Massachusetts Institute of Technology

Housing Replacement Analysis Project
(HRA)
Discovery

–

Undergraduate Housing:
Current Business Process Timelines

Version 1.2

HRA
Undergraduate Housing
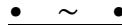# Current Business Process Timelines

MIT DSL

● ~ ●

Document History

Version	Description	Author	Date
1.1	Initial Document	R. Runnion	2012/06/04
1.2	Updates based on User Review & Feedback	R. Runnion	2012/06/22

HRA – Housing Replacement Analysis Project

Current Business Process Timelines
Prepared by R. Runnion   CONFIDENTIAL   IST

Massachusetts
Institute of
Technology

HRA
Undergraduate Housing
Current Business Process Timelines
MIT DSL

● ~ ●

TABLE OF CONTENTS

1. HRA Current Business Process & Timelines

1.1. *[Undergraduate Housing]*

1.1.01. Freshman Housing Allocation Process - Overview

Student Housing at MIT is comprised of several different business areas and enterprise systems working in conjunction. MIT Housing itself, governed by the Office of the Dean for Student Life, is comprised of several functional subdivisions with shared responsibility, providing both Graduate and Undergraduate services – among these are Housing Financial Services, Central Housing, Residence Hall Housing Managers, and Conference & Guest Services. Though the Central Housing Office is ultimately responsible for the process, there are several other MIT stakeholders with a direct or indirect effect upon the overall housing business mechanism during the course of an academic year. These stakeholders include (but are not limited to) Admissions, IS&T, Student Financial Services, the Card Services Office, the Security and Emergency Management Office, Institutional Research, the International Students Office, and the Registrar.

The inherent complexity of the cooperative interdepartmental business process the MIT Housing represents is further complicated by the wide array of technologies utilized amongst constituent business areas. Integration of these disparate systems of record is accomplished through means both automatic and manual, with a heavy emphasis on the latter in much of the process. A history of proprietary, functionally-isolated implementations between departments often requires that the same data be entered in two or three different places at a time, or that several interfaces must be monitored and collated to compose a single cohesive report.

This document focuses on several key aspects of Undergraduate Housing at MIT, with an overview of the interwoven business process taking place within an academic cycle. The steps below represent key operations for both incoming freshmen and continuing upperclassmen, anchored by the Central Housing Office, but involving the many different stakeholders and systems referenced above.

1.1.02. <u>Freshman Housing Allocation Process - Timeline</u>

Step ID[#]	Step Title	Systems [Stakeholder]	Description
FRA-001	**Freshman Application to MIT**	MyMIT [Admissions]	Freshman applies for Admission to MIT via custom Online Admissions system
FRA-002	**Admissions Record Created**	Stargate [Admissions]	Application & Biographical Record created by MyMIT connection to Stargate DB
FRA-003	**Feed to MITSIS**	Datafeed Engine [IS&T]	Biographical & Application records sent to MITSIS
FRA-004	**MITID Assignment**	MITiD App [Registrar]	Automatic Matching & Synchronization between MITSIS & MIT ID DB » Ambiguous or problematic records matched by hand
FRA-005	**Admissions Decision**	Stargate [Admissions]	Decision Entered in Stargate by Committee
FRA-006	**Feed to MITSIS – Decision**	Datafeed Engine [IS&T]	
FRA-007	**MITSIS - Conversion to Student**	MITSIS [Registrar]	

FRA-008	**Housing Annual Setup & Configuration**	MITSIS [HFS]	Housing Financial Services (HFS) Accounting
			» Enrollment Management Group (MIT Corporation)
			  • Reviews rate proposal for the academic year
			    – process begins in October
			    – rates finalized in March
			  • Reviews all budgetary implications
			  • Votes to Approve/Disapprove/Amend
			» Billing Rate Setup [Room Rate + House Tax]
			  • Coordinated annual rooming rate setup with SFS
			  • HFS Accounting inputs fall room rates into MITSIS
			» HFS Accounting updates building/room definitions in MITSIS

FRA-009	**Housing SURVEY Open to Freshmen**	Qualtrics [IR]	Solicitation via Mass Email » Freshmen surveyed on building & lifestyle preferences
FRA-010	**Survey Results Extracted**	Qualtrics + Excel / CSV [IR]	MASTER FILE » Excel/CSV download of students + preferences • Contains MIT ID/Kerb ID, preferences, manual assignments, notations
FRA-011	**Massaging of Survey Data**	Excel [Housing + IR]	Results in unified <u>Survey Master File</u> to be utilized by Lottery Process
FRA-012	**Lottery Process Setup {Genjob: SLPHMAWCL}**	MITSIS [SFS]	Student Financial Services (SFS) » Executed via MITSIS Oracle Form » Loads Weighted Average rate into Housing Table for specified term
FRA-013	**Lottery Process Setup {Genjob: SLPHAFAWC}**	MITSIS [HFS]	Housing Financial Services (HFS) Accounting » Loads freshmen into generic housing assignments DORM=FRESH, Room=0

FRA-014	**July Housing Billing Assessment**	MITSIS [HFS]	Bills freshmen for weighted average residential fee Calculated according to MITSIS room rate configuration for the specified term Central Housing Office will Notify IR (Jag) by email when complete to initiate the next step
FRA-015	**Spaces File Extracted**	FileMaker + CSV [Housing]	Spaces File to be utilized by Lottery Process » Establishes Capacity & Gender Ratio per building
FRA-016	**Building Lottery Executed**	"Lottery Blackbox" [IS&T]	Students matched with a BUILDING (not rooms) by custom algorithm, according to collective evaluation of survey & availability » Input: Survey Master + Spaces files » Output: Building Lottery Results File returned as CSV & evaluated by IR+Housing
FRA-017	**Building Lottery Results File Delivered**	Excel / CSV + Emacs + PGP + FTP + Datafeed Engine [Housing + IR]	Building Lottery Results file placed in Secure Dropbox (for import into MITSIS) » Contains MIT ID & Building » Encrypted using PGP prior to dropbox placement » Fed back to MITSIS by datafeed
FRA-018	**Lottery Results Import to MITSIS {Genjob: SLPHAFIMP}**	MITSIS [HFS]	Genjob loads freshmen into Actual DORM, Room=0 » Always done AFTER the July assessment (students are not supposed to see or be billed for real dorm until August)
FRA-019	**Lottery Results File Parceled ("The SLICE")**	Excel [Housing]	Extract parceled out by building to divide lists of people for sending to House Managers
FRA-020	**"Room Assignment Questionnaire" Results Delivered**	Microsoft Office [Housing]	Second half of Housing Survey extracted & parceled out by building to divide into distinct lists for determination of actual room assignment within lottery-set residence » Mailmerge to decode CSV, create PDF Listing of Rooming Preferences • *more data from original Qualtrics Survey* • *sorted by Building+Alphabetical* » Manually-Separated for distribution » Rooming Preferences Delivered to Housemasters, HouseMgrs & Rooming Chairs
FRA-021	**Internal Residence Allocation**	Excel + PDF [Housing]	Coordinated process to locate appropriate floor & room for each resident » Rooming Chairs within the building establish optimal assignments floor-to-floor
FRA-022	**Actual Room Assignments Returned**	Excel [Housing]	Actual room assignments returned to Housing Central by Room Chairs » House Managers are Cc'd (this is how they receive the actual assignments to put in using SISTIM) • And also how they get the final residence list for check-in & CCURE building access cross-reference » Housing Room Assignments entered into SISTIM by 3rd Week of July

FRA-023	**Actual Room Assignments input to MITSIS**	SISTIM + MITSIS [Housing]	Posted in MITSIS after July Assessment date » But before results are posted to STUDENT
FRA-024	**Residence Card Access Established (Building Security System)**	CCURE via Citrix [Housing + SEMO]	CCURE Card Access System Operated & Maintained by SEMO » Freshman identities imported from CSGold (Card Office software suite) » Clearance activated as soon as housing assignment becomes active » Upperclassman clearances input by House Manager into CCURE one at a time by MIT ID
FRA-025	**Ultimate Results Master File Compiled**	FileMaker + CSV [Housing]	Listing File now includes both BUILDING + ROOM NUMBER
FRA-026	**Housing Lottery Results Posted Online**	Excel + Web [Housing+IS&T]	Results posted on & hosted by MIT Residential Life Website » IR(Jag) gives Jeff a CSV file to post to the Web server » Visible to freshmen as "Freshman Lottery Website" • If Dining Plan required for residence, LINK is on this page to send student to Campus Dining Plan Survey (Odyssey HMS)
FRA-027	**Housing Agreements (Licenses) Solicited & Signed**	Web + Odyssey HMS [Housing]	» {MIT RLP webpage} Same results site requests that each resident reads and signs their housing agreement by checking a box right there (pre-2012) » {Odyssey} License Signing File Uploaded for Signature Solicitation (2012)
FRA-028	**MIT Directory Address Load Executed {Genjob: SPPPETAL}**	MITSIS [Registrar]	Student Directory Data loaded into MITSIS/WebSIS » Address based upon pre-configured parameters, according to the building to which resident is assigned
FRA-029	**Student Move-In to Residence Hall**	FrontDesk System [Housing]	Residential check-ins and preparatory work separately handled by each House Manager » Often assisted by proprietary electronic front desk management system
FRA-030	**Adjustment Period (Formerly Adjustment Lottery)**	FileMaker + MITSIS [Housing]	Post-Lottery Moves handled *ad hoc* by central Housing Office staff » Special move requests handled in the last two weeks before Registration Day » Must be completed & input to MITSIS before September Assessment deadline
FRA-031	**MIT Registration Day**	MIT OnlineReg System [Registrar]	Student Enrollment Begins » "Registered" Status established in MITSIS
FRA-032	**September Housing Billing Assessment**	MITSIS [HFS]	Resident Billed at (adjusted, if necessary) rate of actual building & room assignment » Performed by HFS administrative staff via MITSIS Oracle Forms » Billing assessed at a daily rate » Any adjustments must be processed prior to SFS monthly account statement run • Otherwise adjustments would carry over to the following month

FRA-033	**Ad Hoc Housing Moves & Adjustments**	MITSIS+SISTIM [HFS / HouseManager / CentralHousing]	Additional moves & adjustments (as necessary) performed by Housing staff throughout the academic year

1.1.03. <u>Undergraduate Housing Allocation Process – Upperclass & Exceptions</u>

Step ID#	Step Title	Systems [Stakeholder]	Description
UGA-001	**Continuing Students: Fall Assignments Rolled to Spring {Genjob: SLRROLL}**	MITSIS [HFS]	HFS Staff executes genjob to create future Spring housing assignments based upon current Fall assignments » May be executed for entire undergraduate population or on a per-residence-hall basis » Applies to both freshmen & upperclassmen who are continuing enrollment for the spring term
UGA-002	**December Housing Billing Assessment**	MITSIS [HFS]	Establishes Undergraduate billing for Spring Semester assignments

UGA-003	**Process Undergraduate House Tax {Genjob: SLPRATAX}**	MITSIS [HFS]	[House Tax]
			» Funds dorm government/social programs & dues to inter-dormitory council
			» Prior to Fall 2012:
			    – *charged monthly for Grads*
			    – *semester-based charge for Udnergrads*
			    – *handled according to room assignment type*
			» As of 2012, MOVING TO A ONCE-PER-YEAR PROCESS in March
			  • Annual Setup Process Includes House Tax rate setup
			» SFS bills individuals after HFS performs this tax assessment to generate the charge

UGA-004	**Process Summer Housing**	FileMaker + MITSIS [CentralHousing + HFS]	Summer Housing System of Record is the Summer Housing FileMaker Database » Maintained by Central Housing Office » Assignments made in conjunction with HFS and House Managers
UGA-005	**Undergraduate Billing Assessment for Summer Semester**	MITSIS [HFS]	HFS Runs Assessment Post-Commencement, Early June » HFS waits until they have the OK from Central Housing, but not past the SFS billing deadline. » House managers have a deadline depending on the SFS schedule (usually a couple of days before) to input all of the Undergraduate students in MITSIS for the summer. Sumer Billing Performed Manually by SFS » Because there are usually so many changes that it is easier for them to input each charge, instead of fix changes to accounts

UGA-006	**Allocation Lottery: Fall & Spring (December/April)**	Excel + Web [Housing]	[Allocation Lottery]
			Fills known vacancies in MIT Housing each semester
			  » Lottery entrants solicited to submit application via Housing Website
			    • Must apply to be considered (this includes those already on the Waitlist)
			
			  » Housing Applicants processed in two Groups with differing methodologies:
			    • [Group A] Previous Waitlist candidates, First-Come-First-Served Priority
			      – Sorted in date-applied order
			      – Preferences & Current Residence evaluated
			    • [Group B] All other Lottery Applicants, Random-order Priority
			
			  » Vacancies may also be generated from Move/Transfer Requests
			    • Additional empty rooms are generated in the process of fulfillment, and supplement initial lottery vacancies
			
			  » Entrance into the Allocation Lottery is a binding commitment
			
			  » Students must accept the results & assume residency
			    • However, no allocations are ever made outside of an entrant's three submitted preferences

UGA-007	**Internal Fall Residence Allocation for Upperclassmen**	Excel + PDF [Housing]	Coordinated process to locate appropriate floor & room for each resident » Rooming Chairs within the building establish optimal assignments floor-to-floor

UGA-008	**Process Early Returns**	FileMaker [CentralHousing]	[Early Returns (ER) is FileMaker Database]
			  » System of record for tudents participating in Orientation/Pre-Orientation Programs, etc.
			
			  » Applications submitted in July via Housing Websites
			    • *about 500 people generally*
			    • *You must be on authorized list AND have applied to receive an assignment*
			
			  » Fall assignment is pulled in from Confirmations DB
			    • *Everything else datawise is input via the ER application data*
			    • *Check to see if person is in summer housing; generally these people don't need early return*
			
			  » Meetings with Housing in May regardign expected participation and availability
			    • Decisions in June about actual Housing availability
			
			  » If students show up without a predetermined Early Return, they will be billed a flat rate
			    • ~$595 as of 2012

UGA-009	**Monthly One-Time Fees Assessment {Genjob: TSRINOTF}**	Excel + MITSIS [HFS]	» Excel Spreadsheet Template used by House Managers to Submit lists of charges to HFS » Excel Template generates flat file for use with TSRINOTF genjob » Genjob TSRINOTF Executed Monthly • Ahead of SFS Billing Deadline • Used to generate housing charges and transmit them to SFS
UGA-010	**Confirmations Database**	FileMaker [CentralHousing]	[Confirmations Database] Ad Hoc reporting for on-campus residential assignments • BUILDING-ONLY – Does not track rooms » Used by central office staff and shared with RLSLP (GRTs, Housemasters) • until students are actually on campus/term has started, they can't be looked up in directory » Records housing confirmation/cancellation status & reason – class year – listing by MITiD/Kerb • Shows whether resident has signed UG housing confirmation form » Changes made concurrently with MITSIS database changes Central Office uses this dataabse to help generate residency list for house managers at end of year/beginning of summer, in prep for following year » Student Room Assignment Chairs in each building use residency lists from this DB to begin fall allocation
UGA-011	**Vacancy Reporting**	FileMaker [CentralHousing]	[Vacancy Database] Manually-entered list of all known vacancies across residence halls » Counts total vacancies only, not specific rooms » House Manager updates central office periodically (each term) » Central finds out about vacancies only when someone cancels their housing/moves dorms • Reporting done via a special web form (on main Housing site) – Information goes through Confirmations DB – Notification goes to House manager via email

UGA-012	**Waiting List Tracking**	FileMaker [CentralHousing]	[Waiting List Database]
			Tracks students awaiting a possible MIT Housing assignment
			» Students who have not previously received an MIT Housing allocation may submit Housing Request Form
			  • *Also used for: transfers, exchange, early return, back form withdrawal, etc.*
			» Mailing list for housing requests*<residence@mit.edu>*
			  • *Contact list for office*
			    – *NOT an RT queue, just a list*
			  • *Website Form sends emails to this list*
			
			» Manual Entry into WaitList DB based on these emails
			  – *No import process in use currently*
			   ~ *less than five per day*
			  – *Date of original application maintaned through updates*
			
			» FM functionality used for sorting & priority
			  – *addressed in order of application, but according to preferences*
			  • *Once opening becomes available, Housing staff MANUALLY TYPE EMAIL, record a flag to note that an offer has been made*
			    – *student has certain number of days to respond (variable)*
			    – *email contains contact info for house manager (nothing about billing rates in this message)*
			
			» Waiting List membership can last multiple terms
			  • *Only about ~25% of waiting list members are offered rooms*
			    – When student responds, response goes to Central Office
			    – *Official noitification/confirmation goes back out to both House Manager & to Student*
			     ~ *300 requests per term*

UGA-013	**Off-Campus Housing**	[MIT OCH]	MIT Off Campus Housing assists students seeking off-campus housing throughout the year