

Housekeeping Spaces & FTE Calculations

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The Future of FTE Databases

FTE value for each Housekeeping Space

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Housekeeping - Room Detail Report

Print Date 06/28/2020

Bldg #	Bldg Name	Room #	HK Use Code	HK Use Description	Gross Area	Cleanable Area	Last Data Update	FTEs
Totals: 107,454					107,454	97,379		3.2148
032A	SAS Hall	4200	CRR	Corridor	3,043	3,043	9/17/2013	0.070738
032A	SAS Hall	4201	CLS	Classroom	1,054	1,054	3/19/2014	0.049778
032A	SAS Hall	4202	OF1	Office	160	160	3/24/2014	0.001208
032A	SAS Hall	4203	ORW	Office Workstations	422	422	3/08/2017	0.003181
032A	SAS Hall	4204	OF1	Office	152	152	3/24/2014	0.001148
032A	SAS Hall	4205	RPB	Rest Room Public	269	269	9/04/2015	0.051345
032A	SAS Hall	4206	OF1	Office	159	159	3/24/2014	0.001196
032A	SAS Hall	4208	OF1	Office	161	161	3/19/2014	0.001215
032A	SAS Hall	4209	RPB	Rest Room Public	282	282	9/04/2015	0.053904
032A	SAS Hall	4210	OF1	Office	158	158	3/19/2014	0.001194
032A	SAS Hall	4212	OF1	Office	160	160	9/21/2017	0.001205
032A	SAS Hall	4213	LRN	Laboratory Research/Nonclass	365	365	9/21/2017	0.002539
032A	SAS Hall	4214	OF1	Office	161	161	9/21/2017	0.001217
032A	SAS Hall	4216	OF1	Office	160	160	9/21/2017	0.001206

Extended Views of FTE Values for Space Use Groups

Room #	HK Use Code	HK Use Description	Gross Area	Cleanable Area	FTEs
Grand Totals: 99,124				97,379	3.2148
AUD Auditorium			Totals: 2,665		0.125889
BSA Building Service Area			Totals: 92	0	0.000000
CIR Circulation			Totals: 5,036	5,036	0.117086
1100	CIR	Circulation	1,455	1,455	0.033825
2100	CIR	Circulation	2,155	2,155	0.050105
4100	CIR	Circulation	648	648	0.015056
5100	CIR	Circulation	779	779	0.018101
CLS Classroom			Totals: 13,021	13,021	0.615075
1102	CLS	Classroom	1,974	1,974	0.093235
1108	CLS	Classroom	960	960	0.045326
1216	CLS	Classroom	1,384	1,384	0.065352
1218	CLS	Classroom	693	693	0.032748
1220	CLS	Classroom	709	709	0.033481
2102	CLS	Classroom	946	946	0.044702
2106	CLS	Classroom	960	960	0.045329
2225	CLS	Classroom	1,175	1,175	0.055498
2229	CLS	Classroom	1,225	1,225	0.057843
2235	CLS	Classroom	1,269	1,269	0.059941
4201	CLS	Classroom	1,054	1,054	0.049778
5270	CLS	Classroom	674	674	0.031841

FTE Values for Each Building and Zones

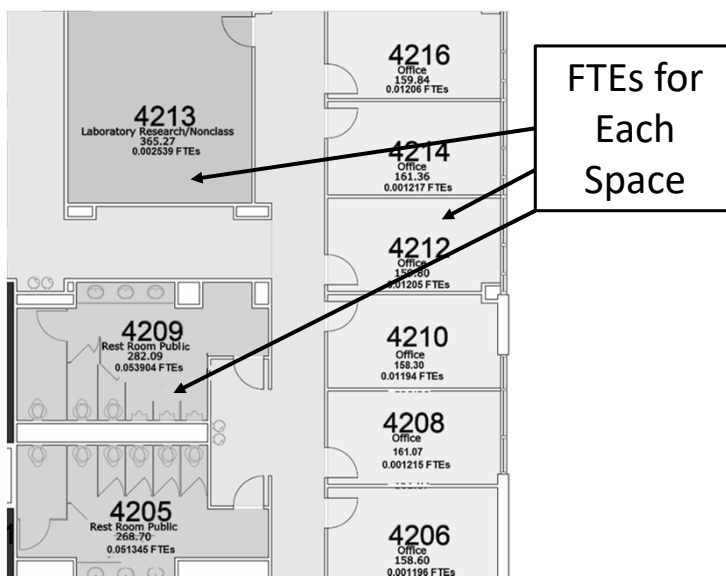
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Housekeeping - Zone Summary EXPORT

Print Date 06/28/2018

HK Zones	Bldg #	Bldg Name	Number of Spaces	HK Space Use	Cleanable SF	Gross SF	FTEs
A1	002	Memorial Belltower	1		0	146	0.002076
A1	003	Holladay Hall	147		22,598	23,171	0.588067
A1	004	Winslow Hall	61		9,069	10,739	0.378606
A1	006	Primrose Hall	25		2,791	3,069	0.130581
A1	008	Peele Hall	111		18,029	19,633	0.653862
A1	017	Information Center	1		38	38	0.003077
A1	024	Poe Hall	552		119,057	129,417	4.492759
A1	029	Yarbrough Dr Steam Plant	16		436	16,681	0.018455
A1	029B	Chilled Water Central Plant	62		14,321	34,723	0.604721
A1	030	Language and Computer Labs	35		10,877	12,621	0.544500
A1	032A	SAS Hall	366		97,379	107,454	3.233379
A1	034	Page Hall	177		24,908	26,728	0.611186
A1	043	Withers Hall	236		57,584	61,804	1.975671
A1	045	Ricks Hall	172		32,082	36,570	0.901409
A1	045A	Ricks Hall Addition	13		6,354	6,606	0.118034
A1	048	Patterson Hall	206		35,886	42,443	1.141455
A2	033	Park Shops	141		39,664	42,922	1.747459
A2	036	1911 Bldg	207		38,787	44,684	1.439072
A2	038	Daniels Hall	350		105,027	116,103	4.491268

Floor Plans Will Display



Floor Surfaces with Square Feet and FTEs for each Building

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30.07 Housekeeping Zones by Finishes

Print Date 07/02/2018

Zone	Bldg #	Building Description	Surface Code	Surface Description	Recorded Surface Area	Cleanable Area	Building Gross	FTEs
A1					501,625	445,557		
	003	Holladay Hall			23,466	22,598	29,810	
	004	Winslow Hall			9,574	9,069	14,048	
	006	Primrose Hall			2,617	2,550	3,735	
	008	Peele Hall			19,557	18,029	23,010	
	024	Poe Hall			127,780	118,018	150,982	
	029	Yarborough Dr Steam Plant			10,985	436	19,679	
	029B	Chilled Water Central Plant			34,060	13,719	38,639	
	030	Language and Computer Labs			11,056	11,029	14,084	
	032A	SAS Hall			107,354	102,943	121,617	
			CNT	CONCRETE	13,764	4,940		0.0511
			CPT	CARPET	74,021	74,358		2.0802
			GRT	GROUTED TILE	8,167	10,670		0.7691
			NSX	NO SERVICE	1,060	0		0.0000
			TRZ	TERRAZZO	3,605	6,431		0.1495
			VCT	VCT	6,737	6,544		0.1802
034	Page Hall				28,731	24,908	30,994	
043	Withers Hall				58,160	57,147	71,420	
045	Ricks Hall				36,445	32,082	44,802	
045A	Ricks Hall Addition				6,606	6,354	8,809	
046	Patterson Hall				27,234	26,677	49,988	

Crosstab Database of Floor Surface FTEs in each building

Zone	Bldg	Building Name	CARPET	CONCRETE	CONCRETE PAINTED	CONCRETE SEALED	DO NOT CLEAN	EPOXY	GROUTED TILE	LINOLEUM	LVT	MARBLE	METAL	NO FLOOR SURFACE	PAVERS	RUBBER HARD	RUBBER SOFT	RUBBER WELDED	SHEET VINYL	TERRAZZO	VCT	WOOD HARD	WOOD PAINTED	WOOD PARQUET	Total
A1		Totals	8.29901	0.29425	0.30250	0.14004	0.00000	0.00000	2.31237	0.12146	0.00319	0.13426	0.00000	0.02774	0.00000	0.04344	0.00000	0.00000	0.00000	0.33791	2.81781	0.01369	0.00000	0.00000	14.84767
	003	Holladay Hall	0.36230	0.00342					0.09001					0.02774		0.01453				0.07972	0.01517	0.00409			0.58245
	004	Winslow Hall	0.27508						0.06178			0.01072								0.01575					0.37786
	006	Primrose Hall	0.09012						0.03314											0.00355					0.12681
	008	Peele Hall	0.40272	0.02160					0.06487			0.12353								0.01707					0.62980
	024	Poe Hall	2.09359	0.07128	0.13277	0.11894			0.44607	0.09781									0.10111	1.32788					4.38945
	029	Yarborough Dr Steam							0.00752																0.00752
	029B	Chilled Water Central	0.17402		0.16973				0.04618	0.02365						0.00933					0.09396				0.51688
	030	Language and Computer	0.35832	0.00289					0.09208												0.08690				0.54019
	032A	SAS Hall	2.08019	0.16656					0.76913										0.14950	0.18017					3.34556
	034	Page Hall	0.37697	0.00185					0.12998		0.00319					0.01958				0.03266		0.00960			0.57384
	043	Withers Hall	0.76673	0.02665					0.41857										0.00386	0.79959					2.01540
	045	Ricks Hall	0.64322						0.12313										0.00372	0.12197					0.89204
	045A	Ricks Hall Addition	0.09246																	0.02181					0.11427
	046	Patterson Hall	0.58329			0.02111			0.02990											0.10132					0.73562

Converting Room Descriptions to Housekeeping Space Uses

Separating Cleanable Square Feet from Gross Square Feet

Cleaning Frequencies and how they Impact Workloads

Cleaning Time Studies – Documentation of the Evidence

The Essential Building Data Components

☐

Building Name (and Number)

☐

Room Number

☐

Room Description

☐

Size / Square Feet

Housekeeping Space Uses

Provide Regional Data for

- * Space Use Type Totals
- * Writing Work Assignments
- * Work Load Balances
- * Cleanable & Gross SF Comparisons
- * FTE Calculations
- * Any Combination of Spaces



Buildings, Zones, Regions Campuses, Departments, Etc.

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Converting Descriptions to HK Uses

Architectural Descriptions

Assistant Provost Office
Manager Office
Associate Dean Office
Dept. Supervisor Office
Lab Support Office

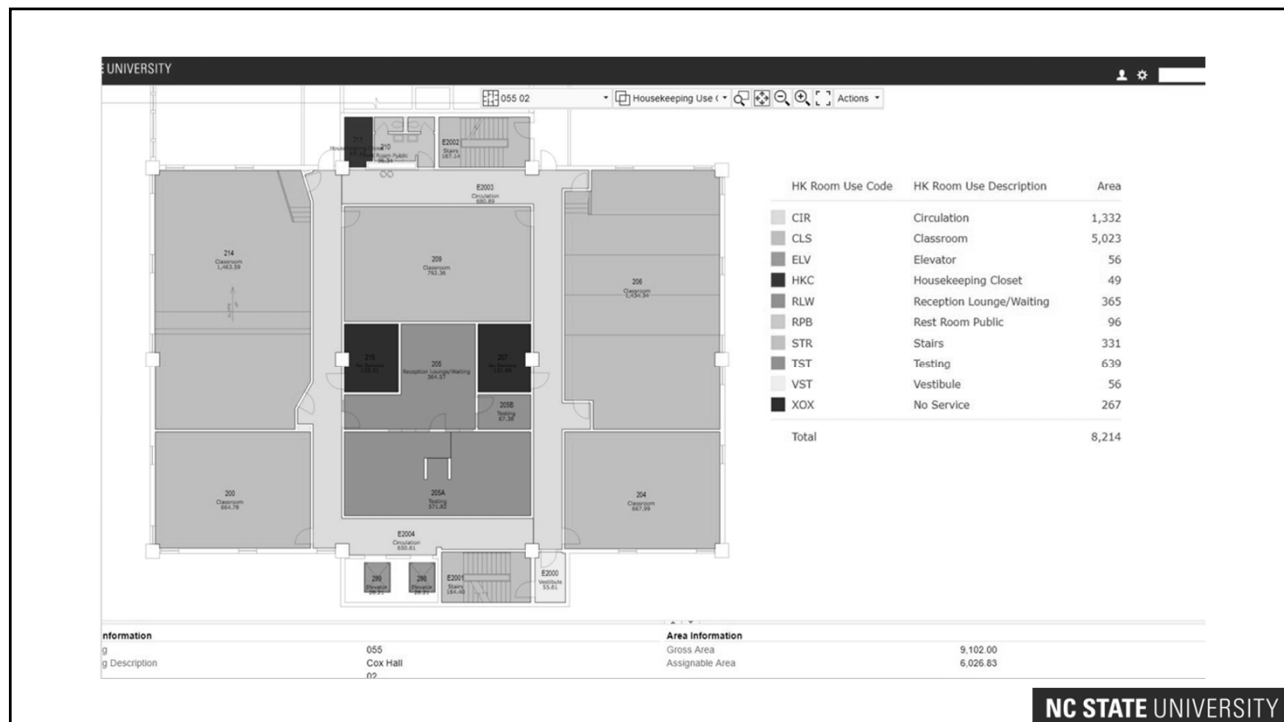
Toilet Women
Toilet Men
Toilet
Restroom Men
Restroom Women

Housekeeping Space Uses

OFFICE

RESTROOM

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Delineating Cleanable Square Feet

Identify Cleanable Housekeeping Space Uses

Assign the Number “1” to All Cleanable Space Uses

Assign a Zero “0” to Spaces Not Cleaned

Gross SF X 1 = Cleanable SF

Gross SF X 0 = 0 Cleanable SF

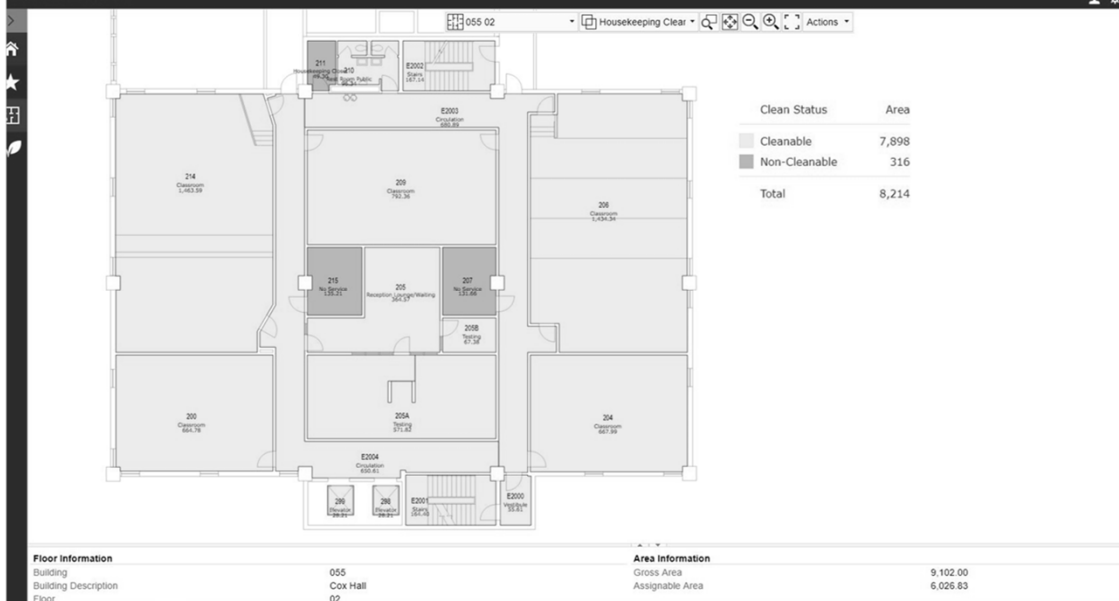
Housekeeping - Room Detail Report

Print Date 11/30/2017

Bldg #	Bldg Name	Room #	HK Use Code	HK Use Description	Gross Area	Cleanable Area	Last Data Update
Totals: 107,454					107,454	97,379	
032A	SAS Hall	2217	CST	Closet	86	86	3/04/2016
032A	SAS Hall	2219	RPB	Rest Room Public	269	269	3/04/2016
032A	SAS Hall	2221	RPB	Rest Room Public	282	282	3/04/2016
032A	SAS Hall	2223	HKC	Housekeeping Closet	83	0	9/17/2013
032A	SAS Hall	2225	CLS	Classroom	1,175	1,175	11/13/2014
032A	SAS Hall	2225A	CST	Closet	29	29	3/04/2016
032A	SAS Hall	2227	CST	Closet	29	29	3/04/2016
032A	SAS Hall	2229	CLS	Classroom	1,225	1,225	9/17/2013
032A	SAS Hall	2231	CST	Closet	33	33	3/04/2016
032A	SAS Hall	2233	CST	Closet	33	33	3/04/2016
032A	SAS Hall	2235	CLS	Classroom	1,269	1,269	11/13/2014
032A	SAS Hall	2235A	STN	Storage No Service	19	0	3/04/2016
032A	SAS Hall	2237	STR	Stairs	311	311	9/17/2013
032A	SAS Hall	3100	VST	Vestibule	614	614	9/21/2017
032A	SAS Hall	3100A	CRR	Corridor	1,618	1,618	9/17/2013
032A	SAS Hall	3100C	LOB	Lobby	245	245	9/17/2013
032A	SAS Hall	3100D	LOB	Lobby	193	193	9/17/2013
032A	SAS Hall	3108	OF1	Office	186	186	6/12/2017
032A	SAS Hall	3110	OF1	Office	141	141	6/12/2017
032A	SAS Hall	3112	OF1	Office	161	161	3/04/2016
032A	SAS Hall	3114	OF1	Office	159	159	3/04/2016
032A	SAS Hall	3115	RPB	Rest Room Public	92	92	3/04/2016
032A	SAS Hall	3116	OF1	Office	159	159	3/04/2016
032A	SAS Hall	3117	CPY	Copy / Print	97	97	3/04/2016
032A	SAS Hall	3118	OF1	Office	161	161	3/04/2016

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Housekeeping - Zone Summary Report						
Print Date 07/26/2017			FMI			
Zone	Bldg #	Bldg Name	Number of Spaces	HK Space Use	Cleanable SF	Gross SF
Grand Totals:			37,978		8,535,881	9,915,862
A1		Zone Totals:	2,045		437,231	510,951
A2		Zone Totals:	1,870		535,214	598,850
A3N		Zone Totals:	483		328,883	364,926
A4D		Zone Totals:	1,373		310,044	396,134
A4N		Zone Totals:	1,572		477,073	548,383
A5		Zone Totals:	1,957		441,570	514,479
A6		Zone Totals:	1,911		460,801	537,813
A7		Zone Totals:	1,694		356,580	398,894
A8		Zone Totals:	1,375		311,569	392,895
A9		Zone Totals:	821		224,798	246,559
AS1		Zone Totals:	950		321,939	526,486
CBC1		Zone Totals:	2,050		467,278	591,566
CBC2		Zone Totals:	416		96,391	114,291
CC1		Zone Totals:	2,657		931,715	1,042,646
CC2		Zone Totals:	2,201		617,593	738,526
H1		Zone Totals:	2,213		342,611	358,248
H2		Zone Totals:	1,249		215,197	237,853
H3		Zone Totals:	2,099		330,504	340,257
H4		Zone Totals:	1,095		200,525	211,301

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FTE DATA PREPARATION

Building Information

Group Housekeeping Space Uses

Record Cleaning Time Studies

Who? When? Where? Times

Define Cleaning Frequencies



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Group HK Space Uses into Cleaning Matrix Terms

100 +

Housekeeping Space Uses

Circulation
Corridor
Vestibule

Conference Room
Meeting Room
Study Room

40 = 25 Daily + 15 Non Daily

Cleaning Matrix Terms

Circulation

Conference Room

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25 Daily Cleaning Tasks

A01	24 HR / Service Desk
A02	Balcony
A03	Break Room
A04	Circulation
A05	Classroom
A06	Computer Lab
A07	Computer Rooms
A08	Conference Room
A09	Copy / Print
A10	Corridor
A11	Elevator
A12	Entrance
A13	Fitness Room
A14	Kitchen
A15	Laundry
A16	Lobby
A17	Lounge
A18	Mail Room
A19	Multipurpose Room
A20	Rest Room Public
A21	Restroom Suite
A22	Restrooms Gang
A23	Study Room
A24	Vending
A25	Work Room

Cleaning Matrix Terms

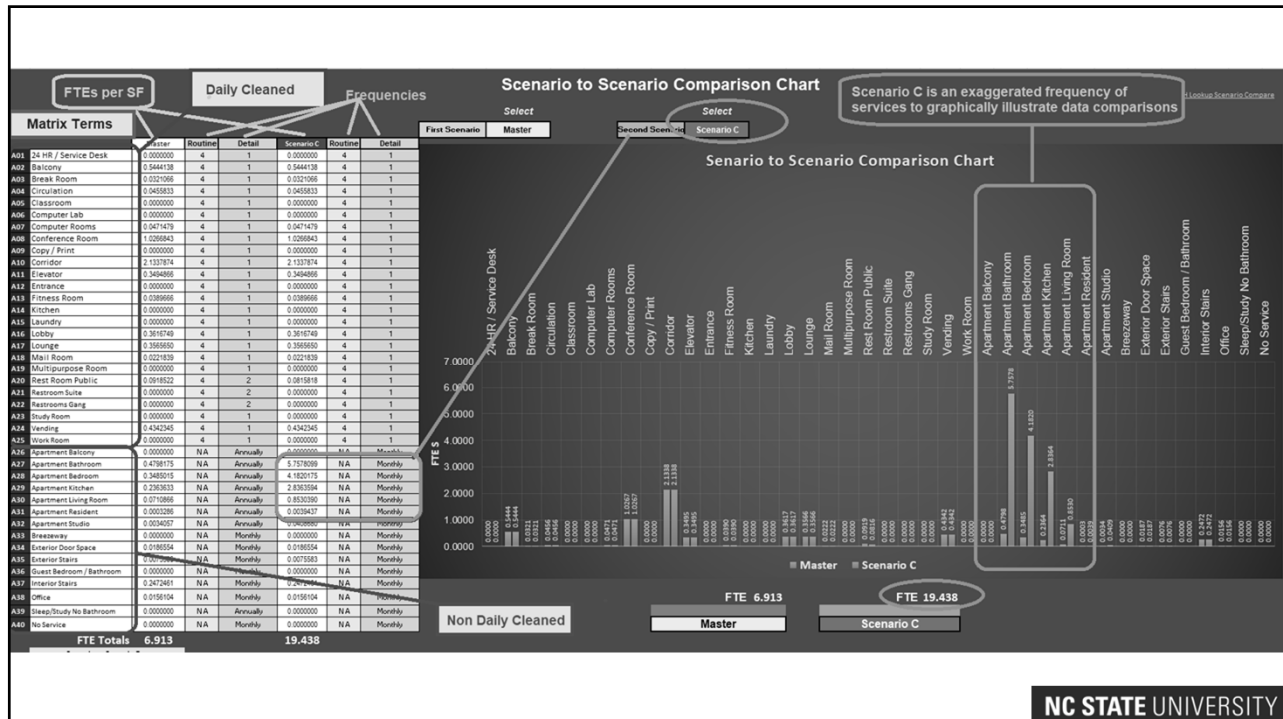
15 Non Daily Cleaning Tasks

A26	Apartment Balcony
A27	Apartment Bathroom
A28	Apartment Bedroom
A29	Apartment Kitchen
A30	Apartment Living Room
A31	Apartment Resident
A32	Apartment Studio
A33	Breezeway
A34	Exterior Door Space
A35	Exterior Stairs
A36	Guest Bedroom / Bathroom
A37	Interior Stairs
A38	Office
A39	Sleep/Study No Bathroom
A40	No Service

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A01	A02	A03	A04	A05	A06	A07	A08	A09	A10	A11	A12	A13	A14	A15	A16	A17	A18	A19	A20	A21	A22	A23	A24	A25	
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	4	4	4	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	1	1	1	
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
24 HR / Service Desk	Balcony	Break Room	Circulation	Classroom	Computer Lab	Computer Rooms	Conference Room	Copy / Print	Corridor	Elevator	Entrance	Fitness Room	Kitchen	Laundry	Lobby	Lounge	Mail Room	Multipurpose Room	Rest Room Public	Restroom Suite	Restrooms Gang	Study Room	Vending	Work Room	
0.0006539	0.0002221	0.0000888	0.0000230	0.0000739	0.0000594	0.0000595	0.0000106	0.0000903	0.0000471	0.0004055	0.0001937	0.0000540	0.0004030	0.0002073	0.0000777	0.0001292	0.0000325	0.0000379	0.0002539	0.0004328	0.0001668	0.0001035	0.0007011	0.0000848	
0.0006539	0.0002221	0.0000888	0.0000230	0.0000739	0.0000594	0.0000595	0.0000106	0.0000903	0.0000471	0.0004055	0.0001937	0.0000540	0.0004030	0.0002073	0.0000777	0.0001292	0.0000325	0.0000379	0.0002539	0.0004328	0.0001668	0.0001035	0.0007011	0.0000848	
0.0000000	0.5444338	0.0321066	0.0000000	0.0000000	0.0000000	0.0473767	1.0266843	0.0000000	2.1337874	0.3434866	0.0000000	0.0369666	0.0000000	0.0000000	0.3676745	0.3565650	0.0221839	0.0000000	0.0918522	0.0000000	0.0000000	0.4342345	0.0000000	0.0000000	
0	2,451	362	1,985	0	0	843	10,101	0	45,267	882	0	722	0	0	4,655	2,759	240	0	321	0	0	0	619	0	
0.000	0.544	0.032	0.046	0.000	0.000	0.047	1.027	0.000	2.134	0.349	0.000	0.039	0.000	0.000	0.362	0.357	0.022	0.000	0.082	0.000	0.000	0.000	0.434	0.000	
A01	A02	A03	A04	A05	A06	A07	A08	A09	A10	A11	A12	A13	A14	A15	A16	A17	A18	A19	A20	A21	A22	A23	A24	A25	
0	0	0	0	0	0	0	987	0	6,651	146	0	0	0	0	677	467	0	59	0	0	0	0	50	0	
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.100	0.000	0.333	0.059	0.000	0.000	0.000	0.000	0.053	0.069	0.000	0.000	0.015	0.000	0.000	0.000	0.035	0.000	
0	606	0	0	0	0	0	1,020	0	5,988	151	0	0	0	0	535	562	0	56	0	0	0	0	110	0	
0.000	0.135	0.000	0.000	0.000	0.000	0.104	0.000	0.282	0.061	0.000	0.000	0.000	0.000	0.000	0.042	0.073	0.000	0.000	0.014	0.000	0.000	0.000	0.077	0.000	
0	615	0	0	0	0	0	1,492	0	5,295	106	0	0	0	0	557	0	0	0	0	0	0	0	156	0	
0.000	0.137	0.000	0.000	0.000	0.000	0.152	0.000	0.260	0.043	0.000	0.000	0.000	0.000	0.000	0.043	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.109	0.000	
0	615	362	0	0	0	0	1,495	0	5,341	106	0	722	0	0	1,136	0	0	122	0	0	0	0	0	0	0
0.000	0.137	0.032	0.000	0.000	0.000	0.000	0.152	0.000	0.312	0.043	0.000	0.039	0.000	0.000	0.089	0.000	0.000	0.000	0.031	0.000	0.000	0.000	0.000	0.000	

A26	A27	A28	A29	A30	A31	A32	A33	A34	A35	A36	A37	A38	A39	A40
Annually	Annually	Annually	Annually	Annually	Annually	Annually	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Annually	Monthly
Annually	Annually	Annually	Annually	Annually	Annually	Annually	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Annually	Monthly
Apartment Balcony	Apartment Bathroom	Apartment Bedroom	Apartment Kitchen	Apartment Living Room	Apartment Reside	Apartment Studio	Breazeway	Exterior Door Space	Exterior Stairs	Guest Bedroom /	Interior Stairs	Office	Sleep/Study No	No Service
0.0000001	0.0000108	0.0000031	0.0000004	0.0000007	0.0000017	0.0000017	0.0000058	0.0000037	0.0000029	0.0000187	0.0000152	0.0000130	0.0000007	0.0000000
0.0000001	0.0000108	0.0000031	0.0000004	0.0000007	0.0000017	0.0000017	0.0000058	0.0000037	0.0000029	0.0000187	0.0000152	0.0000130	0.0000007	0.0000000
0.0000000	0.4798175	0.3485015	0.2363633	0.0710666	0.0003286	0.0004057	0.0000000	0.0186554	0.0075983	0.0000000	0.2472461	0.0156104	0.0000000	0.0000000
0	44,524	112,161	28,231	95,888	192	2,056	0	5,051	2,571	0	16,244	1,202	0	2,201
0.000	0.480	0.349	0.236	0.071	0.000	0.003	0.000	0.019	0.008	0.000	0.247	0.016	0.000	0.000
0	5,867	15,483	3,863	13,234	0	0	0	1,079	0	0	1,556	0	0	0
0.000	0.063	0.048	0.032	0.010	0.000	0.000	0.000	0.001	0.000	0.000	0.030	0.000	0.000	0.000
0	9,677	13,315	4,202	12,151	0	689	0	1,079	0	0	2,158	0	0	0
0.000	0.104	0.035	0.035	0.009	0.000	0.001	0.000	0.004	0.000	0.000	0.033	0.000	0.000	0.000
0	5,915	14,818	2,999	11,129	0	1,299	0	1,983	0	0	1,983	0	0	0
0.000	0.064	0.048	0.032	0.008	0.000	0.000	0.000	0.004	0.000	0.000	0.030	0.000	0.000	0.000
0	1,118	13,312	2,438	12,777	0	0	0	1,410	0	0	1,984	0	0	1,001
0.000	0.064	0.048	0.032	0.009	0.000	0.000	0.000	0.005	0.000	0.000	0.030	0.000	0.000	0.000



Cleaning Time Study Data

Date and Time of Day

Name of Individual Cleaning the Space

Building Name and Number with Room Location

Room Type / Space Use

Square Feet of Space

Specify Routine or Detail Cleaning



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Organize the Cleaning Time Study Data

Group Space Uses Together for each Cleaning Matrix Term

Regionalize Data According to Campus or Purpose

Separate Daily and Non Daily Cleaned Spaces

Store Time Study Info on a Central Database



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Problems with Manual Data Entry

Wrong Room Number	Entered Wrong Building
Wrong Space Use	Housekeeper in 2 locations at the same time
No Date Entered	Same Exact times repeated
No Time of Day Entered	Exaggerated Cleaning Times
Missing Housekeeper Name	Shortened Cleaning Times
No Cleaning Time Entered	Guessing of Cleaning Times
Lost Written Form	Misrepresentation of Data

How can we even prove the data is accurate when these errors reoccur ?

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Current Cleaning Time Data Collection Methods

// ENTER // ENTER // ENTER		DATE		MILITARY TIME		// HOUSEKEEPER // HOUSEKEEPER //		// AUTO-FILL // AUTO-FILL //		// SELECT // SELECT // SELECT //		// ENTER //		// SELECT //		// SELECT //		// SELECT //		// ENTER //		ENTER // ENTER // ENTER // ENTER	
Name of Semester	Name of Housekeeper	Recorded	Time of Day	Building Name	Room #	Matrix Term	Housekeeping Space Use Type	Room #	Square Feet	HOURS	MINUTES	SECONDS	ROUTINE	ROUTINE	ROUTINE	DETAIL	DETAIL	DETAIL	Comments				
Shirley	Sherry	01/24/17	10:30 AM	Peele Hall	008	1	Break Rooms	Break Room	110	143.76	0	5	5	0	10	10				Tile			
Shirley	William	02/09/17	5:30 AM	Chilled Water Central Plant	0298	1	Break Rooms	Break Room	205	195.16	0	4	55	0	9	59				Hard surface,bunisher and auto scrub			
					N/A	1	Break Rooms				0	0	0	0	0	0							
Ryan	Rachelne Balala	07/18/16	7:55 AM	Holladay Hall	009	2	Circulation/Corridors	Circulation	12	143.87	0	4	31	0	6	5				waiting area			
Shirley	Chris	02/06/17	7:00 AM	Pee Hall	024	2	Circulation/Corridors	Corridor	3000	1874.56	0	14	59	0	25	3				Tile			
Shirley	Helene	02/16/17	7:00 AM	Patterson Hall	046	2	Circulation/Corridors	Corridor	3000	1350.75	0	9	59	0	14	59							
Shirley	Rose	01/25/17	4:30 AM	Pee Hall	024	3	Classrooms	Classroom	202	1120.46	0	20	5	0	45	2							
Shirley	Chris	02/06/17	5:00 AM	Pee Hall	024	3	Classrooms	Auditorium	216	2233.29	0	30	59	0	59	1							
					N/A	3	Classrooms				0	0	0	0	0	0							

Date and Time

Building & Number

Prescribed Matrix Term

HK Space Use & SF

Routine Time

Detail Time

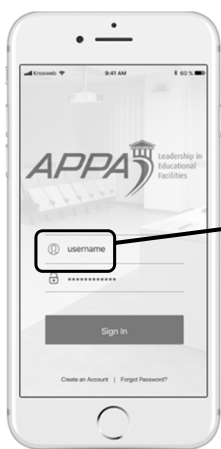
Name of Cleaner & Timer

Name of Cleaner & Timer
 Date and Time
 Building & Number
 Prescribed Matrix Term
 HK Space Use & SF
 Routine Time
 Detail Time

Biggest Complaint "I'm too busy!"

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Mobile Cleaning Time Recording Application



Home			
Instructions: Sort database by "Housekeeping Use type" and note the Sample ID # on the left from the drop down Sample ID # cells on the Daily Clean Times tabs.			
Sample ID #	Name of Sampler	Name of Housekeeper	Date
602	Android	John Smith	
603			
604			
605			
606			
607			
608			
609			

Validates who is doing the time Study

We can set it up with the employee's Unity ID or Name

The Application can be installed on any Android Device

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User Names / Passwords Management and Storage

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HOUSEKEEPING

Search

Reports

Add / Remove Employees

Employee Database

Export Options

Dashboard Options

ADD NEW EMPLOYEE

Housekeeper Name EMAIL HK Zone

☒ FULL TIME ☐ TEMP

Actions	EDIT	DELETE
☐ Example Name	name@gmail.com	HK Zone - A4 Full Time
☐ Example Name	name@gmail.com	HK Zone - B7 Temp
☐ Example Name	name@gmail.com	HK Zone - C1 Full Time
☐ Example Name	name@gmail.com	HK Zone - D6 Full Time
☐ Example Name	name@gmail.com	HK Zone - B2 Temp
☐ Example Name	name@gmail.com	HK Zone - A6 Temp
☐ Example Name	name@gmail.com	HK Zone - F8 Full Time
☐ Example Name	name@gmail.com	HK Zone - K9 Temp
☐ Example Name	name@gmail.com	HK Zone - A1 Full Time

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Step 1: Scan the Door Sign

When the Camera Takes the Picture a couple of things happen.

1. GIS records the Longitude and Latitude positions

35.785629,-78.667991
Daniels Hall


2. The Door Sign Picture becomes "TEXT"
"216" "CLASSROOM"

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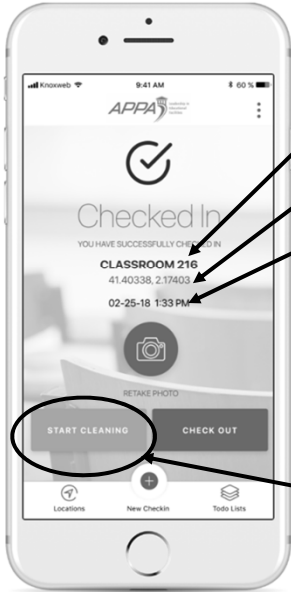
Step 2: START Cleaning Time

Notice the Text Location "CLASSROOM 216"

Longitude and Latitude

Date and Time

Building Name by GIS location

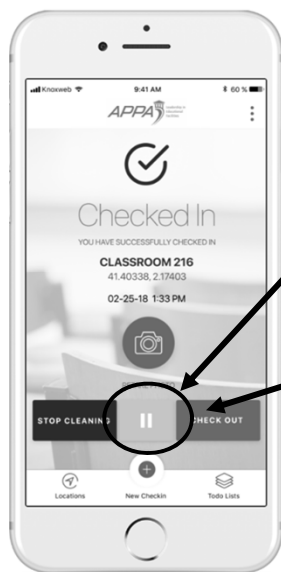


Name of Sampler	Name of Housekeeper	Date Recorded (mm/dd/yr)	Time of Day	Building Name	Build. #	Housekeeping Space Use Type	Room # or Space ID
Android	John Smith	02/25/18	1:33 PM	Daniels Hall	38	Classroom	216

Press START CLEANING to begin recording Cleaning Time

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Interruptions? Not a problem



The Housekeeper can "PAUSE" the application

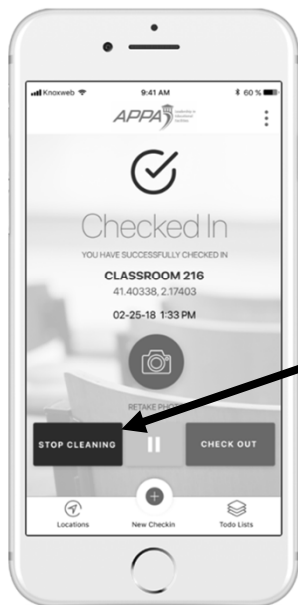
The Pause Button will convert to an Arrow



Which allows the Housekeeper to continue recording time

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Step 3: STOP the Cleaning Time



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Step 4: ROUTINE or DETAIL Cleaning Time?



The Housekeeper Must Select

DETAIL CLEANING

Or

ROUTINE CLEANING

Before They can

CHECK OUT

Cleaning Time Cloud Data Base

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	HouseKeeper Name	GPS Location	Date	Time	Building Name	Room ID	HK Space Use	HK Code	Sq Feet	Routine Hours	Routine Minutes	Routine Seconds	Routine Hours	Routine Minutes	Routine Seconds
Search	Tonya Howard	41.40338, 2.17403	10-13-17	6:00AM	Welsiger-Brown Ath Fao	135F	Computer Class Lab	2221	1689.39	00	51	41			
Requests	Sample Name	41.40338, 2.17403	01-01-17	7:51AM	Sample Building Name	22C	Example Use Type	6545	645				00	51	41
Add / Remove Employees	Sample Name	41.40338, 2.17403	01-01-17	8:34AM	Sample Building Name	59D	Example Use Type	9878	211				00	39	56
Employee Database	Sample Name	41.40338, 2.17403	01-02-17	9:21AM	Sample Building Name	45V	Example Use Type	4216	456	01	59	49			
Export Options	Sample Name	41.40338, 2.17403	01-21-17	6:45AM	Sample Building Name	56D	Example Use Type	5691	900				02	45	34
Dashboard Options	Sample Name	41.40338, 2.17403	02-24-17	6:00AM	Sample Building Name	46T	Example Use Type	9751	6200	00	47	48			
	Sample Name	41.40338, 2.17403	05-04-17	7:51AM	Sample Building Name	97S	Example Use Type	3156	784	01	45	12			
	Sample Name	41.40338, 2.17403	01-01-16	8:34AM	Sample Building Name	451	Example Use Type	3248	450	00	39	36			
	Sample Name	41.40338, 2.17403	01-01-12	9:21AM	Sample Building Name	67S	Example Use Type	4597	511				01	32	31
	Sample Name	41.40338, 2.17403	03-04-17	5:45AM	Sample Building Name	31R	Example Use Type	2397	390	00	31	11			
	Sample Name	41.40338, 2.17403	06-07-17	7:56 AM	Sample Building Name	32R	Example Use Type	3541	900				03	51	23
	Sample Name	41.40338, 2.17403	01-21-17	5:45AM	Sample Building Name	56D	Example Use Type	5691	900						
	Sample Name	41.40338, 2.17403	02-24-17	6:00AM	Sample Building Name	46T	Example Use Type	9751	6200	00	47	48			
	Sample Name	41.40338, 2.17403	05-04-17	7:51AM	Sample Building Name	97S	Example Use Type	3156	784	01	45	12			
	Sample Name	41.40338, 2.17403	01-01-16	8:34AM	Sample Building Name	451	Example Use Type	3248	450	00	39	36			

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Cleaning Frequencies

Assign Clean Matrix Terms with Cleaning Frequencies

Separate Matrix Terms into Two Groups Daily Cleaned and Non Daily Cleaned Spaces

Arrange the Two Groups in the desired Sequence

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Cleaning Frequency Percentage 260 to 1

100% Divided by 260 Work Days a Year

260 = $\frac{1}{260}$ or every day

$0.1000 \times \frac{1}{260} = 0.0003846$ FTE

$\frac{1}{2} = 0.5$ or every other day

$0.1000 \times 0.5 = 0.0500$ FTE

24 = 0.092 two times a month

$0.1000 \times 0.092 = 0.0092$

1 = 0.004 One time a year

$0.1000 \times 0.004 = .0004$

36 = 0.138 Three times a Month

$0.1000 \times 0.138 = 0.0138$

Cleaned Daily = 1 day (260 x year)

5 days a week

2 days a week (104 x year)

Equals 0.40 FTEs

	Days per Year	Frequency in %		Days per Year	Frequency in %		Days per Year	Frequency in %		Days per Year	Frequency in %		Days per Year	Frequency in %
No Cleaning	0	0.000	54	0.205	108	0.419	162	0.623	216	0.831				
1 x Year	1	0.004	55	0.212	109	0.419	163	0.627	217	0.835				
Bi Annual	2	0.008	56	0.215	110	0.423	164	0.631	218	0.838				
3 x A Year	3	0.012	57	0.219	111	0.427	165	0.635	219	0.842				
Quarterly	4	0.015	58	0.223	112	0.431	166	0.638	220	0.846				
	5	0.019	59	0.227	113	0.435	167	0.642	221	0.850				
	6	0.023	60	0.231	114	0.438	168	0.646	222	0.854				
	7	0.027	61	0.235	115	0.442	169	0.650	223	0.858				
	8	0.031	62	0.238	116	0.446	170	0.654	224	0.862				
	9	0.035	63	0.242	117	0.450	171	0.658	225	0.865				
	10	0.039	64	0.246	118	0.454	172	0.662	226	0.869				
	11	0.042	65	0.250	119	0.458	173	0.665	227	0.873				
Monthly	12	0.048	66	0.254	120	0.462	174	0.669	228	0.877				
	13	0.050	67	0.258	121	0.465	175	0.673	229	0.881				
	14	0.054	68	0.262	122	0.469	176	0.677	230	0.885				
	15	0.058	69	0.265	123	0.473	177	0.681	231	0.888				
	16	0.062	70	0.269	124	0.477	178	0.685	232	0.892				
	17	0.065	71	0.273	125	0.481	179	0.688	233	0.896				
	18	0.069	72	0.277	126	0.485	180	0.692	234	0.900				
	19	0.073	73	0.281	127	0.488	181	0.695	235	0.904				
	20	0.077	74	0.285	128	0.492	182	0.700	236	0.908				
	21	0.081	75	0.288	129	0.496	183	0.704	237	0.912				
	22	0.085	76	0.292	130	0.500	184	0.708	238	0.916				
	23	0.088	77	0.295	131	0.504	185	0.712	239	0.919				
	24	0.092	78	0.300	132	0.508	186	0.715	240	0.923				
	25	0.095	79	0.304	133	0.512	187	0.719	241	0.927				
	26	0.100	80	0.308	134	0.516	188	0.723	242	0.931				
	27	0.104	81	0.312	135	0.519	189	0.727	243	0.935				
	28	0.108	82	0.315	136	0.523	190	0.731	244	0.938				
	29	0.112	83	0.319	137	0.527	191	0.735	245	0.942				
	30	0.115	84	0.323	138	0.531	192	0.738	246	0.946				
	31	0.119	85	0.327	139	0.535	193	0.742	247	0.950				
	32	0.123	86	0.331	140	0.538	194	0.746	248	0.954				
	33	0.127	87	0.334	141	0.542	195	0.750	249	0.958				
	34	0.131	88	0.338	142	0.546	196	0.754	250	0.962				
	35	0.135	89	0.342	143	0.550	197	0.758	251	0.965				
	36	0.138	90	0.346	144	0.554	198	0.762	252	0.969				
	37	0.142	91	0.350	145	0.558	199	0.765	253	0.973				
	38	0.146	92	0.354	146	0.562	200	0.769	254	0.977				
	39	0.150	93	0.358	147	0.566	201	0.773	255	0.981				
	40	0.154	94	0.362	148	0.569	202	0.777	256	0.985				
	41	0.158	95	0.365	149	0.573	203	0.781	257	0.988				
	42	0.162	96	0.369	150	0.577	204	0.785	258	0.992				
	43	0.165	97	0.373	151	0.581	205	0.788	259	0.996				
	44	0.169	98	0.377	152	0.585	206	0.792	260	1.000				
	45	0.173	99	0.381	153	0.588	207	0.796	261	1.004				
	46	0.177	100	0.385	154	0.592	208	0.800	262	1.008				
	47	0.181	101	0.388	155	0.596	209	0.804	263	1.012				
	48	0.185	102	0.392	156	0.600	210	0.808	264	1.016				
	49	0.188	103	0.396	157	0.604	211	0.812	265	1.020				
	50	0.192	104	0.400	158	0.608	212	0.815	266	1.024				
	51	0.196	105	0.404	159	0.612	213	0.819	267	1.028				
	52	0.200	106	0.408	160	0.615	214	0.823	268	1.032				
	53	0.204	107	0.412	161	0.619	215	0.827	269	1.036				

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Upgrade FTE Calculator, Frequency Scenario - Excel

Arctic Hall-Wolf Village Apartments Bldg A

Bldg	Select Building Name Here	Bldg #	MASTER In Use	Master Select Below	FTE Total	FTE Total	Name
1	Arctic Hall-Wolf Village Apartments Bldg	222A	MASTER is the Original Starting Point		6.770	0.723	Arctic Hall-Wolf

Housekeeping Space Use Terms	FTEs per SF	Routine	Detail	Frequency		
Home	A01	Balcony	0.0000275	4	1	Weekly
Link Workbooks Set Up Instructions	A02	Break Room	0.0001127	4	1	Weekly
Import Cleaning Time Database	A03	Circulation	0.0000171	4	1	Weekly
Daily Cleaning Times Setup	A04	Computer Rooms	0.0000444	4	1	Weekly
Non-Daily Cleaning Times Setup	A05	Conference Room	0.0000465	4	1	Weekly
Scenario Compare and edit	A06	Corridor	0.0000468	4	1	Weekly
Master to Scenario Building Data	A07	Elevator	0.0001536	4	1	Weekly
Master to Scenario Chart	A08	Fitness Room	0.0000523	4	1	Weekly
Scenario to Scenario Building Data	A09	Lobby	0.0000461	4	1	Weekly
Scenario to Scenario Compare Chart	A10	Lounge	0.0000423	4	1	Weekly
Bldg to Bldg FTE Comparison Chart	A11	Mail Room	0.0001415	4	1	Weekly
Bldg to Bldg SF Comparison Chart	A12	Restroom Toilet	0.0003647	4	1	Weekly
	A13	Vending	0.0001233	4	1	Weekly
	A14	14	0.0000000	4	1	Weekly
	A15	15	0.0000000	4	1	Weekly

Home Set Up Page Cleaning Time Database Daily Cleaning Times Non Daily Cleaning Times Scenario data generator Scenario Compare

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Cleaning Frequency Scenarios

HOUSE										HOUSE									
Master					Survey	Building	Midway	Net		Adjusted Master					Survey	Building	Midway	Net	
MASTER in Use										Not in Use									
001 MASTER is the Original Starting Point										ADJUSTED MASTER or Alternative Master									
100% 13.396 0.688										100% 13.396 0.688 100%									
13.396 0.688										13.396 0.688 100%									
J. 2nd Use										J. 2nd Use									
Housekeeping Space Use Terms										Housekeeping Space Use Terms									
FTEs per SF					Routine	Detail	Frequency	FTEs per SF		FTEs per SF					Routine	Detail	Frequency	FTEs per SF	
A01	Balcony	0.0000275	4	1	Weekly	0.0000275	4	1	Weekly	A01	Balcony	0.0000275	4	1	Weekly	0.0000275	4	1	Weekly
A02	Break Room	0.0001127	4	1	Weekly	0.0001127	4	1	Weekly	A02	Break Room	0.0001127	4	1	Weekly	0.0001127	4	1	Weekly
A03	Circulation	0.0000171	4	1	Weekly	0.0000171	4	1	Weekly	A03	Circulation	0.0000171	4	1	Weekly	0.0000171	4	1	Weekly
A04	Computer Class Labs	0.0000636	4	1	Weekly	0.0000636	4	1	Weekly	A04	Computer Class Labs	0.0000636	4	1	Weekly	0.0000636	4	1	Weekly
A05	Computer Rooms	0.0000444	4	1	Weekly	0.0000444	4	1	Weekly	A05	Computer Rooms	0.0000444	4	1	Weekly	0.0000444	4	1	Weekly
A06	Copy / Print	0.0000152	4	1	Weekly	0.0000152	4	1	Weekly	A06	Copy / Print	0.0000152	4	1	Weekly	0.0000152	4	1	Weekly
A07	Corridor	0.0000468	4	1	Weekly	0.0000468	4	1	Weekly	A07	Corridor	0.0000468	4	1	Weekly	0.0000468	4	1	Weekly
A08	Exam/Treatment Room	0.0000508	4	1	Weekly	0.0000508	4	1	Weekly	A08	Exam/Treatment Room	0.0000508	4	1	Weekly	0.0000508	4	1	Weekly
A09	Elevator	0.0001537	4	1	Weekly	0.0001537	4	1	Weekly	A09	Elevator	0.0001537	4	1	Weekly	0.0001537	4	1	Weekly
A10	Fitness Room	0.0000523	4	1	Weekly	0.0000523	4	1	Weekly	A10	Fitness Room	0.0000523	4	1	Weekly	0.0000523	4	1	Weekly
A11	Lobby	0.0000461	4	1	Weekly	0.0000461	4	1	Weekly	A11	Lobby	0.0000461	4	1	Weekly	0.0000461	4	1	Weekly
A12	Lounge	0.0000423	4	1	Weekly	0.0000423	4	1	Weekly	A12	Lounge	0.0000423	4	1	Weekly	0.0000423	4	1	Weekly
A13	Mail Room	0.0001415	4	1	Weekly	0.0001415	4	1	Weekly	A13	Mail Room	0.0001415	4	1	Weekly	0.0001415	4	1	Weekly
A14	Restroom	0.0003647	4	1	Weekly	0.0003647	4	1	Weekly	A14	Restroom	0.0003647	4	1	Weekly	0.0003647	4	1	Weekly
A15	Vending	0.0001233	4	1	Weekly	0.0001233	4	1	Weekly	A15	Vending	0.0001233	4	1	Weekly	0.0001233	4	1	Weekly
A16	14	0.0000000	4	1	Weekly	0.0000000	4	1	Weekly	A16	14	0.0000000	4	1	Weekly	0.0000000	4	1	Weekly
A17	15	0.0000000	4	1	Weekly	0.0000000	4	1	Weekly	A17	15	0.0000000	4	1	Weekly	0.0000000	4	1	Weekly
A18	Feeding	0.0000126	4	1	Weekly	0.0000126	4	1	Weekly	A18	Feeding	0.0000126	4	1	Weekly	0.0000126	4	1	Weekly
A19	Security	0.0000018	4	1	Weekly	0.0000018	4	1	Weekly	A19	Security	0.0000018	4	1	Weekly	0.0000018	4	1	Weekly
A20	Survey	0.0000048	N.A.	N.A.	Monthly	0.0000048	N.A.	N.A.	Monthly	A20	Survey	0.0000048	N.A.	N.A.	Monthly	0.0000048	N.A.	N.A.	Monthly
A21	Training	0.0000002	N.A.	N.A.	Monthly	0.0000002	N.A.	N.A.	Monthly	A21	Training	0.0000002	N.A.	N.A.	Monthly	0.0000002	N.A.	N.A.	Monthly

Scenario	Master Select Below	FTE Total	FTE Total	Scenario	Master Select Below	FTE Total	FTE Total	Scenario	Master Select Below	FTE Total	FTE Total	Scenario	Master Select Below	FTE Total	FTE Total	Scenario	Master Select Below	FTE Total	FTE Total
001 MASTER In Use	100%	13.396	0.688	001 MASTER In Use	100%	13.396	0.688	001 MASTER In Use	100%	13.396	0.688	001 MASTER In Use	100%	13.396	0.688	001 MASTER In Use	100%	13.396	0.688
002 MASTER is the Original Starting Point	100%	13.396	0.688	002 MASTER is the Original Starting Point	100%	13.396	0.688	002 MASTER is the Original Starting Point	100%	13.396	0.688	002 MASTER is the Original Starting Point	100%	13.396	0.688	002 MASTER is the Original Starting Point	100%	13.396	0.688
003 MASTER is the Original Starting Point	100%	13.396	0.688	003 MASTER is the Original Starting Point	100%	13.396	0.688	003 MASTER is the Original Starting Point	100%	13.396	0.688	003 MASTER is the Original Starting Point	100%	13.396	0.688	003 MASTER is the Original Starting Point	100%	13.396	0.688

- Example: 1,000 SF Restroom, 2 hours to Detail Clean, 1 x Week (= 120 Mins)
- 1 Hour to Routine Clean, 4 x Week (= 240 Mins), 120 Mins + 240 Mins = 360 Mins per Week
- 360 Mins per week / 5 Days = 72 Average Daily Minutes
- 8 Hours in a day (8 x 60 = 480 Minutes) – 60 mins = 420 Daily Work Minutes
- Two 15 Minute breaks = 30 Mins for meetings, travel and setup & tear down time
- 72 Average Daily Minutes / 420 Daily Work Minutes = 0.17142869 Raw FTEs
- 100 Employees have 10,000 hours of vacation time, 10000 / 100 = 100 hours Average Vacation Time
- FTE Allowance: Divided by Total Combined Hours Worked per Staff Member
- 100 hours of Average Vacation Time / 1000 Total Combined Hours = 10% or .10 as the FTE Allowance Fraction
- So multiply the 0.17142869 Raw FTE x FTE Allowance Fraction .10 = FTE Allowance 0.0171428
- Then Add: 0.17142869 Raw FTE + FTE Allowance 0.0171428 = 0.1885714 Total FTE
- Dividing 100 by 260 we can multiply the base Daily FTE 100 division (%)
- Example: The Space FTE is 0.181225 , Cleaned daily it would be $0.181225 \times 1 = 0.181225$ FTEs
- If It is done once a month it would be $0.181225 \times .046 = .0083363$ FTEs
- If we want to calculate the FTEs per Square feet, We divide the Daily FTE by the SF of the Space Use
- Daily FTE of Space = $0.181225 / 100 \text{ SF} = .0018122$ FTEs per SF



Simplification with Unification

Standardize Housekeeping Space Use Terms

Setup Process Collaborate and Assist Institutions

Simplify Cleaning Time Study Procedures

Mutual Calculation Methods for All Institutions



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Benefits of Standardization

Sharing Ideas

Designing Better Systems

Make it Easier to Operate and Present

Simplify Service Agreement Estimates

Validate Staffing and Funding while Saving Jobs



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QUESTIONS?

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The FTE Grading Curve

100% Assumes Every Space Needs Cleaning

FTE Percentage Adjustment Console				Master / Zone		Sent to																							
Master FTE % Curve	Adjust	Zone	Select	Calculator																									
A1 HK Zone FTE % Curve	75%	Master	100%																										
A2 HK Zone FTE % Curve	75%	Master	100%																										
A3N HK Zone FTE % Curve	75%	Master	100%																										
A4D HK Zone FTE % Curve	75%	Master	100%																										
A4N HK Zone FTE % Curve	75%	Master	100%																										
A5 HK Zone FTE % Curve	75%	Master	100%																										
A6 HK Zone FTE % Curve	75%	Master	100%																										
CC1 HK Zone FTE % Curve	75%	Master	100%																										
CC2HK Zone FTE % Curve	75%	Master	100%																										

Holiday Hall

003

MASTER is the Original Starting Point

100%

15.396

0.588

FTE Percentage Adjustment Console

100%

No Curve

100%

15.396

0.588

Buildings FTE and SF Linked Master				100%	Housekeeping Space Use Terms									
Home	A01	Break Room		0.0000834	4	1	Weekly	0.000	0.152					
Link Workbooks Set Up Instructions	A02	Circulation		0.0000232	4	1	Weekly	0.089	2.445					
Import Cleaning Time Database	A03	Classroom		0.0000472	4	1	Weekly	0.000	2.170					
Daily Cleaning Times Setup	A04	Computer Class Lab		0.0000570	4	1	Weekly	0.000	0.880					
Non-Daily Cleaning Times Setup	A05	Conference Room		0.0000806	4	1	Weekly	0.102	1.968					
Scenario Compare and edit	A06	Copy / Print		0.0001012	4	1	Weekly	0.033	0.774					
Master to Scenario Building Data	A07	Elevator		0.0002656	4	1	Weekly	0.046	0.371					

The Adjustable Percentage Cleaning Curve recognizes Cleaning Flexibilities

FTE Percentage Adjustment Console				Master / Zone		Sent to																							
Master FTE % Curve	Adjust	Zone	Select	Calculator																									
A1 HK Zone FTE % Curve	75%	Zone	75%																										
A2 HK Zone FTE % Curve	75%	Master	100%																										
A3N HK Zone FTE % Curve	75%	Master	100%																										
A4D HK Zone FTE % Curve	75%	Master	100%																										
A4N HK Zone FTE % Curve	75%	Master	100%																										
A5 HK Zone FTE % Curve	75%	Master	100%																										
A6 HK Zone FTE % Curve	75%	Master	100%																										
CC1 HK Zone FTE % Curve	75%	Master	100%																										
CC2HK Zone FTE % Curve	75%	Master	100%																										

Holiday Hall	Bldg #	003	MASTER is the Original Starting Point	Below	Total	Total												
				75%	11.547	0.441												
				100%	15.396	0.588												
Buildings FTE and SF Linked Master			100%	Housekeeping Space Use Terms														
Home	A01	Break Room		0.0000834	4	1	Weekly	0.000	0.114									
Link Workbooks Set Up Instructions	A02	Circulation		0.0000232	4	1	Weekly	0.067	1.834									
Import Cleaning Time Database	A03	Classroom		0.0000472	4	1	Weekly	0.000	1.628									
Daily Cleaning Times Setup	A04	Computer Class Lab		0.0000570	4	1	Weekly	0.000	0.660									
Non-Daily Cleaning Times Setup	A05	Conference Room		0.0000806	4	1	Weekly	0.077	1.476									
Scenario Compare and edit	A06	Copy / Print		0.0001012	4	1	Weekly	0.025	0.581									
Master to Scenario Building Data	A07	Elevator		0.0002656	4	1	Weekly	0.034	0.278									

FTE % Curve Changes Zone A1 Restroom Total

100% = 2.359 FTEs

75% = 1.769 FTEs

