



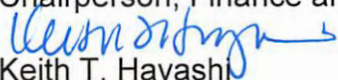
**STATE OF HAWAII**  
**DEPARTMENT OF EDUCATION**

P.O. BOX 2360  
HONOLULU, HAWAII 96804

OFFICE OF THE SUPERINTENDENT

July 18, 2017

TO: The Honorable Kenneth Uemura  
Chairperson, Finance and Infrastructure Committee

FROM:   
Keith T. Hayashi  
Interim Superintendent

SUBJECT: **Update on Department of Education's Facilities Assessment Study**

1. DESCRIPTION

The Office of School Facilities and Support Services (OSFSS) provides a status update on the study and facilities master plan being done by Jacobs Project Management Co.

2. UPDATE

OSFSS provides a brief on the development of the study and facilities master plan being done by Jacobs Project Management Co.

KTH:tto  
Attachment

c: Office of School Facilities and Support Services



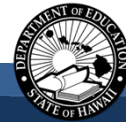
## Finance and Infrastructure Committee

July 18, 2017

### Update on Department of Education's Facilities Assessment Study

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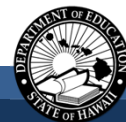
## Agenda

- Project Background
- Facility Assessment Findings
- Facility Master Plan Pilot
- Questions



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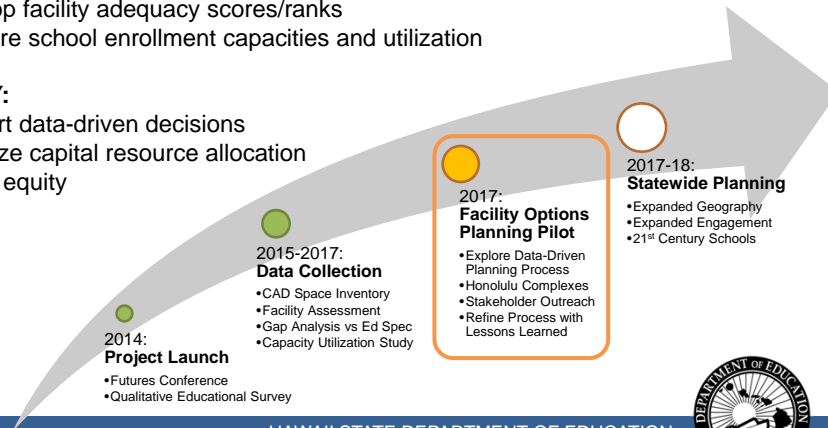
# Project Background

## The WHAT:

- Compile composite site plans/floorplans and comprehensive space inventory database
- Benchmark all facilities against Department of Education (HIDOE) facility educational standards (EDSPECS) and identify program gaps/needs
- Develop facility adequacy scores/ranks
- Measure school enrollment capacities and utilization

## The WHY:

- Support data-driven decisions
- Optimize capital resource allocation
- Foster equity



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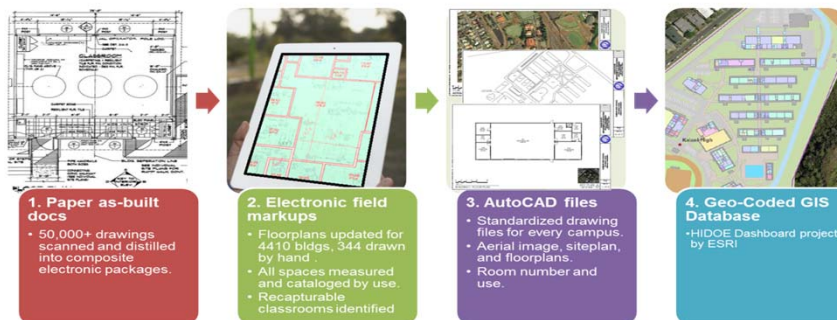
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# Facility Assessment Findings

Portfolio Overview, Facility Deficiencies, Functional Adequacy, Capacity Utilization



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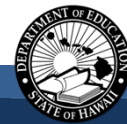
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## Portfolio Overview

- 20.7** Million net square feet (SF)
- 261** Schools (including conversion Charters)
- 4,410** Buildings
- \$7.2** Billion current replacement value  
(=\$350/SF x 20.7 million net SF)
- 62** Average school age
- 45** Average building age (weighted by SF)
- 53** Buildings over 100 years of age

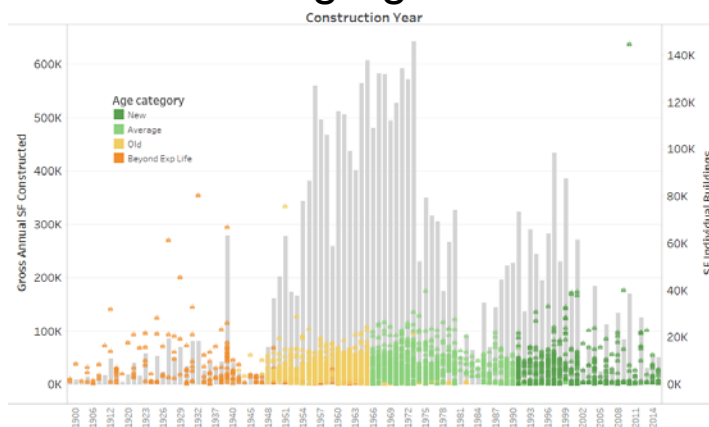


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## Building Age Profile



- Average building age – 45 years
- HIDOE school facilities are well-maintained for their age.



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# School Size Benchmarking

Grade Level	Average Enrollment			Average School SF			Average SF / Student		
	HI	US	% of Nat'l Avg	HI	US	% of Nat'l Avg	HI	US	% of Nat'l Avg
Elementary School	514	520	⇒ 99%	2,962	77,792	↓ 68%	103.0	149.6	↓ 69%
Middle School	774	705	⇒ 110%	97,310	122,177	↓ 80%	125.8	173.3	↓ 73%
High School	1,362	992	↑ 137%	193,088	172,806	↑ 112%	141.7	174.2	↑ 81%

- HIDOE school facilities have **smaller average SF/student** at all grade levels, especially at elementary school (ES) and middle school (MS) level.
- **HIDOE high schools (HS) are large compared to the mainland** (137% enrollment of US avg)

Source: Annual School Construction Report by School Planning & Management magazine

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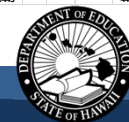
# Facility Deficiencies

- Performed gap-analysis of all schools vs. HIDOE EDSPECS
- Deficiencies and outlier conditions identified

Space Description	Middle School Enrollment Range			400-500			500-600		
	#of	Size	Total	#of	Size	Total	#of	Size	Total
<b>Classroom/Instructional Area</b>									
General Classrooms (6-8)	11	980	10780	14	980	13720			
Supplemental Classrooms	2	980	1960	3	980	2940			
<b>Special Education Classrooms</b>									
Self-Contained A	2	1800	3760	2	1800	3760			
Self-Contained Y	1	1200	1200	1	1200	1200			
Resource	1	980	980	2	980	1960			
<b>Arts &amp; BPA Classrooms</b>									
Art Classroom				1	2050	2050			
Choral Room					1940	0			
Band Room				1	3795	3795			
Music Commo					600	600			
Family & Consu				1	2500	2500			
Business Educat					1380	0			
Industrial Arts				1	3800	3800			
Industrial Tech					2960	0			
Science Classroo				4	2260	9040			
<b>Total Class</b>							30		45365
<b>Support Area</b>									
Administrative C				1	9110	9110			
Library Media Ce				1	8060	8060			
Dining/Multi-Pu				30	8600				
Food Service-Kit	1	3485	3485	1	3485	3485			
Custodial Service Center	1	500	500	1	520	520			
Faculty Center	1	980	980	2	980	1960			
Computer Resource Center	1	1200	1200	2	1200	2400			
Itinerant Room	1	330	330	1	330	330			
PE Locker Shower	1	7740	7740	1	8340	8340			
<b>Total Support Area</b>									39445

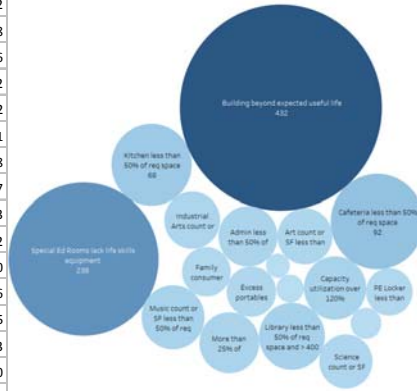
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# Major Facility Deficiencies

Capital need	Occurrences
Building beyond expected useful life	432
Special Ed Rooms lack life skills equipment	238
Cafeteria less than 50% of req space	92
Kitchen less than 50% of req space	68
Library less than 50% of req space and > 400 projected enrollment	46
Athletic Locker less than 50% of req space	42
Music count or SF less than 50% of req	42
Capacity utilization over 120%	41
More than 25% of capacity in portables	38
Admin less than 50% of req space and > 400 projected enrollment	37
Industrial Arts count or SF less than 50% of req	33
Art count or SF less than 50% of req	32
Science count or SF less than 50% of req	30
Excess portables	26
Family consumer count or SF less than 50% of req	25
PE Locker less than 50% of req space	23
PE Locker/Shower gender equity beyond 60/40 split	10
Dance/dama count or SF less than 50% of req	8
Athletic Locker/Shower gender equity beyond 60/40 split	6
High School or Middle/High Combination School w/o Gymnasium	5



# Functional Adequacy

Applied field-verified facility data to weighted rubric to develop one composite adequacy score and eight categorical adequacy scores:

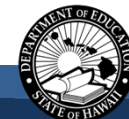
1. Gen/SPED Classrooms
2. Specialized Classrooms
3. Age of Classrooms
4. Extent of Portables
5. Administrative Center
6. Library/Computer Center
7. Food Service
8. PE/Athletics



# Functional Adequacy



- Specialized classrooms score lowest on average, especially at elementary schools
- Outlier cases exist for each adequacy category



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# Capacity Utilization

Applied field-verified facility data to consistent capacity formulas to determine:

- **Capacity:** the number of students a facility can effectively serve given its educational program
- **Utilization:** projected student enrollment divided into the capacity (expressed as %)

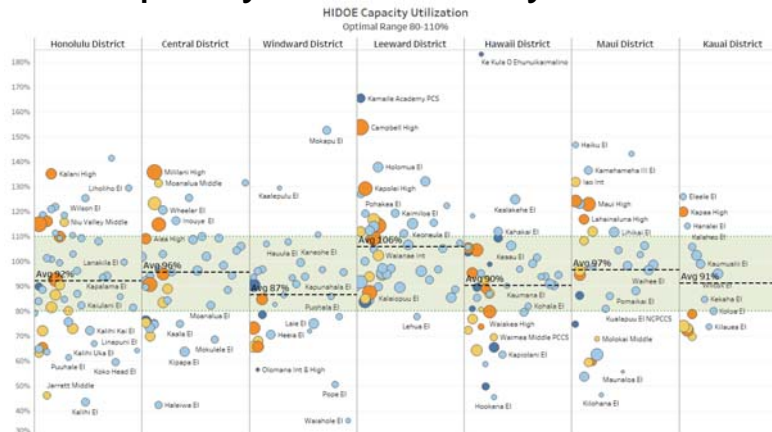


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# Capacity Utilization by District



- Every district has over and under-utilized schools
- High-growth Leeward District has highest average capacity utilization



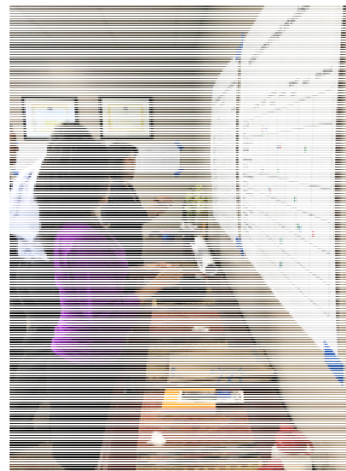
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# 2017 Facility Options Planning Pilot

- Build HIDOE leadership support for a data-driven facility planning process
- Pilot for Honolulu District
- Led by HIDOE Pilot Executive Planning Committee
- Internal stakeholder outreach
- Lessons-learned to fine-tune process for broader roll-out



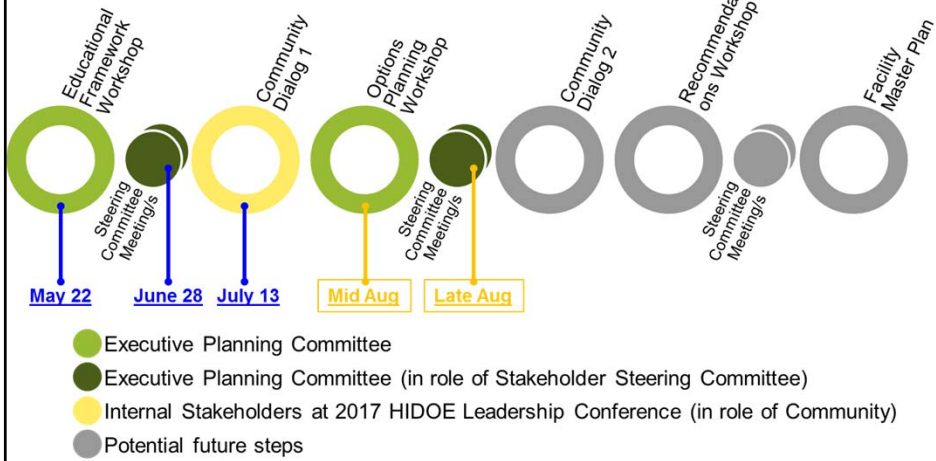
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# 2017 Facility Options Planning Pilot



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# QUESTIONS?



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