



University of Hawai'i

***Facility Renewal Reinvestment Study
2017 Update***

October 2017

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**University of Hawai'i
Facility Renewal Reinvestment Study
Sightlines LLC
2017 Update**

Executive Summary

This report by Sightlines LLC¹ presents the fiscal year 2016-2017 results of the implementation of the Facilities Renewal Reinvestment Model (FRRM™) for the University of Hawai'i (UH). FRRM™ is a web-based budget-modeling tool designed to support campuses in documenting the backlog of maintenance and estimating the annual funding required for on-going capital reinvestment. The underlying design and assumptions of the model were developed by The Pacific Partners Consulting Group, Inc. and customized for the University of Hawai'i in 2007-2008. While unit cost assumptions are escalated each year, Sightlines thoroughly updated the building sub-system unit cost assumptions in 2013-2014 as part of its customary review of model assumptions for each client every five years.

The FRRM™ uses University of Hawai'i campus building information (e.g. building name, gross square feet and construction date), and a life-cycle methodology based on building sub-system and campus infrastructure life-cycles and replacement costs to estimate deferred maintenance and future capital repair needs.

For the first time, the University of Hawai'i has utilized Sightlines' Building Portfolio Solutions process for the assessment of the general fund space on UH Mānoa's Main Campus. Building Portfolio Solutions (BPS) is a process that spans a technical assessment of campus need, integration of operational perspective, and strategic capital planning.

The scope and objectives of the original project to implement the FRRM™ for the University of Hawai'i and more details on the BPS process used at UHM are reviewed in Chapter 1 of this report. An overview of the implementation process, discussion of the analytical methods used to implement the FRRM™, and definitions of terms employed throughout this report can be found in Chapter 2. Chapters 3 and 4 detail the results of this 2017 update providing information for each UH campus on the current status of maintenance backlog and future capital renewal investment needs. Chapter 5 provides funding scenarios to reduce the maintenance backlog.

This executive summary presents information on the Current Replacement Value (CRV) for buildings on each campus, provides an overview of the maintenance backlog, an estimate of capital repair needs over the next ten years, and an estimate of probable costs based on an assumed inflation rate of 5% per year. There is also a discussion of the Facilities Condition Index (FCI) for each campus. Finally, a complete system-wide summary table is included on pages 8 and 9.

¹ Sightlines LLC acquired the Pacific Partners Consulting Group, Inc. in May 2011.

University of Hawai'i Current Replacement Value

Current Replacement Value (CRV) is the total cost to replace each building on the University's ten campuses and the Community College System Office. For Fiscal Year 2016-2017, the current replacement value for all building on the University campuses is \$6.34 billion dollars. The following table shows the CRV for each campus.

University of Hawai'i 2017 Gross Square Feet (GSF) And Current Replacement Value² (CRV)

CAMPUS	GSF	Calculated CRV \$(000's)
<u>All Funds</u>		
UH Mānoa	9,440,696	\$ 4,387,623
UH Hilo	969,867	\$ 516,417
UH West O'ahu	219,139	\$ 106,567
Hawai'i CC	206,734	\$ 98,318
Honolulu CC	741,839	\$ 298,524
Kapi'olani CC	406,569	\$ 173,391
Kaua'i CC	303,246	\$ 151,441
Leeward CC	419,997	\$ 196,451
Maui College	395,549	\$ 166,415
Windward CC	357,031	\$ 245,952
Systemwide	13,460,667	6,341,099

² Does not include affiliated space.

Maintenance Backlog

Buildings with a *Maintenance Backlog* are facilities that have failing sub-systems, or sub-systems that are operating beyond their useful lifetime. For Fiscal Year 2016-2017, the University has a total maintenance backlog of approximately \$694.3 million. General funded facilities represent 88% of the backlog, or \$610.0 million. Special funded facilities represent 12% of the backlog, or \$84.3 million.

The following tables show the backlog for each campus by maintenance funding source.

University of Hawai'i 2017 Maintenance Backlog - All Funds \$(000's)

CAMPUS	GSF	Backlog		
		Building and Infrastructure	Code and Safety	Total
<u>All Funds</u>				
UH Mānoa	9,440,696	\$ 513,443	\$ 37,422	\$ 550,866
UH Hilo	969,867	\$ 23,058	\$ 4,192	\$ 27,250
UH West O'ahu	219,139	\$ -	\$ -	\$ -
Hawai'i CC	206,734	\$ 1,836	\$ 1,551	\$ 3,387
Honolulu CC	741,839	\$ 23,968	\$ 2,177	\$ 26,145
Kapi'olani CC	406,569	\$ 13,284	\$ 8,636	\$ 21,920
Kaua'i CC	303,246	\$ 1,732	\$ 3,191	\$ 4,923
Leeward CC	419,997	\$ 24,323	\$ 8,463	\$ 32,785
Maui College	395,549	\$ 7,977	\$ 3,631	\$ 11,608
Windward CC	357,031	\$ 10,884	\$ 4,510	\$ 15,393
Systemwide	13,460,667	\$ 620,506	\$ 73,772	\$ 694,278

University of Hawai'i 2017 Maintenance Backlog – General Funds \$(000's)

CAMPUS	GSF	Backlog		
		Building and Infrastructure	Code and Safety	Total
<u>General Funds</u>				
UH Mānoa	5,421,507	\$ 442,481	\$ 28,585	\$ 471,066
UH Hilo	747,679	\$ 18,556	\$ 4,192	\$ 22,748
UH West O'ahu	219,139	\$ -	\$ -	\$ -
Hawai'i CC	206,734	\$ 1,836	\$ 1,551	\$ 3,387
Honolulu CC	741,839	\$ 23,968	\$ 2,177	\$ 26,145
Kapi'olani CC	406,569	\$ 13,284	\$ 8,636	\$ 21,920
Kaua'i CC	303,246	\$ 1,732	\$ 3,191	\$ 4,923
Leeward CC	419,997	\$ 24,323	\$ 8,463	\$ 32,785
Maui College	395,549	\$ 7,977	\$ 3,631	\$ 11,608
Windward CC	357,031	\$ 10,884	\$ 4,510	\$ 15,393
Systemwide	9,219,290	\$ 545,040	\$ 64,935	\$ 609,975

University of Hawai'i 2017 Maintenance Backlog – Special Funds \$(000's)

CAMPUS	GSF	Backlog		
		Building and Infrastructure	Code and Safety	Total
<u>Special Funds</u>				
UH Mānoa	4,019,189	\$ 70,963	\$ 8,837	\$ 79,800
UH Hilo	222,188	\$ 4,503	\$ -	\$ 4,503
UH West O'ahu	-	\$ -	\$ -	\$ -
Hawai'i CC	-	\$ -	\$ -	\$ -
Honolulu CC	-	\$ -	\$ -	\$ -
Kapi'olani CC	-	\$ -	\$ -	\$ -
Kaua'i CC	-	\$ -	\$ -	\$ -
Leeward CC	-	\$ -	\$ -	\$ -
Maui College	-	\$ -	\$ -	\$ -
Windward CC	-	\$ -	\$ -	\$ -
Systemwide	4,241,377	\$ 75,465	\$ 8,837	\$ 84,302

Future Capital Renewal Needs

In addition to estimating the maintenance backlog, the FRRM™ provides a forecast of building and infrastructure capital renewal needs into the future to facilitate planning for the timing and funding of projects. The 2017 update estimates the total ten-year (2018 through 2027) renewal needs for the University to be \$963.0 million (current 2017 dollars). This includes \$798.9 million for General Funded facilities and \$164.1 million for Special Fund facilities. Chapter 4 provides summary tables by campus.

Probable Costs

The FRRM™ reports all costs in current 2017 dollars. An assumption of 5% annual cost escalation for each of the next ten years provides the following “probable” cost estimates for the combined maintenance backlog and renewal requirements through 2027. The details of this table are included in the Summary on page 10. The FRRM database encompasses the maintenance backlog and building and infrastructure capital renewal needs. The FRRM data does not include major renovations or modernization projects that may be required to address changing program needs.

	<u>Backlog</u>	<u>Capital Renewal 2018-2027</u>	<u>Total</u>
Total System:	\$729 million	\$1.28 billion	\$ 2.01 billion
General Funds Facilities:	\$640 million	\$1.07 billion	\$ 1.71 billion
Special Fund Facilities:	\$ 89 million	\$ 215 million	\$ 304 million

Facility Condition Index

The Facility Condition Index (or FCI) of a campus is a measure of what share of the campus is in need of repair or replacement. Thus, higher FCIs mean that a higher proportion of the campus is in need of repair. Typically, older buildings will have higher FCIs. For example, the University of Hawai‘i at Mānoa’s Kuykendall Hall (built in 1964) has a higher FCI of 0.42 compared with the Agricultural Science building that was constructed in 2000 and has an FCI of 0.02.

The FCI for the entire University of Hawai‘i System is .09, or 9% of the University’s space is in need of repair. However, the FCIs for the various campuses range from a low of 0% for West O‘ahu to a high of 12% for the Leeward Community College Campus. The specific FCIs for the individual campuses are shown on the following table:

Campuses Sorted by Facilities Condition Index (FCI) – All Fund Sources

CAMPUS	GSF	Calculated CRV (1,000's)	FCI
<u>All Funds</u>			
Leeward - CC	419,997	\$ 196,451	0.12
UH - Manoa	9,440,696	\$ 4,387,623	0.11
Kapiolani - CC	406,569	\$ 173,391	0.08
Honolulu - CC	741,839	\$ 298,524	0.07
UH Hilo	969,867	\$ 516,417	0.04
Windward - CC	357,031	\$ 245,952	0.04
Maui College	395,549	\$ 166,415	0.04
Hawaii - CC	206,734	\$ 98,318	0.02
Kauai - CC	303,246	\$ 151,441	0.01
UH - West Oahu	219,139	\$ 106,567	-
Systemwide	13,460,667	\$ 6,341,099	0.09

Campuses with FCIs at 4% or below include: UH Hilo, Windward Community College, Maui College, Kaua'i Community College, Hawai'i Community College and UH West O'ahu. UH Mānoa, Honolulu Community College, Kapi'olani Community College, and the Leeward Community College now have FCIs at 7% or above.

Backlog and Capital Renewal Summary by Campus

The following table shows the total GSF, backlog, ten-year capital renewal requirements, Code & Safety, and Other One Time Needs summarized at the campus level by funding source. The “probable” costs (at a 5% per year escalation) are also shown for systemwide totals. Note that elsewhere in this report, Code & Safety and Other One Time Needs are included as Backlog.

University of Hawai'i FRRM 2017 Update																	
University of Hawai'i - Systemwide Summary																	
Funding Source	Campus/Category	Gross Square Feet	Current Replacement Value (000s)	Backlog (000s of Dollars)			2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total
				Building and Infrastructure	Code and Safety	Total											
All	Systemwide Total	13,460,667	\$6,341,098	\$620,506	\$73,772	\$694,278	\$96,203	\$103,918	\$107,500	\$66,081	\$81,432	\$70,467	\$92,492	\$125,927	\$95,730	\$123,211	\$962,961
General Funds	Systemwide Total	9,219,290	\$4,650,243	\$545,040	\$64,935	\$609,975	\$88,251	\$75,675	\$85,308	\$57,870	\$63,183	\$62,263	\$76,937	\$87,924	\$88,651	\$112,836	\$798,900
Special Funds	Systemwide Total	4,241,377	\$1,690,855	\$75,465	\$8,837	\$84,302	\$7,952	\$28,243	\$22,191	\$8,211	\$18,249	\$8,204	\$15,555	\$38,003	\$7,078	\$10,375	\$164,060
	Check / Test	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
All	UH Mānoa	9,440,696	\$4,387,623	\$513,443	\$37,422	\$550,866	\$70,740	\$92,572	\$82,462	\$53,565	\$64,306	\$56,260	\$64,494	\$107,771	\$84,016	\$87,324	\$763,509
General Funds	UH Mānoa	5,421,507	\$2,821,567	\$442,481	\$28,585	\$471,066	\$62,943	\$64,564	\$63,457	\$46,550	\$46,715	\$48,056	\$48,939	\$75,613	\$76,938	\$77,914	\$611,687
	Main Campus	4,926,741	\$2,595,145	\$414,095	\$28,585	\$442,680	\$62,340	\$62,340	\$62,340	\$45,447	\$45,556	\$45,447	\$45,578	\$74,874	\$74,874	\$75,569	\$594,365
	Off Campus	494,766	\$226,422	\$28,386	\$0	\$28,386	\$603	\$2,224	\$1,117	\$1,103	\$1,159	\$2,609	\$3,361	\$739	\$2,064	\$2,345	\$17,323
Special Funds	UH Mānoa	4,019,189	\$1,566,056	\$70,963	\$8,837	\$79,800	\$7,796	\$28,008	\$19,005	\$7,015	\$17,591	\$8,204	\$15,555	\$32,159	\$7,078	\$9,410	\$151,821
	Main Campus	3,010,064	\$935,124	\$38,311	\$8,837	\$47,148	\$7,756	\$11,359	\$7,765	\$2,861	\$13,520	\$5,663	\$13,704	\$20,364	\$7,049	\$5,324	\$95,365
	Off Campus	1,009,125	\$630,933	\$32,652	\$0	\$32,652	\$40	\$16,649	\$11,240	\$4,154	\$4,072	\$2,541	\$1,850	\$11,794	\$29	\$4,087	\$56,456
All	UH Hilo	969,867	\$516,417	\$23,058	\$4,192	\$27,250	\$3,510	\$958	\$7,308	\$4,794	\$5,830	\$1,760	\$2,457	\$8,946	\$4,491	\$6,008	\$46,062
General Funds	UH Hilo	747,679	\$391,618	\$18,556	\$4,192	\$22,748	\$3,354	\$723	\$4,122	\$3,598	\$5,173	\$1,760	\$2,457	\$3,101	\$4,491	\$5,043	\$33,823
	Main Campus	641,332	\$354,922	\$15,461	\$4,192	\$19,653	\$561	\$691	\$3,534	\$3,598	\$5,173	\$990	\$1,730	\$3,037	\$4,052	\$5,043	\$28,408
	Off Campus	106,347	\$36,696	\$3,095	\$0	\$3,095	\$2,793	\$32	\$588	\$0	\$770	\$727	\$65	\$440	\$0	\$5,414	
Special Funds	UH Hilo	222,188	\$124,798	\$4,503	\$0	\$4,503	\$155	\$235	\$3,186	\$1,196	\$657	\$0	\$0	\$5,845	\$0	\$965	\$12,239
	Main Campus	222,188	\$124,798	\$4,503	\$0	\$4,503	\$155	\$235	\$3,186	\$1,196	\$657	\$0	\$0	\$5,845	\$0	\$965	\$12,239
All	UH West O'ahu	219,139	\$106,567	\$0	\$0	\$0	\$2,982	\$2,376	\$1,585	\$0	\$1,041	\$0	\$0	\$0	\$0	\$4,738	\$12,721
General Funds	UH West O'ahu	219,139	\$106,567	\$0	\$0	\$0	\$2,982	\$2,376	\$1,585	\$0	\$1,041	\$0	\$0	\$0	\$0	\$4,738	\$12,721
	Main Campus	219,139	\$106,567	\$0	\$0	\$0	\$2,982	\$2,376	\$1,585	\$0	\$1,041	\$0	\$0	\$0	\$0	\$4,738	\$12,721
All	Hawai'i Community College	206,734	\$98,318	\$1,836	\$1,551	\$3,387	\$1,057	\$764	\$2,868	\$757	\$471	\$1,195	\$130	\$1,171	\$340	\$2,323	\$11,076
General Funds	Hawai'i Community College	206,734	\$98,318	\$1,836	\$1,551	\$3,387	\$1,057	\$764	\$2,868	\$757	\$471	\$1,195	\$130	\$1,171	\$340	\$2,323	\$11,076
	Main Campus	206,734	\$98,318	\$1,836	\$1,551	\$3,387	\$1,057	\$764	\$2,868	\$757	\$471	\$1,195	\$130	\$1,171	\$340	\$2,323	\$11,076

University of Hawai'i
FRRM 2017 Update

University of Hawai'i - Systemwide Summary

Funding Source	Campus/Category	Gross Square Feet	Current Replacement Value (000s)	Backlog (000s of Dollars)			2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total
				Building and Infrastructure	Code and Safety	Total											
All	Honolulu Community College	741,839	\$298,524	\$23,968	\$2,177	\$26,145	\$5,178	\$2,889	\$2,076	\$560	\$4,808	\$1,527	\$14,603	\$3,860	\$2,656	\$2,955	\$41,112
General Funds	Honolulu Community College	741,839	\$298,524	\$23,968	\$2,177	\$26,145	\$5,178	\$2,889	\$2,076	\$560	\$4,808	\$1,527	\$14,603	\$3,860	\$2,656	\$2,955	\$41,112
	Main Campus	558,579	\$246,020	\$21,580	\$2,177	\$23,756	\$4,319	\$2,669	\$1,170	\$101	\$4,808	\$1,527	\$14,603	\$432	\$2,570	\$2,917	\$35,116
	Off Campus	183,260	\$52,504	\$2,389		\$2,389	\$858	\$221	\$906	\$459	\$0	\$0	\$0	\$3,428	\$86	\$38	\$5,996
All	Kapi'olani Community College	406,569	\$173,391	\$13,284	\$8,636	\$21,920	\$5,219	\$291	\$1,486	\$2,857	\$441	\$652	\$1,337	\$646	\$687	\$1,584	\$15,199
General Funds	Kapi'olani Community College	406,569	\$173,391	\$13,284	\$8,636	\$21,920	\$5,219	\$291	\$1,486	\$2,857	\$441	\$652	\$1,337	\$646	\$687	\$1,584	\$15,199
	Main Campus	406,569	\$173,391	\$13,284	\$8,636	\$21,920	\$5,219	\$291	\$1,486	\$2,857	\$441	\$652	\$1,337	\$646	\$687	\$1,584	\$15,199
All	Kaua'i Community College	303,246	\$151,441	\$1,732	\$3,191	\$4,923	\$344	\$1,480	\$1,563	\$1,177	\$1,225	\$877	\$4,355	\$753	\$1,859	\$3,705	\$17,338
General Funds	Kaua'i Community College	303,246	\$151,441	\$1,732	\$3,191	\$4,923	\$344	\$1,480	\$1,563	\$1,177	\$1,225	\$877	\$4,355	\$753	\$1,859	\$3,705	\$17,338
	Main Campus	303,246	\$151,441	\$1,732	\$3,191	\$4,923	\$344	\$1,480	\$1,563	\$1,177	\$1,225	\$877	\$4,355	\$753	\$1,859	\$3,705	\$17,338
All	Leeward Community College	419,997	\$196,451	\$24,323	\$8,463	\$32,785	\$4,493	\$19	\$2,596	\$604	\$1,201	\$7,675	\$1,933	\$112	\$52	\$1,868	\$20,553
General Funds	Leeward Community College	419,997	\$196,451	\$24,323	\$8,463	\$32,785	\$4,493	\$19	\$2,596	\$604	\$1,201	\$7,675	\$1,933	\$112	\$52	\$1,868	\$20,553
	Main Campus	419,997	\$196,451	\$24,323	\$8,463	\$32,785	\$4,493	\$19	\$2,596	\$604	\$1,201	\$7,675	\$1,933	\$112	\$52	\$1,868	\$20,553
All	UH Maui	395,549	\$166,415	\$7,977	\$3,631	\$11,608	\$2,637	\$2,376	\$3,014	\$1,417	\$1,146	\$523	\$3,023	\$1,790	\$1,226	\$1,878	\$19,029
General Funds	UH Maui	395,549	\$166,415	\$7,977	\$3,631	\$11,608	\$2,637	\$2,376	\$3,014	\$1,417	\$1,146	\$523	\$3,023	\$1,790	\$1,226	\$1,878	\$19,029
	Main Campus	395,549	\$166,415	\$7,977	\$3,631	\$11,608	\$2,637	\$2,376	\$3,014	\$1,417	\$1,146	\$523	\$3,023	\$1,790	\$1,226	\$1,878	\$19,029
All	Windward Community College	357,031	\$245,952	\$10,884	\$4,510	\$15,393	\$44	\$194	\$2,542	\$349	\$962	\$0	\$161	\$877	\$403	\$10,829	\$16,363
General Funds	Windward Community College	357,031	\$245,952	\$10,884	\$4,510	\$15,393	\$44	\$194	\$2,542	\$349	\$962	\$0	\$161	\$877	\$403	\$10,829	\$16,363
	Main Campus	357,031	\$245,952	\$10,884	\$4,510	\$15,393	\$44	\$194	\$2,542	\$349	\$962	\$0	\$161	\$877	\$403	\$10,829	\$16,363

University of Hawai'i
FRRM 2017 Update

University of Hawai'i - Probable Costs

Funding Source	Campus/Category	Gross Square Feet	Current Replacement Value (000s)	Backlog (000s of Dollars)			Capital Renewal Requirements (000s of Dollars)											
				Building and Infrastructure	Code and Safety	Total	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total	
PROBABLE COSTS - INFLATED AT 5%/YEAR																		
All	Systemwide Total	13,460,667	\$6,341,099	\$620,506	\$73,772	\$694,278	\$96,203	\$103,918	\$107,500	\$66,081	\$81,432	\$70,467	\$92,492	\$125,927	\$95,730	\$123,211	\$962,961	
General Funds	Systemwide Total	9,219,290	\$ 4,650,244	\$ 545,040	\$ 64,935	\$ 609,975	\$ 88,251	\$ 75,675	\$ 85,308	\$ 57,870	\$ 63,183	\$ 62,263	\$ 76,937	\$ 87,924	\$ 88,651	\$ 112,836	\$798,900	
Special Funds	Systemwide Total	4,241,377	\$ 1,690,855	\$ 75,465	\$ 8,837	\$ 84,302	\$ 7,952	\$ 28,243	\$ 22,191	\$ 8,211	\$ 18,249	\$ 8,204	\$ 15,555	\$ 38,003	\$ 7,078	\$ 10,375	\$164,060	
All	Systemwide Totals	13,460,667	\$6,341,099	\$620,506	\$73,772	\$694,278	\$96,203	\$103,918	\$107,500	\$66,081	\$81,432	\$70,467	\$92,492	\$125,927	\$95,730	\$123,211	\$962,961	
	<i>5%/Year (Compounded)</i>					\$728,991	\$101,013	\$114,570	\$124,444	\$80,322	\$103,930	\$94,433	\$130,145	\$186,052	\$148,508	\$200,698	#####	
General Funds	Base Figures	9,219,290	\$4,650,244	\$545,040	\$64,935	\$609,975	\$88,251	\$75,675	\$85,308	\$57,870	\$63,183	\$62,263	\$76,937	\$87,924	\$88,651	\$112,836	\$798,900	
	<i>5%/Year (Compounded)</i>					\$640,474	\$92,664	\$83,432	\$98,755	\$70,342	\$80,640	\$83,439	\$108,258	\$129,904	\$137,528	\$183,798	#####	
Special Funds	Base Figures	4,241,377	\$1,690,855	\$75,465	\$8,837	\$84,302	\$7,952	\$28,243	\$22,191	\$8,211	\$18,249	\$8,204	\$15,555	\$38,003	\$7,078	\$10,375	\$164,060	
	<i>5%/Year (Compounded)</i>					\$88,517	\$8,349	\$31,137	\$25,689	\$9,981	\$23,291	\$10,994	\$21,887	\$56,148	\$10,981	\$16,900	\$215,356	
						5%	5%	10%	16%	22%	28%	34%	41%	48%	55%	63%		

Chapter 1 – Introduction

Purpose and Scope

This report, for the University of Hawai'i, presents the results of the seventh update to the 2007-2008 implementation of the Facilities Renewal Resource Model (FRRM™). The objective is to provide a conceptual framework for uniformly and systematically assessing the University's ongoing capital renewal needs. Capital renewal generally refers to those repair and renewal activities essential to maintaining existing facilities and their supporting infrastructure in a state of good working order. The implementation of the FRRM™ provides a continuing and methodological approach to estimating the University's building and infrastructure reinvestment needs over time. Accordingly, the report that follows provides a current estimate of the Maintenance Backlog, a ten-year forecast of capital renewal needs, and scenarios for eliminating the backlog.

The on-going objectives for the FRRM™ implementation are to:

- Maintain an inventory of UH buildings and infrastructure (e.g. roadways, parking lots, utility generation and distribution) for all of the campuses;
- Maintain maintenance history on buildings at the level of major building systems (e.g. roofs plumbing, electrical, HVAC);
- Maintain a budget model to predict annual funding requirements for capital renewal and document the existing maintenance backlog in a consistent way for all campuses;
- Provide a basis for a funding plan that will address adequate resources for renewal and a reduction of the backlog;
- Provide consistent and comparative data among campuses for determining funding allocations and targets for addressing renewal as a part of operating or capital budgets;
- Provide a cost model for each campus with associated staff training so that capital renewal and backlog needs can be updated annually and progress in meeting those needs can be measured;
- Provide a planning tool for campus use which provides a useful life “systems” profile of each building, as a way of predicting future funding needs or packaging projects to leverage fund sources;

Project Team

The University of Hawai'i organized and supervised the original study conducted by Pacific Partners Consulting Group, Inc. (PPCG), headquartered in Stanford, California. PPCG was acquired by Sightlines LLC in 2011 and staff from the original project completed the 2012 update. The 2013 thru 2017 annual updates have been completed by Sightlines staff only. The University of Hawai'i project team included representatives from each of the ten campuses and the support of the University of Hawai'i System offices.

Chapter 2 – Project Overview/Methodology/Definitions

Project Overview

The goal of this project was to categorize, benchmark, and report facility renewal and backlog of renewal needs for the University of Hawai'i. This was accomplished by adapting and implementing the Facilities Renewal Resource Model (FRRM™) for UH facilities. The result is a web-based planning model that forecasts the necessary expenditure levels required for on-going capital renewal as well as the current backlog of needs. The scope of the project included all of University of Hawai'i facilities.

Working with University of Hawai'i staff, Sightlines LLC reviewed the FRRM™ life-cycle approach, model, and methodology and facilitated a process to tailor the model to meet the unique requirements of the University of Hawai'i. This included establishing appropriate building types; sub-systems; infrastructure categories; life-cycles; and costs for the University's facilities³.

Using the specifications developed, Sightlines LLC configured the application so that UH employees can generate fifty-year forecasts of facility renewal needs by building and fiscal year. The application was designed for ease in updating the information from one year to the next. This report is the result of the sixth annual update.

Methodology

The methodology used by Sightlines LLC to forecast backlog and capital renewal needs is a life-cycle approach. This method was developed at Stanford University in 1980, and is currently in use by eight higher education systems with over 220 campuses and over 440 million gross square feet of space.

The methodology has been recognized in a book published by the National Association for College and University Business Officers (NACUBO), The Association of Higher Education Facilities Officers (APPA) and the Society for College and University Planning (SCUP) as the “best method” for projecting capital renewal needs.

The life cycle model generates an overview of current capital renewal needs and any accumulated backlog based on institution-specific information, including: the age and type of building; building sub-system life-cycles; infrastructure support requirements; and the current cost of replacement⁴ – adjusted for regional cost differences within the State of Hawai'i. The model uses system life-cycles, current replacement values, and actual University of Hawai'i cost information⁵ to develop a 50 year forecast of estimated backlog and renewal costs. The methodology relies on the expertise of the facilities staff on each campus to provide the historical information on the age of each building sub-system to populate the model. The FRRM database

³ Details of these systems, costs, and life-cycles are available in the April 2008 Report, University of Hawai'i Facilities Renewal Reinvestment Study.

⁴ An escalation rate of 4.8% was used to calculate current 2017 dollars from 2016 figures as per the State of Hawai'i Department of Business, Economic Development & Tourism construction index for High Rise buildings.

⁵ The cost data used to estimate renewal needs was updated in 2013-2014 using 6 recent building projects on University of Hawai'i campuses and verified against Sightlines' FRRM database of over 440 million gross square feet across 226 campuses.

encompasses the maintenance backlog and building and infrastructure capital renewal needs. The FRRM data does not include major renovations or modernization projects that may be required to address changing program needs.

Definitions

Capital Renewal – All buildings are comprised of different sub-systems that have predictable lifetimes. The Sightlines LLC Report encompasses roofs, building exteriors, elevators and conveying systems, air conditioning, lighting, electrical equipment, plumbing, fire protection and detection systems, built-in specialties and equipment, and interior finishes. *Capital Renewal* requirements are sub-systems that are at the end of their useful lives and need to be replaced. In other words, the failure to implement *Capital Renewal* projects results in a commensurate increase to the maintenance backlog.

Maintenance Backlog – Buildings with a *Maintenance Backlog* are facilities that have failing sub-systems, or sub-systems that are operating beyond their useful lifetime. The Sightlines LLC Report separately identifies building and infrastructure backlog, code and safety, and other one time needs. These three components comprise the total *Maintenance Backlog*.

General Funded Facilities – Facilities that depend on the general fund for building maintenance. These facilities are comprised of classrooms, laboratories, offices, and other related spaces that do not have revenue generating programs that could otherwise finance major repairs and maintenance on the facilities.

Special Funded Facilities – Facilities that have their own dedicated source of revenues, typically from fees or user charges, to finance the repairs and maintenance of facilities. This includes programs such as student housing, faculty housing, parking, auxiliary enterprises, and other programs that do not depend on the general fund for repairs and maintenance.

Main Campus and Off-Campus Facilities – Main campuses are the primary service points of the University of Hawai'i and includes University Education Centers. The University of Hawai'i at Mānoa, University of Hawai'i at Hilo, Honolulu Community College, and Maui Community College have off-campus facilities that are separate from the main campus.

Current Replacement Value (CRV) – is the current cost to replace a building of similar size and usage. This cost includes both construction and soft costs, but does not include land or site improvements.

The Facility Condition Index (FCI) is the ratio of deferred maintenance backlog to Current Replacement Value (CRV) (the equation is deferred maintenance backlog divided by current replacement value, expressed as an index or percentage). The FCI calculation is useful as a benchmark for comparison to an institution's baseline conditions or to other institution's, and as a tool to determine objectives and strategies to address backlogs of deferred maintenance. Higher FCIs mean that a higher proportion of the campus is in need of repair.

$$FCI = \frac{\text{Deferred Maintenance Backlog}}{\text{Current Replacement Value}}$$

Building Portfolio Solutions

The University of Hawai'i has elected to utilize Sightlines Building Portfolio Solutions (BPS) analysis in place of the FRRM process to assess the need of the General Fund buildings on UH Manoa's Main campus for the first time in 2017.

Data Gathering Process

The technical assessment of need started with a team of 8 Sightlines analysts walking all UH Manoa General Fund buildings over 10k GSF in order to document the components of said buildings, including mechanical & structural components inside and out. The Sightlines analysts were grouped into three teams who walked all 106 buildings over the course of four days on site, taking pictures of components along the way. This information was then compiled into an initial asset inventory. The inventory is tracked at this detailed component level in order to account for the fact that different mechanical & structural building materials have varying life cycle lengths and are often replaced on a case by case basis rather than through a full-scale building renovation, therefore resulting in capital replacement needs coming due at different times.

This inventory was then reviewed with UH Manoa staff within the Office of Planning & Facilities in order to incorporate operational knowledge about each building and its systems. The goal of this step is to confirm the timeframe of when the capital need of each component is coming due, and then to quantify the estimated project cost.

This review step started with four days of review meetings on site organized by building component type. When appropriate, existing studies and inventories were collected to supplement and validate the inventory. Continued review of costs was also conducted in order to confirm appropriate unit costs are being used consistent to UHM costing experience with consideration of mark-ups commonly encountered in order to represent comprehensive project costs.

In addition to the component-level needs of these buildings, one-time infrastructure projects were also identified during the on-site review meetings for this campus.

Resulting Information

The result of the aforementioned process is a detailed project list that identifies when each component of all 106 buildings will be coming due for capital reinvestment, with an estimate of the project cost.

The timing of when each component is coming due is identified within one of the following timeframes:

- Backlog: Deferred maintenance, already past due
- A: Next 1-3 years
- B: Next 4-7 years
- C: Next 8-10 years
- X: Beyond 10 years

For the purposes of analyzing the need of all University of Hawai'i campuses consistently, the need of each building within each timeframe is evenly divided between the appropriate years to each timeframe. For example, A timeframe needs are evenly split between 2018, 2019, and 2020.

Small Buildings

Buildings under 10k GSF within the UH Manoa General Fund space on the Main campus were not assessed through the full BPS process. Instead, the need of these buildings was identified as a full building renovation project with a cost calculated based on the building type and size, consistent with the costs in the FRRM database.

Chapter 3 – Systemwide Summary

FCI or the Facilities Condition Index is calculated for each campus by dividing the building maintenance backlog by the current replacement value. The following tables present the FCI calculations for each campus for General Funded space, Special Funded space and the systemwide total.

Summary of GSF/CRV/FCI – General Funds Only

CAMPUS	GSF	Calculated CRV (1,000's)	FCI
<u>General Funds</u>			
UH - Manoa	5,421,507	\$ 2,821,567	0.15
UH Hilo	747,679	\$ 391,618	0.04
Honolulu - CC	741,839	\$ 298,524	0.07
Leeward - CC	419,997	\$ 196,451	0.12
Kapiolani - CC	406,569	\$ 173,391	0.08
Maui College	395,549	\$ 166,415	0.04
Windward - CC	357,031	\$ 245,952	0.04
Kauai - CC	303,246	\$ 151,441	0.01
UH - West Oahu	219,139	\$ 106,567	-
Hawaii - CC	206,734	\$ 98,318	0.02
Systemwide	9,219,290	\$ 4,650,244	0.11

Summary of GSF/CRV/FCI – Special Funds

CAMPUS	GSF	Calculated CRV (1,000's)	FCI
<u>Special Funds</u>			
UH - Manoa	4,019,189	\$ 1,566,056	0.05
UH Hilo	222,188	\$ 124,798	0.04
Honolulu - CC	-	\$ -	-
Leeward - CC	-	\$ -	-
Kapiolani - CC	-	\$ -	-
Maui College	-	\$ -	-
Windward - CC	-	\$ -	-
Kauai - CC	-	\$ -	-
UH - West Oahu	-	\$ -	-
Hawaii - CC	-	\$ -	-
Systemwide	4,241,377	\$ 1,690,855	0.04

Summary of GSF/CRV/FCI – All Funds

CAMPUS	GSF	Calculated CRV (1,000's)	FCI
<u>All Funds</u>			
UH - Manoa	9,440,696	\$ 4,387,623	0.11
UH Hilo	969,867	\$ 516,417	0.04
Honolulu - CC	741,839	\$ 298,524	0.07
Leeward - CC	419,997	\$ 196,451	0.12
Kapiolani - CC	406,569	\$ 173,391	0.08
Maui College	395,549	\$ 166,415	0.04
Windward - CC	357,031	\$ 245,952	0.04
Kauai - CC	303,246	\$ 151,441	0.01
UH - West Oahu	219,139	\$ 106,567	-
Hawaii - CC	206,734	\$ 98,318	0.02
Systemwide	13,460,667	\$ 6,341,099	0.09

Chapter 4 – Backlog and 10-Year Capital Renewal Forecasts by Campus/Funding/ Main and Off Campus

The data in this chapter represent detailed forecasts for each University of Hawai'i building for: backlog, capital renewal requirements over the next ten years, code & safety, and other one-time needs. (These tables do not include the breakdown by sub-system, which is how the forecast is derived. This information is available from other FRRM™ reports.) The data is organized as follows:

UH Mānoa Main Campus General Funded
UH Mānoa Off Campus General Funded
UH Mānoa Main Campus Special Funds
UH Mānoa Off Campus Special Funds
UH Hilo Main Campus General Funded
UH Hilo Off Campus General Funded
UH Hilo Main Campus Special Funds
UH West O'ahu Main Campus General Funded
Hawai'i Community College Main Campus General Funded
Honolulu Community College Main Campus General Funded
Honolulu Community College Off Campus General Funded
Kapi'olani Community College Main Campus General Funded
Kaua'i Community College Main Campus General Funded
Maui College Main Campus General Funded
Leeward Community College Main Campus General Funded
Windward Community College Main Campus General Funded

University of Hawai'i
FRRM 2017 Update

University of Hawai'i at Mānoa - Main Campus - General Funded

Campus	Building			Gross Square Feet	Current Replacement Value (000s)	Backlog (000s of Dollars)			Capital Renewal Requirements (000s of Dollars)										Total			
	Number	Name	Assessment			Building and Infrastructure	Code and Safety	Total	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027				
UH - Manoa Main	Campus	Code & Safety	FRRM	N/A	N/A	\$0	\$28,585	\$28,585	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	Campus	Infrastructure	BPS	N/A	N/A	\$22,547	\$0	\$22,547	\$3,003	\$3,003	\$3,003	\$4,147	\$4,147	\$4,147	\$4,147	\$201	\$201	\$201	\$0	\$0	\$26,200	
UH - Manoa Main	1079	2350 DOLE STREET (FORMER KHET TV - PBS BUILDING)	BPS	19,400	\$10,550	\$7,562	\$0	\$7,562	\$3	\$3	\$3	\$5	\$5	\$5	\$5	\$138	\$138	\$138	\$0	\$0	\$444	
UH - Manoa Main	1124	ADMINISTRATIVE SERVICES BUILDING 1	BPS	13,733	\$5,854	\$1,653	\$0	\$1,653	\$615	\$615	\$615	\$190	\$190	\$190	\$190	\$148	\$148	\$148	\$0	\$0	\$3,048	
UH - Manoa Main	1124A	ADMINISTRATIVE SERVICES BUILDING 2	BPS	5,040	\$2,148	\$448	\$0	\$448	\$198	\$198	\$198	\$110	\$110	\$110	\$110	\$88	\$88	\$88	\$0	\$0	\$1,301	
UH - Manoa Main	1088	Agricultural Engineering Institute	BPS	15,689	\$6,688	\$3,791	\$0	\$3,791	\$63	\$63	\$63	\$176	\$176	\$176	\$176	\$196	\$196	\$196	\$0	\$0	\$1,484	
UH - Manoa Main	1210	AGRICULTURAL SCIENCE BUILDING	BPS	91,540	\$65,032	\$1,187	\$0	\$1,187	\$912	\$912	\$912	\$1,174	\$1,174	\$1,174	\$1,174	\$2,374	\$2,374	\$2,374	\$0	\$0	\$14,553	
UH - Manoa Main	1210A	Agricultural Science Mechanical Building	BPS	1,125	\$280	\$0	\$0	\$0	\$53	\$53	\$53	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$161	
UH - Manoa Main	1108A	Air Force ROTC #1	BPS	2,025	\$490	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Main	1108B	Air Force ROTC #2	BPS	1,781	\$431	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Main	1212	ANDREWS OUTDOOR THEATRE	BPS	10,800	\$2,206	\$215	\$0	\$215	\$0	\$0	\$0	\$13	\$13	\$13	\$13	\$0	\$0	\$0	\$0	\$0	\$53	
UH - Manoa Main	1016	Architecture Building	BPS	65,946	\$28,110	\$7,210	\$0	\$7,210	\$2,272	\$2,272	\$2,272	\$434	\$434	\$434	\$434	\$262	\$262	\$262	\$0	\$0	\$9,339	
UH - Manoa Main	1108C	Armory ROTC #1	BPS	480	\$199	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Main	1108Q	Army ROTC #3	BPS	1,400	\$348	\$446	\$0	\$446	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Main	1007	Army ROTC Building	BPS	5,178	\$2,207	\$1,016	\$0	\$1,016	\$64	\$64	\$64	\$89	\$89	\$89	\$89	\$52	\$52	\$52	\$0	\$0	\$701	
UH - Manoa Main	1049	Art Building	BPS	157,462	\$11,865	\$0	\$0	\$0	\$1,811	\$1,811	\$1,811	\$4,294	\$4,294	\$4,294	\$4,294	\$783	\$783	\$783	\$0	\$0	\$24,966	
UH - Manoa Main	1108G	Athletic Lettermans Club	BPS	2,160	\$537	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Main	1103B	Bachman Annex #10	BPS	1,680	\$418	\$536	\$0	\$536	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Main	1103C	Bachman Annex #11	BPS	1,738	\$432	\$555	\$0	\$555	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Main	1103D	Bachman Annex #12	BPS	1,754	\$436	\$560	\$0	\$560	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Main	1103E	Bachman Annex #13	BPS	1,840	\$458	\$587	\$0	\$587	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Main	1024C	Bachman Annex #2 (Alumni & Treasury)	BPS	1,768	\$440	\$564	\$0	\$564	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Main	1103A	Bachman Annex #9	BPS	1,700	\$423	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Main	1024	BACHMAN ANNEX 6	BPS	1,768	\$440	\$1,597	\$0	\$1,597	\$30	\$30	\$30	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$91	
UH - Manoa Main	1107	Bachman Hall	BPS	28,070	\$13,760	\$12,309	\$0	\$12,309	\$1,189	\$1,189	\$1,189	\$166	\$166	\$166	\$166	\$308	\$308	\$308	\$0	\$0	\$5,159	
UH - Manoa Main	1126A	Bilger Addition	BPS	73,330	\$52,095	\$4,439	\$0	\$4,439	\$844	\$844	\$844	\$0	\$0	\$0	\$0	\$46	\$46	\$46	\$0	\$0	\$3,871	
UH - Manoa Main	1126	Bilger Hall	BPS	74,906	\$31,929	\$9,268	\$0	\$9,268	\$2,193	\$2,193	\$2,193	\$17	\$17	\$17	\$17	\$290	\$290	\$290	\$0	\$0	\$7,514	
UH - Manoa Main	1172	Biomedical Sciences Building	BPS	184,592	\$150,809	\$11,816	\$0	\$11,816	\$1,131	\$1,131	\$1,131	\$2,719	\$2,719	\$2,719	\$2,719	\$2,255	\$2,255	\$2,255	\$0	\$0	\$21,033	
UH - Manoa Main	1172F	BIOMEDICAL SCIENCES MECHANICAL BUILDING	BPS	4,000	\$1,705	\$162	\$0	\$162	\$0	\$0	\$0	\$31	\$31	\$31	\$31	\$0	\$0	\$0	\$0	\$0	\$124	
UH - Manoa Main	1195C	Biophysics Lab (PBRC) - Warehouse	BPS	5,141	\$913	\$0	\$0	\$0	\$0	\$0	\$0	\$287	\$287	\$287	\$287	\$0	\$0	\$0	\$0	\$0	\$1,148	
UH - Manoa Main	1077A	Building #77 A	BPS	5,278	\$1,312	\$0	\$0	\$0	\$561	\$561	\$561	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,683	
UH - Manoa Main	1077B	Building #77 B (Globalization Research Center)	BPS	6,744	\$1,677	\$0	\$0	\$0	\$717	\$717	\$717	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,150	
UH - Manoa Main	1031C	Building 31C	BPS	3,200	\$1,328	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Main	1037	Building 37 (ITS Building)	BPS	3,653	\$908	\$1,164	\$0	\$1,164	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Main	1041	Bus Stop Building- University Ave	BPS	100	\$25	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$32	
UH - Manoa Main	1017	BUSINESS ADMINISTRATION BUILDING - SHIDLER	BPS	129,143	\$55,048	\$15,945	\$0	\$15,945	\$2,843	\$2,843	\$2,843	\$1,286	\$1,286	\$1,286	\$1,286	\$1,768	\$1,768	\$1,768	\$0	\$0	\$18,975	
UH - Manoa Main	1149B	Campus Security, Relocatable	BPS	1,741	\$433	\$555	\$0	\$555	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Main	1188	CAMPUS SERVICES	BPS	24,336	\$17,289	\$3,470	\$0	\$3,470	\$237	\$237	\$237	\$1,304	\$1,304	\$1,304	\$1,304	\$40	\$40	\$40	\$0	\$0	\$6,048	
UH - Manoa Main	1069	Caretakers Cottage (Castle Memorial)	BPS	1,678	\$417	\$536	\$0	\$536	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Main	1080	Castle Annex	BPS	3,307	\$800	\$1,054	\$0	\$1,054	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Main	1068	Castle Memorial Hall	BPS	28,484	\$13,963	\$10,702	\$0	\$10,702	\$303	\$303	\$303	\$785	\$785	\$785	\$785	\$0	\$0	\$0	\$0	\$0	\$4,049	
UH - Manoa Main	1116	Ching Athletic Complex - Equipment Storage Facility	BPS	4,160	\$1,007	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Main	1116A	CHING FIELD - RESTROOM FACILITIES	BPS	1,500	\$373	\$414	\$0	\$414	\$11	\$11	\$11	\$11	\$11	\$11	\$0	\$0	\$0	\$0	\$0	\$0	\$34	
UH - Manoa Main	1254	CLARENCE TC CHING ATHLETICS COMPLEX	BPS	31,096	\$12,901	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$378	\$378	\$378	\$0	\$0	\$1,133	
UH - Manoa Main	1172B	C-MORE (THE DANIEL K INOUE CENTER FOR	BPS	32,126	\$22,823	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$277	
UH - Manoa Main	1185	College Hill	BPS	10,220	\$5,010	\$473	\$0	\$473	\$138	\$138	\$138	\$80	\$80	\$80	\$80	\$203	\$203	\$203	\$0	\$0	\$1,340	
UH - Manoa Main	1185B	College Hill Greenhouse	BPS	1,500	\$622	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Main	1214	Communication Vault (Lower Campus Road)	BPS	475	\$115	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Main	1171A	Contracts & Grants	BPS	1,470	\$366	\$469	\$0	\$469	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Main	1003A	Cottage #1	BPS	1,155	\$287	\$368	\$0	\$368	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Main	1003B	Cottage #2 - Credit Union Office	BPS	1,309	\$325	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Main	1003C	Cottage #3	BPS	1,155	\$287	\$368	\$0	\$368	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Main	1003D	Cottage #4	BPS	1,155	\$279	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Main	1003E	Cottage #5 - Thrift Shop	BPS	1,081	\$269	\$344	\$0	\$344	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Main	1057	Crawford Hall	BPS	24,662	\$12,089	\$572	\$0	\$572	\$313	\$313	\$313	\$268	\$268	\$268	\$268	\$1,032	\$1,032	\$1,032	\$0	\$0	\$5,110	
UH - Manoa Main	1138	CRCH Refrigeration Lab	BPS	1,566	\$389	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Main	1251	DANCE BUILDING	BPS	7,046	\$2,923	\$234	\$0	\$234	\$0	\$0	\$0	\$48	\$48	\$48	\$48	\$58	\$58	\$58	\$0	\$0	\$366	

University of Hawai'i
FRRM 2017 Update

University of Hawai'i at Mānoa - Main Campus - General Funded

Campus	Building			Gross Square Feet	Current Replacement Value (000s)	Backlog (000s of Dollars)				Capital Renewal Requirements (000s of Dollars)									
	Number	Name	Assessment			Building and Infrastructure	Code and Safety	Total	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total
UH - Manoa Main	1030	Dean Hall	BPS	18,768	\$9,200	\$10,808	\$0	\$10,808	\$159	\$159	\$159	\$146	\$146	\$146	\$146	\$62	\$62	\$62	\$1,245
UH - Manoa Main	1171G	Disbursing Storage (Makai Campus)	BPS	885	\$220	\$282	\$0	\$282	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1171H	Disbursing-PPMO Offices	BPS	3,210	\$798	\$1,024	\$0	\$1,024	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1067	Dole Street Offices	BPS	7,400	\$3,627	\$1,231	\$0	\$1,231	\$108	\$108	\$108	\$48	\$48	\$48	\$48	\$184	\$184	\$184	\$1,065
UH - Manoa Main	1113	DUKE KAHANAMOKU AQUATIC COMPLEX (DKAC)	BPS	40,507	\$28,777	\$3,402	\$0	\$3,402	\$283	\$283	\$283	\$351	\$351	\$351	\$351	\$560	\$560	\$560	\$3,935
UH - Manoa Main	1095B	East Web Substation M	BPS	10,000	\$4,148	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1164	EDMONDSON HALL	BPS	43,480	\$18,039	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$900	\$900	\$900	\$2,701	
UH - Manoa Main	1048	ENERGY HOUSE	BPS	1,802	\$448	\$0	\$0	\$0	\$24	\$24	\$24	\$6	\$6	\$6	\$6	\$8	\$8	\$8	\$119
UH - Manoa Main	1202A	Environmental Health and Safety Office 1	BPS	1,200	\$298	\$383	\$0	\$383	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1202B	Environmental Health and Safety Office 2	BPS	1,200	\$298	\$383	\$0	\$383	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1202C	Environmental Health and Safety Office 3-Dive Safety	BPS	528	\$131	\$168	\$0	\$168	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1202D	Environmental Health and Safety Office 4-Dive Safety	BPS	528	\$128	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1200	Environmental Protection Facility	BPS	2,856	\$710	\$910	\$0	\$910	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1081	Every Hall	BPS	20,625	\$8,791	\$1,990	\$0	\$1,990	\$0	\$0	\$0	\$394	\$394	\$394	\$394	\$0	\$0	\$0	\$1,576
UH - Manoa Main	1149C	Fire Safety Office, Relocatable	BPS	1,757	\$437	\$560	\$0	\$560	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1116C	Football Field - Equipment Storage	BPS	2,250	\$559	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$239	\$239	\$239	\$718	
UH - Manoa Main	1257A	FROG 1	BPS	1,500	\$1,374	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1257B	FROG 2	BPS	1,500	\$1,374	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1013D	Fruit Fly Laboratory	BPS	810	\$196	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1015	GARTLEY HALL	BPS	24,493	\$11,685	\$0	\$0	\$0	\$0	\$0	\$0	\$16	\$16	\$16	\$16	\$450	\$450	\$450	\$1,414
UH - Manoa Main	1019	George Hall	BPS	47,761	\$23,412	\$1,173	\$0	\$1,173	\$781	\$781	\$781	\$1,546	\$1,546	\$1,546	\$693	\$693	\$693	\$10,609	
UH - Manoa Main	1089	Gilmore Hall	BPS	73,180	\$35,872	\$383	\$0	\$383	\$0	\$0	\$0	\$746	\$746	\$746	\$1,352	\$1,352	\$1,352	\$7,040	
UH - Manoa Main	1089A	GILMORE MECHANICAL BUILDING	BPS	2,122	\$729	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$17	\$17	\$17	\$50	
UH - Manoa Main	1194D	Ground Maintenance Service	BPS	3,900	\$970	\$1,243	\$0	\$1,243	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1199D	HAMILTON LIBRARY- MECHANICAL BUILDING	BPS	10,000	\$7,459	\$0	\$0	\$0	\$0	\$0	\$0	\$6	\$6	\$6	\$9	\$9	\$9	\$51	
UH - Manoa Main	1199	HAMILTON LIBRARY PHASE 1 (1968) AND PHASE 2 (1972)	BPS	280,143	\$143,295	\$3,282	\$0	\$3,282	\$2,399	\$2,399	\$2,399	\$1,625	\$1,625	\$1,625	\$1,625	\$7,082	\$7,082	\$7,082	\$34,944
UH - Manoa Main	1199C	HAMILTON LIBRARY PHASE 3 (2000)	BPS	121,453	\$62,124	\$2,155	\$0	\$2,155	\$0	\$0	\$0	\$704	\$704	\$704	\$5,357	\$5,357	\$5,357	\$18,887	
UH - Manoa Main	1002	Hawaii Hall	BPS	36,489	\$3,525	\$3,525	\$0	\$3,525	\$703	\$703	\$703	\$218	\$218	\$218	\$817	\$817	\$817	\$5,432	
UH - Manoa Main	9684	Hawaii Institute Marine Biology (Coconut Island)	BPS	46,700	\$15,829	\$3,972	\$0	\$3,972	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1165	Hawaii Institute of Geophysics	BPS	126,708	\$103,519	\$21,867	\$0	\$21,867	\$3,835	\$3,835	\$3,835	\$0	\$0	\$0	\$336	\$336	\$336	\$12,513	
UH - Manoa Main	1165A	HAWAII INSTITUTE OF GEOPHYSICS MECHANICAL BUILDING	BPS	200	\$69	\$706	\$0	\$706	\$17	\$17	\$17	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$51
UH - Manoa Main	1115B	HECO Substation 2 - Lower Campus	BPS	10,000	\$4,263	\$0	\$0	\$0	\$0	\$0	\$0	\$1,307	\$1,307	\$1,307	\$1,307	\$0	\$0	\$0	\$5,228
UH - Manoa Main	1129	Henke Hall	BPS	24,686	\$10,523	\$1,981	\$0	\$1,981	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$387	\$387
UH - Manoa Main	1163	Holmes Hall	BPS	88,546	\$62,905	\$19,629	\$0	\$19,629	\$3,882	\$3,882	\$3,882	\$0	\$0	\$0	\$5,421	\$5,421	\$5,421	\$27,908	
UH - Manoa Main	1012	IFA Manoa	BPS	55,400	\$11,807	\$2,572	\$0	\$2,572	\$304	\$304	\$304	\$1,584	\$1,584	\$1,584	\$3,299	\$3,299	\$3,299	\$17,145	
UH - Manoa Main	1140	INFORMATION TECHNOLOGY CENTER	BPS	73,754	\$51,285	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$501	\$501	\$501	\$1,503	
UH - Manoa Main	1181A	Jakuan Ceremonial Teahouse	BPS	799	\$194	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1131	KAMAKAKUOKALANI CENTER FOR HAWAIIAN STUDIES	BPS	22,000	\$9,378	\$2,156	\$0	\$2,156	\$59	\$59	\$59	\$0	\$0	\$0	\$1,389	\$1,389	\$1,389	\$4,343	
UH - Manoa Main	1255	Kanewai Cultural Resource Center	BPS	200	\$83	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1158	Keller Hall	BPS	49,143	\$34,912	\$4,528	\$0	\$4,528	\$1,012	\$1,012	\$1,012	\$433	\$433	\$433	\$433	\$619	\$619	\$619	\$6,624
UH - Manoa Main	1183	Kennedy Theatre	BPS	47,302	\$23,187	\$1,536	\$0	\$1,536	\$217	\$217	\$217	\$478	\$478	\$478	\$522	\$522	\$522	\$4,130	
UH - Manoa Main	1171B	Keypunch Section	BPS	1,295	\$322	\$413	\$0	\$413	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1076A	Korean Studies Pavilion, Center for	BPS	900	\$218	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1076	Korean Studies, Center for	BPS	16,569	\$7,063	\$1,929	\$0	\$1,929	\$722	\$722	\$722	\$182	\$182	\$182	\$281	\$281	\$281	\$3,736	
UH - Manoa Main	1046U	Krauss Annex #7 - CTAHR	BPS	1,500	\$373	\$478	\$0	\$478	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1046T	Krauss Annex #9 - Environmental Center	BPS	1,540	\$383	\$491	\$0	\$491	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1046	KRAUSS HALL	BPS	19,870	\$8,470	\$3,604	\$0	\$3,604	\$147	\$147	\$147	\$200	\$200	\$200	\$198	\$198	\$198	\$1,834	
UH - Manoa Main	1046C	Krauss Hall PRI Building #2	BPS	3,600	\$895	\$1,148	\$0	\$1,148	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1046D	Krauss Hall PRI Building #3 - Physics ANITA Lab	BPS	2,340	\$582	\$746	\$0	\$746	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1046B	KRAUSS HALL PRI BUILDING 1	BPS	19,870	\$8,470	\$3,333	\$0	\$3,333	\$459	\$459	\$459	\$409	\$409	\$409	\$222	\$222	\$222	\$3,680	
UH - Manoa Main	1125	Kuykendall Annex - CTAHR	BPS	1,773	\$441	\$565	\$0	\$565	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1192	Kuykendall Hall	BPS	86,492	\$46,085	\$19,222	\$0	\$19,222	\$517	\$517	\$517	\$1,224	\$1,224	\$1,224	\$562	\$562	\$562	\$8,131	
UH - Manoa Main	1192A	Kuykendall Mechanical Building	BPS	1,767	\$753	\$308	\$0	\$308	\$0	\$0	\$0	\$0	\$0	\$0	\$3	\$3	\$3	\$8	\$8
UH - Manoa Main	1170	Lab School Lockers (University High School Lockers)	BPS	2,436	\$606	\$776	\$0	\$776	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1143	Law Library	BPS	33,245	\$14,879	\$2,623	\$0	\$2,623	\$476	\$476	\$476	\$164	\$164	\$164	\$514	\$514	\$514	\$3,625	

University of Hawai'i
FRRM 2017 Update

University of Hawai'i at Mānoa - Main Campus - General Funded

Campus	Building			Gross Square Feet	Current Replacement Value (000s)	Backlog (000s of Dollars)			Capital Renewal Requirements (000s of Dollars)											Total		
	Number	Name	Assessment			Building and Infrastructure	Code and Safety	Total	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027				
UH - Manoa Main	1142	Law School	BPS	53,190	\$22,672	\$4,987	\$0	\$4,987	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,228	\$2,228	\$2,228	\$6,685
UH - Manoa Main	1115	LES MURAKAMI STADIUM	BPS	81,244	\$7,215	\$5,806	\$0	\$5,806	\$1,265	\$1,265	\$1,265	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$36	\$36	\$36	\$3,903
UH - Manoa Main	1174A	Lower Campus #1	BPS	1,245	\$310	\$397	\$0	\$397	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1174B	Lower Campus #2	BPS	1,789	\$445	\$570	\$0	\$570	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1174C	Lower Campus #3	BPS	2,136	\$531	\$681	\$0	\$681	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1174D	Lower Campus #4	BPS	1,789	\$445	\$570	\$0	\$570	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1092F	Lunailo Freeway Portable #1	BPS	1,757	\$437	\$560	\$0	\$560	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1092I	Lunailo Freeway Portable #2	BPS	1,773	\$441	\$565	\$0	\$565	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1008C	MAGOON FIELD LABORATORY - PEPS	BPS	1,828	\$455	\$112	\$0	\$112	\$43	\$43	\$43	\$55	\$55	\$55	\$55	\$0	\$0	\$0	\$0	\$0	\$0	\$348
UH - Manoa Main	1034C	MAGOON GREENHOUSE 1	BPS	3,064	\$742	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1008A	MAGOON GREENHOUSE 10 - TPSS	BPS	2,892	\$700	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1008B	MAGOON GREENHOUSE 11 - TPSS	BPS	2,892	\$700	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1009	MAGOON GREENHOUSE 12 - TPSS	BPS	1,747	\$422	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1034B	MAGOON GREENHOUSE 2	BPS	2,700	\$654	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1034A	MAGOON GREENHOUSE 3	BPS	2,700	\$654	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1033	MAGOON GREENHOUSE 4	BPS	5,952	\$2,537	\$3,111	\$0	\$3,111	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1005A	MAGOON GREENHOUSE 5 - TPSS	BPS	3,016	\$730	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1005B	MAGOON GREENHOUSE 6 - TPSS	BPS	3,600	\$871	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1005C	MAGOON GREENHOUSE 7 - TPSS	BPS	8,311	\$2,011	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1010B	MAGOON GREENHOUSE 8 - TPSS	BPS	3,000	\$726	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1010C	MAGOON GREENHOUSE 9 - NREM	BPS	2,892	\$700	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1005	Magoon Headhouse	BPS	4,749	\$1,181	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$504	\$504	\$504	\$1,513	
UH - Manoa Main	1010	MAGOON SOIL LABORATORY - NREM	BPS	6,593	\$2,810	\$367	\$0	\$367	\$88	\$88	\$88	\$4	\$4	\$4	\$4	\$4	\$4	\$37	\$37	\$37	\$391	
UH - Manoa Main	1010A	MAGOON STORAGE SHED - TPSS	BPS	675	\$168	\$39	\$0	\$39	\$94	\$94	\$94	\$1	\$1	\$1	\$1	\$1	\$0	\$0	\$0	\$0	\$0	\$283
UH - Manoa Main	1025B	Maile Way #2 - Relocatable	BPS	1,741	\$433	\$555	\$0	\$555	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1194E	Maintenance Garage and Storage	BPS	3,420	\$850	\$1,090	\$0	\$1,090	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1194G	Maintenance Shop Storage	BPS	3,024	\$752	\$964	\$0	\$964	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1194	MAINTENANCE SHOPS	BPS	15,120	\$6,445	\$4,857	\$0	\$4,857	\$1,004	\$1,004	\$1,004	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,013
UH - Manoa Main	1194F	Maintenance Storage	BPS	3,528	\$877	\$0	\$0	\$0	\$375	\$375	\$375	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,125
UH - Manoa Main	1195	MAINTENANCE WAREHOUSE (HALE UKANA)	BPS	38,400	\$6,820	\$2,639	\$0	\$2,639	\$885	\$885	\$885	\$0	\$0	\$0	\$0	\$25	\$25	\$25	\$25	\$25	\$25	\$2,729
UH - Manoa Main	1108P	Makai Campus	BPS	1,894	\$471	\$604	\$0	\$604	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1108R	Makai Campus #13	BPS	1,894	\$471	\$604	\$0	\$604	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1108S	Makai Campus #14	BPS	1,610	\$400	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1108T	Makai Campus #15	BPS	1,610	\$400	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1108U	Makai Campus #16	BPS	1,540	\$383	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1098	Marine Sciences Building	BPS	95,500	\$78,022	\$17	\$0	\$17	\$181	\$181	\$181	\$735	\$735	\$735	\$735	\$1,760	\$1,760	\$1,760	\$1,760	\$1,760	\$8,764	
UH - Manoa Main	1098A	MARINE SCIENCES MECHANICAL BUILDING	BPS	1,946	\$829	\$1,174	\$0	\$1,174	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1135	Mid Pac Potting House	BPS	259	\$64	\$83	\$0	\$83	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1062	Miller Hall	BPS	19,273	\$8,215	\$2,676	\$0	\$2,676	\$244	\$244	\$244	\$173	\$173	\$173	\$173	\$117	\$117	\$117	\$117	\$117	\$1,778	
UH - Manoa Main	1175	Moore Hall	BPS	110,940	\$47,289	\$2,981	\$0	\$2,981	\$981	\$981	\$981	\$688	\$688	\$688	\$688	\$2,401	\$2,401	\$2,401	\$2,401	\$2,401	\$12,897	
UH - Manoa Main	1093	MUSIC COMPLEX PHASE 1 (1959)	BPS	10,361	\$4,416	\$484	\$0	\$484	\$207	\$207	\$207	\$242	\$242	\$242	\$135	\$135	\$135	\$135	\$135	\$135	\$1,995	
UH - Manoa Main	1091	MUSIC COMPLEX PHASE 2 (1975)	BPS	49,970	\$21,300	\$3,335	\$0	\$3,335	\$642	\$642	\$642	\$863	\$863	\$863	\$863	\$461	\$461	\$461	\$461	\$461	\$6,763	
UH - Manoa Main	1152E	Na Koa Football Boosters Organization	BPS	1,021	\$254	\$325	\$0	\$325	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa Main	1166	Orvis Auditorium	BPS	8,837	\$3,767	\$166	\$0	\$166	\$204	\$204	\$204	\$70	\$70	\$70	\$70	\$57	\$57	\$57	\$57	\$57	\$1,061	
UH - Manoa Main	1152	OTTO KLUM GYMNASIUM	BPS	23,884	\$10,181	\$3,839	\$0	\$3,839	\$248	\$248	\$248	\$0	\$0	\$0	\$0	\$132	\$132	\$132	\$132	\$132	\$1,139	
UH - Manoa Main	1121	Pacific Bioscience Research Center (PBRC)	BPS	16,294	\$11,576	\$846	\$0	\$846	\$130	\$130	\$130	\$326	\$326	\$326	\$326	\$149	\$149	\$149	\$149	\$149	\$2,141	
UH - Manoa Main	1162	Pacific Ocean Science & Technology (POST)	BPS	246,670	\$175,240	\$5,485	\$0	\$5,485	\$4,361	\$4,361	\$4,361	\$671	\$671	\$671	\$671	\$704	\$704	\$704	\$704	\$704	\$17,880	

University of Hawai'i
FRRM 2017 Update

University of Hawai'i at Mānoa - Off Campus - General Funded

Campus	Building			Gross Square Feet	Current Replacement Value (000s)	Backlog (000s of Dollars)			Capital Renewal Requirements (000s of Dollars)										
	Number	Name	Assessment			Building and Infrastructure	Code and Safety	Total	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total
UH - Manoa Off	Campus	Code & Safety	FRRM	N/A	N/A	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	Campus	Infrastructure	FRRM	N/A	N/A	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9618M	Arboretum Greenhouse 2	FRRM	1,536	\$382	\$0	\$0	\$137	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$137	
UH - Manoa Off	9618N	Arboretum Greenhouse 3	FRRM	2,747	\$683	\$0	\$0	\$0	\$0	\$0	\$244	\$0	\$0	\$0	\$0	\$0	\$0	\$244	
UH - Manoa Off	9685	Edwin W. Pauly Marine Lab (Coconut Island)	FRRM	22,000	\$15,629	\$2,750	\$0	\$2,750	\$243	\$0	\$0	\$0	\$1,628	\$0	\$0	\$0	\$0	\$1,870	
UH - Manoa Off	9370	HAKALAU Forest Biological FS	FRRM	18,000	\$8,823	\$0	\$0	\$224	\$0	\$0	\$0	\$0	\$584	\$0	\$0	\$0	\$0	\$809	
UH - Manoa Off	9251A	HALEAKALA STATION Cottage (1)	FRRM	11,000	\$5,392	\$1,261	\$0	\$1,261	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9251D	HALEAKALA STATION- FIELD LAB & OFFICE (4)	FRRM	1,500	\$1,225	\$0	\$0	\$0	\$0	\$0	\$67	\$0	\$0	\$0	\$0	\$139	\$0	\$206	
UH - Manoa Off	9251C	HALEAKALA STATION-GREENHOUSE (3)	FRRM	3,000	\$858	\$307	\$0	\$307	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9251B	HALEAKALA STATION-OFFICE & STORAGE BUILDING (2)	FRRM	2,000	\$572	\$204	\$0	\$204	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9356A	HAMAKUA STATION Cottage (2)	FRRM	773	\$221	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$79	\$79	
UH - Manoa Off	9356B	HAMAKUA STN-FLD Off & Eqp Strg (1)	FRRM	3,600	\$1,029	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$368	\$0	\$368	
UH - Manoa Off	9631A	HYPERBARIC FACILITY	FRRM	1,000	\$249	\$0	\$0	\$0	\$0	\$89	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$89	
UH - Manoa Off	9301F	IFA 2.2-Meter Telescope	FRRM	12,698	\$10,774	\$747	\$0	\$747	\$0	\$1,965	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,965	
UH - Manoa Off	9301C	IFA Hilo	FRRM	32,399	\$15,882	\$0	\$0	\$0	\$0	\$770	\$0	\$0	\$0	\$0	\$724	\$0	\$0	\$1,494	
UH - Manoa Off	9290	IFA Maui Advanced Technology Research Center	FRRM	16,416	\$4,024	\$0	\$0	\$0	\$0	\$0	\$0	\$350	\$0	\$0	\$0	\$0	\$242	\$592	
UH - Manoa Off	9274	IFA Waiakoa Main Building	FRRM	4,750	\$1,562	\$437	\$0	\$437	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9635	Jean Charlet House	FRRM	2,500	\$1,225	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$85	\$0	\$0	\$0	\$0	\$85	
UH - Manoa Off	9450BB	Kauai A.R.C. - LUNCH ROOM (9)	FRRM	200	\$57	\$20	\$0	\$20	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9450AA	KAUAI A.R.C. (17 - WEED OFFICE)	FRRM	800	\$392	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$19	\$0	\$19	
UH - Manoa Off	9450C	KAUAI A.R.C.-COTTAGE DWELLING #1 (7)	FRRM	1,000	\$286	\$102	\$0	\$102	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9450D	KAUAI A.R.C.-COTTAGE DWELLING #2 (7)	FRRM	1,000	\$286	\$102	\$0	\$102	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9450G	KAUAI A.R.C.-FIELD OFFICE (5)	FRRM	1,400	\$400	\$143	\$0	\$143	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9450A	KAUAI A.R.C.-OFFICE & LAB BLDG	FRRM	1,800	\$1,471	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$42	\$0	\$42	
UH - Manoa Off	9450R	Kauai ARC (10) Equipment and Tractor Shop	FRRM	2,800	\$801	\$286	\$0	\$286	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9450Z	Kauai ARC (18-Main Office)	FRRM	3,200	\$1,569	\$357	\$0	\$357	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9450Y	Kauai ARC Conf/Trop Sci Ctr (4)	FRRM	1,200	\$343	\$123	\$0	\$123	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9500EE	KAUAI ARC Greenhouse #1 (13)	FRRM	3,600	\$1,029	\$368	\$0	\$368	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9450FF	Kauai ARC Greenhouse #1 (14)	FRRM	3,600	\$1,029	\$368	\$0	\$368	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9450HH	Kauai ARC Storage	FRRM	1,080	\$309	\$96	\$0	\$96	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9450CC	Kauai ARC Storage (11 - FERT/POST/SCI)	FRRM	6,250	\$1,277	\$234	\$0	\$234	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9450F	Kauai ARC Storage (8 - Motor Pool)	FRRM	1,200	\$343	\$123	\$0	\$123	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9475A	KAUAI RICE PADDY CROP STATION- STATION SHED (2)	FRRM	1,700	\$486	\$174	\$0	\$174	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9475C	KAUAI RICE PADDY CROP STATION-TRACTOR & EQUIP. SHED (1)	FRRM	600	\$172	\$61	\$0	\$61	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9605	KEWALO MARINE LAB	FRRM	18,100	\$7,715	\$1,831	\$0	\$1,831	\$0	\$0	\$0	\$487	\$0	\$0	\$0	\$0	\$0	\$487	
UH - Manoa Off	3370C	KOMOHANA Ag Res Complex C (NEW LAB)	FRRM	14,596	\$11,925	\$0	\$0	\$0	\$0	\$0	\$0	\$312	\$0	\$0	\$0	\$0	\$0	\$312	
UH - Manoa Off	3370A	KOMOHANA Ag Res Complex Wing A (Admin)	FRRM	12,190	\$5,975	\$1,261	\$0	\$1,261	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	3370B	KOMOHANA Ag res COMPLEX WING B (REN OFFICE)	FRRM	12,696	\$6,223	\$375	\$0	\$375	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$470	\$0	\$470	
UH - Manoa Off	3370D	KOMOHANA Ag Res Wing D (wet lab)	FRRM	12,050	\$9,845	\$1,205	\$0	\$1,205	\$0	\$0	\$0	\$0	\$0	\$0	\$132	\$509	\$0	\$641	
UH - Manoa Off	9362	KONA EXTENSION SERVICE (OFFICE)	FRRM	5,328	\$2,612	\$0	\$0	\$0	\$96	\$0	\$0	\$0	\$0	\$87	\$0	\$0	\$0	\$183	
UH - Manoa Off	9357G	KONA FARM EQP Shed	FRRM	800	\$229	\$82	\$0	\$82	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9357I	KONA FARM- STORAGE BLDG	FRRM	300	\$86	\$31	\$0	\$31	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9357N	KONA FARM-COFFEE & Macad proc (11)	FRRM	1,600	\$458	\$164	\$0	\$164	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9357A	KONA FARM-GARAGE #1	FRRM	800	\$229	\$82	\$0	\$82	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9357B	KONA FARM-GARAGE #2 (for cottage)	FRRM	200	\$57	\$20	\$0	\$20	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9357P	KONA FARM-GREENHOUSE #1	FRRM	6,070	\$1,736	\$620	\$0	\$620	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9357M	KONA STATION-COTTAGE (5)	FRRM	1,700	\$486	\$174	\$0	\$174	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9357Q	KONA STATION-GREENHOUSE #2	FRRM	8,000	\$1,634	\$263	\$0	\$263	\$0	\$59	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$59	
UH - Manoa Off	9357L	KONA STATION-RESEARCH OFFICE	FRRM	640	\$183	\$65	\$0	\$65	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9357O	KONA STATION-STORAGE BUILDING (7)	FRRM	800	\$229	\$82	\$0	\$82	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9250C	KULA STATION - COTTAGE 3	FRRM	900	\$257	\$92	\$0	\$92	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9250G	KULA STATION - FIELD OFFICE 7	FRRM	350	\$100	\$36	\$0	\$36	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9250 L	KULA STATION - FRUIT FLY REARING BUILDING 12	FRRM	400	\$114	\$41	\$0	\$41	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9250 I	KULA STATION - Garage Shop	FRRM	4,340	\$3,546	\$925	\$0	\$925	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9250 D	KULA STATION - GREENHOUSE #1 (4)	FRRM	1,380	\$395	\$141	\$0	\$141	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9250E	KULA STATION - GREENHOUSE #2 (5)	FRRM	2,688	\$769	\$275	\$0	\$275	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9250J	KULA STATION - GREENHOUSE #4 (10)	FRRM	1,920	\$549	\$196	\$0	\$196	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9250K	KULA STATION - GREENHOUSE #5 (11)	FRRM	1,920	\$549	\$196	\$0	\$196	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9250H	KULA STATION - PESTICIDE SHED (8)	FRRM	272	\$78	\$28	\$0	\$28	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9250F	KULA STATION GREENHOUSE #3 (6)	FRRM	2,560	\$732	\$262	\$0	\$262	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9354B	LALAMILO STN COTTAGE (2)	FRRM	1,500	\$429	\$153	\$0	\$153	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9354C	LALAMILO STN Field Off & Wrkshp (1)	FRRM	2,000	\$572	\$204	\$0	\$204	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9354A	LALAMILO STN Grg&Storage Shed (3)	FRRM	1,200	\$343	\$123	\$0	\$123	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	

University of Hawai'i
FRRM 2017 Update

University of Hawai'i at Mānoa - Off Campus - General Funded

Campus	Building			Gross Square Feet	Current Replacement Value (000s)	Backlog (000s of Dollars)			Capital Renewal Requirements (000s of Dollars)										
	Number	Name	Assessment			Building and Infrastructure	Code and Safety	Total	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total
UH - Manoa Off	9351J	WAIAKEA STN Nursery SHED	FRRM	840	\$240	\$86	\$0	\$86	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9351C	WAIAKEA STN SHEEP BARN (3)	FRRM	1,935	\$553	\$198	\$0	\$198	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9351E	WAIAKEA STN-FIELD LAB&Off (5)	FRRM	1,925	\$550	\$197	\$0	\$197	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9640	Waikiki Aquarium	FRRM	33,905	\$24,087	\$1,160	\$0	\$1,160	\$0	\$0	\$770	\$0	\$0	\$0	\$0	\$724	\$0	\$0	\$1,494
UH - Manoa Off	9628D	WAIMANALO STATION GREENHOUSE STORAGE	FRRM	600	\$172	\$61	\$0	\$61	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9628C	WAIMANALO STATION-FOREMAN COTTAGE	FRRM	875	\$250	\$89	\$0	\$89	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9628K	WAIMANALO STATION-GREENHSE #5	FRRM	3,000	\$858	\$307	\$0	\$307	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9628H	WAIMANALO STATION-OFFC/CLSRM	FRRM	2,040	\$583	\$209	\$0	\$209	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa	9628A	WAIMANALO STATION-OFFICE & LOCKER ROOM	FRRM	1,127	\$322	\$115	\$0	\$115	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa	9628J	WAIMANALO STATION-SEED LAB	FRRM	2,400	\$686	\$245	\$0	\$245	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa	9628B	WAIMANALO STATION-STORAGE BLDG	FRRM	4,158	\$1,189	\$425	\$0	\$425	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa	9628L	WAIMANALO STATION-STORAGE BUILDING #3	FRRM	4,000	\$1,144	\$409	\$0	\$409	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa	9628G	WAIMANALO STATION-TRACTOR GARAGE & STORAGE BLDG #2	FRRM	500	\$143	\$51	\$0	\$51	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9628M	WAIMANALO STATION-TRACTOR SHED (7)	FRRM	1,600	\$458	\$164	\$0	\$164	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9666A	WHITMORE STN Field Off & Strg (1)	FRRM	1,500	\$429	\$153	\$0	\$153	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
UH - Manoa Off	9666B	WHITMORE STN Greenhouse (7)	FRRM	3,600	\$1,029	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$368	\$368
University of Hawai'i at Mānoa - Off Campus, General Funded				494,766	\$226,422	\$28,386	\$0	\$28,386	\$603	\$2,224	\$1,117	\$1,103	\$1,159	\$2,609	\$3,361	\$739	\$2,064	\$2,345	\$17,323

University of Hawai'i FRRM 2017 Update																			
University of Hawai'i at Mānoa - Main Campus - Special Funded																			
Campus	Number	Building Name	Assessment	Gross Square Feet	Current Replacement Value (000s)	Backlog (000s of Dollars)			Capital Renewal Requirements (000s of Dollars)										
						Building and Infrastructure	Code and Safety	Total	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total
UH - Manoa	Main	Campus	Code & Safety	N/A	N/A		\$0	\$8,837	\$8,837	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa	Main	Campus	Infrastructure	N/A	N/A		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa	Main	1055	Campus Center	FRRM	121,000	\$51,577	\$2,488	\$0	\$2,488	\$0	\$2,246	\$0	\$0	\$5,465	\$0	\$0	\$0	\$0	\$7,710
UH - Manoa	Main	1161	Gateway House	FRRM	75,283	\$36,903	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,607	\$0	\$1,607	
UH - Manoa	Main	1122E	Hale Aloha Cafeteria	FRRM	19,875	\$8,472	\$483	\$0	\$483	\$0	\$0	\$0	\$369	\$156	\$0	\$112	\$0	\$535	\$1,173
UH - Manoa	Main	1122A	Hale Aloha, Ilima Tower	FRRM	71,315	\$37,998	\$466	\$0	\$466	\$0	\$0	\$0	\$0	\$1,654	\$0	\$0	\$0	\$77	\$1,731
UH - Manoa	Main	1122B	Hale Aloha, Lehua Tower	FRRM	71,381	\$38,033	\$1,049	\$0	\$1,049	\$0	\$0	\$0	\$0	\$0	\$1,656	\$0	\$0	\$77	\$1,733
UH - Manoa	Main	1122D	Hale Aloha, Lokelani Tower	FRRM	71,381	\$38,033	\$583	\$0	\$583	\$0	\$0	\$0	\$0	\$0	\$1,656	\$0	\$0	\$77	\$1,733
UH - Manoa	Main	1122C	Hale Aloha, Mokihana Tower	FRRM	71,315	\$37,998	\$466	\$0	\$466	\$0	\$0	\$0	\$0	\$1,654	\$0	\$0	\$0	\$77	\$1,731
UH - Manoa	Main	1114	Hale Anuenue	FRRM	19,631	\$9,623	\$264	\$0	\$264	\$393	\$0	\$0	\$0	\$0	\$0	\$0	\$419	\$0	\$812
UH - Manoa	Main	1095A	Hale Halawai	FRRM	1,500	\$373	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$133	\$0	\$0	\$0	\$133
UH - Manoa	Main	1189	Hale Kahawai	FRRM	37,578	\$16,018	\$2,330	\$0	\$2,330	\$0	\$0	\$0	\$0	\$2,312	\$0	\$0	\$0	\$0	\$2,312
UH - Manoa	Main	1180	Hale Kuahine	FRRM	37,605	\$16,029	\$0	\$0	\$0	\$0	\$0	\$698	\$0	\$0	\$0	\$778	\$0	\$0	\$1,475
UH - Manoa	Main	1196	Hale Lualima	FRRM	38,446	\$18,388	\$2,177	\$0	\$2,177	\$1,871	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,871
UH - Manoa	Main	1182	Hale Manoa	FRRM	151,613	\$80,782	\$8,559	\$0	\$8,559	\$0	\$0	\$0	\$10,677	\$981	\$0	\$0	\$3,710	\$0	\$15,368
UH - Manoa	Main	1123A	Hale Noelani Tower A	FRRM	34,100	\$14,535	\$0	\$0	\$1,298	\$0	\$0	\$0	\$0	\$0	\$0	\$633	\$0	\$1,931	\$1,931
UH - Manoa	Main	1123B	Hale Noelani Tower B	FRRM	29,800	\$12,702	\$553	\$0	\$553	\$1,135	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,135
UH - Manoa	Main	1123C	Hale Noelani Tower C	FRRM	27,500	\$11,722	\$0	\$0	\$1,047	\$0	\$0	\$0	\$0	\$510	\$0	\$0	\$0	\$0	\$1,557
UH - Manoa	Main	1123D	Hale Noelani Tower D	FRRM	16,400	\$6,991	\$0	\$0	\$0	\$624	\$0	\$0	\$0	\$304	\$0	\$0	\$0	\$0	\$929
UH - Manoa	Main	1123E	Hale Noelani Tower E	FRRM	32,400	\$13,811	\$601	\$0	\$601	\$1,234	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,234
UH - Manoa	Main	1120A	Hale Wainani F Tower	FRRM	67,700	\$36,072	\$5,026	\$0	\$5,026	\$0	\$3,222	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,222
UH - Manoa	Main	1120B	Hale Wainani G Tower	FRRM	28,500	\$15,185	\$2,116	\$0	\$2,116	\$0	\$1,356	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,356
UH - Manoa	Main	1120C	Hale Wainani H Tower	FRRM	19,360	\$8,252	\$1,150	\$0	\$1,150	\$0	\$737	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$737
UH - Manoa	Main	1120D	Hale Wainani I Tower	FRRM	48,052	\$20,482	\$2,854	\$0	\$2,854	\$0	\$1,830	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,830
UH - Manoa	Main	1056	Hemenway Hall	BPS	34,861	\$14,866	\$2,485	\$0	\$2,485	\$154	\$154	\$972	\$972	\$972	\$602	\$602	\$602	\$602	\$6,159
UH - Manoa	Main	1155	John A. Burns Hall	FRRM	143,600	\$61,210	\$0	\$0	\$0	\$0	\$2,665	\$0	\$0	\$0	\$2,969	\$0	\$0	\$0	\$5,634
UH - Manoa	Main	1130	Johnson Hall A	FRRM	22,921	\$9,770	\$733	\$0	\$733	\$0	\$0	\$0	\$0	\$0	\$0	\$425	\$0	\$0	\$425
UH - Manoa	Main	1156	Johnson Hall B	FRRM	26,830	\$11,436	\$858	\$0	\$858	\$0	\$0	\$0	\$0	\$0	\$0	\$498	\$0	\$0	\$498
UH - Manoa	Main	9620D2	Kauiohaloa Iki Condo D - Bldg 2	FRRM	5,632	\$2,401	\$0	\$0	\$0	\$188	\$0	\$0	\$0	\$0	\$335	\$0	\$0	\$0	\$523
UH - Manoa	Main	9620D3	Kauiohaloa Iki Condo D - Bldg 3	FRRM	5,632	\$2,401	\$0	\$0	\$0	\$188	\$0	\$0	\$0	\$0	\$230	\$105	\$0	\$0	\$523
UH - Manoa	Main	9620D4	Kauiohaloa Iki Condo D - Bldg 4	FRRM	5,632	\$2,401	\$0	\$0	\$0	\$293	\$0	\$0	\$0	\$0	\$230	\$0	\$0	\$0	\$523
UH - Manoa	Main	9620D1	Kauiohaloa Iki Condo D - Bldg 1	FRRM	5,632	\$2,401	\$0	\$0	\$0	\$188	\$0	\$0	\$0	\$0	\$230	\$105	\$0	\$0	\$523
UH - Manoa	Main	9620D5	Kauiohaloa Iki Condo D - Bldg 5	FRRM	5,632	\$2,401	\$0	\$0	\$0	\$188	\$0	\$0	\$0	\$0	\$230	\$0	\$105	\$0	\$523
UH - Manoa	Main	9620D6	Kauiohaloa Iki Condo D - Bldg 6	FRRM	5,632	\$2,401	\$0	\$0	\$0	\$188	\$0	\$0	\$0	\$0	\$230	\$0	\$105	\$0	\$523
UH - Manoa	Main	9620DH	Kauiohaloa Iki Condo DH	FRRM	10,240	\$4,365	\$0	\$0	\$0	\$271	\$0	\$0	\$0	\$0	\$513	\$0	\$95	\$0	\$879
UH - Manoa	Main	9620A10	Kauiohaloa Nui Fac Apt A - Bldg 10	FRRM	7,930	\$3,380	\$0	\$0	\$0	\$0	\$154	\$0	\$0	\$0	\$0	\$471	\$0	\$0	\$625
UH - Manoa	Main	9620A2	Kauiohaloa Nui Fac Apt A - Bldg 2	FRRM	7,930	\$3,380	\$0	\$0	\$0	\$0	\$154	\$0	\$0	\$0	\$0	\$471	\$0	\$0	\$625
UH - Manoa	Main	9620A3	Kauiohaloa Nui Fac Apt A - Bldg 3	FRRM	7,930	\$3,380	\$0	\$0	\$0	\$0	\$154	\$0	\$0	\$0	\$0	\$471	\$0	\$0	\$625
UH - Manoa	Main	9620A4	Kauiohaloa Nui Fac Apt A - Bldg 4	FRRM	7,930	\$3,380	\$0	\$0	\$0	\$0	\$154	\$0	\$0	\$0	\$0	\$471	\$0	\$0	\$625
UH - Manoa	Main	9620A5	Kauiohaloa Nui Fac Apt A - Bldg 5	FRRM	7,930	\$3,380	\$0	\$0	\$0	\$0	\$154	\$0	\$0	\$0	\$0	\$471	\$0	\$0	\$625
UH - Manoa	Main	9620A6	Kauiohaloa Nui Fac Apt A - Bldg 6	FRRM	7,930	\$3,380	\$0	\$0	\$0	\$0	\$154	\$0	\$0	\$0	\$0	\$471	\$0	\$0	\$625
UH - Manoa	Main	9620A7	Kauiohaloa Nui Fac Apt A - Bldg 7	FRRM	7,930	\$3,380	\$0	\$0	\$0	\$0	\$154	\$0	\$0	\$0	\$0	\$471	\$0	\$0	\$625
UH - Manoa	Main	9620A8	Kauiohaloa Nui Fac Apt A - Bldg 8	FRRM	7,930	\$3,380	\$0	\$0	\$0	\$0	\$154	\$0	\$0	\$0	\$0	\$471	\$0	\$0	\$625
UH - Manoa	Main	9620A9	Kauiohaloa Nui Fac Apt A - Bldg 9	FRRM	7,930	\$3,380	\$0	\$0	\$0	\$0	\$154	\$0	\$0	\$0	\$0	\$471	\$0	\$0	\$625
UH - Manoa	Main	9620H1	Kauiohaloa Nui Fac Apt AH - Bldg 1	FRRM	7,930	\$3,380	\$0	\$0	\$0	\$0	\$154	\$0	\$0	\$0	\$0	\$471	\$0	\$0	\$625
UH - Manoa	Main	9620H2	Kauiohaloa Nui Fac Apt AH - Bldg 2	FRRM	7,930	\$3,380	\$0	\$0	\$0	\$0	\$154	\$0	\$0	\$0	\$0	\$471	\$0	\$0	\$625
UH - Manoa	Main	9620H3	Kauiohaloa Nui Fac Apt AH - Bldg 3	FRRM	7,930	\$3,380	\$0	\$0	\$0	\$0	\$154	\$0	\$0	\$0	\$0	\$471	\$0	\$0	\$625
UH - Manoa	Main	9620H4	Kauiohaloa Nui Fac Apt AH - Bldg 4	FRRM	7,930	\$3,380	\$0	\$0	\$0	\$0	\$154	\$0	\$0	\$0	\$0	\$471	\$0	\$0	\$625
UH - Manoa	Main	9620B1	Kauiohaloa Nui Fac Apt B - Bldg 1	FRRM	11,827	\$5,041	\$0	\$0	\$0	\$0	\$230	\$0	\$0	\$0	\$0	\$702	\$0	\$0	\$932
UH - Manoa	Main	9620B2	Kauiohaloa Nui Fac Apt B - Bldg 2	FRRM	11,827	\$5,041	\$0	\$0	\$0	\$0	\$230	\$0	\$0	\$0	\$0	\$702	\$0	\$0	\$932
UH - Manoa	Main	9620C	Kauiohaloa Nui Fac Apt C	FRRM	6,202	\$2,643	\$0	\$0	\$0	\$0	\$207	\$0	\$0	\$0	\$0	\$368	\$0	\$0	\$576
UH - Manoa	Main	9620FM	Kauiohaloa Nui Fac Mgrs Office	FRRM	5,107	\$2,177	\$0	\$0	\$0	\$0	\$171	\$0	\$0	\$0	\$0	\$303	\$0	\$0	\$474
UH - Manoa	Main	9620A1	Kauiohaloa Nui Fac. Apt A - Bldg 1	FRRM	7,930	\$3,380	\$0	\$0	\$0	\$0	\$265	\$0	\$0	\$0	\$0	\$471	\$0	\$0	\$736
UH - Manoa	Main	1179A	Lincoln Annex #1	FRRM	1,765	\$439	\$157	\$0	\$157	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa	Main	1179B	Lincoln Annex #2	FRRM	2,448	\$609	\$0	\$0	\$0	\$0	\$0	\$0	\$218	\$0	\$0	\$0	\$0	\$0	\$218
UH - Manoa	Main	1179	Lincoln Hall	FRRM	48,756	\$20,782	\$276	\$0	\$276	\$0	\$0	\$1,631	\$0	\$252	\$0	\$0	\$0	\$0	\$1,883
UH - Manoa	Main	9621	Manoa Innovation Center	FRRM	10,000	\$4,148	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - Manoa	Main	1132B	Motor Pool Service Station (gas pumps)	FRRM	225	\$56	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20	\$0	\$0	\$0	\$20
UH - Manoa	Main	1132A	Motor Pool, Pre-Fab Building	FRRM	6,000	\$2,558	\$0	\$0	\$0	\$0	\$33	\$0	\$0	\$0	\$0	\$0	\$46	\$0	\$79

University of Hawai'i FRRM 2017 Update																				
University of Hawai'i at Mānoa - Main Campus - Special Funded																				
Campus	Number	Building Name	Assessment	Gross Square Feet	Current Replacement Value (000s)	Backlog (000s of Dollars)			Capital Renewal Requirements (000s of Dollars)											
						Building and Infrastructure	Code and Safety	Total	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total	
UH - Manoa	Main	1211	New Parking Structure - Dole Street	FRRM	145,800	\$12,947	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$767
UH - Manoa	Main	1201	Paradise Palms Cafe	FRRM	13,400	\$5,712	\$0	\$0	\$0	\$0	\$275	\$0	\$0	\$0	\$12	\$587	\$0	\$249	\$0	\$1,123
UH - Manoa	Main	1001	Parking Structure	FRRM	735,000	\$65,270	\$2,179	\$0	\$2,179	\$0	\$0	\$0	\$0	\$0	\$0	\$1,354	\$1,538	\$0	\$0	\$2,892
UH - Manoa	Main	1001A	Parking Structure -Phase II	FRRM	331,000	\$29,394	\$459	\$0	\$459	\$0	\$0	\$0	\$41	\$0	\$162	\$0	\$0	\$162	\$0	\$365
UH - Manoa	Main	1181	Thomas Jefferson Hall	FRRM	61,558	\$26,239	\$0	\$0	\$0	\$0	\$0	\$1,142	\$0	\$0	\$0	\$0	\$1,273	\$0	\$0	\$2,415
UH - Manoa	Main	1154A	Waahila Faculty Housing Building A	FRRM	16,096	\$6,861	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$332	\$0	\$0	\$0	\$0	\$454	\$786
UH - Manoa	Main	1154B	Waahila Faculty Housing Building B	FRRM	16,096	\$6,861	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$332	\$0	\$0	\$0	\$0	\$454	\$786
UH - Manoa	Main	1154C	Waahila Faculty Housing Building C	FRRM	16,096	\$6,861	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$332	\$0	\$0	\$0	\$0	\$454	\$786
UH - Manoa	Main	1154D	Waahila Faculty Housing Building D	FRRM	16,096	\$6,861	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$174	\$0	\$0	\$0	\$0	\$454	\$629
UH - Manoa	Main	1154E	Waahila Faculty Housing Building E	FRRM	16,096	\$6,861	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$332	\$0	\$0	\$0	\$0	\$454	\$786
UH - Manoa	Main	1250	Warrior Recreation Center	FRRM	63,677	\$26,417	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
University of Hawai'i at Mānoa - Main Campus, Special Funded					3,010,064	\$935,124	\$38,311	\$8,837	\$47,148	\$7,756	\$11,359	\$7,765	\$2,861	\$13,520	\$5,663	\$13,704	\$20,364	\$7,049	\$5,324	\$95,365

University of Hawai'i FRRM 2017 Update																						
University of Hawai'i at Hilo - Off Campus - General Funded																						
Campus	Building			Gross Square Feet	Current Replacement Value (000s)	Backlog (000s of Dollars)			Capital Renewal Requirements (000s of Dollars)													
	Number	Name	Assessment			Building and Infrastructure	Code and Safety	Total	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total			
UH Hilo	Off	Campus	Code & Safety	FRRM	N/A	N/A	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH Hilo	Off	Campus	Infrastructure	FRRM	N/A	N/A	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH Hilo	Off	9335	Hawaii Small Business Innovation Center	FRRM	13,801	\$6,765	\$0	\$0	\$0	\$670	\$0	\$155	\$0	\$0	\$328	\$0	\$0	\$0	\$0	\$0	\$0	\$1,154
UH Hilo	Off	3350E	Keaukaha Fish Hatchery Greenhouse	FRRM	4,800	\$3,922	\$160	\$0	\$160	\$0	\$0	\$102	\$0	\$0	\$0	\$0	\$32	\$0	\$0	\$0	\$0	\$135
UH Hilo	Off	3350F	KEAUKAHA Pearl Hatchery Grnhs	FRRM	4,800	\$3,922	\$160	\$0	\$160	\$0	\$0	\$102	\$0	\$0	\$0	\$0	\$32	\$0	\$0	\$0	\$0	\$135
UH Hilo	Off	3374C	Panaewa Animal Complex	FRRM	1,815	\$519	\$186	\$0	\$186	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH Hilo	Off	3374V	Panaewa Aquaculture Greenhouse 1	FRRM	4,032	\$1,153	\$0	\$0	\$0	\$412	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$412
UH Hilo	Off	3374K	Panaewa Cattle AI Barn	FRRM	1,344	\$384	\$137	\$0	\$137	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH Hilo	Off	3374O	Panaewa Compost Facility	FRRM	1,432	\$409	\$0	\$0	\$0	\$0	\$0	\$146	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$146
UH Hilo	Off	3374U	Panaewa Environmental Chambers	FRRM	4,300	\$1,230	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$440	\$440
UH Hilo	Off	3374N	Panaewa Environmental Grnhs	FRRM	6,400	\$1,830	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$654	\$0	\$0	\$0	\$0	\$654
UH Hilo	Off	3374Q	Panaewa Equestrian Area	FRRM	19,950	\$4,075	\$0	\$0	\$0	\$0	\$32	\$0	\$0	\$0	\$0	\$0	\$73	\$0	\$0	\$0	\$0	\$105
UH Hilo	Off	3374	Panaewa Greenhouse 1	FRRM	7,200	\$2,059	\$736	\$0	\$736	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH Hilo	Off	3374D	Panaewa Greenhouse 2	FRRM	7,200	\$2,059	\$0	\$0	\$0	\$736	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$736
UH Hilo	Off	3374G	Panaewa Greenhouse 4	FRRM	6,480	\$1,853	\$331	\$0	\$331	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$331
UH Hilo	Off	3374F	Panaewa Grnhs 3 (HAW CC)	FRRM	6,480	\$1,853	\$331	\$0	\$331	\$331	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$331
UH Hilo	Off	3374P	Panaewa Horse Facility	FRRM	4,320	\$1,235	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$442	\$0	\$0	\$0	\$0	\$0	\$442
UH Hilo	Off	3374A	Panaewa Managers House	FRRM	1,452	\$415	\$371	\$0	\$371	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH Hilo	Off	3374H	Panaewa Media/Pot Bldg	FRRM	5,500	\$1,573	\$562	\$0	\$562	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH Hilo	Off	3374B	Panaewa Office	FRRM	861	\$246	\$88	\$0	\$88	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH Hilo	Off	3374M	Panaewa Pesticide Storage	FRRM	180	\$51	\$0	\$0	\$0	\$18	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$18
UH Hilo	Off	3374L	Panaewa Sheep and Goat Handling Barn	FRRM	2,880	\$824	\$0	\$0	\$0	\$294	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$294
UH Hilo	Off	3374Y	Panaewa Swine House 2	FRRM	320	\$92	\$33	\$0	\$33	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH Hilo	Off	3374J	Panaewa Vegetable Pack Shed	FRRM	800	\$229	\$0	\$0	\$0	\$0	\$0	\$82	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$82
University of Hawai'i at Hilo - Off Campus, General Funded					106,347	\$36,696	\$3,095	\$0	\$3,095	\$2,793	\$32	\$588	\$0	\$0	\$770	\$727	\$65	\$440	\$0	\$0	\$5,414	

University of Hawai'i FRRM 2017 Update																						
University of Hawai'i at Hilo - Main Campus - Special Funded																						
Campus	Building			Gross Square Feet	Current Replacement Value (000s)	Backlog (000s of Dollars)			Capital Renewal Requirements (000s of Dollars)													
	Number	Name	Assessment			Building and Infrastructure	Code and Safety	Total	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total			
UH Hilo	Main	Campus	Code & Safety	FRRM	N/A	N/A	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH Hilo	Main	Campus	Infrastructure	FRRM	N/A	N/A	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH Hilo	Main	3330A	HALE IKENA, A	FRRM	10,342	\$5,070	\$429	\$0	\$429	\$0	\$0	\$0	\$0	\$62	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$62
UH Hilo	Main	3330B	HALE IKENA, B	FRRM	10,342	\$8,449	\$0	\$0	\$0	\$0	\$0	\$0	\$221	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$670	\$891
UH Hilo	Main	3330C	HALE IKENA, C	FRRM	6,572	\$3,222	\$272	\$0	\$272	\$0	\$0	\$0	\$39	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$39
UH Hilo	Main	3330D	HALE IKENA, D	FRRM	7,950	\$3,897	\$329	\$0	\$329	\$0	\$0	\$0	\$0	\$47	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$47
UH Hilo	Main	3330E	HALE IKENA, E	FRRM	11,793	\$5,781	\$488	\$0	\$488	\$0	\$0	\$0	\$0	\$70	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$70
UH Hilo	Main	3330F	HALE IKENA, F	FRRM	11,793	\$5,781	\$488	\$0	\$488	\$0	\$0	\$0	\$0	\$70	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$70
UH Hilo	Main	3330G	HALE IKENA, G	FRRM	5,922	\$2,903	\$245	\$0	\$245	\$0	\$0	\$0	\$0	\$35	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$35
UH Hilo	Main	3330H	HALE IKENA, H-MULTI-PURP	FRRM	5,184	\$2,541	\$156	\$0	\$156	\$0	\$0	\$0	\$0	\$31	\$0	\$153	\$0	\$0	\$0	\$0	\$0	\$184
UH Hilo	Main	3347	HALE KANILEHUA	FRRM	13,799	\$6,764	\$122	\$0	\$122	\$155	\$0	\$0	\$0	\$82	\$0	\$0	\$0	\$0	\$0	\$0	\$294	\$532
UH Hilo	Main	3343	HALE KAUAHOE-DORM II	FRRM	33,636	\$16,488	\$1,973	\$0	\$1,973	\$0	\$0	\$0	\$1,196	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,196
UH Hilo	Main	3331-A	HALE KEHAU DINING	FRRM	5,000	\$2,451	\$0	\$0	\$0	\$0	\$235	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$235
UH Hilo	Main	3331-B	HALE KEHAU DORMITORY	FRRM	61,593	\$30,192	\$0	\$0	\$0	\$0	\$0	\$0	\$2,369	\$0	\$0	\$0	\$0	\$0	\$4,207	\$0	\$0	\$6,577
UH Hilo	Main	9312	JMILOA Astronomy Center	FRRM	38,262	\$31,260	\$0	\$0	\$0	\$0	\$0	\$0	\$817	\$0	\$0	\$0	\$0	\$0	\$1,484	\$0	\$0	\$2,301
University of Hawai'i at Hilo - Main Campus, Special Funded					222,188	\$124,798	\$4,503	\$0	\$4,503	\$155	\$235	\$3,186	\$1,196	\$657	\$0	\$0	\$5,845	\$0	\$965	\$0	\$12,239	

University of Hawai'i FRRM 2017 Update																						
University of Hawai'i at West O'ahu - Main Campus - General Funded																						
Campus	Building			Gross Square Feet	Current Replacement Value (000s)	Backlog (000s of Dollars)			Capital Renewal Requirements (000s of Dollars)													
	Number	Name	Assessment			Building and Infrastructure	Code and Safety	Total	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total			
UH - West Oahu	Main	Campus	Code & Safety	FRRM	N/A	N/A	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - West Oahu	Main	Campus	Infrastructure	FRRM	N/A	N/A	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UH - West Oahu	Main	7914	Campus Center	FRRM	63,469	\$27,054	\$0	\$0	\$0	\$1,928	\$164	\$0	\$0	\$207	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,372
UH - West Oahu	Main	7915	Classroom	FRRM	41,136	\$17,534	\$0	\$0	\$0	\$162	\$106	\$578	\$0	\$134	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$889
UH - West Oahu	Main	7916	Laboratory	FRRM	41,798	\$29,694	\$0	\$0	\$0	\$380	\$1,731	\$0	\$0	\$222	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$904
UH - West Oahu	Main	7917	Library Resource Center	FRRM	60,065	\$26,883	\$0	\$0	\$0	\$413	\$155	\$1,007	\$0	\$196	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,299
UH - West Oahu	Main	7918	Maintenance/Mechanical	FRRM	12,671	\$5,401	\$0	\$0	\$0	\$100	\$218	\$0	\$0	\$281	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$274
University of Hawai'i at West O'ahu - Main Campus, General Funded					219,139	\$106,567	\$0	\$0	\$0	\$2,982	\$2,376	\$1,585	\$0	\$1,041	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,738

University of Hawai'i FRRM 2017 Update																						
Hawai'i Community College - Main Campus - General Funded																						
Campus	Building			Gross Square Feet	Current Replacement Value (000s)	Backlog (000s of Dollars)			Capital Renewal Requirements (000s of Dollars)													
	Number	Name	Assessment			Building and Infrastructure	Code and Safety	Total	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total			
Hawaii - CC	Main	Campus	Code & Safety	FRRM	N/A	N/A	\$0	\$1,551	\$1,551	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Hawaii - CC	Main	Campus	Infrastructure	FRRM	N/A	N/A	\$115	\$0	\$115	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Hawaii - CC	Main	3378	HAW CC - ADMINISTRATION / STUDENT SERVICES	FRRM	3474	\$1,703	\$39	\$0	\$39	\$0	\$0	\$0	\$0	\$63	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$174
Hawaii - CC	Main	3393	HAW CC - AGRICULTURE & EARLY CHILDHOOD DEV	FRRM	9506	\$4,660	\$0	\$0	\$0	\$0	\$203	\$0	\$0	\$252	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$455
Hawaii - CC	Main	3386A	HAW CC - AGRICULTURE MECHANICS	FRRM	4484	\$2,198	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$81	\$0	\$0	\$0	\$81
Hawaii - CC	Main	3392	HAW CC - APPLIED TECHNICAL EDUCATION	FRRM	8243	\$4,041	\$0	\$0	\$0	\$0	\$193	\$0	\$0	\$54	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$148
Hawaii - CC	Main	3385A	HAW CC - APPRENTICESHIP/OCET	FRRM	2688	\$769	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$137	\$0	\$0	\$0	\$0	\$0	\$137
Hawaii - CC	Main	3385C	HAW CC - ART	FRRM	1344	\$384	\$0	\$0	\$0	\$0	\$131	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$131
Hawaii - CC	Main	3395	HAW CC - ART LAB/OFFICES	FRRM	4467	\$2,190	\$356	\$0	\$356	\$155	\$0	\$0	\$66	\$29	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$250
Hawaii - CC	Main	3321	HAW CC - AUTO BODY BLDG	FRRM	13960	\$6,843	\$81	\$0	\$81	\$0	\$0	\$413	\$331	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$744
Hawaii - CC	Main	3322	HAW CC - AUTO MECH SHOP	FRRM	13960	\$6,843	\$81	\$0	\$81	\$0	\$0	\$0	\$331	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$331
Hawaii - CC	Main	3389	HAW CC - AUX SHOP	FRRM	5978	\$2,930	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$108	\$0	\$0	\$0	\$108
Hawaii - CC	Main	3386AA	HAW CC - BIO SCIENCE LAB	FRRM	1494	\$732	\$16	\$0	\$16	\$0	\$0	\$0	\$0	\$16	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$16
Hawaii - CC	Main	3397	HAW CC - BUS OFC/PERSONNEL/EEO/AA	FRRM	2380	\$1,167	\$0	\$0	\$0	\$0	\$51	\$0	\$0	\$0	\$59	\$0	\$0	\$0	\$0	\$0	\$0	\$110
Hawaii - CC	Main	3382	HAW CC - CAFETERIA	FRRM	20844	\$10,218	\$284	\$0	\$284	\$0	\$0	\$1,659	\$0	\$136	\$0	\$89	\$0	\$33	\$0	\$0	\$0	\$1,916
Hawaii - CC	Main	3386B	HAW CC - CARPENTRY	FRRM	3023	\$1,482	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$65
Hawaii - CC	Main	3390	HAW CC - CARPENTRY SHOP	FRRM	8418	\$4,126	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$152	\$0	\$0	\$0	\$152
Hawaii - CC	Main	3394	HAW CC - CAS/ART LABS	FRRM	4845	\$1,385	\$297	\$0	\$297	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Hawaii - CC	Main	3385B	HAW CC - CERAMIC SHOP	FRRM	1344	\$384	\$0	\$0	\$0	\$0	\$131	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$131
Hawaii - CC	Main	3380	HAW CC - CLASSROOMS (AEC/HLS/OCET)	FRRM	12066	\$5,915	\$91	\$0	\$91	\$0	\$0	\$0	\$217	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$579
Hawaii - CC	Main	3388	HAW CC - CLASSROOMS/OFFICE	FRRM	6477	\$3,175	\$0	\$0	\$0	\$378	\$0	\$42	\$0	\$0	\$258	\$0	\$0	\$0	\$0	\$0	\$0	\$678
Hawaii - CC	Main	3323	HAW CC - DIESEL MECHANIC SHOP	FRRM	12480	\$6,118	\$73	\$0	\$73	\$369	\$0	\$0	\$0	\$296	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$665
Hawaii - CC	Main	3391	HAW CC - ELECTRIC/ELECTRONIC	FRRM	15183	\$7,443	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$238	\$0	\$0	\$0	\$0	\$0	\$849
Hawaii - CC	Main	3389A	HAW CC - HULA STUDIO	FRRM	1081	\$309	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$55
Hawaii - CC	Main	3367	HAW CC - LEARNING CENTER/IT SUPPORT	FRRM	5978	\$2,930	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$234	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$234
Hawaii - CC	Main	3381B	HAW CC - MPA PORTABLE CLASSROOM	FRRM	1700	\$486	\$0	\$0	\$0	\$0	\$165	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$165
Hawaii - CC	Main	3379A	HAW CC - OCET / FINANCIAL AID	FRRM	4480	\$2,196	\$0	\$0	\$0	\$0	\$77	\$0	\$0	\$29	\$70	\$0	\$0	\$0	\$0	\$0	\$0	\$176
Hawaii - CC	Main	3337I	HAW CC - PB16 PORTABLE CLASSROOM	FRRM	1792	\$512	\$27	\$0	\$27	\$156	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$156
Hawaii - CC	Main	3379	HAW CC - STUDENT SERVICES	FRRM	6955	\$3,409	\$148	\$0	\$148	\$0	\$0	\$97	\$0	\$125	\$45	\$0	\$0	\$0	\$0	\$0	\$0	\$135
Hawaii - CC	Main	3381	HAW CC - UHH/OCET CLASSROOM	FRRM	12150	\$5,956	\$91	\$0	\$91	\$0	\$0	\$0	\$0	\$0	\$0	\$449	\$0	\$0	\$0	\$0	\$0	\$285
Hawaii - CC	Main	3324	HAW CC - WELDING / SHEETMETAL SHOP	FRRM	15940	\$7,814	\$135	\$0	\$135	\$0	\$0	\$471	\$0	\$95	\$104	\$0	\$0	\$0	\$0	\$0	\$0	\$670
Hawai'i Community College - Main Campus, General Funded					206,734	\$98,318	\$1,836	\$1,551	\$3,387	\$1,057	\$764	\$2,868	\$757	\$471	\$1,195	\$130	\$1,171	\$340	\$2,323	\$0	\$0	\$11,076

University of Hawai'i FRRM 2017 Update																					
Honolulu Community College - Main Campus - General Funded																					
Campus	Building			Gross Square Feet	Current Replacement Value (000s)	Backlog (000s of Dollars)			Capital Renewal Requirements (000s of Dollars)												
	Number	Name	Assessment			Building and Infrastructure	Code and Safety	Total	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total		
Honolulu - CC	Main	Campus	Code & Safety	FRRM	N/A	N/A	\$0	\$2,177	\$2,177	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Honolulu - CC	Main	Campus	Infrastructure	FRRM	N/A	N/A	\$2,578	\$0	\$2,578	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Honolulu - CC	Main	8874	Carpenter Storage	FRRM	420	\$104	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$37	\$0	\$37
Honolulu - CC	Main	8828	HCC PALAMA STATION	FRRM	5200	\$2,549	\$0	\$0	\$0	\$129	\$0	\$249	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Honolulu - CC	Main	8806	HCC-ADMINISTRATION BLDG	FRRM	17380	\$7,408	\$222	\$0	\$222	\$0	\$290	\$0	\$0	\$0	\$671	\$0	\$0	\$0	\$0	\$0	\$962
Honolulu - CC	Main	8803	HCC-AUTO BODY/REPAIR/PAINT	FRRM	30903	\$13,173	\$1,289	\$0	\$1,289	\$227	\$175	\$0	\$0	\$1,528	\$0	\$0	\$0	\$0	\$0	\$0	\$1,929
Honolulu - CC	Main	8843	HCC-AUTOMOTIVE TECHNOLOGY	FRRM	48546	\$20,693	\$5,231	\$0	\$5,231	\$0	\$275	\$0	\$0	\$0	\$0	\$0	\$0	\$1,574	\$0	\$0	\$1,848
Honolulu - CC	Main	8804	HCC-CAFETERIA/APPRENTICESHIP	FRRM	18790	\$8,009	\$184	\$0	\$184	\$840	\$85	\$264	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,188
Honolulu - CC	Main	8802	HCC-CAMPUS CENTER/CLASSROOM	FRRM	81838	\$40,116	\$6,587	\$0	\$6,587	\$0	\$533	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$533
Honolulu - CC	Main	8820	HCC-CENT	FRRM	11203	\$4,775	\$238	\$0	\$238	\$0	\$63	\$86	\$0	\$468	\$0	\$0	\$157	\$0	\$0	\$0	\$774
Honolulu - CC	Main	8813	HCC-CENT BLDG	FRRM	5901	\$2,515	\$0	\$0	\$0	\$190	\$0	\$0	\$0	\$0	\$64	\$0	\$0	\$0	\$0	\$0	\$254
Honolulu - CC	Main	8811	HCC-CHILDCARE #1	FRRM	3505	\$872	\$312	\$0	\$312	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Honolulu - CC	Main	8827	HCC-COSMOTOLOGY/FASHIONS	FRRM	33480	\$14,271	\$0	\$0	\$0	\$337	\$189	\$0	\$0	\$1,293	\$235	\$0	\$177	\$0	\$746	\$0	\$2,978
Honolulu - CC	Main	8824	HCC-EIMT	FRRM	6964	\$2,968	\$278	\$0	\$278	\$0	\$39	\$0	\$0	\$0	\$0	\$0	\$98	\$0	\$215	\$0	\$352
Honolulu - CC	Main	8805	HCC-GENERAL CLASSROOM BLDG	FRRM	32409	\$13,814	\$1,088	\$0	\$1,088	\$0	\$183	\$0	\$0	\$0	\$1,228	\$0	\$0	\$0	\$0	\$0	\$1,411
Honolulu - CC	Main	8812	HCC-GENERAL TRADES LAB	FRRM	5912	\$2,520	\$178	\$0	\$178	\$537	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$76	\$0
Honolulu - CC	Main	8844	HCC-HEAVY EQMT MAINT/REPAIR	FRRM	15919	\$6,786	\$789	\$0	\$789	\$1,081	\$90	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,171
Honolulu - CC	Main	8814	HCC-INDUSTRIAL TRADE COMPLEX	FRRM	81838	\$34,884	\$1,775	\$0	\$1,775	\$424	\$463	\$0	\$0	\$1,519	\$0	\$0	\$0	\$428	\$2,106	\$0	\$3,940
Honolulu - CC	Main	8807	HCC-LIBRARY/CLASSROOM BLDG	FRRM	112141	\$57,361	\$0	\$0	\$0	\$0	\$0	\$315	\$0	\$0	\$13,579	\$0	\$0	\$0	\$0	\$0	\$13,894
Honolulu - CC	Main	8872B	HCC-MODULAR MAKAI	FRRM	12000	\$2,131	\$0	\$0	\$0	\$0	\$105	\$0	\$0	\$0	\$80	\$0	\$0	\$0	\$0	\$0	\$185
Honolulu - CC	Main	8872A	HCC-MODULAR MAUKA	FRRM	12000	\$2,131	\$0	\$0	\$0	\$0	\$105	\$0	\$0	\$0	\$80	\$0	\$0	\$0	\$0	\$0	\$185
Honolulu - CC	Main	8809	HCC-OFFICE/STORAGE OPS MAINT	FRRM	2878	\$716	\$0	\$0	\$0	\$0	\$0	\$256	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$256
Honolulu - CC	Main	8818	HCC-OPERATIONS & MAINTENANCE	FRRM	6493	\$2,768	\$462	\$0	\$462	\$91	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$65	\$156
Honolulu - CC	Main	8816	HCC-PRINT/DUPLICATING SHOP	FRRM	6449	\$2,749	\$0	\$0	\$0	\$450	\$36	\$0	\$101	\$0	\$0	\$0	\$0	\$240	\$0	\$0	\$828
Honolulu - CC	Main	8817	HCC-SHEETMETAL/PLASTICS	FRRM	6264	\$2,670	\$368	\$0	\$368	\$0	\$35	\$0	\$0	\$0	\$0	\$193	\$0	\$0	\$0	\$0	\$229
Honolulu - CC	Main	8844A	HCC-STORAGE	FRRM	146	\$36	\$0	\$0	\$0	\$13	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13
Honolulu Community College - Main Campus - General Funded					558,579	\$246,020	\$21,580	\$2,177	\$23,756	\$4,319	\$2,669	\$1,170	\$101	\$4,808	\$1,527	\$14,603	\$432	\$2,570	\$2,917	\$35,116	

University of Hawai'i FRRM 2017 Update																					
Honolulu Community College - Off Campus - General Funded																					
Campus	Building			Gross Square Feet	Current Replacement Value (000s)	Backlog (000s of Dollars)			Capital Renewal Requirements (000s of Dollars)												
	Number	Name	Assessment			Building and Infrastructure	Code and Safety	Total	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total		
Honolulu - CC	Off	Campus	Code & Safety	FRRM	N/A	N/A	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Honolulu - CC	Off	Campus	Infrastructure	FRRM	N/A	N/A	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Honolulu - CC	Off	8851	HCC Acqatic Facility	FRRM	1387	\$345	\$0	\$0	\$0	\$0	\$0	\$123	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$123
Honolulu - CC	Off	8852	HCC Airport Training Center	FRRM	38980	\$16,615	\$299	\$0	\$299	\$858	\$221	\$255	\$0	\$0	\$0	\$1,924	\$72	\$0	\$0	\$0	\$3,330
Honolulu - CC	Off	8850	HCC Marine Education	FRRM	36826	\$15,697	\$1,018	\$0	\$1,018	\$0	\$0	\$433	\$0	\$0	\$0	\$1,504	\$0	\$0	\$0	\$0	\$1,937
Honolulu - CC	Off	8852A	HCC-MECHANICAL BLDG	FRRM	1067	\$265	\$0	\$0	\$0	\$0	\$0	\$95	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$95
Honolulu - CC	Off	8857	HCC-PACIFIC AEROSPACE TRAINING CTR	FRRM	105000	\$19,581	\$1,071	\$0	\$1,071	\$0	\$0	\$0	\$459	\$0	\$0	\$0	\$14	\$38	\$0	\$0	\$511
Honolulu Community College - Off Campus - General Funded					183,260	\$52,504	\$2,389	\$0	\$2,389	\$858	\$221	\$906	\$459	\$0	\$0	\$3,428	\$86	\$38	\$0	\$0	\$5,996

University of Hawai'i
FRRM 2017 Update

Kapi'olani Community College - Main Campus - General Funded

Campus	Building			Gross Square Feet	Current Replacement Value (000s)	Backlog (000s of Dollars)			Capital Renewal Requirements (000s of Dollars)											
	Number	Name	Assessment			Building and Infrastructure	Code and Safety	Total	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total	
Kapiolani - CC	Main	Campus	Code & Safety	FRRM	N/A	N/A	\$0	\$8,636	\$8,636	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Kapiolani - CC	Main	Campus	Infrastructure	FRRM	N/A	N/A	\$147	\$0	\$147	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Kapiolani - CC	Main	6936	KCC-ALANI (CHILD CARE)	FRRM	5102	\$2,175	\$95	\$0	\$95	\$0	\$0	\$0	\$131	\$0	\$0	\$0	\$0	\$131		
Kapiolani - CC	Main	6946	KCC-CHAPEL	FRRM	3829	\$1,095	\$213	\$0	\$213	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Kapiolani - CC	Main	6931A	KCC-GREENHOUSE	FRRM	1386	\$345	\$123	\$0	\$123	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Kapiolani - CC	Main	6921A	KCC-ILIAHI (CLASSROOMS)A	FRRM	15711	\$6,697	\$231	\$0	\$231	\$292	\$0	\$0	\$0	\$0	\$404	\$154	\$0	\$849		
Kapiolani - CC	Main	6921B	KCC-ILIAHI (CLASSROOMS)B	FRRM	6081	\$2,592	\$202	\$0	\$202	\$156	\$0	\$0	\$0	\$0	\$0	\$91	\$0	\$247		
Kapiolani - CC	Main	6921C	KCC-ILIAHI (CLASSROOMS)C	FRRM	13072	\$5,572	\$100	\$0	\$100	\$421	\$0	\$0	\$0	\$243	\$196	\$0	\$859			
Kapiolani - CC	Main	6921D	KCC-ILIAHI (MECHANICAL ROOM)	FRRM	315	\$78	\$28	\$0	\$28	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
Kapiolani - CC	Main	6927A	KCC-ILIMA (ADMIN) A	FRRM	8443	\$3,599	\$204	\$0	\$204	\$282	\$0	\$0	\$0	\$0	\$0	\$0	\$282			
Kapiolani - CC	Main	6927B	KCC-ILIMA (ADMIN) B	FRRM	6306	\$2,688	\$152	\$0	\$152	\$210	\$0	\$0	\$0	\$0	\$0	\$0	\$210			
Kapiolani - CC	Main	6927C	KCC-ILIMA (ADMIN) C	FRRM	6373	\$2,717	\$154	\$0	\$154	\$164	\$0	\$0	\$0	\$0	\$0	\$0	\$164			
Kapiolani - CC	Main	6932	KCC-KALIA	FRRM	16852	\$7,183	\$313	\$0	\$313	\$129	\$0	\$0	\$433	\$0	\$0	\$0	\$562			
Kapiolani - CC	Main	6919A	KCC-KAUILA (ALLIED HEALTH) A	FRRM	18577	\$7,919	\$725	\$0	\$725	\$477	\$0	\$0	\$0	\$0	\$0	\$0	\$477			
Kapiolani - CC	Main	6919B	KCC-KAUILA (ALLIED HEALTH) B	FRRM	21573	\$9,196	\$165	\$0	\$165	\$562	\$0	\$0	\$0	\$179	\$0	\$0	\$741			
Kapiolani - CC	Main	6922B	KCC-KOA (ART)	FRRM	13197	\$5,625	\$1,023	\$0	\$1,023	\$339	\$0	\$0	\$0	\$0	\$129	\$0	\$468			
Kapiolani - CC	Main	6922A	KCC-Koa (Ceramics)	FRRM	3764	\$1,604	\$167	\$0	\$167	\$97	\$0	\$0	\$0	\$0	\$39	\$0	\$136			
Kapiolani - CC	Main	6920	KCC-KOKIO (SCIENCE)	FRRM	19395	\$8,267	\$1,862	\$0	\$1,862	\$498	\$0	\$0	\$0	\$152	\$0	\$0	\$651			
Kapiolani - CC	Main	6939A	KCC-KOPIKO (NURSING) A	FRRM	24622	\$10,495	\$86	\$0	\$86	\$0	\$189	\$0	\$0	\$0	\$633	\$0	\$821			
Kapiolani - CC	Main	6939B	KCC-KOPIKO (NURSING) B	FRRM	13338	\$5,685	\$47	\$0	\$47	\$0	\$102	\$0	\$0	\$0	\$343	\$0	\$248			
Kapiolani - CC	Main	6939C	KCC-KOPIKO COMPLEX (ELEVATOR)	FRRM	571	\$142	\$51	\$0	\$51	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
Kapiolani - CC	Main	6935	KCC-LAMA (LIBRARY)	FRRM	49412	\$22,115	\$0	\$0	\$0	\$975	\$0	\$0	\$1,820	\$0	\$0	\$853	\$3,648			
Kapiolani - CC	Main	6916	KCC-MAILE (DRAMA STUDIO)	FRRM	4352	\$1,855	\$352	\$0	\$352	\$9	\$0	\$0	\$0	\$12	\$0	\$0	\$21			
Kapiolani - CC	Main	6917	KCC-MAMANE (Computer Ctr)	FRRM	3744	\$1,596	\$301	\$0	\$301	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
Kapiolani - CC	Main	6937	KCC-MANELE (COMMUNITY SVC)	FRRM	5256	\$2,240	\$20	\$0	\$20	\$59	\$0	\$0	\$135	\$0	\$30	\$78	\$302			
Kapiolani - CC	Main	6938	KCC-MANONO (COMMUNITY SVC)	FRRM	6787	\$2,893	\$95	\$0	\$95	\$0	\$0	\$0	\$174	\$0	\$0	\$126	\$300			
Kapiolani - CC	Main	6918	KCC-MOKIHANA (CLASSROOMS)	FRRM	3488	\$1,487	\$373	\$0	\$373	\$0	\$0	\$0	\$27	\$0	\$0	\$0	\$27			
Kapiolani - CC	Main	6929	KCC-NAIO (MEDIA CENTER)	FRRM	19235	\$8,199	\$641	\$0	\$641	\$0	\$494	\$0	\$0	\$0	\$0	\$357	\$851			
Kapiolani - CC	Main	6930	KCC-OHELO (FINE DINING)	FRRM	32904	\$14,025	\$2,611	\$0	\$2,611	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
Kapiolani - CC	Main	6928	KCC-OHIA (CAMPUS CENTER)	FRRM	38579	\$16,444	\$1,990	\$0	\$1,990	\$0	\$0	\$991	\$0	\$0	\$0	\$0	\$991			
Kapiolani - CC	Main	6940	KCC-OLAPA (HOTEL OPERATIONS)	FRRM	23840	\$10,162	\$525	\$0	\$525	\$183	\$0	\$0	\$0	\$613	\$0	\$0	\$795			
Kapiolani - CC	Main	6934	KCC-OLONA	FRRM	14934	\$6,366	\$277	\$0	\$277	\$114	\$0	\$0	\$384	\$0	\$0	\$0	\$498			
Kapiolani - CC	Main	6931	KCC-OLOPUA (MAINTENANCE)	FRRM	5400	\$2,302	\$0	\$0	\$0	\$252	\$0	\$0	\$221	\$0	\$0	\$0	\$472			
Kapiolani - CC	Main	6931B	KCC-STORAGE	FRRM	131	\$33	\$12	\$0	\$12	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
Kapi'olani Community College - Main Campus - General Funded					406,569	\$173,391	\$13,284	\$8,636	\$21,920	\$5,219	\$291	\$1,486	\$2,857	\$441	\$652	\$1,337	\$646	\$687	\$1,584	\$15,199

University of Hawai'i
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Kauai Community College - Main Campus - General Funded

Campus	Building			Gross Square Feet	Current Replacement Value (000s)	Backlog (000s of Dollars)			Capital Renewal Requirements (000s of Dollars)														
	Number	Name	Assessment			Building and Infrastructure	Code and Safety	Total	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total				
Kauai - CC	Main	Campus	Code & Safety	FRRM	N/A	N/A	\$0	\$3,191	\$3,191	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Kauai - CC	Main	Campus	Infrastructure	FRRM	N/A	N/A	\$157	\$0	\$157	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Kauai - CC	Main	4452	KAUAI CC - One Stop Center	FRRM	33010	\$16,181	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Kauai - CC	Main	4468	KAUAI CC-A/C EQUIPMENT BLDG	FRRM	1644	\$470	\$0	\$0	\$0	\$0	\$0	\$34	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$101	\$0	\$0	\$134
Kauai - CC	Main	4466	KAUAI CC-AUTO BODY SHOP	FRRM	12619	\$6,186	\$0	\$0	\$0	\$0	\$0	\$75	\$269	\$0	\$0	\$373	\$142	\$398	\$0	\$0	\$0	\$0	\$1,257
Kauai - CC	Main	4467	KAUAI CC-AUTOMOTIVE SHOP	FRRM	11014	\$5,399	\$0	\$0	\$0	\$0	\$0	\$66	\$235	\$0	\$0	\$0	\$124	\$347	\$0	\$0	\$0	\$0	\$772
Kauai - CC	Main	4465	KAUAI CC-CAMPUS CENTER BLDG	FRRM	31478	\$15,430	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$537	\$0	\$0	\$0	\$0	\$0	\$0	\$1,291	\$0	\$1,828
Kauai - CC	Main	4464	KAUAI CC-CARPENTRY SHOP	FRRM	12422	\$6,089	\$216	\$0	\$216	\$0	\$0	\$74	\$265	\$0	\$0	\$0	\$140	\$570	\$0	\$0	\$0	\$0	\$1,049
Kauai - CC	Main	4473	KAUAI CC-CHILD CARE CENTER	FRRM	1260	\$360	\$0	\$0	\$0	\$0	\$90	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$90
Kauai - CC	Main	4463G	KAUAI CC-COMM SVC PB 4463G	FRRM	864	\$247	\$0	\$0	\$0	\$0	\$57	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$57
Kauai - CC	Main	4463	KAUAI CC-ELECTRONIC TECH	FRRM	14712	\$12,020	\$384	\$0	\$384	\$0	\$0	\$314	\$0	\$0	\$0	\$1,092	\$0	\$0	\$0	\$0	\$0	\$0	\$1,406
Kauai - CC	Main	4454D	KAUAI CC-EMS PORTABLE	FRRM	1200	\$343	\$0	\$0	\$0	\$0	\$0	\$110	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$110
Kauai - CC	Main	4456A	KAUAI CC-FACULTY BLDG#1	FRRM	3039	\$869	\$0	\$0	\$0	\$0	\$0	\$93	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$93
Kauai - CC	Main	4456B	KAUAI CC-FACULTY BLDG#2	FRRM	2816	\$805	\$0	\$0	\$0	\$0	\$0	\$144	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$86
Kauai - CC	Main	4459B	KAUAI CC-FINE ARTS BLDG#2	FRRM	6473	\$3,173	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$138	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$249
Kauai - CC	Main	4478	KAUAI CC-GREENHOUSE #1	FRRM	2400	\$686	\$61	\$0	\$61	\$0	\$0	\$0	\$0	\$184	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$184
Kauai - CC	Main	4458A	KAUAI CC-HAWAIIAN STUDIES	FRRM	864	\$247	\$0	\$0	\$0	\$0	\$79	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$79
Kauai - CC	Main	4474A	KAUAI CC-JTPA CLASSROOM A	FRRM	943	\$270	\$0	\$0	\$0	\$0	\$63	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$63
Kauai - CC	Main	4474B	KAUAI CC-JTPA RESTROOM	FRRM	272	\$78	\$28	\$0	\$28	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Kauai - CC	Main	4477	KAUAI CC-KWAI YI TING GAZEBO	FRRM	560	\$160	\$0	\$0	\$0	\$0	\$0	\$57	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$57
Kauai - CC	Main	4455	KAUAI CC-LRC/ADMIN	FRRM	40731	\$19,966	\$522	\$0	\$522	\$0	\$0	\$0	\$0	\$0	\$0	\$243	\$348	\$0	\$0	\$0	\$0	\$0	\$604
Kauai - CC	Main	4463C	KAUAI CC-MACHINE SHOP	FRRM	5259	\$2,578	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$85	\$123	\$0	\$0	\$0	\$0	\$0	\$0	\$208
Kauai - CC	Main	4469	KAUAI CC-MAINTENANCE BLDG	FRRM	6792	\$1,387	\$0	\$0	\$0	\$0	\$11	\$16	\$31	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$58
Kauai - CC	Main	4462	KAUAI CC-MULTI-FUNCTION CLASSROOM (ELECTIONS)	FRRM	7880	\$3,863	\$0	\$0	\$0	\$0	\$168	\$47	\$51	\$0	\$0	\$0	\$176	\$0	\$0	\$0	\$0	\$0	\$442
Kauai - CC	Main	4453	KAUAI CC-NATURAL SCIENCE BLDG	FRRM	14010	\$11,446	\$120	\$0	\$120	\$0	\$0	\$0	\$0	\$366	\$0	\$83	\$0	\$179	\$894	\$0	\$0	\$0	\$1,523
Kauai - CC	Main	4454C	KAUAI CC-NURSING PORTABLE C	FRRM	1200	\$343	\$0	\$0	\$0	\$0	\$0	\$123	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$123
Kauai - CC	Main	4454	KAUAI CC-NURSING/BUS EDUCATION	FRRM	16168	\$7,925	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$96	\$0	\$0	\$0	\$0	\$0	\$0	\$488
Kauai - CC	Main	4464A	KAUAI CC-PHYSICAL EDUCATION PB	FRRM	484	\$138	\$47	\$0	\$47	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Kauai - CC	Main	4471	KAUAI CC-POWER GENERATOR	FRRM	552	\$158	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$56
Kauai - CC	Main	4458	KAUAI CC-SOCIAL SCIENCE	FRRM	5104	\$2,502	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$88	\$82	\$0	\$0	\$0	\$0	\$0	\$170
Kauai - CC	Main	4472	KAUAI CC-SWG TRTMNT (not in use)	FRRM	264	\$75	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$27
Kauai - CC	Main	4461	KAUAI CC-THEATER	FRRM	31063	\$15,227	\$0	\$0	\$0	\$0	\$0	\$1,190	\$202	\$0	\$0	\$0	\$1,644	\$0	\$0	\$0	\$0	\$0	\$3,036
Kauai - CC	Main	4463F	KAUAI CC-TRADES OFFICES PB	FRRM	884	\$253	\$45	\$0	\$45	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Kauai - CC	Main	4464C	KAUAI CC-WEIGHT ROOM	FRRM	1053	\$301	\$0	\$0	\$0	\$0	\$102	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$102
Kauai - CC	Main	4463A	KAUAI CC-WELDING SHOP#1	FRRM	11005	\$5,395	\$0	\$0	\$0	\$0	\$0	\$189	\$407	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$776
Kauai - CC	Main	4463B	KAUAI CC-WELDING SHOP#2	FRRM	2475	\$708	\$152	\$0	\$152	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Kauai - CC	Main	4457	OCET/Bookstore	FRRM	20732	\$10,163	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$442	\$0	\$0	\$0	\$0	\$0	\$0	\$442
Kauai Community College - Main Campus - General Funded					303,246	\$151,441	\$1,732	\$3,191	\$4,923	\$344	\$1,480	\$1,563	\$1,177	\$1,225	\$877	\$4,355	\$753	\$1,859	\$3,705	\$0	\$0	\$0	\$17,338

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UH Maui College - Main Campus - General Funded

Campus	Number	Building Name	Assessment	Gross Square Feet	Current Replacement Value (000s)	Backlog (000s of Dollars)			Capital Renewal Requirements (000s of Dollars)														
						Building and Infrastructure	Code and Safety	Total	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total				
Maui College	Main	Campus	Code & Safety	FRRM	N/A	N/A	\$0	\$3,631	\$3,631	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Maui College	Main	Campus	Infrastructure	FRRM	N/A	N/A	\$891	\$0	\$891	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Maui College	Main	2223	MAU AUTO BODY SHOP	FRRM	8193	\$3,492	\$0	\$0	\$0	\$0	\$116	\$0	\$152	\$0	\$0	\$0	\$0	\$0	\$81	\$0	\$42	\$391	
Maui College	Main	2201	MAU AUTOMOTIVE TECHNOLOGY BLDG	FRRM	9342	\$4,579	\$0	\$0	\$0	\$0	\$243	\$191	\$0	\$0	\$0	\$0	\$0	\$84	\$0	\$0	\$57	\$574	
Maui College	Main	2252B	MAU BACKUP GENERATOR (Kaaikae/Paina/Central)	FRRM	600	\$149	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$53	\$0	\$53
Maui College	Main	2202	MAU BUILDING TRADES SHOP	FRRM	5912	\$2,520	\$11	\$0	\$11	\$0	\$131	\$0	\$99	\$0	\$0	\$45	\$0	\$0	\$0	\$0	\$31	\$306	
Maui College	Main	0	MAU Campuswide DM	FRRM	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Maui College	Main	2204	MAU CARPENTRY SHOP	FRRM	7535	\$3,212	\$14	\$0	\$14	\$0	\$0	\$0	\$0	\$126	\$0	\$58	\$0	\$0	\$0	\$39	\$223		
Maui College	Main	2216	MAU CLASSROOM HALE 2216	FRRM	770	\$191	\$27	\$0	\$27	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Maui College	Main	2217	MAU CLASSROOM HALE 2217	FRRM	770	\$191	\$27	\$0	\$27	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Maui College	Main	2218	MAU CLASSROOM HALE 2218	FRRM	770	\$191	\$27	\$0	\$27	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Maui College	Main	2219	MAU CLASSROOM HALE 2219	FRRM	770	\$191	\$27	\$0	\$27	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Maui College	Main	2205	MAU COMMUNITY SERVICE BLDG	FRRM	2328	\$579	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$103	\$0	\$0	\$0	\$0	\$0	\$0	\$103	
Maui College	Main	2248C	MAU DORMITORY BLDG C (former)	FRRM	3629	\$1,547	\$458	\$0	\$458	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Maui College	Main	2248D	MAU DORMITORY BLDG D (former)	FRRM	3629	\$1,547	\$458	\$0	\$458	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Maui College	Main	2220	MAU FACULTY HALE 2220	FRRM	2567	\$638	\$46	\$0	\$46	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Maui College	Main	2225	MAU FOREIGN LANGUAGE LAB	FRRM	1638	\$407	\$44	\$0	\$44	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Maui College	Main	2231	MAU HEONA FINE ARTS BLDG (OLD PE BLDG)	FRRM	7082	\$3,019	\$0	\$0	\$0	\$131	\$0	\$54	\$0	\$0	\$0	\$37	\$0	\$0	\$0	\$0	\$0	\$222	
Maui College	Main	2233	MAU HIPOI (CHILD CARE)	FRRM	1200	\$298	\$0	\$0	\$0	\$0	\$85	\$0	\$0	\$21	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$107	
Maui College	Main	2208	MAU HOOKIPA (Bus. Admin/Student Services/Fashion)	FRRM	15744	\$6,711	\$798	\$0	\$798	\$292	\$82	\$0	\$0	\$0	\$444	\$0	\$0	\$0	\$0	\$0	\$0	\$818	
Maui College	Main	2239A	MAU HOOUULU (AG CLASSROOM)	FRRM	4889	\$1,216	\$0	\$0	\$0	\$0	\$0	\$217	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$217	
Maui College	Main	2239B	MAU HOOUULU (AG GREENHOUSE)	FRRM	7920	\$3,376	\$22	\$0	\$22	\$112	\$0	\$89	\$77	\$147	\$204	\$0	\$0	\$0	\$0	\$0	\$86	\$715	
Maui College	Main	2249	MAU KA LAMA (BUSINESS ED)	FRRM	42948	\$18,307	\$0	\$0	\$0	\$797	\$834	\$222	\$301	\$0	\$1,754	\$0	\$0	\$0	\$0	\$0	\$0	\$3,909	
Maui College	Main	2252	MAU KAAIKE (MEDIA-TELECOM-COMP. SRVS.)	FRRM	40380	\$17,212	\$1,675	\$0	\$1,675	\$749	\$0	\$0	\$209	\$0	\$0	\$0	\$0	\$1,068	\$0	\$0	\$0	\$2,026	
Maui College	Main	2255	MAU Kaiako (Lauulu Project)	FRRM	2016	\$859	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$88	\$0	\$0	\$0	\$0	\$0	\$88	
Maui College	Main	2250	MAU KUPAA (CLASSRM/LABS)	FRRM	18926	\$8,067	\$185	\$0	\$185	\$351	\$0	\$500	\$0	\$98	\$0	\$0	\$934	\$0	\$0	\$0	\$0	\$1,884	
Maui College	Main	2270	MAU Lahaina Education Center	FRRM	2500	\$622	\$56	\$0	\$56	\$0	\$0	\$0	\$0	\$0	\$167	\$0	\$0	\$0	\$0	\$0	\$0	\$167	
Maui College	Main	2251	MAU LAULIMA (OCET/VITECH)	FRRM	31943	\$13,616	\$759	\$0	\$759	\$0	\$0	\$0	\$0	\$0	\$167	\$0	\$0	\$0	\$0	\$0	\$0	\$167	
Maui College	Main	2251A	MAU LAULIMA CHILLER ENCLOSURE	FRRM	800	\$199	\$71	\$0	\$71	\$0	\$0	\$19	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Maui College	Main	2224	MAU LIBRARY	FRRM	25407	\$11,371	\$0	\$0	\$0	\$0	\$472	\$782	\$0	\$0	\$0	\$59	\$0	\$0	\$0	\$275	\$1,589		
Maui College	Main	2230	MAU LIBRARY A/ C CHILLER/STORAGE	FRRM	1747	\$434	\$155	\$0	\$155	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Maui College	Main	2212B	MAU MAIN POWER VAULT	FRRM	900	\$384	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$17	\$0	\$0	\$0	\$0	\$0	\$17	
Maui College	Main	5051	MAU MOLOKAI ED CTR FARM (classroom, greenhouse)	FRRM	1280	\$414	\$133	\$0	\$133	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Maui College	Main	5015	MAU MOLOKAI EDUCATION CTR	FRRM	10950	\$4,667	\$163	\$0	\$163	\$203	\$0	\$226	\$0	\$0	\$0	\$357	\$0	\$0	\$0	\$0	\$0	\$786	
Maui College	Main	2215	MAU MULTIPURPOSE BLDG (RDP & KAPIOLANI E)	FRRM	4906	\$1,220	\$0	\$0	\$0	\$0	\$218	\$0	\$0	\$0	\$0	\$218	\$0	\$0	\$0	\$0	\$0	\$436	
Maui College	Main	2221	MAU NOII (SCIENCE)	FRRM	14914	\$10,595	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$105	\$0	\$0	\$0	\$0	\$105	
Maui College	Main	2238	MAU NURSING (Allied Health Classrooms&Offices)	FRRM	4531	\$1,127	\$403	\$0	\$403	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Maui College	Main	2240a	MAU Nursing Portable A - Classroom	FRRM	1680	\$716	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$73	\$0	\$0	\$0	\$0	\$0	\$0	\$73	
Maui College	Main	2235	MAU OPERATIONS & MAINTENANCE FACILITY	FRRM	4519	\$1,124	\$0	\$0	\$0	\$0	\$0	\$0	\$362	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$362	
Maui College	Main	2253	MAU PAINA (CULINARY)	FRRM	37570	\$16,014	\$733	\$0	\$733	\$0	\$697	\$0	\$0	\$195	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$892	
Maui College	Main	2222	MAU PAVILION (Open Hale)	FRRM	747	\$186	\$66	\$0	\$66	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Maui College	Main	2232	MAU PILINA (STUDENT CENTER)	FRRM	41786	\$17,811	\$546	\$0	\$546	\$0	\$0	\$0	\$775	\$0	\$0	\$0	\$0	\$864	\$0	\$0	\$0	\$1,639	
Maui College	Main	2227	MAU RESTROOM (nickname=Million \$ Bathroom)	FRRM	798	\$198	\$71	\$0	\$71	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Maui College	Main	2204A	MAU STORAGE A (VoTech)	FRRM	144	\$36	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13	\$0	\$0	\$0	\$0	\$0	\$0	\$13	
Maui College	Main	2204B	MAU STORAGE B (VoTech)	FRRM	67	\$17	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6	\$0	\$0	\$0	\$0	\$0	\$0	\$6	
Maui College	Main	2204C	MAU STORAGE C (VoTech)	FRRM	167	\$42	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$15	\$0	\$0	\$0	\$0	\$0	\$0	\$15	
Maui College	Main	2237	MAU THE LEARNING CENTER (TLC)	FRRM	8088	\$3,448	\$0	\$0	\$0	\$0	\$320	\$0	\$0	\$0	\$113	\$0	\$0	\$0	\$0	\$42	\$476		
Maui College	Main	2214	MAU UH CO-OP EXTENSION SVC	FRRM	4635	\$1,152	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$412	\$412	
Maui College	Main	2203	MAU WELDING SHOP	FRRM	5912	\$2,520	\$110	\$0	\$110	\$0	\$93	\$33	\$0	\$0	\$84	\$0	\$0	\$0	\$0	\$0	\$31	\$241	
UH Maui College - Main Campus - General Funded					395,549	\$166,415	\$7,977	\$3,631	\$11,608	\$2,637	\$2,376	\$3,014	\$1,417	\$1,146	\$523	\$3,023	\$1,790	\$1,226	\$1,878	\$19,029			

University of Hawai'i FRRM 2017 Update																				
Leeward Community College - Main Campus - General Funded																				
Campus	Building			Gross Square Feet	Current Replacement Value (000s)	Backlog (000s of Dollars)			Capital Renewal Requirements (000s of Dollars)											
	Number	Name	Assessment			Building and Infrastructure	Code and Safety	Total	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total	
Leeward - CC	Main	Campus	Code & Safety	FRRM	N/A	N/A	\$0	\$8,463	\$8,463	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Leeward - CC	CC	Main	Infrastructure	FRRM	N/A	N/A	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Leeward - CC	Main	7876	LCC-ADMINISTRATION (B)	FRRM	19523	\$8,322	\$658	\$0	\$658	\$0	\$0	\$502	\$0	\$367	\$0	\$0	\$0	\$0	\$870	
Leeward - CC	Main	7883	LCC-ARTS & MUSIC BLDG (F-1)	FRRM	14591	\$6,219	\$802	\$0	\$802	\$0	\$0	\$0	\$487	\$76	\$0	\$0	\$0	\$0	\$563	
Leeward - CC	Main	7890	LCC-AUTOMOTIVE SHOP	FRRM	41065	\$17,504	\$2,265	\$0	\$2,265	\$576	\$0	\$0	\$0	\$461	\$0	\$112	\$0	\$0	\$1,149	
Leeward - CC	Main	7878	LCC-BIOLOGICAL SCIENCES (C-2)	FRRM	23701	\$16,838	\$1,337	\$0	\$1,337	\$1,435	\$0	\$0	\$0	\$123	\$0	\$0	\$0	\$0	\$1,558	
Leeward - CC	Main	7887	LCC-BUS SHELTER	FRRM	444	\$110	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$39	\$0	\$0	\$39	
Leeward - CC	Main	7886	LCC-BUSINESS EDUCATION (G)	FRRM	23564	\$10,044	\$1,495	\$0	\$1,495	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Leeward - CC	Main	7881	LCC-DRAFTING TECHNOLOGY (D-2)	FRRM	27651	\$11,786	\$2,187	\$0	\$2,187	\$0	\$0	\$0	\$0	\$286	\$342	\$0	\$0	\$0	\$628	
Leeward - CC	Main	7895	LCC-ELECTRIC POWER VAULT	FRRM	560	\$139	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50	\$0	\$0	\$0	\$0	\$50	
Leeward - CC	Main	7884	LCC-FINE ARTS BLDG (F-2)	FRRM	23815	\$10,151	\$697	\$0	\$697	\$0	\$0	\$0	\$0	\$123	\$613	\$0	\$0	\$0	\$736	
Leeward - CC	Main	7880	LCC-GENERAL TECHNOLOGY (D-1)	FRRM	23472	\$10,005	\$791	\$0	\$791	\$0	\$0	\$604	\$0	\$122	\$0	\$0	\$0	\$0	\$726	
Leeward - CC	Main	7892	LCC-HEALTH SCIENCES	FRRM	3600	\$1,535	\$0	\$0	\$0	\$19	\$0	\$0	\$0	\$0	\$107	\$0	\$0	\$0	\$126	
Leeward - CC	Main	7889	LCC-LANGUAGE ARTS (J-1)	FRRM	27747	\$11,827	\$1,755	\$0	\$1,755	\$0	\$0	\$0	\$714	\$287	\$0	\$0	\$0	\$0	\$1,001	
Leeward - CC	Main	7875	LCC-LIBRARY	FRRM	40663	\$17,333	\$528	\$0	\$528	\$0	\$2,093	\$0	\$0	\$421	\$0	\$0	\$0	\$981	\$3,495	
Leeward - CC	Main	7894A	LCC-MAINT & OPERATIONS FACILIT	FRRM	7300	\$1,815	\$214	\$0	\$214	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Leeward - CC	Main	7894B	LCC-MAINT & OPERATIONS FACILIT - STORAGE	FRRM	717	\$178	\$64	\$0	\$64	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Leeward - CC	Main	7879	LCC-MATH-SCIENCES (C-3)	FRRM	20106	\$14,284	\$2,469	\$0	\$2,469	\$0	\$0	\$0	\$0	\$208	\$0	\$0	\$0	\$887	\$1,095	
Leeward - CC	Main	7899A	LCC-OBSERVATORY1	FRRM	144	\$36	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13	\$0	\$0	\$13	
Leeward - CC	Main	7877	LCC-PHYSICAL-SCIENCES (C-1)	FRRM	23708	\$16,843	\$2,047	\$0	\$2,047	\$2,482	\$0	\$0	\$0	\$123	\$0	\$0	\$0	\$0	\$2,604	
Leeward - CC	Main	7891A	LCC-RELOCATABLE-MENS SHOWER	FRRM	373	\$93	\$33	\$0	\$33	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Leeward - CC	Main	7891B	LCC-RELOCATABLE-WOMENS SHOWER	FRRM	373	\$93	\$33	\$0	\$33	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Leeward - CC	Main	7882	LCC-STUDENT CENTER BLDG (E)	FRRM	43323	\$18,467	\$2,198	\$0	\$2,198	\$0	\$0	\$0	\$0	\$4,523	\$0	\$0	\$0	\$0	\$4,523	
Leeward - CC	Main	7885	LCC-THEATER (F-3)	FRRM	53557	\$22,829	\$4,750	\$0	\$4,750	\$0	\$0	\$0	\$0	\$555	\$821	\$0	\$0	\$0	\$1,376	
Leeward Community College - Main Campus - General Funded					419,997	\$196,451	\$24,323	\$8,463	\$32,785	\$4,493	\$19	\$2,596	\$604	\$1,201	\$7,675	\$1,933	\$112	\$52	\$1,868	\$20,553

University of Hawai'i FRRM 2017 Update																				
Windward Community College - Main Campus - General Funded																				
Campus	Building			Gross Square Feet	Current Replacement Value (000s)	Backlog (000s of Dollars)			Capital Renewal Requirements (000s of Dollars)											
	Number	Name	Assessment			Building and Infrastructure	Code and Safety	Total	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total	
Windward - CC	Main	Campus	Code & Safety	FRRM	N/A	N/A	\$0	\$4,510	\$4,510	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Windward - CC	CC	Main	Infrastructure	FRRM	N/A	N/A	\$1,624	\$0	\$1,624	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Windward - CC	Main	5990	WCC-HALE AKOAKOA (CAMPUS CNTR)	FRRM	55052	\$26,986	\$646	\$0	\$646	\$0	\$0	\$0	\$328	\$0	\$0	\$0	\$0	\$3,154	\$3,482	
Windward - CC	Main	5982	WCC-HALE ALAKAI (ECKERDT)	FRRM	34333	\$19,354	\$2,098	\$0	\$2,098	\$0	\$1,086	\$0	\$0	\$161	\$0	\$0	\$0	\$0	\$1,247	
Windward - CC	Main	5992	WCC-HALE AO WHITE HOUSE (HWN STUDS.)	FRRM	3089	\$1,016	\$0	\$0	\$0	\$0	\$316	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$316	
Windward - CC	Main	5993	WCC-HALE AWA (LAW LIB Micro)	FRRM	11612	\$5,692	\$233	\$0	\$233	\$0	\$0	\$285	\$0	\$0	\$0	\$517	\$0	\$0	\$802	
Windward - CC	Main	5989	WCC-HALE HOKULANI (PLANETARIUM)	FRRM	4438	\$3,626	\$0	\$0	\$0	\$0	\$0	\$116	\$0	\$0	\$0	\$0	\$223	\$19	\$358	
Windward - CC	Main	5988A	WCC-HALE IMILOA (EQUIP STRG)	FRRM	192	\$55	\$0	\$0	\$0	\$0	\$0	\$20	\$0	\$0	\$0	\$0	\$0	\$0	\$20	
Windward - CC	Main	5988	WCC-HALE IMILOA (NATURAL SCIENCE)	FRRM	32359	\$26,437	\$4,789	\$0	\$4,789	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Windward - CC	Main	5983	WCC-HALE KAKOO (OLD NAAUAO)	FRRM	10831	\$6,106	\$228	\$0	\$228	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Windward - CC	Main	5987	WCC-HALE KUHINA (OCET/ETC)	FRRM	11295	\$6,367	\$110	\$0	\$110	\$0	\$194	\$622	\$0	\$0	\$0	\$0	\$0	\$0	\$817	
Windward - CC	Main	5995	WCC-HALE LA AKEA (LLC)	FRRM	69128	\$59,301	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,920	\$2,920	
Windward - CC	Main	5994	WCC-HALE LANIHULI (Observatory)	FRRM	1400	\$1,144	\$0	\$0	\$0	\$0	\$0	\$30	\$0	\$0	\$0	\$45	\$0	\$0	\$75	
Windward - CC	Main	5977	WCC-HALE MANALEO (LANGUAGE ART)	FRRM	8031	\$4,527	\$169	\$0	\$169	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Windward - CC	Main	5979	WCC-HALE MANAOPONO (MAHI Math/Bus)	FRRM	8062	\$4,545	\$308	\$0	\$308	\$0	\$0	\$204	\$0	\$0	\$0	\$316	\$0	\$0	\$520	
Windward - CC	Main	5980	WCC-HALE NAAUAO (SOCIAL SCIENCE)	FRRM	7694	\$4,337	\$162	\$0	\$162	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Windward - CC	Main	5991	WCC-HALE PALANAKILA (HUM/THEATER)	FRRM	82759	\$67,613	\$0	\$0	\$0	\$0	\$0	\$0	\$493	\$0	\$0	\$0	\$0	\$4,697	\$5,190	
Windward - CC	Main	5986B	WCC-HALE ULUWEHI (AG GREEN HOUSE)	FRRM	6086	\$2,983	\$0	\$0	\$0	\$0	\$152	\$0	\$0	\$0	\$0	\$180	\$0	\$0	\$332	
Windward - CC	Main	5986A	WCC-HALE ULUWEHI (AG)	FRRM	800	\$229	\$0	\$0	\$0	\$0	\$82	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$82	
Windward - CC	Main	5985	WCC-MAINTENANCE SHOP	FRRM	7434	\$3,644	\$515	\$0	\$515	\$44	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$44	
Windward - CC	Main	5990X	WCC-MECHANICAL BUILDING	FRRM	1280	\$1,046	\$0	\$0	\$0	\$0	\$0	\$0	\$64	\$0	\$0	\$0	\$0	\$21	\$85	
Windward - CC	Main	5991X	WCC-MECHANICAL BUILDING	FRRM	1156	\$944	\$0	\$0	\$0	\$0	\$0	\$58	\$0	\$0	\$0	\$0	\$0	\$19	\$76	
Windward Community College - Main Campus - General Funded					357,031	\$245,952	\$10,884	\$4,510	\$15,393	\$44	\$194	\$2,542	\$349	\$962	\$0	\$161	\$877	\$403	\$10,829	\$16,363

Chapter 5 – Scenarios to Reduce Maintenance Backlog

The following three scenarios represent investment alternatives to eliminate the total Maintenance Backlog in six, eight, and ten years, respectively. All scenarios are in 2017 constant dollars and in each case the starting total backlog is the sum of: building renewal backlog, infrastructure backlog, code and safety needs and other one-time needs. These numbers, from Page 3, University of Hawai'i 2017 Maintenance Backlog – All Funds, total \$694.3 million dollars.

All three scenarios include building and infrastructure renewal needs over the appropriate time frame. That is, the six-year scenario includes total renewal needs for the fiscal years 2018, 2019, 2020, 2021, 2022 and 2023.

The first line at the top of each scenario identifies the starting total backlog. The annual capital renewal requirements are added to the total backlog to identify the total financial investments required in each fiscal year. Investments are then subtracted to determine the ending backlog. The ending backlog then becomes the initial backlog for the following year. Investment levels are set in such a way that the total backlog (including annual capital renewal needs) is zero by the end of the scenario period.

Scenario 1 demonstrates that investment levels of \$203.3 million per year (in 2017 dollars) will eliminate the total backlog in six years. Scenario 2 demonstrates that investment levels of \$179.8 million per year will eliminate the backlog in eight years. Scenario 3 demonstrates that investment levels of \$165.7 million per year will eliminate the backlog in ten years.

Scenario 1: Annual Investment Required to Eliminate the Total Backlog in Six Years

	\$ (000)					
	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
Starting Backlog	\$ 694,278	\$ 587,167	\$ 487,772	\$ 391,959	\$ 254,727	\$ 132,846
Renewal Needs	\$ 96,203	\$ 103,918	\$ 107,500	\$ 66,081	\$ 81,432	\$ 70,467
Total	\$ 790,481	\$ 691,085	\$ 595,272	\$ 458,040	\$ 336,159	\$ 203,313
Investment	\$ 203,313	\$ 203,313	\$ 203,313	\$ 203,313	\$ 203,313	\$ 203,313
Ending Backlog	\$ 587,167	\$ 487,772	\$ 391,959	\$ 254,727	\$ 132,846	\$0

Annual Investment Required to Eliminate the Backlog in 6 Years

Year	Investment (Dollars 000)	Backlog (Dollars 000)
2018	203,313	694,278
2019	203,313	587,167
2020	203,313	487,772
2021	203,313	391,959
2022	203,313	254,727
2023	203,313	0

Scenario 2: Annual Investment Required to Eliminate the Total Backlog in Eight Years

	\$ (000)							
	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>
Starting Backlog	\$ 694,278	\$ 610,693	\$ 534,824	\$ 462,537	\$ 348,831	\$ 250,475	\$ 141,156	\$ 53,860
Renewal Needs	\$ 96,203	\$ 103,918	\$ 107,500	\$ 66,081	\$ 81,432	\$ 70,467	\$ 92,492	\$ 125,927
Total	\$ 790,481	\$ 714,611	\$ 642,324	\$ 528,618	\$ 430,263	\$ 320,943	\$ 233,647	\$ 179,787
Investment	\$ 179,787	\$ 179,787	\$ 179,787	\$ 179,787	\$ 179,787	\$ 179,787	\$ 179,787	\$ 179,787
Ending Backlog	\$ 610,693	\$ 534,824	\$ 462,537	\$ 348,831	\$ 250,475	\$ 141,156	\$ 53,860	\$ 0

Annual Investment Required to Eliminate the Backlog in 8 Years

Year	Investment (Dollars 000)	Backlog (Dollars 000)
2018	179,787	694,278
2019	179,787	610,693
2020	179,787	534,824
2021	179,787	462,537
2022	179,787	348,831
2023	179,787	250,475
2024	179,787	141,156
2025	179,787	0

Scenario 3: Annual Investment Required to Eliminate the Total Backlog in Ten Years

	\$ (000)									
	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>
Starting Backlog	\$ 694,278	\$ 624,757	\$ 562,951	\$ 504,727	\$ 405,084	\$ 320,792	\$ 225,536	\$ 152,304	\$ 112,507	\$ 42,513
Renewal Needs	\$ 96,203	\$ 103,918	\$ 107,500	\$ 66,081	\$ 81,432	\$ 70,467	\$ 92,492	\$ 125,927	\$ 95,730	\$ 123,211
Total	\$ 790,481	\$ 728,675	\$ 670,450	\$ 570,808	\$ 486,516	\$ 391,260	\$ 318,027	\$ 278,231	\$ 208,237	\$ 165,724
Investment	\$ 165,724	\$ 165,724	\$ 165,724	\$ 165,724	\$ 165,724	\$ 165,724	\$ 165,724	\$ 165,724	\$ 165,724	\$ 165,724
Ending Backlog	\$ 624,757	\$ 562,951	\$ 504,727	\$ 405,084	\$ 320,792	\$ 225,536	\$ 152,304	\$ 112,507	\$ 42,513	\$ 0

Annual Investment Required to Eliminate the Backlog in 10 Years

Year	Investment (\$000)	Backlog (\$000)
2018	165,724	694,278
2019	165,724	624,757
2020	165,724	562,951
2021	165,724	504,727
2022	165,724	405,084
2023	165,724	320,792
2024	165,724	225,536
2025	165,724	152,304
2026	165,724	112,507
2027	165,724	42,513