current Replacement Value	4,265,986	**Address 1**	10 Campbell Drive
Size	22,586 SF	**Address 2**	-
Year Constructed	1992	**City**	Highland Heights
Year Renovated	-	**State/Province/Region**	Kentucky
Commission Date	-	**Zip/Postal Code**	41076
Decommission Date	-	**Architect**	Miller / Player & Associates
Ownership	Client Owned	**Historical Category**	None
Floors	4	**Construction Type**	IBC - Type 3A
Type	Building	**Use**	Education/Support
1-YR Building Condition Code	2. Remodeling A	**2006 Space Study?**	NO
5-YR Building Condition Code	2. Remodeling A	**Fit For Contined Use Cost**	
Fit For Continued Use Cost per SF	-		

PHOTO



Woodcrest - Sycamore Signature Shot

Woodcrest - Sycamore Signature Shot

Woodcrest - Sycamore
5-yr FCI:
20%

ASSET DESCRIPTION

Architectural Description:

The "Sycamore" building (or building #374) on the NKU Campus is one of three apartment style dormitory buildings in the Woodcrest Apartments complex. All three buildings were built in 1992 with minor additions to the stairwells in 2002. The Woodcrest Apartments are located at the western edge of the Residential Village, which also includes Norse Hall, Norse Commons, Kentucky Hall, Commonwealth Hall, Cumberland Hall, and the University Suites.

The Sycamore Building contains approximately 22,586 gross square feet of space on four levels, which is comprised of apartments of one, two, and three bedroom units as well as efficiency units, and a few utility spaces. Most of the units are one and three bedrooms, and there are three handicapped accessible units on the first floor.

All costs in USD.

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The structure of the building is wood frame supported by concrete piers. There is a partial crawlspace under the first floor. The exterior is clad in E.I.F.S. panels over wood sheathing, with aluminum framed window units.

Vertical circulation is exterior steel stairs inside breezeways which serve all floors. Each apartment unit has its own entry off of the breezeways. The roofing material is asphalt shingle with areas of metal roofing over the breezeways.

Interior finishes are carpet and linoleum on floors, painted GWB on walls and ceiling, with ceramic tile in shower stalls. The CT is being replaced piecemeal with one-piece vinyl shower unit inserts. Exterior doors are metal in metal frames with wood doors in metal frames on the interior. Hardware is lever type.

Parking for the Woodcrest apartments is available in lots P and Q, which contain Accessible parking spaces. The parking lots are connected to the site by concrete walkways. The walkways are marginally handicapped accessible.

HVAC

The building is conditioned by a single TRAIN chilled water 2 pipe system and fan coil units in each appartment.

Hot water is generated by a two gas or oil-fired Ajax boiler rated at 400 MBH. water is returned by a 1/2HP simplex pump, . Heating equipment is located in the mechanical building.

Chilled water is generated by two 25-ton Refrigeration Systems water-cooled DX compressors. The chillers use refrigerant R-22, but the machine room is not monitored for refrigerant leaks. Circulation of condenser water to the cooling tower is by a 5 HP pump. The 28 ton capacity Marley cross flow cooling tower has a 2 HP fan, and is located adjacent to the west side of the building. Neither the condenser water nor the boiler appears to have automatic chemical treatment systems.

The HVAC system for the building is controlled pneumatically, with compressed air supplied by a 3/4 HP simplex unit with a 30-gallon storage tank.

PLUMBING

Natural gas is supplied to the building by a 2-inch line that enters the building at the mechanical building, with distribution by black steel pipe. Domestic water is supplied to the building by a 4-inch line that does not have backflow prevention. Domestic hot water is generated by an 80 gallon AO Smith electric water heater with a 1/6 HP recirculation pump. Distribution is by copper piping. Drinking water is provided by two Sunroc pedestal DX water coolers that are not UFAS compliant. The sixteen examining rooms each have a stainless steel cabinet lavatory, while the laboratory has a stainless steel two well sink and an emergency eyewash stations. Process water and the domestic water heater have reduced pressure backflow preventers.

FIRE PROTECTION

The building does have an automatic fire sprinkler system. ABC type handheld extinguishers are located throughout the building.

ELECTRICAL

ELECTRICAL SERVICE AND DISTRIBUTION

Power is supplied to the building by the site power system via a liquid filled, sealed and locked, 225kVA pad-mounted transformer located outside the building that feeds an 800A main disconnect switch located in the mechanical building. This feeds the panel adjacent to the switch that is rated at 800Amps, 208Y/120 Volt, three phase, four wire, switch and fuse main distribution panel. From this main distribution panel general power distribution is handled through electric panels distributed throughout the building and a motor control center located in mechanical room.

EMERGENCY LIGHT AND POWER

There is no emergency lighting as these are apartment units.

LIGHTING

The majority of lighting in the building is made up of two by four foot flourescent, one by four foot or two by four foot fluorescent lamp fixtures equipped with energy inefficient T-12 fluorescent lamps and magnetic ballasts. Restrooms are equipped with incandescent vanity lighting fixtures above the

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mirrors.

Exterior lighting is made up of a mix of ceiling mounted HID fixtures and flourscent fixtures at the stair wells.

FIRE ALARM

The building is equipped with a local fire alarm system consisting of pull stations and bells. There are aged smoke detectors present and the system is connected to the local fire department.

COMMUNICATION

The building is equipped with a telecommunication system distributed to individual desktops and work areas via a backbone located in a room in the center of the building. The room houses a rack system with hubs/router, fiber, telephone punch down blocks, etc.

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REPLACEMENT VALUE

System	System Name	Cost
A-Substructure	Foundation Wall and Footings - no Basement	18,356
B10-Superstructure	Multi Floor Superstructure - Low Cost	396,791
B2010-Exterior Walls	EIFS Wall Panels - Economy	206,006
B2010-Exterior Walls	Stud Walls	155,995
B2020-Exterior Windows	Aluminum Windows	169,946
B2030-Exterior Doors	Door Assembly 5 - Average	89,623
B30-Roofing	Asphalt Shingled Roofing	42,924
B30-Roofing	Metal Roofing - High End	39,761
C1010-Partitions	GWB 2HR Rated Walls	84,078
C1010-Partitions	GWB Walls - Standard	169,614
C1020-Interior Doors	Swinging Doors - Economy	319,232
C20-Stairs	Stairs - Economy	112,595
C3010-Wall Finishes	Ceramic Tiles - Economy	19,464
C3010-Wall Finishes	Painted Finish - Average	127,422
C3020-Floor Finishes	Carpeting 4 - Economy	124,831
C3020-Floor Finishes	Vinyl Sheet Goods	61,609
C3030-Ceiling Finishes	Plaster Veneer over GWB	122,688
C3030-Ceiling Finishes	Vinyl Paneled System	25,488
D20-Plumbing	Rain Water Drainage - Average	9,194
D20-Plumbing	Sanitary Waste System - High End	106,953
D2010-Plumbing Fixtures	Restroom Fixtures 4 - High Density - Medium Quality	97,310
D2020-Domestic Water Distribution	Domestic Water Dist Complete - Average	53,953
D3040-Distribution Systems	Perimeter Units - HW/Steam/CW	240,096
D40-Fire Protection	Backflow Prevention for Fire System	3,525
D40-Fire Protection	Wet Sprinkler System w/Pump - Lt Hazard	127,909
D5010-Electrical Service and Distribution	Feeder for Moderate Service	19,056
D5010-Electrical Service and Distribution	Switchgear - Average Duty	11,717
D5020-Lighting and Branch Wiring	Lighting Fixtures - Average Density	106,894
D5030-Communications and Security	Fire Alarm System - Average Density	94,034
D5030-Communications and Security	Telephone System - Average Density	58,543
D5092-Emergency Light and Power Systems	Exit Signs - Average Density	14,603
E-Equipment and Furnishings	Kitchen Cabinets - Average	51,319

All costs in USD.

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System	System Name	Cost
Subtotal		**3,281,529**

Overhead Cost

Description	Cost
Equipment and Furnishings (+ 25%)	820,382
Site Remediation (+ 5%)	164,076
Subtotal	**984,458**
Total Replacement Value	4,265,987

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RENEWAL EVENTS

Renewal costs include 0% inflation rate

System	System Name	Renewal FY	Renewal Cost
C3020-Floor Finishes	Vinyl Sheet Goods	2007	77,000
		2022	77,000
C3030-Ceiling Finishes	Vinyl Paneled System	2016	31,850
D5030-Communications and Security	Telephone System - Average Density	2011	62,154
		2021	62,154
D5010-Electrical Service and Distribution	Switchgear - Average Duty	2022	14,681
D2010-Plumbing Fixtures	Restroom Fixtures 4 - High Density - Medium Quality	2022	121,682
C3030-Ceiling Finishes	Plaster Veneer over GWB	2016	76,625
D3040-Distribution Systems	Perimeter Units - HW/Steam/CW	2021	270,100
C3010-Wall Finishes	Painted Finish - Average	2010	159,078
		2020	159,078
D5020-Lighting and Branch Wiring	Lighting Fixtures - Average Density	2012	133,540
E-Equipment and Furnishings	Kitchen Cabinets - Average	2012	64,148
D5030-Communications and Security	Fire Alarm System - Average Density	2011	117,447
		2021	117,447
D5010-Electrical Service and Distribution	Feeder for Moderate Service	2022	23,715
D5092-Emergency Light and Power Systems	Exit Signs - Average Density	2011	18,351
		2021	18,351
B2030-Exterior Doors	Door Assembly 5 - Average	2016	112,028
D2020-Domestic Water Distribution	Domestic Water Dist Complete - Average	2022	60,728
C3010-Wall Finishes	Ceramic Tiles - Economy	2007	24,323
C3020-Floor Finishes	Carpeting 4 - Economy	2010	156,030
		2020	156,030
B30-Roofing	Asphalt Shingled Roofing	2011	53,640
B2020-Exterior Windows	Aluminum Windows	2021	212,441

All costs in USD.

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Institution: Northern Kentucky University
Campus: Northern Kentucky University CAMPUS=01

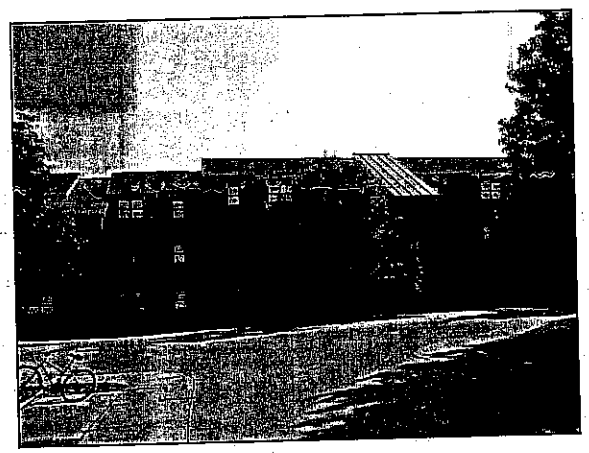
Asset Name: WOODCREST APARTMENTS - WILLOW
Asset Number: 375

STATISTICS

FCI Requirements Cost:	0	FCI:	0.16

Current Replacement Value	7,070,117	**Address 1**	10 Campbell Drive
Size	36,632 SF	**Address 2**	-
Year Constructed	1992	**City**	Highland Heights
Year Renovated	-	**State/Province/Region**	Kentucky
Commission Date	-	**Zip/Postal Code**	41076
Decommission Date	-	**Architect**	Miller / Player & Associates
Ownership	Client Owned	**Historical Category**	None
Floors	4	**Construction Type**	IBC - Type 3A
Type	Building	**Use**	Education/Support
1-YR Building Condition Code	2. Remodeling A	**2006 Space Study?**	NO
5-YR Building Condition Code	2. Remodeling A	**Fit For Contined Use Cost**	
Fit For Continued Use Cost per SF	-		

PHOTO



Woodcrest - Willow Signature Shot

Woodcrest - Willow Signature Shot

Woodcrest-Willow
5-yr FCI:
19%

ASSET DESCRIPTION

Architectural Description:

The "Willow" building (or building #375) the NKU Campus is one of three apartment style dormitory buildings in the Woodcrest Apartments complex. All three buildings were built in 1992 with minor additions to the stairwells in 2002. The Woodcrest Apartments are located at the western edge of the Residential Village, which also includes Norse Hall, Norse Commons, Kentucky Hall, Commonwealth Hall, Cumberland Hall, and the University Suites.

The Willow Building contains approximately 36,632 gross square feet of space on four levels, which is comprised of apartments of one, two, and three bedroom units as well as efficiency units, and a few utility spaces. Most of the units are one and three bedrooms, and there are three handicapped accessible units on the first floor.

All costs in USD.

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The structure of the building is wood frame supported by concrete piers. There is a partial crawlspace under the first floor. The exterior is clad in E.I.F.S. panels over wood sheathing, with aluminum framed double-hung window units. Vertical circulation is exterior steel stairs inside breezeways which serve all floors. Each apartment unit has its own entry off of the breezeways. The roofing material is asphalt shingle with areas of metal roofing over the breezeways.

Interior finishes are carpet and linoleum on floors, painted GWB on walls and ceiling, with ceramic tile in shower stalls. The CT is being replaced piecemeal with one-piece vinyl shower unit inserts. Exterior doors are metal in metal frames with wood doors in metal frames on the interior. Hardware is lever type.

Parking for the Woodcrest apartments is available in lots P and Q, which contain Accessible parking spaces. The parking lots are connected to the site by concrete walkways. The walkways are marginally handicapped accessible.

HVAC

The building is conditioned by a single TRAIN chilled water 2 pipe system and fan coil units in each appartment.

Hot water is generated by a two gas or oil-fired Ajax boiler rated at 400 MBH. water is returned by a 1/2HP simplex pump, . Heating equipment is located in the mechanical building.

Chilled water is generated by two 25-ton Refrigeration Systems water-cooled DX compressors. The chillers use refrigerant R-22, but the machine room is not monitored for refrigerant leaks. Circulation of condenser water to the cooling tower is by a 5 HP pump. The 28 ton capacity Marley cross flow cooling tower has a 2 HP fan, and is located adjacent to the west side of the building. Neither the condenser water nor the boiler appears to have automatic chemical treatment systems.

The HVAC system for the building is controlled pneumatically, with compressed air supplied by a 3/4 HP simplex unit with a 30-gallon storage tank.

PLUMBING

Natural gas is supplied to the building by a 2-inch line that enters the building at the mechanical building, with distribution by black steel pipe. Domestic water is supplied to the building by a 4-inch line that does not have backflow prevention. Domestic hot water is generated by an 80 gallon AO Smith electric water heater with a 1/6 HP recirculation pump. Distribution is by copper piping. Drinking water is provided by two Sunroc pedestal DX water coolers that are not UFAS compliant. The sixteen examining rooms each have a stainless steel cabinet lavatory, while the laboratory has a stainless steel two well sink and an emergency eyewash stations. Process water and the domestic water heater have reduced pressure backflow preventers.

FIRE PROTECTION

The building does have an automatic fire sprinkler system. ABC type handheld extinguishers are located throughout the building.

ELECTRICAL

ELECTRICAL SERVICE AND DISTRIBUTION

Power is supplied to the building by the site power system via a liquid filled, sealed and locked, 225kVA pad-mounted transformer located outside the building that feeds an 800A main disconnect switch located in the mechanical building. This feeds the panel adjacent to the switch that is rated at 800Amps, 208Y/120 Volt, three phase, four wire, switch and fuse main distribution panel. From this main distribution panel general power distribution is handled through electric panels distributed throughout the building and a motor control center located in mechanical room.

EMERGENCY LIGHT AND POWER

There is no emergency lighting as these are apartment units.

LIGHTING

The majority of lighting in the building is made up of two by four foot flourescent, one by four foot or two by four foot fluorescent lamp fixtures equipped with energy inefficient T-12 fluorescent lamps and magnetic ballasts. Restrooms are equipped with incandescent vanity lighting fixtures above the mirrors.

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Exterior lighting is made up of a mix of ceiling mounted HID fixtures and flourscent fixtures at the stair wells.

FIRE ALARM

The building is equipped with a local fire alarm system consisting of pull stations and bells. There are aged smoke detectors present and the system is connected to the local fire department.

COMMUNICATION

The building is equipped with a telecommunication system distributed to individual desktops and work areas via a backbone located in a room in the center of the building. The room houses a rack system with hubs/router, fiber, telephone punch down blocks, etc.

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REPLACEMENT VALUE

System	System Name	Cost
A-Substructure	Foundation Wall and Footings - no Basement	23,059
B10-Superstructure	Multi Floor Superstructure - Low Cost	643,551
B2010-Exterior Walls	EIFS Wall Panels - Economy	329,610
B2010-Exterior Walls	Stud Walls	249,592
B2020-Exterior Windows	Aluminum Windows	275,632
B2030-Exterior Doors	Door Assembly 5 - Average	142,227
B30-Roofing	Asphalt Shingled Roofing	68,678
B30-Roofing	Metal Roofing - High End	66,269
C1010-Partitions	GWB 2HR Rated Walls	134,525
C1010-Partitions	GWB Walls - Standard	271,382
C1020-Interior Doors	Swinging Doors - Economy	510,077
C20-Stairs	Stairs - Economy	187,659
C3010-Wall Finishes	Ceramic Tiles - Economy	31,142
C3010-Wall Finishes	Painted Finish - Average	206,663
C3020-Floor Finishes	Carpeting 4 - Economy	199,729
C3020-Floor Finishes	Vinyl Sheet Goods	61,609
C3030-Ceiling Finishes	Plaster Veneer over GWB	190,166
C3030-Ceiling Finishes	Vinyl Paneled System	50,976
D20-Plumbing	Rain Water Drainage - Average	59,649
D20-Plumbing	Sanitary Waste System - Low End	68,827
D2010-Plumbing Fixtures	Restroom Fixtures 4 - High Density - Medium Quality	157,827
D3040-Distribution Systems	Perimeter Units - HW/Steam/CW	389,410
D40-Fire Protection	Backflow Prevention for Fire System	3,525
D40-Fire Protection	Fire Extinguishers	1,283
D40-Fire Protection	Wet Sprinkler System w/Pump - Lt Hazard	207,454
D5010-Electrical Service and Distribution	Distribution - Average Capacity	321,962
D5010-Electrical Service and Distribution	Feeder for Moderate Service	30,906
D5010-Electrical Service and Distribution	Switchgear - Average Duty	19,004
D5020-Lighting and Branch Wiring	Lighting Fixtures - Average Density	173,370
D5030-Communications and Security	Fire Alarm System - Average Density	152,513
D5030-Communications and Security	Telephone System - Average Density	94,950
D5092-Emergency Light and Power Systems	Exit Signs - Average Density	23,684

All costs in USD.

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System	System Name	Cost
E-Equipment and Furnishings	Kitchen Cabinets - Average	91,642
Subtotal		5,438,552

Overhead Cost

Description	Cost
Equipment and Furnishings (+ 25%)	1,359,638
Site Remediation (+ 5%)	271,928
Subtotal	1,631,566
Total Replacement Value	7,070,118

All costs in USD.

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RENEWAL EVENTS

Renewal costs include 0% inflation rate

System	System Name	Renewal FY	Renewal Cost
C3020-Floor Finishes	Vinyl Sheet Goods	2007	77,000
		2022	77,000
C3030-Ceiling Finishes	Vinyl Paneled System	2016	63,700
D5030-Communications and Security	Telephone System - Average Density	2011	100,807
		2021	100,807
D5010-Electrical Service and Distribution	Switchgear - Average Duty	2022	23,811
D2010-Plumbing Fixtures	Restroom Fixtures 4 - High Density - Medium Quality	2022	197,355
C3030-Ceiling Finishes	Plaster Veneer over GWB	2016	118,769
D3040-Distribution Systems	Perimeter Units - HW/Steam/CW	2022	438,073
C3010-Wall Finishes	Painted Finish - Average	2010	258,006
		2020	258,006
D5020-Lighting and Branch Wiring	Lighting Fixtures - Average Density	2012	216,587
E-Equipment and Furnishings	Kitchen Cabinets - Average	2012	114,550
D40-Fire Protection	Fire Extinguishers	2022	1,832
D5030-Communications and Security	Fire Alarm System - Average Density	2011	190,486
		2021	190,486
D5010-Electrical Service and Distribution	Feeder for Moderate Service	2022	38,464
D5092-Emergency Light and Power Systems	Exit Signs - Average Density	2011	29,764
		2021	29,764
B2030-Exterior Doors	Door Assembly 5 - Average	2016	177,784
D5010-Electrical Service and Distribution	Distribution - Average Capacity	2022	402,494
C3010-Wall Finishes	Ceramic Tiles - Economy	2007	38,916
C3020-Floor Finishes	Carpeting 4 - Economy	2010	249,648
		2020	249,648
B30-Roofing	Asphalt Shingled Roofing	2011	85,824
B2020-Exterior Windows	Aluminum Windows	2021	344,555

All costs in USD.

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System Crosstab

By Asset and Year

Dorm Buildings

Asset >> Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total
REGENTS HALL	2,832	0	0	133	389	0	0	286	96	302	162	0	0	82	17	859	5,157
STORAGE FACILITY	319	0	25	0	63	617	205	0	147	11	187	0	0	44	57	0	1,674
LANDRUM ACADEMIC CENTER	9,964	0	3,115	594	1,496	0	0	210	0	166	82	0	802	0	702	846	17,978
CUMBERLAND COMMUNITY	19	29	0	76	29	124	0	0	0	36	7	33	0	76	61	0	492
WOODCREST APARTMENTS - SYCAMORE	101	0	0	315	252	198	0	0	0	221	0	0	0	315	680	298	2,380
FINE ARTS CENTER	15,282	0	267	1,124	2,501	505	0	145	0	289	2,180	0	0	1,124	868	2,879	27,164
UNIVERSITY CENTER	5,066	5,728	981	104	2,877	0	1,066	0	0	168	303	60	0	341	1,050	0	17,744
HONORS HOUSE	26	30	47	12	146	0	0	126	119	0	0	172	47	12	20	5	763
APPLIED SCIENCE & TECHNOLOGY	2,039	136	1,376	499	1,293	0	0	5,091	1,179	65	90	0	5,832	499	801	576	19,477
KENTUCKY HALL	40	81	0	286	334	1,241	0	8	0	285	191	81	0	194	163	275	3,178
MAINTENANCE BUILDING	617	0	0	0	451	0	0	91	89	11	140	0	18	38	42	0	1,498
Total	86,967	8,733	17,975	10,982	38,036	7,271	2,667	16,575	3,445	8,584	6,708	714	15,304	7,890	16,184	18,767	266,802

All Costs in 000s USD. Renewal Costs include 0.0% inflation rate.

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Institution:
Northern Kentucky University

Campus:
Northern Kentucky University CAMPUS=01, Northern Kentucky University CAMPUS=02

Asset >> Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total
COMMONWEALTH HALL	59	98	0	336	669	928	0	31	45	346	255	110	0	258	432	130	3,697
FOUNDERS HALL (Old Science Building)	12,064	0	2,611	1,126	2,320	0	0	153	0	417	102	0	0	457	1,344	652	21,246
MECHANICAL EQUIPMENT	0	0	0	0	0	9	0	0	0	0	0	0	0	0	14	8	31
ALBRIGHT HEALTH CENTER	2,535	0	5,956	0	2,980	0	0	6,512	0	80	111	0	2,094	0	748	709	21,726
HANKINS HALL (Covington Campus)	4,058	1,886	0	1,153	654	197	0	0	0	508	317	254	0	0	377	0	9,404
CERAMICS & SCULPTURE	15	129	6	0	97	137	0	0	0	0	429	0	0	0	97	398	1,309
NUNN HALL	11,159	0	0	412	4,223	242	1,376	0	138	0	92	0	0	412	899	4,070	23,023
CENTRAL (OLD) POWER PLANT	2,115	0	0	0	144	0	0	4	0	1,021	17	0	2	0	0	107	3,409
WOODCREST APARTMENTS - WILLOW	116	0	0	508	407	331	0	0	0	360	0	0	0	508	666	1,179	4,074
NORSE HALL	1,046	0	0	1,798	443	1,294	20	0	0	1,091	0	0	0	965	936	2,177	9,770
BUSINESS-EDUCATION-PSYCHOLOGY CENTER	0	0	1,694	849	4,778	0	0	3,456	137	0	104	0	5,511	1,173	1,288	824	21,062
STEELY LIBRARY	10,283	0	1,718	938	3,025	0	0	209	1,396	0	115	0	997	913	1,488	736	21,819
LUCAS ADMINISTRATIVE CENTER	5,736	616	135	0	7,915	0	0	208	64	2,977	88	0	0	0	1,986	402	20,127
WOODCREST APARTMENTS - OAK	101	0	0	314	250	197	0	0	0	221	0	0	0	318	407	322	2,130
NORSE COMMONS	125	0	43	403	299	1,254	0	43	35	10	1,737	3	0	160	1,041	1,317	6,470

All Costs in 000s USD. Renewal Costs include 0.0% Inflation Rate.

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System Renewal Report

By Renewal Year

Dorm Buildings

Year: 2007

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
CERAMICS SCULPTURE	0305	D5092-Emergency Light and Power Systems	Emergency Battery Pack Lights	10	1 (Observed)	0.76	16,090	12,215	125%	15,286
COMMONWEALTH HALL	372	C3020-Floor Finishes	Ceramic Tile	25	0 (Observed)	9.19	960	8,820	100%	8,822
COMMONWEALTH HALL	372	C3020-Floor Finishes	Carpeting 4 - Economy	10	0 (Observed)	7.43	2,350	17,461	125%	21,826
COMMONWEALTH HALL	372	C3020-Floor Finishes	Ceramic Tile - Economy	25	0 (Observed)	12.69	266	3,375	125%	4,219
COMMONWEALTH HALL	372	C20-Stairs	Exterior Concrete Stairs	50	0 (Observed)	1,059.41	1	1,059	100%	1,059
COMMONWEALTH HALL	372	C3010-Wall Finishes	Ceramic Tiles - Economy	25	1 (Observed)	7.89	2,333	18,410	125%	23,009
CUMBERLAND COMMUNITY	371	C3020-Floor Finishes	Carpeting 4 - Economy	10	0 (Observed)	7.43	700	5,201	125%	6,501
CUMBERLAND COMMUNITY	371	C3020-Floor Finishes	Ceramic Tile	25	0 (Observed)	9.19	320	2,940	100%	2,941
CUMBERLAND COMMUNITY	371	C3020-Floor Finishes	Ceramic Tile - Economy	25	0 (Observed)	12.69	88	1,117	125%	1,396
CUMBERLAND COMMUNITY	371	C3010-Wall Finishes	Ceramic Tiles - Economy	25	1 (Observed)	7.89	777	6,131	125%	7,663
FINE ARTS CENTER	0320	D2010-Plumbing Fixtures	Drinking Fountains	20	0 (Observed)	0.21	159,584	33,098	125%	41,891
FINE ARTS CENTER	0320	D3040-Distribution Systems	Perimeter Units - HW/Steam/CW	18	0 (Observed)	7.84	159,584	1,251,350	113%	1,407,531
FINE ARTS CENTER	0320	D3040-Distribution Systems	Condenser Water Heat Exchanger	25	0 (Observed)	2.66	159,584	425,054	125%	530,617

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Year: 2007

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
HONORS HOUSE	0170	D3040-Distribution Systems	Exhaust - Restroom	20	0 (Observed)	2.57	6,678	17,144	125%	21,453
HONORS HOUSE	0170	D2020-Domestic Water Distribution	Water Heater - Electrical	15	1 (Observed)	0.58	6,678	3,900	125%	4,842
KENTUCKY HALL	370	C3020-Floor Finishes	Carpeting 4 - Economy	10	0 (Observed)	7.43	1,700	12,632	125%	15,789
KENTUCKY HALL	370	C3020-Floor Finishes	Ceramic Tile	25	0 (Observed)	9.19	640	5,880	100%	5,882
KENTUCKY HALL	370	C3020-Floor Finishes	Ceramic Tile - Economy	25	0 (Observed)	12.69	177	2,246	125%	2,808
KENTUCKY HALL	370	C3010-Wall Finishes	Ceramic Tiles - Economy	25	1 (Observed)	7.89	1,555	12,271	125%	15,336
LANDRUM ACADEMIC CENTER	0300	D10-Conveying	Traction Geared Passenger Elev. - Low Rise	35	0 (Observed)	538,683.09	3	1,616,049	31%	505,015
LANDRUM ACADEMIC CENTER	0300	D2010-Plumbing Fixtures	Drinking Fountains	20	0 (Observed)	0.21	100,500	20,844	125%	26,381
LANDRUM ACADEMIC CENTER	0300	D2020-Domestic Water Distribution	Domestic Water Dist Complete - Average	30	0 (Observed)	2.39	100,500	240,071	113%	270,219
LANDRUM ACADEMIC CENTER	0300	D2020-Domestic Water Distribution	Water Heater - Gas Fired	15	0 (Observed)	0.98	100,500	98,467	125%	123,113

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Year: 2007

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
MAINTENANCE BUILDING	0310	D5010-Electrical Service and Distribution	Distribution - Average Capacity	30	0 (Observed)	8.79	15,392	135,282	125%	169,120
MAINTENANCE BUILDING	0310	D5010-Electrical Service and Distribution	Switchgear - Average Duty	30	0 (Observed)	0.52	15,392	7,985	125%	10,005
MAINTENANCE BUILDING	0310	D5010-Electrical Service and Distribution	Feeder for Moderate Service	30	0 (Observed)	8.22	15,392	126,556	125%	158,153
MAINTENANCE BUILDING	0310	D5020-Lighting and Branch Wiring	Branch Wiring - Average Density	20	0 (Observed)	4.73	15,392	72,847	125%	91,005
MAINTENANCE BUILDING	0310	D5020-Lighting and Branch Wiring	Lighting Fixtures - 2005 Average Density	20	0 (Observed)	4.73	15,392	72,847	125%	91,005
MAINTENANCE BUILDING	0310	D5092-Emergency Light and Power Systems	Exit Signs - Average Density	10	0 (Observed)	0.65	15,392	9,952	125%	12,506
MAINTENANCE BUILDING	0310	D5092-Emergency Light and Power Systems	Emergency Battery Pack Lights	10	0 (Observed)	0.76	15,392	11,685	125%	14,622
NORSE COMMONS	377	C3030-Ceiling Finishes	ACT System - Economy	10	0 (Observed)	2.97	22,000	65,261	125%	81,675
NORSE COMMONS	377	C3020-Floor Finishes	VCT 5 - Economy	10	0 (Observed)	3.44	1,200	4,130	125%	5,160
NORSE COMMONS	377	C1030-Fittings	Toilet Partitions - Economy	40	0 (Observed)	1.21	25,315	30,539	125%	38,289

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Year: 2007

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
NORSE HALL	376	C3010-Wall Finishes	Ceramic Tiles - Economy	25	0 (Observed)	10.81	16,000	173,010	125%	216,200
NORSE HALL	376	C3020-Floor Finishes	Vinyl Sheet Goods	15	1 (Observed)	11.00	9,150	100,665	125%	125,813
NORSE HALL	376	D3040-Distribution Systems	Exhaust - Kitchen	15	1 (Observed)	8.08	69,721	563,326	125%	704,182
NUNN HALL	0130	D2010-Plumbing Fixtures	Drinking Fountains	20	0 (Observed)	0.21	113,027	23,442	125%	29,670
NUNN HALL	0130	D2020-Domestic Water Distribution	Domestic Water Dist Complete - Average	30	0 (Observed)	2.39	113,027	269,995	113%	303,901
NUNN HALL	0130	D3040-Distribution Systems	Four Pipe System	30	0 (Observed)	16.32	113,027	1,844,217	113%	2,075,176
NUNN HALL	0130	D3040-Distribution Systems	Exhaust - General Building	25	0 (Observed)	1.47	113,027	165,870	113%	186,918
NUNN HALL	0130	D5010-Electrical Service and Distribution	Distribution - Average Capacity	30	0 (Observed)	8.79	113,027	993,406	125%	1,241,884
NUNN HALL	0130	D5010-Electrical Service and Distribution	Feeder for Moderate Service	30	0 (Observed)	8.22	113,027	929,327	125%	1,161,352
NUNN HALL	0130	D5010-Electrical Service and Distribution	Switchgear - Average Duty	30	0 (Observed)	0.52	113,027	58,635	125%	73,468
NUNN HALL	0130	D5020-Lighting and Branch Wiring	Lighting Fixtures - 2005 Average Density	20	0 (Observed)	4.73	113,027	534,930	125%	668,272

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Year: 2007

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
UNIVERSITY CENTER	0340	D5092-Emergency Light and Power Systems	Exit Signs - Average Density	10	0 (Observed)	0.65	102,720	66,414	125%	83,460
WOODCREST APARTMENTS - OAK	373	C3010-Wall Finishes	Ceramic Tiles - Economy	25	0 (Observed)	10.81	1,800	19,464	125%	24,323
WOODCREST APARTMENTS - OAK	373	C3020-Floor Finishes	Vinyl Sheet Goods	15	1 (Observed)	11.00	5,600	61,609	125%	77,000
WOODCREST APARTMENTS - SYCAMORE	374	C3010-Wall Finishes	Ceramic Tiles - Economy	25	0 (Observed)	10.81	1,800	19,464	125%	24,323
WOODCREST APARTMENTS - SYCAMORE	374	C3020-Floor Finishes	Vinyl Sheet Goods	15	1 (Observed)	11.00	5,600	61,609	125%	77,000
WOODCREST APARTMENTS - WILLOW	375	C3010-Wall Finishes	Ceramic Tiles - Economy	25	0 (Observed)	10.81	2,880	31,142	125%	38,916
WOODCREST APARTMENTS - WILLOW	375	C3020-Floor Finishes	Vinyl Sheet Goods	15	1 (Observed)	11.00	5,600	61,609	125%	77,000

Total Renewal Costs: 82,908,864

Year: 2008

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
APPLIED SCIENCE TECHNOLOGY	0330	D2020-Domestic Water Distribution	Water Heater - Gas Fired	15	2 (Observed)	0.98	110,693	108,454	125%	135,599

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Year: 2008

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
CERAMICS SCULPTURE	0305	B30-Roofing	Ballasted Single Ply Membrane	25	2 (Observed)	6.43	16,090	103,425	125%	129,323
COMMONWEALTH HALL	372	C3020-Floor Finishes	Carpeting 4 - Economy	10	2 (Observed)	7.43	10,560	78,465	125%	98,076
CUMBERLAND COMMUNITY	371	C3020-Floor Finishes	Carpeting 4 - Economy	10	2 (Observed)	7.43	3,160	23,480	125%	29,349
HONORS HOUSE	0170	B2020-Exterior Windows	Wood Windows	30	2 (Observed)	60.34	400	24,134	125%	30,170
KENTUCKY HALL	370	C3020-Floor Finishes	Carpeting 4 - Economy	10	2 (Observed)	7.43	7,900	58,700	125%	73,371
KENTUCKY HALL	370	D2010-Plumbing Fixtures	Drinking Fountains	20	2 (Observed)	0.21	27,565	5,717	125%	7,236
LUCAS ADMINISTRATIVE CENTER	0360	D10-Conveying	Traction Geared Passenger Elev. - Low Rise	35	2 (Observed)	656,917.95	3	1,970,754	31%	615,861
UNIVERSITY CENTER	0340	D2020-Domestic Water Distribution	Domestic Water Dist Complete - Average	30	2 (Observed)	2.39	102,720	245,374	113%	276,188
UNIVERSITY CENTER	0340	D2020-Domestic Water Distribution	Water Heater - Gas Fired	30	2 (Observed)	0.98	102,720	100,642	125%	125,832
UNIVERSITY CENTER	0340	D3040-Distribution Systems	Four Pipe System	30	2 (Observed)	16.32	102,720	1,676,042	113%	1,885,939
UNIVERSITY CENTER	0340	D5010-Electrical Service and Distribution	Distribution - Average Capacity	30	2 (Observed)	8.79	102,720	902,816	125%	1,128,636

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Year: 2009

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
FINE ARTS CENTER	0320	B2030-Exterior Doors	Door Assembly 5 - Average	30	3 (Observed)	11,502.85	9	103,526	125%	129,407
FINE ARTS CENTER	0320	C1030-Fittings	Restroom Accessories - Average	25	3 (Observed)	1.05	105,000	110,660	125%	137,813
FOUNDERS HALL (Old Science Building)	0150	C1030-Fittings	Toilet Partitions - Average	40	3 (Observed)	1.71	125,296	213,838	125%	267,820
FOUNDERS HALL (Old Science Building)	0150	B2020-Exterior Windows	Aluminum Windows	30	3 (Observed)	86.49	21,676	1,874,679	125%	2,343,447
HONORS HOUSE	0170	C3010-Wall Finishes	Painted Finish - Average	10	3 (Observed)	1.28	29,397	37,675	125%	47,035
LANDRUM ACADEMIC CENTER	0300	B2020-Exterior Windows	Aluminum Windows	30	3 (Observed)	86.49	17,386	1,503,653	125%	1,879,644
LANDRUM ACADEMIC CENTER	0300	C3020-Floor Finishes	Carpeting 3 - Average	10	3 (Observed)	7.99	70,000	559,440	125%	699,125
LANDRUM ACADEMIC CENTER	0300	C3030-Ceiling Finishes	ACT System - Standard	15	3 (Observed)	4.77	90,000	428,976	125%	536,625
LUCAS ADMINISTRATIVE CENTER	0360	B30-Roofing	BUR (Built up Roofing)	20	3 (Observed)	7.97	13,530	107,815	125%	134,790
NORSE COMMONS	377	C3020-Floor Finishes	VCT 4 - Average	15	3 (Observed)	5.49	6,200	34,016	125%	42,548
STEELY LIBRARY	0290	C3010-Wall Finishes	Painted Finish - Average	10	3 (Observed)	1.28	623,178	798,665	125%	997,085

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Year: 2009

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
STEELY LIBRARY	0290	C3030-Ceiling Finishes	ACT System - Standard	15	3 (Observed)	4.77	120,898	576,248	125%	720,854
STORAGE FACILITY	0312	D2020-Domestic Water Distribution	Water Heater - Electrical	15	3 (Observed)	0.98	20,560	20,144	125%	25,186
UNIVERSITY CENTER	0340	D5030-Communications and Security	Fire Alarm System - Average Density	15	3 (Observed)	4.16	102,720	427,662	125%	534,144
UNIVERSITY CENTER	0340	C3030-Ceiling Finishes	ACT System - Standard	15	3 (Observed)	4.77	75,000	357,480	125%	447,188

Total Renewal Costs: 17,974,889

Year: 2010

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
APPLIED SCIENCE TECHNOLOGY	0330	C3020-Floor Finishes	Carpeting 3 - Average	10	4 (Observed)	7.99	50,000	399,600	125%	499,375
BUSINESS-EDUCATION-PSYCHOLOGY CENTER	0340	C3020-Floor Finishes	Carpeting 3 - Average	10	4 (Observed)	7.99	85,000	679,320	125%	848,938
COMMONWEALTH HALL	372	C3010-Wall Finishes	Painted Finish - Average	10	4 (Observed)	1.28	161,043	206,393	125%	257,669
COMMONWEALTH HALL	372	D3060-Controls and Instrumentation	HVAC Controls - Electric	20	4 (Observed)	1.72	36,584	62,796	125%	78,656
CUMBERLAND COMMUNITY	371	C3010-Wall Finishes	Painted Finish - Average	10	4 (Observed)	1.28	47,766	61,217	125%	76,426

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Year: 2010

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
FINE ARTS CENTER	0320	C3010-Wall Finishes	Painted Finish - Average	10	4 (Observed)	1.28	702,489	900,310	125%	1,123,982
FOUNDERS HALL (Old Science Building)	0150	C3020-Floor Finishes	VCT - Average	15	4 (Observed)	5.49	1,000	5,486	125%	6,863
FOUNDERS HALL (Old Science Building)	0150	C3010-Wall Finishes	Painted Finish - Average	10	4 (Observed)	1.28	285,424	365,799	125%	456,678
FOUNDERS HALL (Old Science Building)	0150	C3030-Ceiling Finishes	ACT System - Standard	15	4 (Observed)	4.77	111,138	529,728	125%	662,660
HONORS HOUSE	0170	D5030-Communications and Security	Telephone System - Light Density	10	4 (Observed)	1.73	6,678	11,540	106%	12,275
KENTUCKY HALL	370	C3010-Wall Finishes	Painted Finish - Average	10	4 (Observed)	1.28	121,341	155,511	125%	194,146
KENTUCKY HALL	370	C3020-Floor Finishes	VCT 4 - Average	15	4 (Observed)	5.49	13,369	73,348	125%	91,745
LANDRUM ACADEMIC CENTER	0300	D5020-Lighting and Branch Wiring	Lighting Fixtures - 2005 Average Density	20	4 (Observed)	4.73	100,500	475,642	125%	594,206
NORSE COMMONS	377	C3010-Wall Finishes	Painted Finish - Average	10	4 (Observed)	1.28	100,100	128,288	125%	160,160
NORSE COMMONS	377	B30-Roofing	Adhered Membrane Single Ply	25	4 (Observed)	7.16	21,500	153,989	125%	192,425
NORSE COMMONS	377	C3020-Floor Finishes	Ceramic Tile	25	4 (Observed)	9.19	5,500	50,530	100%	50,545

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Year: 2010

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
NORSE HALL	376	C3010-Wall Finishes	Painted Finish - Average	10	4 (Observed)	1.28	306,912	393,338	125%	491,059
NORSE HALL	376	C3020-Floor Finishes	Carpeting 4 - Economy	10	4 (Observed)	7.43	51,000	378,950	125%	473,663
NORSE HALL	376	D3040-Distribution Systems	Perimeter Units - HW/Steam/CW	18	4 (Observed)	10.63	69,721	741,156	113%	833,776
NUNN HALL	0130	C3010-Wall Finishes	Painted Finish - Average	10	4 (Observed)	1.28	257,476	329,981	125%	411,962
REGENTS HALL	0140	C3010-Wall Finishes	Painted Finish - Average	10	4 (Observed)	1.28	31,828	40,791	125%	50,925
REGENTS HALL	0140	C3020-Floor Finishes	Carpeting 2 - High Quality	10	4 (Observed)	9.99	2,500	24,984	125%	31,219
REGENTS HALL	0140	C3030-Ceiling Finishes	ACT System - Standard	15	4 (Observed)	4.77	8,474	40,390	125%	50,526
STEELY LIBRARY	0290	D10-Conveying	Hydraulic Freight/Passenger Elev. - Special	35	4 (Observed)	375,374.91	2	750,750	125%	938,437
UNIVERSITY CENTER	0340	C3020-Floor Finishes	Wood Flooring - Premium	25	4 (Observed)	23.76	3,500	83,170	125%	103,950
WOODCREST APARTMENTS - OAK	373	C3010-Wall Finishes	Painted Finish - Average	10	4 (Observed)	1.28	98,710	126,507	125%	157,936
WOODCREST APARTMENTS - OAK	373	C3020-Floor Finishes	Carpeting 4 - Economy	10	4 (Observed)	7.43	16,800	124,831	125%	156,030
WOODCREST APARTMENTS - SYCAMORE	374	C3010-Wall Finishes	Painted Finish - Average	10	4 (Observed)	1.28	99,424	127,422	125%	159,078

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Year: 2010

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
WOODCREST APARTMENTS - SYCAMORE	374	C3020-Floor Finishes	Carpeting 4 - Economy	10	4 (Observed)	7.43	16,800	124,831	125%	156,030
WOODCREST APARTMENTS - WILLOW	375	C3010-Wall Finishes	Painted Finish - Average	10	4 (Observed)	1.28	161,254	206,663	125%	258,006
WOODCREST APARTMENTS - WILLOW	375	C3020-Floor Finishes	Carpeting 4 - Economy	10	4 (Observed)	7.43	26,880	199,729	125%	249,648

Total Renewal Costs: 9,828,994

Year: 2011

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
ALBRIGHT HEALTH CENTER	0145	D2020-Domestic Water Distribution	Water Heater - Steam Fired from Heat Plant	15	5 (Observed)	0.98	136,324	133,566	125%	166,997
ALBRIGHT HEALTH CENTER	0145	D5030-Communications and Security	Telephone System - Average Density	10	5 (Observed)	2.59	136,324	353,352	106%	375,147
ALBRIGHT HEALTH CENTER	0145	C3010-Wall Finishes	Ceramic Tiles - Average	25	5 (Observed)	16.83	15,000	252,463	125%	315,563
ALBRIGHT HEALTH CENTER	0145	C3010-Wall Finishes	Painted Finish - Average	10	5 (Observed)	1.28	210,000	269,136	125%	336,000
ALBRIGHT HEALTH CENTER	0145	C3020-Floor Finishes	Wood Flooring - Premium	25	5 (Observed)	23.76	25,000	594,072	125%	742,500

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Year: 2011

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
BUSINESS-EDUCATION-PSYCHOLOGY CENTER	0345	B2030-Exterior Doors	Door Assembly 5 - Average	30	5 (Observed)	11,502.85	25	287,571	125%	359,464
BUSINESS-EDUCATION-PSYCHOLOGY CENTER	0345	C1030-Fittings	Restroom Accessories - Average	25	5 (Observed)	1.05	128,283	135,197	125%	168,371
BUSINESS-EDUCATION-PSYCHOLOGY CENTER	0345	C3010-Wall Finishes	Painted Finish - Average	10	5 (Observed)	1.28	564,702	723,722	125%	903,523
BUSINESS-EDUCATION-PSYCHOLOGY CENTER	0345	C3030-Ceiling Finishes	ACT System - Standard	15	5 (Observed)	4.77	110,000	524,304	125%	655,875
CENTRAL (OLD) POWER PLANT	0301	B2030-Exterior Doors	Door Assembly	30	5 (Observed)	11,502.85	10	115,029	125%	143,786
CERAMICS SCULPTURE	0305	D5030-Communications and Security	Telephone System - Average Density	10	5 (Observed)	2.59	16,090	41,705	106%	44,278
CERAMICS SCULPTURE	0305	D5092-Emergency Light and Power Systems	Exit Signs - Average Density	10	5 (Observed)	0.65	16,090	10,403	125%	13,073
CERAMICS SCULPTURE	0305	C3010-Wall Finishes	Painted Finish	10	5 (Observed)	1.28	25,000	32,040	125%	40,000
COMMONWEALTH HALL	372	B2020-Exterior Windows	Aluminum Windows	30	5 (Observed)	86.49	3,183	275,286	125%	344,122
COMMONWEALTH HALL	372	C3020-Floor Finishes	Carpeting 4 - Economy	10	5 (Observed)	7.43	10,560	78,465	125%	98,076
COMMONWEALTH HALL	372	C3020-Floor Finishes	Vinyl Sheet Goods	15	5 (Observed)	11.00	150	1,650	125%	2,063

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Year: 2011

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
COMMONWEALTH HALL	372	D5030-Communications and Security	Fire Alarm System - Average Density	10	5 (Observed)	4.16	36,584	152,313	125%	190,237
COMMONWEALTH HALL	372	D5092-Emergency Light and Power Systems	Emergency Battery Pack Lights	10	5 (Observed)	0.76	36,584	27,774	125%	34,755
CUMBERLAND COMMUNITY	371	C3020-Floor Finishes	Carpeting 4 - Economy	10	5 (Observed)	7.43	3,160	23,480	125%	29,349
FINE ARTS CENTER	0320	D2020-Domestic Water Distribution	Domestic Water Dist Complete - Average	30	5 (Observed)	2.39	159,584	381,209	113%	429,081
FINE ARTS CENTER	0320	D5030-Communications and Security	Telephone System - Average Density	10	5 (Observed)	2.59	159,584	413,642	106%	439,155
FINE ARTS CENTER	0320	C3020-Floor Finishes	VCT - Average	15	5 (Observed)	5.49	45,000	246,888	125%	308,813
FINE ARTS CENTER	0320	C3020-Floor Finishes	Carpeting 3 - Average	10	5 (Observed)	7.99	42,928	343,081	125%	428,743
FINE ARTS CENTER	0320	C3020-Floor Finishes	Quarry Tile - Average	25	5 (Observed)	22.14	3,000	66,407	125%	83,025
FINE ARTS CENTER	0320	C3030-Ceiling Finishes	ACT System - Standard	15	5 (Observed)	4.77	136,285	649,589	125%	812,599
FOUNDERS HALL (Old Science Building)	0150	D5030-Communications and Security	Telephone System - Average Density	10	5 (Observed)	2.59	125,296	324,767	106%	344,799

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Year: 2011

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
MAINTENANCE BUILDING	0310	C1030-Fittings	Restroom Accessories - Average	25	5 (Observed)	1.05	5,000	5,270	125%	6,563
NORSE COMMONS	377	D5030-Communications and Security	Clock System - Average Building	10	5 (Observed)	3.88	25,315	98,336	125%	122,778
NORSE COMMONS	377	D5030-Communications and Security	Fire Alarm System - Average Density	10	5 (Observed)	4.16	25,315	105,396	125%	131,638
NORSE COMMONS	377	D5092-Emergency Light and Power Systems	Emergency Battery Pack Lights	10	5 (Observed)	0.76	25,315	19,219	125%	24,049
NORSE COMMONS	377	D5092-Emergency Light and Power Systems	Exit Signs - Average Density	10	5 (Observed)	0.65	25,315	16,367	125%	20,568
NORSE HALL	376	B30-Roofing	Asphalt Shingled Roofing	20	5 (Observed)	5.96	21,900	130,559	125%	163,155
NORSE HALL	376	D2020-Domestic Water Distribution	Backflow Prevention for Dos Water	5	5 (Observed)	2,798.50	9	25,186	125%	31,483
NORSE HALL	376	D5030-Communications and Security	Telephone System - Average Density	10	5 (Observed)	2.59	69,721	180,717	106%	191,863
NORSE HALL	376	D5092-Emergency Light and Power Systems	Exit Signs - Average Density	10	5 (Observed)	0.65	69,721	45,078	125%	56,648

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Year: 2011

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
UNIVERSITY CENTER	0340	C1030-Fittings	Restroom Accessories - Average	25	5 (Observed)	1.05	102,720	108,257	125%	134,820
UNIVERSITY CENTER	0340	C3010-Wall Finishes	Painted Finish - Average	10	5 (Observed)	1.28	105,000	134,568	125%	168,000
UNIVERSITY CENTER	0340	C3020-Floor Finishes	Quarry Tile - Average	25	5 (Observed)	22.14	10,000	221,357	125%	276,750
UNIVERSITY CENTER	0340	C3020-Floor Finishes	Carpeting 3 - Average	10	5 (Observed)	7.99	60,000	479,520	125%	599,250
UNIVERSITY CENTER	0340	B30-Roofing	Pavers on Roof	25	5 (Observed)	39.61	1,600	63,379	125%	79,220
UNIVERSITY CENTER	0340	C3020-Floor Finishes	Vinyl Sheet Goods	15	5 (Observed)	11.00	5,000	55,008	125%	68,750
UNIVERSITY CENTER	0340	B2020-Exterior Windows	Aluminum Windows	30	5 (Observed)	86.49	1,000	86,486	125%	108,113
WOODCREST APARTMENTS - OAK	373	B30-Roofing	Asphalt Shingled Roofing	20	5 (Observed)	5.96	7,200	42,924	125%	53,640
WOODCREST APARTMENTS - OAK	373	D5030-Communications and Security	Fire Alarm System - Average Density	10	5 (Observed)	4.16	22,424	93,360	125%	116,605
WOODCREST APARTMENTS - OAK	373	D5030-Communications and Security	Telephone System - Average Density	10	5 (Observed)	2.59	22,424	58,123	106%	61,708
WOODCREST APARTMENTS - OAK	373	D5092-Emergency Light and Power Systems	Exit Signs - Average Density	10	5 (Observed)	0.65	22,424	14,498	125%	18,220

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Year: 2011

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
WOODCREST APARTMENTS - SYCAMORE	374	B30-Roofing	Asphalt Shingled Roofing	20	5 (Observed)	5.96	7,200	42,924	125%	53,640
WOODCREST APARTMENTS - SYCAMORE	374	D5030-Communications and Security	Fire Alarm System - Average Density	10	5 (Observed)	4.16	22,586	94,034	125%	117,447
WOODCREST APARTMENTS - SYCAMORE	374	D5030-Communications and Security	Telephone System - Average Density	10	5 (Observed)	2.59	22,586	58,543	106%	62,154
WOODCREST APARTMENTS - SYCAMORE	374	D5092-Emergency Light and Power Systems	Exit Signs - Average Density	10	5 (Observed)	0.65	22,586	14,603	125%	18,351
WOODCREST APARTMENTS - WILLOW	375	B30-Roofing	Asphalt Shingled Roofing	20	5 (Observed)	5.96	11,520	68,678	125%	85,824
WOODCREST APARTMENTS - WILLOW	375	D5030-Communications and Security	Fire Alarm System - Average Density	10	5 (Observed)	4.16	36,632	152,513	125%	190,486
WOODCREST APARTMENTS - WILLOW	375	D5030-Communications and Security	Telephone System - Average Density	10	5 (Observed)	2.59	36,632	94,950	106%	100,807
WOODCREST APARTMENTS - WILLOW	375	D5092-Emergency Light and Power Systems	Exit Signs - Average Density	10	5 (Observed)	0.65	36,632	23,684	125%	29,764

Total Renewal Costs: 37,382,627

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Year: 2012

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
CERAMICS SCULPTURE	0305	D2020-Domestic Water Distribution	Water Heater - Gas Fired	15	6 (Observed)	0.98	16,090	15,765	125%	19,710
CERAMICS SCULPTURE	0305	D5030-Communications and Security	Fire Alarm System - Average Density	15	6 (Observed)	4.16	16,090	66,989	125%	83,668
CERAMICS SCULPTURE	0305	D3050-Terminal and Package Units	Package Gas Heat and AC	15	6 (Observed)	6.60	4,090	26,976	125%	33,743
COMMONWEALTH HALL	372	C3020-Floor Finishes	VCT 4 - Average	15	6 (Observed)	5.49	17,743	97,345	125%	121,761
COMMONWEALTH HALL	372	C1030-Fittings	Restroom Accessories - Economy	20	6 (Observed)	0.90	36,584	32,781	125%	41,157
COMMONWEALTH HALL	372	D2010-Plumbing Fixtures	Kitchenette Cab Counter Sink	30	6 (Observed)	0.43	36,584	15,774	125%	19,664
COMMONWEALTH HALL	372	D2010-Plumbing Fixtures	Restroom Fixtures 7 - Standard Density	30	6 (Observed)	1.98	36,584	72,259	125%	90,545
COMMONWEALTH HALL	372	D2020-Domestic Water Distribution	Domestic Water Dist Complete - Average	30	6 (Observed)	2.39	36,584	87,391	113%	98,365
COMMONWEALTH HALL	372	D5010-Electrical Service and Distribution	Distribution - Average Capacity	30	6 (Observed)	8.79	36,584	321,540	125%	401,967

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Year: 2012

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
COMMONWEALTH HALL	372	D5010-Electrical Service and Distribution	Switchgear - Average Duty	30	6 (Observed)	0.52	36,584	18,979	125%	23,780
COMMONWEALTH HALL	372	D5030-Communications and Security	Telephone System - Average Density	10	6 (Observed)	2.59	36,584	94,826	106%	100,675
COMMONWEALTH HALL	372	D5092-Emergency Light and Power Systems	Exit Signs - Average Density	10	6 (Observed)	0.65	36,584	23,653	125%	29,725
CUMBERLAND COMMUNITY	371	B2020-Exterior Windows	Aluminum Windows	30	6 (Observed)	86.49	944	81,643	125%	102,058
CUMBERLAND COMMUNITY	371	B2030-Exterior Doors	Door Assembly 5 - Average	30	6 (Observed)	1,948.32	4	7,793	125%	9,742
CUMBERLAND COMMUNITY	371	C1030-Fittings	Restroom Accessories - Economy	20	6 (Observed)	0.90	10,851	9,723	125%	12,207
FINE ARTS CENTER	0320	D10-Conveying	Traction Geared Passenger Elev. - Low Rise	35	6 (Observed)	538,683.09	3	1,616,049	31%	505,015
KENTUCKY HALL	370	B2030-Exterior Doors	Door Assembly 4 - Moderate Size and Cost	30	6 (Observed)	3,691.77	2	7,384	125%	9,229
KENTUCKY HALL	370	B2030-Exterior Doors	Door Assembly 5 - Average	30	6 (Observed)	1,948.32	9	17,535	125%	21,919

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Year: 2012

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
KENTUCKY HALL	370	B2020-Exterior Windows	Vinyl Windows	30	6 (Observed)	60.34	1,340	80,850	125%	101,070
KENTUCKY HALL	370	C1030-Fittings	Restroom Accessories - Economy	20	6 (Observed)	0.90	27,565	24,700	125%	31,011
KENTUCKY HALL	370	D2010-Plumbing Fixtures	Restroom Fixtures 8 - Std Density - Economy	30	6 (Observed)	1.87	27,565	51,535	125%	64,433
KENTUCKY HALL	370	D2010-Plumbing Fixtures	Service/Utility Sinks	30	6 (Observed)	0.28	9,188	2,584	125%	3,216
KENTUCKY HALL	370	D2020-Domestic Water Distribution	Domestic Water Dist Complete - Average	30	6 (Observed)	2.39	27,565	65,846	113%	74,115
KENTUCKY HALL	370	D3020-Heat Generating Systems	Boiler HW - Gas/Oil Fired - Economy	30	6 (Observed)	6.51	27,565	179,440	125%	224,310
KENTUCKY HALL	370	D3040-Distribution Systems	Exhaust - General Building	25	6 (Observed)	1.47	9,188	13,484	113%	15,195
KENTUCKY HALL	370	D3040-Distribution Systems	Four Pipe Perimeter Units - Add for	30	6 (Observed)	6.99	27,565	192,558	113%	216,764
KENTUCKY HALL	370	D3060-Controls and Instrumentation	DDC System - Economy	20	6 (Observed)	1.50	27,565	41,483	125%	51,684
KENTUCKY HALL	370	D5010-Electrical Service and Distribution	Distribution - Average Capacity	30	6 (Observed)	8.79	27,565	242,272	125%	302,870

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Year: 2012

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
KENTUCKY HALL	370	D5010-Electrical Service and Distribution	Feeder for Average Service	30	6 (Observed)	1.69	27,565	46,513	125%	58,231
KENTUCKY HALL	370	D5010-Electrical Service and Distribution	Switchgear - Average Duty	30	6 (Observed)	0.52	27,565	14,300	125%	17,917
KENTUCKY HALL	370	D5092-Emergency Light and Power Systems	Exit Signs - Average Density	10	6 (Observed)	0.65	27,565	17,822	125%	22,397
KENTUCKY HALL	370	D5092-Emergency Light and Power Systems	Emergency Battery Pack Lights	10	6 (Observed)	0.76	27,565	20,927	125%	26,187
MECHANICAL EQUIPMENT	378	B30-Roofing	Asphalt Shingled Roofing	20	6 (Observed)	5.96	1,200	7,154	125%	8,940
NORSE COMMONS	377	C1030-Fittings	Restroom Accessories - Economy	20	6 (Observed)	0.90	25,315	22,684	125%	28,479
NORSE COMMONS	377	D2010-Plumbing Fixtures	Drinking Fountains	20	6 (Observed)	0.21	25,315	5,250	125%	6,645
NORSE COMMONS	377	D3030-Cooling Generating Systems	Chiller Reciprocating and Cooling Tower	20	6 (Observed)	6.57	25,315	166,373	125%	207,899
NORSE COMMONS	377	D3040-Distribution Systems	Exhaust - Kitchen	15	6 (Observed)	8.08	25,315	204,538	125%	255,682
NORSE COMMONS	377	D3040-Distribution Systems	Exhaust System - High Velocity	15	6 (Observed)	16.15	25,315	408,935	113%	459,942

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Year: 2012

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
NORSE COMMONS	377	D40-Fire Protection	Carbon Dioxide System 75 Lb.	15	6 (Observed)	7,846.96	1	7,847	125%	9,809
NORSE COMMONS	377	D5020-Lighting and Branch Wiring	Lighting Fixtures - Average Density	20	6 (Observed)	4.73	25,315	119,810	125%	149,675
NORSE COMMONS	377	D5030-Communications and Security	LAN System - Economy	15	6 (Observed)	2.45	25,315	61,971	106%	65,898
NORSE COMMONS	377	D5030-Communications and Security	Telephone System - Average Density	10	6 (Observed)	2.59	25,315	65,616	106%	69,664
NORSE HALL	376	E-Equipment and Furnishings	Kitchen Cabinets - Average	20	6 (Observed)	183.28	620	113,636	125%	142,042
NORSE HALL	376	D3040-Distribution Systems	Exhaust - Restroom	20	6 (Observed)	3.67	69,721	256,002	125%	319,845
NORSE HALL	376	D3060-Controls and Instrumentation	HVAC Controls - Electric	20	6 (Observed)	1.72	69,721	119,675	125%	149,900
NORSE HALL	376	D5020-Lighting and Branch Wiring	Lighting Fixtures - Average Density	20	6 (Observed)	4.73	69,721	329,973	125%	412,225
NORSE HALL	376	D5030-Communications and Security	LAN System - Medium	15	6 (Observed)	3.64	69,721	253,757	106%	269,646
NUNN HALL	0130	C1030-Fittings	Toilet Partitions - Average	40	6 (Observed)	1.71	113,027	192,899	125%	241,595

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Year: 2012

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
STORAGE FACILITY	0312	D2020-Domestic Water Distribution	Domestic Water Dist Complete - Average	30	6 (Observed)	2.39	20,560	49,113	113%	55,281
STORAGE FACILITY	0312	D5010-Electrical Service and Distribution	Feeder for Moderate Service	30	6 (Observed)	8.22	20,560	169,048	125%	211,254
STORAGE FACILITY	0312	D5010-Electrical Service and Distribution	Distribution - Average Capacity	30	6 (Observed)	8.79	20,560	180,704	125%	225,903
STORAGE FACILITY	0312	B2030-Exterior Doors	Door Assembly	30	6 (Observed)	11,502.85	6	69,017	125%	86,271
STORAGE FACILITY	0312	B2020-Exterior Windows	Steel Windows	30	6 (Observed)	75.83	400	30,332	125%	37,915
WOODCREST APARTMENTS - OAK	373	E-Equipment and Furnishings	Kitchen Cabinets - Average	20	6 (Observed)	183.28	280	51,319	125%	64,148
WOODCREST APARTMENTS - OAK	373	D5020-Lighting and Branch Wiring	Lighting Fixtures - Average Density	20	6 (Observed)	4.73	22,424	106,127	125%	132,582
WOODCREST APARTMENTS - SYCAMORE	374	E-Equipment and Furnishings	Kitchen Cabinets - Average	20	6 (Observed)	183.28	280	51,319	125%	64,148
WOODCREST APARTMENTS - SYCAMORE	374	D5020-Lighting and Branch Wiring	Lighting Fixtures - Average Density	20	6 (Observed)	4.73	22,586	106,894	125%	133,540

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Year: 2012

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
WOODCREST APARTMENTS - WILLOW	375	E-Equipment and Furnishings	Kitchen Cabinets - Average	20	6 (Observed)	183.28	500	91,642	125%	114,550
WOODCREST APARTMENTS - WILLOW	375	D5020-Lighting and Branch Wiring	Lighting Fixtures - Average Density	20	6 (Observed)	4.73	36,632	173,370	125%	216,587

Total Renewal Costs: 7,074,395

Year: 2013

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
NORSE HALL	376	C3020-Floor Finishes	Vinyl Sheet Goods	15	7 (Observed)	11.00	1,489	16,381	125%	20,474
NUNN HALL	0130	D5030-Communications and Security	Telephone System - Average Density	10	7 (Observed)	2.59	500,000	1,296,000	106%	1,375,938
STORAGE FACILITY	0312	B30-Roofing	Built-up Roofing	15	7 (Observed)	7.97	20,560	163,836	125%	204,829
UNIVERSITY CENTER	0340	D10-Conveying	Hydraulic Freight/Passenger Elev. - Special	35	7 (Observed)	187,687.45	1	187,687	125%	234,609
UNIVERSITY CENTER	0340	D40-Fire Protection	Wet Sprinkler System wo/Pump - Med Hazard	35	7 (Observed)	6.53	102,720	670,457	113%	754,607

All Costs in USD. Renewal Costs include 0.0% inflation rate.

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Year: 2014

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
BUSINESS-EDUCATION-PSYCHOLOGY CENTER	0315	D3040-Distribution Systems	Air VAV with Central AHU	25	8 (Observed)	17.57	128,283	2,253,470	125%	2,817,415
BUSINESS-EDUCATION-PSYCHOLOGY CENTER	0315	D3040-Distribution Systems	Exhaust - General Building	25	8 (Observed)	1.47	128,283	188,259	113%	212,148
CENTRAL (OLD) POWER PLANT	0301	C3020-Floor Finishes	Carpeting	10	8 (Observed)	9.99	300	2,998	125%	3,746
COMMONWEALTH HALL	372	B2030-Exterior Doors	Door Assembly 5 - Average	30	8 (Observed)	1,948.32	9	17,535	125%	21,919
COMMONWEALTH HALL	372	B2030-Exterior Doors	Door Assembly 4 - Moderate Size and Cost	30	8 (Observed)	3,691.77	2	7,384	125%	9,229
FINE ARTS CENTER	0320	B30-Roofing	Ballasted Single Ply Membrane	25	8 (Observed)	6.43	18,000	115,702	125%	144,675
FOUNDERS HALL (Old Science Building)	0150	D2020-Domestic Water Distribution	Water Heater - Gas Fired	15	8 (Observed)	0.98	125,296	122,761	125%	153,488
HONORS HOUSE	0170	D5020-Lighting and Branch Wiring	Branch Wiring - Light Density	20	8 (Observed)	3.08	6,678	20,590	125%	25,710
HONORS HOUSE	0170	D5092-Emergency Light and Power Systems	Exit Signs - Average Density	10	8 (Observed)	0.65	6,678	4,318	125%	5,426
HONORS HOUSE	0170	D5092-Emergency Light and Power Systems	Emergency Battery Pack Lights	10	8 (Observed)	0.76	6,678	5,070	125%	6,344

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Year: 2014

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
HONORS HOUSE	0170	D5020-Lighting and Branch Wiring	Lighting Fixtures - Light Density	20	8 (Observed)	3.86	6,678	25,761	125%	32,221
HONORS HOUSE	0170	C3020-Floor Finishes	VCT 4 - Average	15	8 (Observed)	5.49	3,239	17,770	125%	22,228
HONORS HOUSE	0170	C3030-Ceiling Finishes	ACT System - Standard	15	8 (Observed)	4.77	5,703	27,183	125%	34,004
KENTUCKY HALL	370	C3020-Floor Finishes	Ceramic Tile	25	8 (Observed)	8.37	950	7,948	100%	7,952
LANDRUM ACADEMIC CENTER	0300	C3010-Wall Finishes	Ceramic Tiles - Average	25	8 (Observed)	16.83	10,000	168,309	125%	210,375
LUCAS ADMINISTRATIVE CENTER	0360	B2030-Exterior Doors	Door Assembly 5 - Average	30	8 (Observed)	11,502.85	8	92,023	125%	115,029
LUCAS ADMINISTRATIVE CENTER	0360	B2030-Exterior Doors	Revolving Door - Average	30	8 (Observed)	74,691.06	1	74,691	125%	93,364
MAINTENANCE BUILDING	0310	D2020-Domestic Water Distribution	Water Heater - Electrical	15	8 (Observed)	0.98	15,392	15,081	125%	18,855
MAINTENANCE BUILDING	0310	C3010-Wall Finishes	Painted Finish	10	8 (Observed)	1.28	36,000	46,138	125%	57,600
MAINTENANCE BUILDING	0310	C3020-Floor Finishes	Carpeting	10	8 (Observed)	9.99	1,200	11,992	125%	14,985
NORSE COMMONS	377	C3020-Floor Finishes	Ceramic Tile	25	8 (Observed)	9.19	4,700	43,180	100%	43,193
REGENTS HALL	0140	B30-Roofing	BUR (Built up Roofing)	20	8 (Observed)	7.97	28,726	228,909	125%	286,183

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Year: 2014

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
STEELY LIBRARY	0290	B30-Roofing	BUR (Built up Roofing)	20	8 (Observed)	7.97	21,000	167,343	125%	209,213

Total Renewal Costs: 16,574,919

Year: 2015

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
APPLIED SCIENCE TECHNOLOGY	0330	D10-Conveying	Hydraulic Freight/Passenger Elev. - Special	35	9 (Observed)	375,374.91	2	750,750	125%	938,437
APPLIED SCIENCE TECHNOLOGY	0330	C3020-Floor Finishes	VCT - Average	15	9 (Observed)	5.49	35,000	192,024	125%	240,188
BUSINESS-EDUCATION-PSYCHOLOGY CENTER	0370	C3020-Floor Finishes	VCT - Average	15	9 (Observed)	5.49	20,000	109,728	125%	137,250
COMMONWEALTH HALL	372	D2020-Domestic Water Distribution	Water Heater - Gas Fired	10	9 (Observed)	0.98	36,584	35,844	125%	44,815
HONORS HOUSE	0170	D5030-Communications and Security	Burglar/Fire Alarm System - Light Density	10	9 (Observed)	3.04	6,678	20,297	125%	25,376
HONORS HOUSE	0170	D3050-Terminal and Package Units	Heat Pump - Air Source	15	9 (Observed)	15.60	2,000	31,194	125%	39,000
HONORS HOUSE	0170	D3050-Terminal and Package Units	Package AC Unit	15	9 (Observed)	13.20	2,000	26,394	125%	33,000

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Year: 2015

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
HONORS HOUSE	0170	D3050-Terminal and Package Units	Package Gas Heat and AC	15	9 (Observed)	6.60	2,678	17,663	125%	22,094
LUCAS ADMINISTRATIVE CENTER	0360	D3060-Controls and Instrumentation	DDC System - Average	20	9 (Observed)	0.47	108,238	51,141	125%	63,590
MAINTENANCE BUILDING	0310	D3060-Controls and Instrumentation	DDC System - Average	20	9 (Observed)	0.47	15,392	7,272	125%	9,043
MAINTENANCE BUILDING	0310	D5030-Communications and Security	Fire Alarm System - Average Density	15	9 (Observed)	4.16	15,392	64,083	125%	80,038
NORSE COMMONS	377	C3020-Floor Finishes	Carpeting 4 - Economy	10	9 (Observed)	7.43	3,750	27,864	125%	34,828
NUNN HALL	0130	D2020-Domestic Water Distribution	Water Heater - Gas Fired	15	9 (Observed)	0.98	113,027	110,740	125%	138,458
REGENTS HALL	0140	D3040-Distribution Systems	Condenser Water Heat Exchanger	25	9 (Observed)	2.66	28,726	76,512	125%	95,514
STEELY LIBRARY	0290	D2020-Domestic Water Distribution	Water Heater - Gas Fired	15	9 (Observed)	0.98	141,567	138,703	125%	173,420
STEELY LIBRARY	0290	D3060-Controls and Instrumentation	DDC System - Average	20	9 (Observed)	0.47	141,567	66,888	125%	83,171

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Year: 2015

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
STEELY LIBRARY	0290	D5020-Lighting and Branch Wiring	Lighting Fixtures - 2005 Average Density	20	9 (Observed)	4.73	141,567	670,002	125%	837,015
STEELY LIBRARY	0290	C1030-Fittings	Toilet Partitions - Average	40	9 (Observed)	1.71	141,567	241,607	125%	302,599
STORAGE FACILITY	0312	D5030-Communications and Security	Fire Alarm System - Average Density	15	9 (Observed)	4.16	20,560	85,599	125%	106,912
STORAGE FACILITY	0312	C3010-Wall Finishes	Painted Finish	10	9 (Observed)	1.28	25,000	32,040	125%	40,000

Total Renewal Costs: 3,444,748

Year: 2016

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
ALBRIGHT HEALTH CENTER	0145	D3060-Controls and Instrumentation	DDC System - Average	20	10 (Observed)	0.47	136,324	64,411	125%	80,090
APPLIED SCIENCE TECHNOLOGY	0330	D3060-Controls and Instrumentation	DDC System - Average	20	10 (Observed)	0.47	110,693	52,301	125%	65,032
CENTRAL (OLD) POWER PLANT	0301	B30-Roofing	Pavers on Roof	25	10 (Observed)	39.61	20,618	816,719	125%	1,020,849
COMMONWEALTH HALL	372	C3030-Ceiling Finishes	Plaster Veneer over GWB	30	10 (Observed)	6.13	25,000	153,360	63%	95,781

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Year: 2016

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
COMMONWEALTH HALL	372	C1030-Fittings	Toilet Partitions - Economy	40	10 (Observed)	0.60	24,000	14,476	125%	18,000
COMMONWEALTH HALL	372	C3020-Floor Finishes	Ceramic Tile - Economy	25	10 (Observed)	12.69	133	1,688	125%	2,110
COMMONWEALTH HALL	372	C3020-Floor Finishes	Ceramic Tile	25	10 (Observed)	9.19	480	4,410	100%	4,411
COMMONWEALTH HALL	372	D2010-Plumbing Fixtures	Drinking Fountains	20	10 (Observed)	0.21	36,584	7,588	125%	9,603
COMMONWEALTH HALL	372	D5020-Lighting and Branch Wiring	Lighting Fixtures - Average Density	20	10 (Observed)	4.73	36,584	173,143	125%	216,303
CUMBERLAND COMMUNITY	371	C3030-Ceiling Finishes	Plaster Veneer over GWB	30	10 (Observed)	6.13	7,500	46,008	63%	28,734
CUMBERLAND COMMUNITY	371	C1030-Fittings	Toilet Partitions - Economy	40	10 (Observed)	0.60	7,200	4,343	125%	5,400
CUMBERLAND COMMUNITY	371	C3020-Floor Finishes	Ceramic Tile	25	10 (Observed)	9.19	160	1,470	100%	1,470
CUMBERLAND COMMUNITY	371	C3020-Floor Finishes	Ceramic Tile - Economy	25	10 (Observed)	12.69	50	634	125%	793
FINE ARTS CENTER	0320	D2020-Domestic Water Distribution	Water Heater - Gas Fired	15	10 (Observed)	0.98	159,584	156,356	125%	195,490
FINE ARTS CENTER	0320	D3060-Controls and Instrumentation	DDC System - Average	20	10 (Observed)	0.47	159,584	75,401	125%	93,756

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Year: 2017

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
FINE ARTS CENTER	0320	D5092-Emergency Light and Power Systems	Exit Signs - Average Density	10	0 (Observed)	0.65	159,584	103,179	125%	129,662
FINE ARTS CENTER	0320	D3040-Distribution Systems	Air VAV with Central AHU (Addition section)	25	11 (Observed)	17.57	59,584	1,046,676	125%	1,308,614
FINE ARTS CENTER	0320	C1030-Fittings	Toilet Partitions - Average	40	11 (Observed)	1.71	105,000	179,199	125%	224,438
FINE ARTS CENTER	0320	C3020-Floor Finishes	Wood Flooring - Premium	25	11 (Observed)	23.76	15,000	356,443	125%	445,500
FINE ARTS CENTER	0320	C1030-Fittings	Restroom Accessories - Average	25	11 (Observed)	1.05	54,500	57,438	125%	71,531
FOUNDERS HALL (Old Science Building)	0150	D5092-Emergency Light and Power Systems	Exit Signs - Average Density	10	0 (Observed)	0.65	125,296	81,010	125%	101,803
KENTUCKY HALL	370	C3020-Floor Finishes	Carpeting 4 - Economy	10	0 (Observed)	7.43	1,700	12,632	125%	15,789
KENTUCKY HALL	370	D40-Fire Protection	Wet Sprinkler System w/Pump - Lt Hazard	35	11 (Observed)	5.66	27,565	156,106	113%	175,520
LANDRUM ACADEMIC CENTER	0300	D5092-Emergency Light and Power Systems	Exit Signs - Average Density	10	0 (Observed)	0.65	100,500	64,978	125%	81,656
LUCAS ADMINISTRATIVE CENTER	0360	D5092-Emergency Light and Power Systems	Exit Signs - Average Density	10	0 (Observed)	0.65	108,238	69,981	125%	87,943

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Year: 2017

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
CERAMICS SCULPTURE	0305	D2010-Plumbing Fixtures	Drinking Fountains	20	11 (Observed)	0.21	16,090	3,337	125%	4,224
CERAMICS SCULPTURE	0305	D3060-Controls and Instrumentation	DDC System - Average	20	11 (Observed)	0.47	16,090	7,602	125%	9,453
CERAMICS SCULPTURE	0305	D5020-Lighting and Branch Wiring	Branch Wiring - Average Density	20	11 (Observed)	4.73	16,090	76,150	125%	95,132
CERAMICS SCULPTURE	0305	D5020-Lighting and Branch Wiring	Lighting Fixtures - 2005 Average Density	20	11 (Observed)	4.73	16,090	76,150	125%	95,132
CERAMICS SCULPTURE	0305	D3050-Terminal and Package Units	Package Gas Heat and AC > 10 Tons	20	11 (Observed)	7.29	12,000	87,450	125%	109,350
CERAMICS SCULPTURE	0305	D3050-Terminal and Package Units	Heat Pump - Water Source	20	11 (Observed)	10.41	2,000	20,827	125%	26,025
CERAMICS SCULPTURE	0305	D3050-Terminal and Package Units	Comp Room Cooling Unit - Water Cooled	20	11 (Observed)	5.98	10,000	59,795	125%	74,750
COMMONWEALTH HALL	372	C3020-Floor Finishes	Carpeting 4 - Economy	10	0 (Observed)	7.43	2,350	17,461	125%	21,826
COMMONWEALTH HALL	372	D40-Fire Protection	Wet Sprinkler System w/Pump - Lt Hazard	35	11 (Observed)	5.66	36,584	207,182	113%	232,949
CUMBERLAND COMMUNITY	371	C3020-Floor Finishes	Carpeting 4 - Economy	10	0 (Observed)	7.43	700	5,201	125%	6,501

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Year: 2016

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
WOODCREST APARTMENTS - WILLOW	375	B2030-Exterior Doors	Door Assembly 5 - Average	30	10 (Observed)	1,948.32	73	142,227	125%	177,784
WOODCREST APARTMENTS - WILLOW	375	C3030-Ceiling Finishes	Plaster Veneer over GWB	30	10 (Observed)	6.13	31,000	190,166	63%	118,769
WOODCREST APARTMENTS - WILLOW	375	C3030-Ceiling Finishes	Vinyl Paneled System	25	10 (Observed)	12.74	4,000	50,976	125%	63,700

Total Renewal Costs: 8,135,078

Year: 2017

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
ALBRIGHT HEALTH CENTER	0145	D5092-Emergency Light and Power Systems	Exit Signs - Average Density	10	0 (Observed)	0.65	136,324	88,140	125%	110,763
APPLIED SCIENCE TECHNOLOGY	0330	D5092-Emergency Light and Power Systems	Exit Signs - Average Density	10	0 (Observed)	0.65	110,693	71,569	125%	89,938
BUSINESS-EDUCATION-PSYCHOLOGY CENTER	0340	D5092-Emergency Light and Power Systems	Exit Signs - Average Density	10	0 (Observed)	0.65	128,283	82,941	125%	104,230
CENTRAL (OLD) POWER PLANT	0301	D5092-Emergency Light and Power Systems	Exit Signs - Average Density	10	0 (Observed)	0.65	20,618	13,331	125%	16,752
CERAMICS SCULPTURE	0305	D5092-Emergency Light and Power Systems	Emergency Battery Pack Lights	10	1 (Observed)	0.76	16,090	12,215	125%	15,286

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Year: 2016

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
REGENTS HALL	0140	C3010-Wall Finishes	Ceramic Tiles - Average	25	10 (Observed)	16.83	1,000	16,831	125%	21,038
REGENTS HALL	0140	C3020-Floor Finishes	Quarry Tile - Average	25	10 (Observed)	22.14	3,000	66,407	125%	83,025
REGENTS HALL	0140	C3020-Floor Finishes	Wood Flooring - Average	25	10 (Observed)	19.83	8,000	158,653	125%	198,300
STORAGE FACILITY	0312	C1030-Fittings	Toilet Partitions - Average	40	10 (Observed)	1.71	5,000	8,533	125%	10,688
UNIVERSITY CENTER	0340	C3010-Wall Finishes	Ceramic Tiles - Average	25	10 (Observed)	16.83	8,000	134,647	125%	168,300
WOODCREST APARTMENTS - OAK	373	B2030-Exterior Doors	Door Assembly 5 - Average	30	10 (Observed)	1,948.32	46	89,623	125%	112,028
WOODCREST APARTMENTS - OAK	373	C3030-Ceiling Finishes	Plaster Veneer over GWB	30	10 (Observed)	6.13	20,000	122,688	63%	76,625
WOODCREST APARTMENTS - OAK	373	C3030-Ceiling Finishes	Vinyl Paneled System	25	10 (Observed)	12.74	2,000	25,488	125%	31,850
WOODCREST APARTMENTS - SYCAMORE	374	B2030-Exterior Doors	Door Assembly 5 - Average	30	10 (Observed)	1,948.32	46	89,623	125%	112,028
WOODCREST APARTMENTS - SYCAMORE	374	C3030-Ceiling Finishes	Plaster Veneer over GWB	30	10 (Observed)	6.13	20,000	122,688	63%	76,625
WOODCREST APARTMENTS - SYCAMORE	374	C3030-Ceiling Finishes	Vinyl Paneled System	25	10 (Observed)	12.74	2,000	25,488	125%	31,850

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Year: 2016

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
LUCAS ADMINISTRATIVE CENTER	0360	D40-Fire Protection	Wet Sprinkler System w/Pump - Med Hazard	35	10 (Observed)	8.73	108,238	945,411	113%	1,063,032
MAINTENANCE BUILDING	0310	C1030-Fittings	Toilet Partitions - Average	40	10 (Observed)	1.71	5,000	8,533	125%	10,688
NORSE COMMONS	377	C3020-Floor Finishes	Ceramic Tile - Economy	25	10 (Observed)	12.69	600	7,613	125%	9,518
NORSE HALL	376	D2020-Domestic Water Distribution	Backflow Prevention for Dos Water	5	5 (Observed)	2,798.50	9	25,186	125%	31,483
NORSE HALL	376	B2030-Exterior Doors	Door Assembly 5 - Average	30	10 (Observed)	1,948.32	138	268,868	125%	336,085
NORSE HALL	376	C3030-Ceiling Finishes	Vinyl Paneled System	25	10 (Observed)	12.74	5,000	63,720	125%	79,625
NORSE HALL	376	C3030-Ceiling Finishes	Plaster Veneer over GWB	30	10 (Observed)	6.13	52,500	322,056	63%	201,141
NORSE HALL	376	C3010-Wall Finishes	Ceramic Tiles - Economy	25	10 (Observed)	10.81	3,200	34,602	125%	43,240
NORSE HALL	376	C3030-Ceiling Finishes	Plaster Veneer over GWB	30	10 (Observed)	6.13	9,500	58,277	63%	36,397
NORSE HALL	376	D5030-Communications and Security	Fire Alarm System - Average Density	10	10 (Observed)	4.16	69,721	290,275	125%	362,549
REGENTS HALL	0140	B2010-Exterior Walls	Concrete Walls	75	10 (Observed)	32.93	28,726	946,028	6%	59,122

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Year: 2016

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
FOUNDERS HALL (Old Science Building)	0150	D3040-Distribution Systems	Condenser Water Heat Exchanger	25	10 (Observed)	2.66	125,296	333,727	125%	416,609
KENTUCKY HALL	370	C3030-Ceiling Finishes	Plaster Veneer over GWB	30	10 (Observed)	6.13	18,250	111,953	63%	69,920
KENTUCKY HALL	370	C1030-Fittings	Toilet Partitions - Economy	40	10 (Observed)	0.60	18,000	10,857	125%	13,500
KENTUCKY HALL	370	C3020-Floor Finishes	Ceramic Tile	25	10 (Observed)	9.19	320	2,940	100%	2,941
KENTUCKY HALL	370	C3020-Floor Finishes	Ceramic Tile - Economy	25	10 (Observed)	12.69	89	1,129	125%	1,412
KENTUCKY HALL	370	D5030-Communications and Security	Fire Alarm System - Average Density	10	10 (Observed)	4.16	27,565	114,763	125%	143,338
KENTUCKY HALL	370	D2020-Domestic Water Distribution	Water Heater - Electric	10	23 (Observed)	1.56	27,565	43,118	125%	53,752
LANDRUM ACADEMIC CENTER	0300	C3020-Floor Finishes	Quarry Tile - Average	25	10 (Observed)	22.14	6,000	132,814	125%	166,050
LUCAS ADMINISTRATIVE CENTER	0360	D5030-Communications and Security	Fire Alarm System - Average Density	15	10 (Observed)	4.16	108,238	450,635	125%	562,838
LUCAS ADMINISTRATIVE CENTER	0360	B2020-Exterior Windows	Aluminum Windows	30	10 (Observed)	86.49	12,500	1,081,080	125%	1,351,406

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Year: 2017

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
MAINTENANCE BUILDING	0310	D5092-Emergency Light and Power Systems	Exit Signs - Average Density	10	0 (Observed)	0.65	15,392	9,952	125%	12,506
MAINTENANCE BUILDING	0310	D5092-Emergency Light and Power Systems	Emergency Battery Pack Lights	10	0 (Observed)	0.76	15,392	11,685	125%	14,622
MAINTENANCE BUILDING	0310	D40-Fire Protection	Wet Sprinkler System wo/Pump - Med Hazard	35	11 (Observed)	6.53	15,392	100,464	113%	113,073
NORSE COMMONS	377	C3030-Ceiling Finishes	ACT System - Economy	10	0 (Observed)	2.97	22,000	65,261	125%	81,675
NORSE COMMONS	377	C3020-Floor Finishes	VCT 5 - Economy	10	0 (Observed)	3.44	1,200	4,130	125%	5,160
NORSE COMMONS	377	D3040-Distribution Systems	Air VAV with Central AHU	25	11 (Observed)	17.57	25,315	444,693	125%	555,981
NORSE COMMONS	377	D3040-Distribution Systems	Exhaust - General Building	25	11 (Observed)	1.47	25,315	37,150	113%	41,865
NORSE COMMONS	377	D3040-Distribution Systems	Fume Hood and Exhaust	25	11 (Observed)	23.51	25,315	595,055	125%	743,945
NORSE COMMONS	377	E-Equipment and Furnishings	Food Service Counters - High End	25	11 (Observed)	3,984.61	50	199,230	125%	249,038
NORSE COMMONS	377	E-Equipment and Furnishings	Kitchen Equipment - Average	25	11 (Observed)	47,679.77	1	47,680	125%	59,600
NUNN HALL	0130	D5092-Emergency Light and Power Systems	Exit Signs - Average Density	10	0 (Observed)	0.65	113,027	73,078	125%	91,834

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Year: 2018

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
COMMONWEALTH HALL	372	C3020-Floor Finishes	Carpeting 4 - Economy	10	2 (Observed)	7.43	10,560	78,465	125%	98,076
COMMONWEALTH HALL	372	C3010-Wall Finishes	Ceramic Tiles - Economy	25	12 (Observed)	7.89	1,166	9,201	125%	11,500
CUMBERLAND COMMUNITY	371	C3020-Floor Finishes	Carpeting 4 - Economy	10	2 (Observed)	7.43	3,160	23,480	125%	29,349
CUMBERLAND COMMUNITY	371	C3010-Wall Finishes	Ceramic Tiles - Economy	25	12 (Observed)	7.89	388	3,062	125%	3,827
HONORS HOUSE	0170	D20-Plumbing	Sanitary Waste System - Low End	50	12 (Observed)	15.03	6,678	100,363	113%	112,917
HONORS HOUSE	0170	C1010-Partitions	GWB Walls - Standard	50	12 (Observed)	5.03	7,593	38,159	63%	23,870
HONORS HOUSE	0170	C1020-Interior Doors	Swinging Doors - Economy	50	12 (Observed)	1,734.96	25	43,374	81%	35,241
KENTUCKY HALL	370	C3020-Floor Finishes	Carpeting 4 - Economy	10	2 (Observed)	7.43	7,900	58,700	125%	73,371
KENTUCKY HALL	370	C3010-Wall Finishes	Ceramic Tiles - Economy	25	12 (Observed)	7.89	777	6,131	125%	7,663
NORSE COMMONS	377	C3030-Ceiling Finishes	GWB Taped and Finished	30	12 (Observed)	5.34	1,000	5,342	63%	3,338
UNIVERSITY CENTER	0340	D3060-Controls and Instrumentation	DDC System - Average	20	12 (Observed)	0.47	102,720	48,533	125%	60,348

Total Renewal Costs: 459,500

All Costs in USD. Renewal Costs include 0.0% inflation rate.

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Total Renewal Costs: 15,303,754

Year: 2020

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
APPLIED SCIENCE TECHNOLOGY	0330	C3020-Floor Finishes	Carpeting 3 - Average	10	4 (Observed)	7.99	50,000	399,600	125%	499,375
BUSINESS-EDUCATION-PSYCHOLOGY CENTER	0335	C3020-Floor Finishes	Carpeting 3 - Average	10	4 (Observed)	7.99	85,000	679,320	125%	848,938
BUSINESS-EDUCATION-PSYCHOLOGY CENTER	0335	C1030-Fittings	Toilet Partitions - Average	40	14 (Observed)	1.71	128,283	218,935	125%	274,205
BUSINESS-EDUCATION-PSYCHOLOGY CENTER	0335	C3020-Floor Finishes	Stone Finish - Economy	40	14 (Observed)	26.60	1,500	39,900	125%	49,875
COMMONWEALTH HALL	372	C3010-Wall Finishes	Painted Finish - Average	10	4 (Observed)	1.28	161,043	206,393	125%	257,669
CUMBERLAND COMMUNITY	371	C3010-Wall Finishes	Painted Finish - Average	10	4 (Observed)	1.28	47,766	61,217	125%	76,426
FINE ARTS CENTER	0320	C3010-Wall Finishes	Painted Finish - Average	10	4 (Observed)	1.28	702,489	900,310	125%	1,123,982
FOUNDERS HALL (Old Science Building)	0150	C3010-Wall Finishes	Painted Finish - Average	10	4 (Observed)	1.28	285,424	365,799	125%	456,678
HONORS HOUSE	0170	D5030-Communications and Security	Telephone System - Light Density	10	4 (Observed)	1.73	6,678	11,540	106%	12,275
KENTUCKY HALL	370	C3010-Wall Finishes	Painted Finish - Average	10	4 (Observed)	1.28	121,341	155,511	125%	194,146
MAINTENANCE BUILDING	0310	D3050-Terminal and Package Units	Package Electrically Heat and AC	15	14 (Observed)	5.70	5,392	30,726	125%	38,418
NORSE COMMONS	377	C3010-Wall Finishes	Painted Finish - Average	10	4 (Observed)	1.28	100,100	128,288	125%	160,160

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Year: 2020

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
NORSE HALL	376	C3010-Wall Finishes	Painted Finish - Average	10	4 (Observed)	1.28	306,912	393,338	125%	491,059
NORSE HALL	376	C3020-Floor Finishes	Carpeting 4 - Economy	10	4 (Observed)	7.43	51,000	378,950	125%	473,663
NUNN HALL	0130	C3010-Wall Finishes	Painted Finish - Average	10	4 (Observed)	1.28	257,476	329,981	125%	411,962
REGENTS HALL	0140	C3010-Wall Finishes	Painted Finish - Average	10	4 (Observed)	1.28	31,828	40,791	125%	50,925
REGENTS HALL	0140	C3020-Floor Finishes	Carpeting 2 - High Quality	10	4 (Observed)	9.99	2,500	24,984	125%	31,219
STEELY LIBRARY	0290	D3040-Distribution Systems	Air VAV with Central AHU (Addition section)	25	14 (Observed)	17.57	41,567	730,182	125%	912,915
STORAGE FACILITY	0312	D3050-Terminal and Package Units	Package Electrically Heat and AC	15	14 (Observed)	5.70	5,392	30,726	125%	38,418
STORAGE FACILITY	0312	C3030-Ceiling Finishes	ACT System	15	14 (Observed)	4.77	1,000	4,766	125%	5,963
UNIVERSITY CENTER	0340	B30-Roofing	Modified Bitumen	20	14 (Observed)	7.97	34,240	272,848	125%	341,116
WOODCREST APARTMENTS - OAK	373	C3010-Wall Finishes	Painted Finish - Average	10	4 (Observed)	1.28	98,710	126,507	125%	157,936
WOODCREST APARTMENTS - OAK	373	C3020-Floor Finishes	Carpeting 4 - Economy	10	4 (Observed)	7.43	16,800	124,831	125%	156,030

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Year: 2020

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
WOODCREST APARTMENTS - OAK	373	D3040-Distribution Systems	Perimeter Units - HW/Steam/CW	18	14 (Observed)	10.63	318	3,383	113%	3,805
WOODCREST APARTMENTS - SYCAMORE	374	C3010-Wall Finishes	Painted Finish - Average	10	4 (Observed)	1.28	99,424	127,422	125%	159,078
WOODCREST APARTMENTS - SYCAMORE	374	C3020-Floor Finishes	Carpeting 4 - Economy	10	4 (Observed)	7.43	16,800	124,831	125%	156,030
WOODCREST APARTMENTS - WILLOW	375	C3010-Wall Finishes	Painted Finish - Average	10	4 (Observed)	1.28	161,254	206,663	125%	258,006
WOODCREST APARTMENTS - WILLOW	375	C3020-Floor Finishes	Carpeting 4 - Economy	10	4 (Observed)	7.43	26,880	199,729	125%	249,648

Total Renewal Costs: 7,889,920

Year: 2021

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
ALBRIGHT HEALTH CENTER	0145	D5030-Communications and Security	Telephone System - Average Density	10	5 (Observed)	2.59	136,324	353,352	106%	375,147
ALBRIGHT HEALTH CENTER	0145	C3010-Wall Finishes	Painted Finish - Average	10	5 (Observed)	1.28	210,000	269,136	125%	336,000
ALBRIGHT HEALTH CENTER	0145	D2090-Other Plumbing Systems	Pool Filter and Treatment Equipment	20	15 (Observed)	9,872.51	3	29,618	125%	37,022

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Year: 2021

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
APPLIED SCIENCE TECHNOLOGY	0330	D5030-Communications and Security	Telephone System - Average Density	10	5 (Observed)	2.59	110,693	286,916	106%	304,613
APPLIED SCIENCE TECHNOLOGY	0330	C3010-Wall Finishes	Painted Finish - Average	10	5 (Observed)	1.28	252,159	323,167	125%	403,454
APPLIED SCIENCE TECHNOLOGY	0330	C3020-Floor Finishes	Terrazzo - Economy	50	15 (Observed)	16.52	4,500	74,345	125%	92,925
BUSINESS-EDUCATION-PSYCHOLOGY CENTER	0315	D5030-Communications and Security	Telephone System - Average Density	10	5 (Observed)	2.59	128,283	332,510	106%	353,019
BUSINESS-EDUCATION-PSYCHOLOGY CENTER	0315	C3010-Wall Finishes	Painted Finish - Average	10	5 (Observed)	1.28	564,702	723,722	125%	903,523
BUSINESS-EDUCATION-PSYCHOLOGY CENTER	0315	C3020-Floor Finishes	Terrazzo - Economy	50	15 (Observed)	16.52	1,500	24,782	125%	30,975
CERAMICS SCULPTURE	0305	D5030-Communications and Security	Telephone System - Average Density	10	5 (Observed)	2.59	16,090	41,705	106%	44,278
CERAMICS SCULPTURE	0305	D5092-Emergency Light and Power Systems	Exit Signs - Average Density	10	5 (Observed)	0.65	16,090	10,403	125%	13,073
CERAMICS SCULPTURE	0305	C3010-Wall Finishes	Painted Finish	10	5 (Observed)	1.28	25,000	32,040	125%	40,000
COMMONWEALTH HALL	372	C3020-Floor Finishes	Carpeting 4 - Economy	10	5 (Observed)	7.43	10,560	78,465	125%	98,076

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Year: 2021

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
COMMONWEALTH HALL	372	D5030-Communications and Security	Fire Alarm System - Average Density	10	5 (Observed)	4.16	36,584	152,313	125%	190,237
COMMONWEALTH HALL	372	D5092-Emergency Light and Power Systems	Emergency Battery Pack Lights	10	5 (Observed)	0.76	36,584	27,774	125%	34,755
COMMONWEALTH HALL	372	B30-Roofing	Asphalt Shingled Roofing	20	15 (Observed)	5.96	14,600	87,039	125%	108,770
CUMBERLAND COMMUNITY	371	C3020-Floor Finishes	Carpeting 4 - Economy	10	5 (Observed)	7.43	3,160	23,480	125%	29,349
CUMBERLAND COMMUNITY	371	B30-Roofing	Asphalt Shingled Roofing	20	15 (Observed)	5.96	4,300	25,635	125%	32,035
FINE ARTS CENTER	0320	D5030-Communications and Security	Telephone System - Average Density	10	5 (Observed)	2.59	159,584	413,642	106%	439,155
FINE ARTS CENTER	0320	C3020-Floor Finishes	Carpeting 3 - Average	10	5 (Observed)	7.99	42,928	343,081	125%	428,743
FOUNDERS HALL (Old Science Building)	0150	D5030-Communications and Security	Telephone System - Average Density	10	5 (Observed)	2.59	125,296	324,767	106%	344,799
FOUNDERS HALL (Old Science Building)	0150	C3020-Floor Finishes	Carpeting 3 - Average	10	5 (Observed)	7.99	100,000	799,200	125%	998,750
HONORS HOUSE	0170	C3020-Floor Finishes	Carpeting 3 - Average	10	5 (Observed)	7.99	2,000	15,984	125%	19,975

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Year: 2021

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
KENTUCKY HALL	370	C3020-Floor Finishes	Carpeting 4 - Economy	10	5 (Observed)	7.43	7,900	58,700	125%	73,371
KENTUCKY HALL	370	B30-Roofing	Asphalt Shingled Roofing	20	15 (Observed)	5.96	10,950	65,280	125%	81,578
KENTUCKY HALL	370	C20-Stairs	Exterior Concrete Stairs	50	15 (Observed)	8,225.78	1	8,226	100%	8,226
LANDRUM ACADEMIC CENTER	0300	D5030-Communications and Security	Telephone System - Average Density	10	5 (Observed)	2.59	100,500	260,496	106%	276,563
LANDRUM ACADEMIC CENTER	0300	C3010-Wall Finishes	Painted Finish - Average	10	5 (Observed)	1.28	228,939	293,408	125%	366,302
LANDRUM ACADEMIC CENTER	0300	D3060-Controls and Instrumentation	DDC System - Average	20	15 (Observed)	0.47	100,500	47,485	125%	59,044
LUCAS ADMINISTRATIVE CENTER	0360	D5030-Communications and Security	Telephone System - Average Density	10	5 (Observed)	2.59	108,238	280,553	106%	297,857
LUCAS ADMINISTRATIVE CENTER	0360	C3010-Wall Finishes	Painted Finish - Average	10	5 (Observed)	1.28	476,464	610,636	125%	762,342
LUCAS ADMINISTRATIVE CENTER	0360	C3020-Floor Finishes	Carpeting 3 - Average	10	5 (Observed)	7.99	85,000	679,320	125%	848,938
LUCAS ADMINISTRATIVE CENTER	0360	C1030-Fittings	Toilet Partitions - Average	40	15 (Observed)	1.71	36,043	61,513	125%	77,042

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Year: 2021

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
MAINTENANCE BUILDING	0310	D5030-Communications and Security	Telephone System - Average Density	10	5 (Observed)	2.59	15,392	39,896	106%	42,357
MECHANICAL EQUIPMENT	378	B2030-Exterior Doors	Door Assembly 5 - Average	30	15 (Observed)	1,948.32	1	1,948	125%	2,435
MECHANICAL EQUIPMENT	378	B2030-Exterior Doors	Door Assembly 3 - High Size and Cost	30	15 (Observed)	9,371.61	1	9,372	125%	11,715
NORSE COMMONS	377	D5030-Communications and Security	Clock System - Average Building	10	5 (Observed)	3.88	25,315	98,336	125%	122,778
NORSE COMMONS	377	D5030-Communications and Security	Fire Alarm System - Average Density	10	5 (Observed)	4.16	25,315	105,396	125%	131,638
NORSE COMMONS	377	D5092-Emergency Light and Power Systems	Emergency Battery Pack Lights	10	5 (Observed)	0.76	25,315	19,219	125%	24,049
NORSE COMMONS	377	D5092-Emergency Light and Power Systems	Exit Signs - Average Density	10	5 (Observed)	0.65	25,315	16,367	125%	20,568
NORSE COMMONS	377	B2020-Exterior Windows	Aluminum Windows	30	15 (Observed)	86.49	6,120	529,297	125%	661,649
NORSE COMMONS	377	B2030-Exterior Doors	Door Assembly 5 - Average	30	15 (Observed)	7,793.28	1	7,793	125%	9,742

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Year: 2021

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
NORSE COMMONS	377	B2030-Exterior Doors	Door Assembly 3 - High Size and Cost	30	15 (Observed)	37,904.99	1	37,905	125%	47,381
NORSE COMMONS	377	B2030-Exterior Doors	Door Assembly 4 - Moderate Size and Cost	30	15 (Observed)	18,784.01	1	18,784	125%	23,480
NORSE HALL	376	D2020-Domestic Water Distribution	Backflow Prevention for Dos Water	5	5 (Observed)	2,798.50	9	25,186	125%	31,483
NORSE HALL	376	D5030-Communications and Security	Telephone System - Average Density	10	5 (Observed)	2.59	69,721	180,717	106%	191,863
NORSE HALL	376	D5092-Emergency Light and Power Systems	Exit Signs - Average Density	10	5 (Observed)	0.65	69,721	45,078	125%	56,648
NORSE HALL	376	B2020-Exterior Windows	Aluminum Windows	30	15 (Observed)	86.49	6,066	524,627	125%	655,810
NUNN HALL	0130	C3020-Floor Finishes	Carpeting 3 - Average	10	5 (Observed)	7.99	90,000	719,280	125%	898,875
REGENTS HALL	0140	D3060-Controls and Instrumentation	DDC System - Average	20	15 (Observed)	0.47	28,726	13,573	125%	16,877
STEELY LIBRARY	0290	D5030-Communications and Security	Telephone System - Average Density	10	5 (Observed)	2.59	141,567	366,942	106%	389,575

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Year: 2021

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
STEELY LIBRARY	0290	C3020-Floor Finishes	Carpeting 3 - Average	10	5 (Observed)	7.99	110,000	879,120	125%	1,098,625
STORAGE FACILITY	0312	D5030-Communications and Security	Telephone System - Average Density	10	5 (Observed)	2.59	20,560	53,292	106%	56,579
UNIVERSITY CENTER	0340	D5030-Communications and Security	Telephone System - Average Density	10	5 (Observed)	2.59	102,720	266,250	106%	282,673
UNIVERSITY CENTER	0340	C3010-Wall Finishes	Painted Finish - Average	10	5 (Observed)	1.28	105,000	134,568	125%	168,000
UNIVERSITY CENTER	0340	C3020-Floor Finishes	Carpeting 3 - Average	10	5 (Observed)	7.99	60,000	479,520	125%	599,250
WOODCREST APARTMENTS - OAK	373	D5030-Communications and Security	Fire Alarm System - Average Density	10	5 (Observed)	4.16	22,424	93,360	125%	116,605
WOODCREST APARTMENTS - OAK	373	D5030-Communications and Security	Telephone System - Average Density	10	5 (Observed)	2.59	22,424	58,123	106%	61,708
WOODCREST APARTMENTS - OAK	373	D5092-Emergency Light and Power Systems	Exit Signs - Average Density	10	5 (Observed)	0.65	22,424	14,498	125%	18,220
WOODCREST APARTMENTS - OAK	373	B2020-Exterior Windows	Aluminum Windows	30	15 (Observed)	86.49	1,951	168,735	125%	210,927

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Year: 2021

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
WOODCREST APARTMENTS - SYCAMORE	374	D5030-Communications and Security	Fire Alarm System - Average Density	10	5 (Observed)	4.16	22,586	94,034	125%	117,447
WOODCREST APARTMENTS - SYCAMORE	374	D5030-Communications and Security	Telephone System - Average Density	10	5 (Observed)	2.59	22,586	58,543	106%	62,154
WOODCREST APARTMENTS - SYCAMORE	374	D5092-Emergency Light and Power Systems	Exit Signs - Average Density	10	5 (Observed)	0.65	22,586	14,603	125%	18,351
WOODCREST APARTMENTS - SYCAMORE	374	B2020-Exterior Windows	Aluminum Windows	30	15 (Observed)	86.49	1,965	169,946	125%	212,441
WOODCREST APARTMENTS - SYCAMORE	374	D3040-Distribution Systems	Perimeter Units - HW/Steam/CW	18	15 (Observed)	10.63	22,586	240,096	113%	270,100
WOODCREST APARTMENTS - WILLOW	375	D5030-Communications and Security	Fire Alarm System - Average Density	10	5 (Observed)	4.16	36,632	152,513	125%	190,486
WOODCREST APARTMENTS - WILLOW	375	D5030-Communications and Security	Telephone System - Average Density	10	5 (Observed)	2.59	36,632	94,950	106%	100,807
WOODCREST APARTMENTS - WILLOW	375	D5092-Emergency Light and Power Systems	Exit Signs - Average Density	10	5 (Observed)	0.65	36,632	23,684	125%	29,764

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Year: 2021

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
WOODCREST APARTMENTS - WILLOW	375	B2020-Exterior Windows	Aluminum Windows	30	15 (Observed)	86.49	3,187	275,632	125%	344,555

Total Renewal Costs: 15,807,551

Year: 2022

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
ALBRIGHT HEALTH CENTER	0145	D5030-Communications and Security	Fire Alarm System - Average Density	15	0 (Observed)	4.16	136,324	567,568	125%	708,885
APPLIED SCIENCE TECHNOLOGY	0330	D5030-Communications and Security	Fire Alarm System - Average Density	15	0 (Observed)	4.16	110,693	460,857	125%	575,604
BUSINESS-EDUCATION-PSYCHOLOGY CENTER	0315	D2020-Domestic Water Distribution	Water Heater - Gas Fired	15	0 (Observed)	0.98	128,283	125,688	125%	157,147
BUSINESS-EDUCATION-PSYCHOLOGY CENTER	0315	D5030-Communications and Security	Fire Alarm System - Average Density	15	0 (Observed)	4.16	128,283	534,090	125%	667,072
CENTRAL (OLD) POWER PLANT	0301	D5030-Communications and Security	Fire Alarm System - Average Density	15	0 (Observed)	4.16	20,618	85,840	125%	107,214
CERAMICS SCULPTURE	0305	D3040-Distribution Systems	Air VAV with Central AHU	25	16 (Observed)	17.57	16,090	282,643	125%	353,377

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Year: 2022

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
CERAMICS SCULPTURE	0305	D3040-Distribution Systems	Exhaust - General Building	25	16 (Observed)	1.47	16,090	23,613	113%	26,609
CERAMICS SCULPTURE	0305	C1030-Fittings	Restroom Accessories - Average	25	16 (Observed)	1.05	13,500	14,228	125%	17,719
COMMONWEALTH HALL	372	D5030-Communications and Security	Telephone System - Average Density	10	6 (Observed)	2.59	36,584	94,826	106%	100,675
COMMONWEALTH HALL	372	D5092-Emergency Light and Power Systems	Exit Signs - Average Density	10	6 (Observed)	0.65	36,584	23,653	125%	29,725
FINE ARTS CENTER	0320	D5030-Communications and Security	Fire Alarm System - Average Density	15	0 (Observed)	4.16	159,584	664,408	125%	829,837
FINE ARTS CENTER	0320	D2010-Plumbing Fixtures	Restroom Fixtures 7 - Standard Density (New section)	30	16 (Observed)	1.98	59,584	117,687	125%	147,470
FINE ARTS CENTER	0320	B30-Roofing	BUR (Built up Roofing)	20	16 (Observed)	7.97	20,000	159,374	125%	199,250
FINE ARTS CENTER	0320	B2030-Exterior Doors	Door Assembly 5 - Average	30	16 (Observed)	11,502.85	14	161,040	125%	201,300
FINE ARTS CENTER	0320	B2020-Exterior Windows	Aluminum Windows	30	16 (Observed)	86.49	13,884	1,200,777	125%	1,501,034

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Year: 2022

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
FOUNDERS HALL (Old Science Building)	0150	D5030-Communications and Security	Fire Alarm System - Average Density	15	0 (Observed)	4.16	125,296	521,654	125%	651,539
HONORS HOUSE	0170	D2020-Domestic Water Distribution	Water Heater - Electrical	15	1 (Observed)	0.58	6,678	3,900	125%	4,842
KENTUCKY HALL	370	D5092-Emergency Light and Power Systems	Exit Signs - Average Density	10	6 (Observed)	0.65	27,565	17,822	125%	22,397
KENTUCKY HALL	370	D5092-Emergency Light and Power Systems	Emergency Battery Pack Lights	10	6 (Observed)	0.76	27,565	20,927	125%	26,187
KENTUCKY HALL	370	D3030-Cooling Generating Systems	Chiller Reciprocating and Cooling Tower	20	16 (Observed)	6.57	27,565	181,160	125%	226,378
LANDRUM ACADEMIC CENTER	0300	D2020-Domestic Water Distribution	Water Heater - Gas Fired	15	0 (Observed)	0.98	100,500	98,467	125%	123,113
LANDRUM ACADEMIC CENTER	0300	D5030-Communications and Security	Fire Alarm System - Average Density	15	0 (Observed)	4.16	100,500	418,419	125%	522,600
LANDRUM ACADEMIC CENTER	0300	B30-Roofing	Modified Bitumen	20	16 (Observed)	7.97	20,100	160,171	125%	200,246
LUCAS ADMINISTRATIVE CENTER	0360	D2020-Domestic Water Distribution	Water Heater - Gas Fired	15	0 (Observed)	0.98	108,238	106,048	125%	132,592

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Year: 2022

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
LUCAS ADMINISTRATIVE CENTER	0360	D40-Fire Protection	FM200 System - Moderate Density	15	0 (Observed)	1.99	108,238	215,091	125%	269,242
MECHANICAL EQUIPMENT	378	D3030-Cooling Generating Systems	Chiller Reciprocating and Cooling Tower	20	16 (Observed)	6.57	1,000	6,572	125%	8,213
NORSE COMMONS	377	D5030-Communications and Security	Telephone System - Average Density	10	6 (Observed)	2.59	25,315	65,616	106%	69,664
NORSE COMMONS	377	D2010-Plumbing Fixtures	Emergency Eyewash and Shower	30	16 (Observed)	0.10	25,315	2,613	125%	3,164
NORSE COMMONS	377	D2010-Plumbing Fixtures	Restroom Fixtures 8 - Std Density - Economy	30	16 (Observed)	1.87	25,315	47,328	125%	59,174
NORSE COMMONS	377	D2010-Plumbing Fixtures	Service/Utility Sinks	30	16 (Observed)	0.28	25,315	7,119	125%	8,860
NORSE COMMONS	377	D2020-Domestic Water Distribution	Domestic Water Dist Complete - Average	30	16 (Observed)	2.39	25,315	60,472	113%	68,066
NORSE COMMONS	377	D3020-Heat Generating Systems	Boiler HW - Gas/Oil - High End	30	16 (Observed)	8.68	25,315	219,724	125%	274,668
NORSE COMMONS	377	D3040-Distribution Systems	Distribution Piping - Steam	30	16 (Observed)	2.90	25,315	73,409	125%	91,767

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Year: 2022

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
NORSE COMMONS	377	D40-Fire Protection	Fire Extinguishers	30	16 (Observed)	0.04	25,315	887	125%	1,266
NORSE COMMONS	377	D5010-Electrical Service and Distribution	Distribution System - Heavy Capacity	30	16 (Observed)	11.97	25,315	303,067	125%	378,776
NORSE COMMONS	377	D5010-Electrical Service and Distribution	Feeder for Heavy Service	30	16 (Observed)	4.18	25,315	105,713	125%	132,271
NORSE COMMONS	377	D5010-Electrical Service and Distribution	Switchgear - Heavy Duty	30	16 (Observed)	0.74	25,315	18,761	125%	23,416
NORSE COMMONS	377	D3020-Heat Generating Systems	Boiler HW - Gas/Oil Fired - Economy	30	16 (Observed)	6.51	25,315	164,793	125%	206,001
NORSE HALL	376	C3020-Floor Finishes	Vinyl Sheet Goods	15	1 (Observed)	11.00	9,150	100,665	125%	125,813
NORSE HALL	376	D3040-Distribution Systems	Exhaust - Kitchen	15	1 (Observed)	8.08	69,721	563,326	125%	704,182
NORSE HALL	376	D2010-Plumbing Fixtures	Kitchenette Cab Counter Sink	30	16 (Observed)	0.43	69,721	30,062	125%	37,475
NORSE HALL	376	D2010-Plumbing Fixtures	Restroom Fixtures 8 - Std Density - Economy	30	16 (Observed)	1.87	69,721	130,348	125%	162,973
NORSE HALL	376	D2020-Domestic Water Distribution	Domestic Water Dist Complete - Average	30	16 (Observed)	2.39	69,721	166,547	113%	187,462

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Year: 2022

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
NORSE HALL	376	D5010-Electrical Service and Distribution	Distribution - Average Capacity	30	16 (Observed)	8.79	69,721	612,785	125%	766,059
NORSE HALL	376	D5010-Electrical Service and Distribution	Feeder for Average Service	30	16 (Observed)	1.69	69,721	117,646	125%	147,286
NORSE HALL	376	D5010-Electrical Service and Distribution	Switchgear - Average Duty	30	16 (Observed)	0.52	69,721	36,169	125%	45,319
NUNN HALL	0130	D5030-Communications and Security	Fire Alarm System - Average Density	15	0 (Observed)	4.16	113,027	470,574	125%	587,740
NUNN HALL	0130	D20-Plumbing	Rain Water Drainage - Average	50	16 (Observed)	2.81	113,027	317,207	113%	357,307
NUNN HALL	0130	D20-Plumbing	Sanitary Waste System - Low End	50	16 (Observed)	16.87	113,027	1,906,765	113%	2,145,111
NUNN HALL	0130	B30-Roofing	Modified Bitumen	20	16 (Observed)	7.97	22,605	180,136	125%	225,206
NUNN HALL	0130	C1010-Partitions	GWB Walls - Standard	50	16 (Observed)	5.03	108,506	545,308	63%	341,116
NUNN HALL	0130	C1020-Interior Doors	Swinging Doors - Average	50	16 (Observed)	2,365.99	215	508,688	81%	413,309
REGENTS HALL	0140	D5030-Communications and Security	Fire Alarm System - Average Density	15	0 (Observed)	4.16	28,726	119,597	125%	149,375

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Year: 2022

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
REGENTS HALL	0140	D20-Plumbing	Sanitary Waste System - Low End	50	16 (Observed)	16.87	28,726	484,608	113%	545,184
REGENTS HALL	0140	D20-Plumbing	Rain Water Drainage - Average	50	16 (Observed)	2.81	28,726	80,619	113%	90,810
REGENTS HALL	0140	C1010-Partitions	GWB Walls - Standard	50	16 (Observed)	5.03	5,000	25,128	63%	15,719
REGENTS HALL	0140	C1020-Interior Doors	Swinging Doors - Average	50	16 (Observed)	2,365.99	30	70,980	81%	57,671
STEELY LIBRARY	0290	D5030-Communications and Security	Fire Alarm System - Average Density	15	0 (Observed)	4.16	141,567	589,397	125%	736,148
WOODCREST APARTMENTS - OAK	373	C3020-Floor Finishes	Vinyl Sheet Goods	15	1 (Observed)	11.00	5,600	61,609	125%	77,000
WOODCREST APARTMENTS - OAK	373	D2010-Plumbing Fixtures	Kitchenette Cab Counter Sink	30	16 (Observed)	0.43	22,424	9,669	125%	12,053
WOODCREST APARTMENTS - OAK	373	D2010-Plumbing Fixtures	Restroom Fixtures 4 - High Density - Medium Quality	30	16 (Observed)	4.31	22,424	96,612	125%	120,809
WOODCREST APARTMENTS - OAK	373	D2020-Domestic Water Distribution	Domestic Water Dist Complete - High End	30	16 (Observed)	2.88	22,424	64,689	113%	72,654

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Year: 2022

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
WOODCREST APARTMENTS - OAK	373	D40-Fire Protection	Fire Extinguishers	30	16 (Observed)	0.04	22,424	786	125%	1,121
WOODCREST APARTMENTS - OAK	373	D5010-Electrical Service and Distribution	Feeder for Moderate Service	30	16 (Observed)	0.84	22,424	18,919	125%	23,545
WOODCREST APARTMENTS - OAK	373	D5010-Electrical Service and Distribution	Switchgear - Average Duty	30	16 (Observed)	0.52	22,424	11,633	125%	14,576
WOODCREST APARTMENTS - SYCAMORE	374	C3020-Floor Finishes	Vinyl Sheet Goods	15	1 (Observed)	11.00	5,600	61,609	125%	77,000
WOODCREST APARTMENTS - SYCAMORE	374	D2020-Domestic Water Distribution	Domestic Water Dist Complete - Average	30	16 (Observed)	2.39	22,586	53,953	113%	60,728
WOODCREST APARTMENTS - SYCAMORE	374	D5010-Electrical Service and Distribution	Switchgear - Average Duty	30	16 (Observed)	0.52	22,586	11,717	125%	14,681
WOODCREST APARTMENTS - SYCAMORE	374	D5010-Electrical Service and Distribution	Feeder for Moderate Service	30	16 (Observed)	0.84	22,586	19,056	125%	23,715
WOODCREST APARTMENTS - SYCAMORE	374	D2010-Plumbing Fixtures	Restroom Fixtures 4 - High Density - Medium Quality	30	16 (Observed)	4.31	22,586	97,310	125%	121,682
WOODCREST APARTMENTS - WILLOW	375	C3020-Floor Finishes	Vinyl Sheet Goods	15	1 (Observed)	11.00	5,600	61,609	125%	77,000

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Year: 2022

Asset Name	Asset Number	System	System Name	Lifetime (Years)	Years Remaining	Unit Cost	Quantity	Replacement Cost	Percent Renew	Renewal Cost
WOODCREST APARTMENTS - WILLOW	375	D40-Fire Protection	Fire Extinguishers	30	16 (Observed)	0.04	36,632	1,283	125%	1,832
WOODCREST APARTMENTS - WILLOW	375	D5010-Electrical Service and Distribution	Switchgear - Average Duty	30	16 (Observed)	0.52	36,632	19,004	125%	23,811
WOODCREST APARTMENTS - WILLOW	375	D5010-Electrical Service and Distribution	Feeder for Moderate Service	30	16 (Observed)	0.84	36,632	30,906	125%	38,464
WOODCREST APARTMENTS - WILLOW	375	D2010-Plumbing Fixtures	Restroom Fixtures 4 - High Density - Medium Quality	30	16 (Observed)	4.31	36,632	157,827	125%	197,355
WOODCREST APARTMENTS - WILLOW	375	D3040-Distribution Systems	Perimeter Units - HW/Steam/CW	18	16 (Observed)	10.63	36,632	389,410	113%	438,073
WOODCREST APARTMENTS - WILLOW	375	D5010-Electrical Service and Distribution	Distribution - Average Capacity	30	16 (Observed)	8.79	36,632	321,962	125%	402,494

Total Renewal Costs: 18,767,218

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