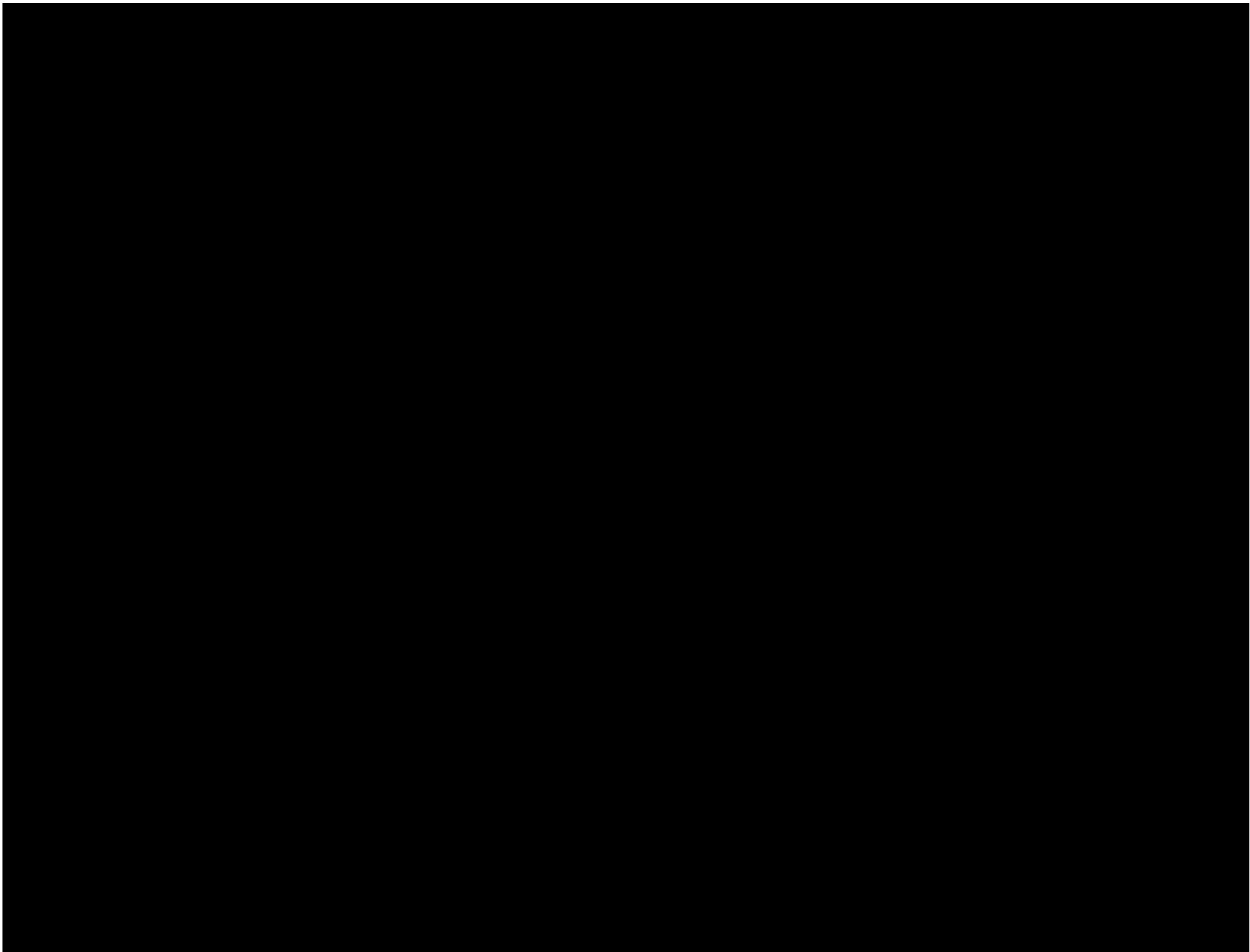


**REPORT ON STATE UNIVERSITY
DEFERRED AND ANNUAL MAINTENANCE**



Executive Summary

This seventh report has been produced in an effort to identify and provide an update on the magnitude of deferrable maintenance issues nationwide.

Factors Contributing to the Problem

Primary factors leading to the current state of deferred maintenance on the university campuses are a lack of funding, coupled with the age of the buildings (see Figure 1 below). It is reported that 18 % of the total building system is

Postsecondary Educational Institution Long-Term Infrastructure Maintenance Program, as well as other important financing mechanisms to be implemented over a five year period. For the six State universities, the five-year maintenance plan included \$90 million in direct state funding, approximately \$47 million in retained interest earnings from universities' funds, and up to \$118 million in private contributions generated by state-funded tax credits. If these separate funding mechanisms, totaling \$255 million, had been fully realized, this legislation would have addressed approximately 38% of the maintenance backlog (documented at \$663 million in 2006) existing on State university campuses.

The economic recession significantly impacted the five-year maintenance program. Ultimately, a total of \$87.4 million was made available. This included \$63.7 million in state funds for the first three years. Interest rates also failed to produce the earnings originally anticipated. Tuition interest earnings amounted to \$21.4 million. 9.8 Program. Ulessed (interest st) Tj 0 -13.5

Now, some 30-50 years later, these buildings require simultaneous overhaul of their major subsystems. Heating, ventilation, electrical, and plumbing systems that have not been replaced already are either worn out or about to wear out - and it isn't because they haven't been maintained. It is simply because the systems have reached the end of their useful life. The average life cycle of the components that make up buildings is 23 years*.

First Steps Taken to Address the Problem

The Board and its institutions are appreciative of steps taken during the 2007 legislative session, enacting legislation creating the

History and Process to Develop this Report

In the fall of 2002, the Kansas Board of Regents performed a study resulting in the document *Report on State University Deferred Maintenance and Capital Renewal*. This study and the resulting report were an

- Assume conditions that will be improved by performance contract projects have been completed.
- Use the definitions on the assessment forms to evaluate the various building, utility and infrastructure components.

3) Simultaneously, the Board office worked with the universities to update replacement costs of buildings, utilities and infrastructure; building inventories; quantities of utilities and infrastructure and other data.

4) In July 2004, an RFP was sent to three well-known facilities management consultants, suggested by the Association of Physical Plant Administrators (APPA). The Council of Business Officers and the Campus Architects reviewed their credentials, and ISES Corporation, Atlanta, Georgia, was selected and other data.



Institution Name	Building Name	Building Number	Year Built	Replacement Cost	Condition Value	Building GSF	To 90% Condition	Renewal Costs	Renewal Costs per SqFt	FCI
ESU										
ESU	Art Annex A	040	1970	374,976	59	1,984	31%	116,243	\$ 59	0.41
ESU	Art Annex B	041	1972	145,152	62	768	28%	40,643	\$ 53	0.39
ESU	Beach Music Hall	001	1926	15,574,470	80	56,104	10%	1,557,447	\$ 28	0.20
ESU	Biology Greenhouse									



Institution Name	Building Name	Building Number	Year Built	Replacement Cost	Condition Value	Building GSF	To 90% Condition	Renewal Costs	Renewal Costs per SqFt	FCI
------------------	---------------	-----------------	------------	------------------	-----------------	--------------	------------------	---------------	------------------------	-----

KSU										
KSU	Ackert/Chalmers Hall	136	1970	48,017,250	70	192,069	20%			
								KSU	12st	
										KSU





Institution Name	Building Name	Building Number	Year Built	Replacement Cost	Condition Value	Building GSF	To 90% Condition	Renewal Costs	Renewal Costs per SqFt	FCI
KSU	Berney Family Welcome Center	104	1922	13,424,698	92	Cond76.1017	Cond91j 35.35 0 .5 0(92) -f 1435.35 0 \$ 0(Cond90%37)	T-79 5 0 (Berney Family W		

Institution Name	Building Name	Building Number	Year Built	Replacement Cost	Condition Value	Renewal Building Costs per GSF Sqft	To 90% Condition	Renewal Costs
------------------	---------------	-----------------	------------	------------------	-----------------	-------------------------------------	------------------	---------------



Institution Name	Building Name	Building Number	Year Built	Replacement Cost	Condition Value	Building GSF	To 90% Condition	Renewal Costs	Renewal Costs per SqFt	FCI
KSU	KSU Garden Maintenance	179	1995	425,250	82	2,250	8%	34,020	\$ 15	0.18
KSU	KSU Garden Maintenance Bldg	179	1995	425,250	85	2,250	5%	21,263	\$ 9	0.15
KSU	KSU Olathe Bldg A	332		28,940,808	95	106,911				

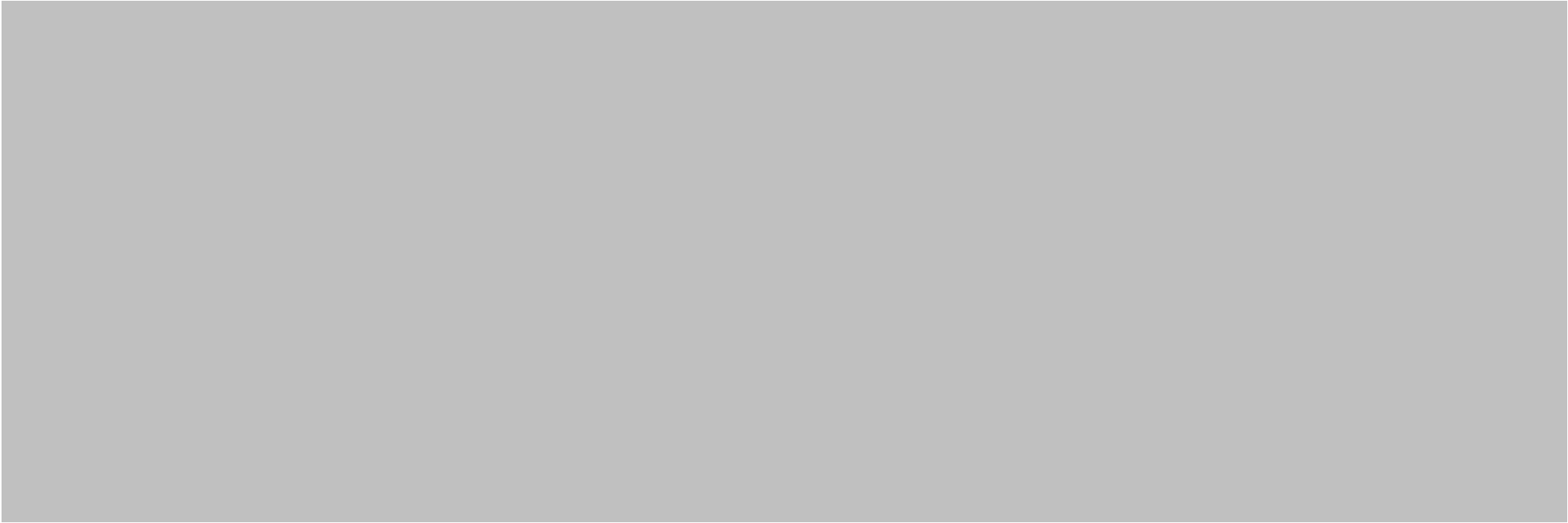




Institution Name	Building Name	Building Number	Year Built	Replacement Cost	Condition Value	Building GSF	To 90% Condition	Renewal Costs	Renewal Costs per SqFt	FCI
KSU	Office - Topeka/Rossville	535	1974	1,485,000	64	5,940	26%	386,100	\$ 65	0.36
KSU	Office - Tribune	988	1928	138,000	53	552	37%	51,060	\$ 93	0.48
KSU	Office/Animal Infirmary - Colby	809	1932	1,090,000	56	4,360	34%	370,600	\$ 85	0.44
KSU	Office/Laboratory - Parsons	977	1985	300,000	81	1,200	9%	27,000	\$ 23	0.19
KSU	Operations Center - Manhattan	516	1961	3,300,000	50	13,200	40%	1,320,000	\$ 100	0.51
KSU	Pecan Exp. Fi. Off/Serv. - Chetopa	325	1964	1,200,000	65	4,800	25%	300,000	\$ 63	0.35
KSU	Pesticide Building - Tribune	994	1988	36,000	65	144	25%	9,000	\$ 63	0.35
KSU	Project Room - Tribune	989	1928	324,000	43	1,390	100%	324,000	\$ 233	0.44
		335	1974	11285,000	781	4,5800	9%	137500	\$483	0219
		394	1972	1,800,000	726	4,200	94,4000	\$485	0219	
		1928		4500,000	360	1,800	350,000	\$785	0940	
000	26	36,000	200,000	8380,745	0.48					
		1500,000	\$383	0235						
4,000	5380,623	0.48								
1,940	\$983	2,100	0919	\$ 65	Carp Tj 54Tj 540	GNRC. OfficeShop (Par3ibune		216	3,3	1,200,000
1,8950	\$ 85	0.44								
102600										
1.15	0 Td (0940) Tj -50	0 Td (\$785) Tj -659.6	-oils (KSU) Tj 54	Office/Animal Infirmary -2ibune	216					

Institution Name	Building Name	Building Number	Year Built	Replacement Cost	Condition Value	Building GSF	To 90% Condition	Renewal Costs	Renewal Costs per SqFt	FCI
KU Edwards Campus										
KU	BEST Building	414	2012	20,467,155	92	78,614	0%	0	\$ 0	0.08
KU	Jayhawk Central	413	2005	5,899,740	85	19,155	5%	294,987	\$ 15	0.15
KU	Regents Center	410	1992	13,842,500	80	55,370	10%	1,384,250	\$ 25	0.20
KU	Regnier Hall	412	2004	21,563,750	84	86,255	6%	1,293,825	\$ 15	0.16
	Subtotal			\$61,773,145	85	239,394	5%	\$2,973,062	\$ 12	0.15
KU Lawrence Campus										
KU	Allen Fieldhouse	059	1955	83,631,339	81	281,587	9%	7,526,821	\$ 27	0.19
KU	Allen Fieldhouse Parking Facility	182B	1989	13,205,734	80	223,826	10%	1,320,573	\$ 6	0.20
KU	Ambler Student Recreation Fitness Center	205	2003							

Institution Name	Building Name	Building Number	Year Built	Replacement Cost	Condition Value	Building GSF	To 90% Condition	Renewal Costs	Renewal Costs per SqFt	FCI
KUMC	Special Storage	025	1974	109,000	76	545	14%	15,260	\$ 28	0.24
KUMC	Spencer Chapel	027	1967	632,475	66	2,811	24%	151,794	\$ 54	0.34
KUMC	Student Services Center	014	1954	15,180,698	64	58,148	26%	3,946,982	\$ 68	0.37
KUMC	Sudler	007	1936	24,177,885	65	95,754	25%	6,044,471	\$ 63	0.35
KUMC	Sutherland Institute	061	1992	6,693,645	77	19,515	13%	870,174	\$ 45	0.23
KUMC	0.340 Tj -50 0 Td (\$ 45) Tj -659.6 -12 Td (Wahl5 TfexTj 54 0 Td (Sudler) 29.15 0 Td (19,51 (4) Tj -tute) Tj 210j 602) 8.7 0 Td (6,693,645) Tj 47.65 0 Td (77)61.									

Institution



Fall 2016

**Summary Calculation of Utilities & Infrastructure Renewal
Kansas Board of Regents University Campuses**

Fall 2016

Calculation of Utilities & Infrastructure Renewal
Emporia State University

Fall 2016

**Calculation of Utilities & Infrastructure Renewal
Fort Hays State University**

Institution	Item	Item	Quantity	Unit Cost	Replacement Cost	Condition Value	To 90% Condition	Renewal Cost
FHSU	Steam & Chilled Water	Lin. Ft.	10,537	\$ 160	\$ 1,685,920	70	20	\$ 337,184
FHSU	Water Mains	Lin. Ft.	25,120	\$ 83	\$ 2,084,960	70	20	\$ 416,992
FHSU	Gas Mains	Lin. Ft.	15,265	\$ 61	\$ 931,165	85	5	\$ 46,558
FHSU	Storm Sewer	Lin. Ft.	27,887	\$ 61	\$ 1,701,107	70	20	\$ 340,221
FHSU	Sanitary Sewer	Lin. Ft.	10,965	\$ 63	\$ 690,795	70	20	\$ 138,159
FHSU	Electric Lines	Lin. Ft.	74,136	\$ 56	\$ 4,151,616	95	0	\$ 0
FHSU	Telecommunication Cables	Lin. Ft.	102,510	\$ 25	\$ 2,562,750	85	5	\$ 128,138
FHSU	Utility Tunnels	Lin. Ft.	6,436	\$ 1,120	\$ 7,208,320	70	20	\$ 1,441,664
FHSU	Streets & Drives	Sq. Yd.	105,551	\$ 64	\$ 6,755,264	85	5	\$ 337,763
FHSU	Sidewalks	Sq. Ft.	552,406	\$ 6	\$ 3,314,436	70	20	\$ 662,887
FHSU	Retaining Walls	Lin. Ft.	4,384	\$ 236	\$ 1,034,624	70	20	\$ 206,925
FHSU	Exterior Stairs/Ramps	Sq. Ft.	4,899	\$ 50	\$ 244,950	85	5	\$ 12,248
FHSU	Exterior Lighting - LPs	Ea.	467	\$ 3,567	\$ 1,665,789	85	5	\$ 83,289
Total					\$ 34,031,696			\$ 4,152,028

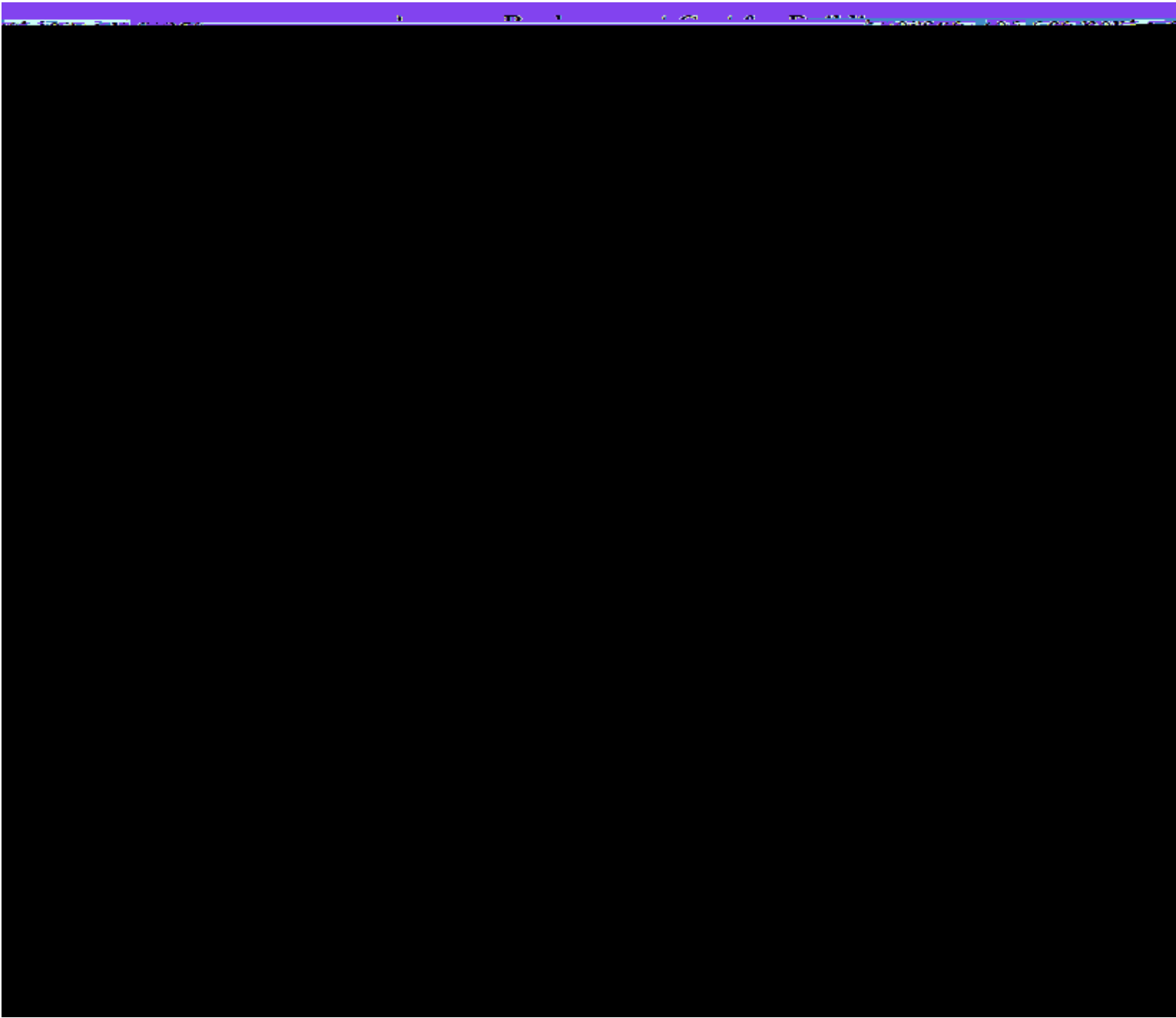
Fall 2016

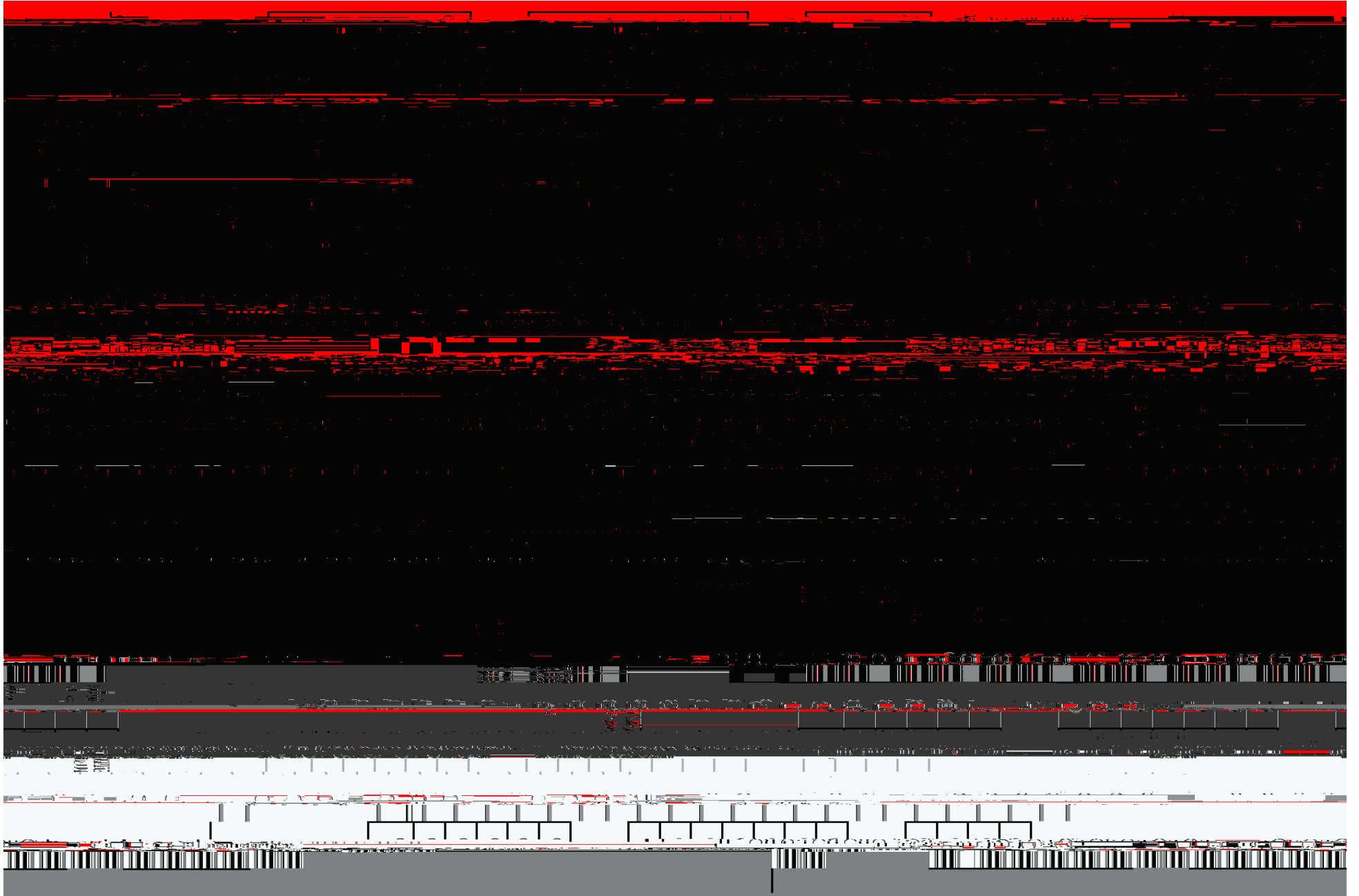
**Calculation of Utilities & Infrastructure Renewal
Kansas State University**

Institution	Item	Item	Quantity	Unit Cost	Replacement Cost	Condition Value	To 90% Condition	Renewal Cost
KSU	Steam & Chilled Water	Lin. Ft.	59,765					
KSU	Water Mains	Lin. Ft.	191,162					
KSU	Gas Mains	Lin. Ft.	121,296					
KSU	Storm Sewer	Lin. Ft.	138,768					
KSU	Sanitary Sewer	Lin. Ft.	130,822					
KSU	Electric Lines	Lin. Ft.	444,355					
KSU	Telecommunication Cables	Lin. Ft.	194,999					
KSU	Utility Tunnels	Lin. Ft.						
KSU	Streets & Drives	Sq. Yd.						
KSU	Sidewalks	Sq. Ft.						
KSU	Retaining Walls	Lin. Ft.						
KSU	Exterior Stairs/Ramps	Sq. Ft.						
KSU	Exterior Lighting - LPs	Ea.						









Facility Condition Assessment (FCA) - A systematic approach to the inventory of the current maintenance and current capital renewal requirements of a facility.

Facility Condition Index (FCI) - The FCI provides a simple measurement of a facility's condition. FCI represents the ratio of the cost to correct a facility's deficiencies to the current replacement value (CRV) of the facility. The higher the FCI, the poorer the condition of the facility.

Life Cycle - The period of time that a building or building system can be expected to adequately serve its intended function.

Mission Critical - Buildings that are predominately used for the academic and/or research missions of the State universities, and the infrastructure that directly supports these buildings.

Non-EBF Eligible - Buildings ineligible for Educational Building Fund (EBF) monies per current Board of Regents' guidance, include:

- All non-state owned buildings regardless of use
- Any state-owned buildings constructed in 2007 or later
- Buildings and infrastructure which are not predominantly used for academic or research purposes (e.g., buildings wholly or predominantly used for administrative offices, barns, chapels, child care, facility shops, intercollegiate athletics, monuments, parking garages, private residences, student health clinics, student housing,