To: Joseph Shepherd, Vice President of Student Affairs

From: Advisory Committee on Residential Life

Diandra Almasco (Blacker House president), Sarah Crucilla (COUCH member), Catherine Day (Avery House president), Kevin Gilmartin (faculty and dean of undergraduate students), Tom Mannion (senior director of student activities and programs), Rachael Morton (IHC chair), Richard Murray (faculty), Antonio Rangel (faculty, ACRL chair), Candace Rypisi (director of student-faculty programs), Sakthi Vetrivel (ASCIT president), Jarrid Whitney (admissions director)

Date: March 16, 2017

Subject: Recommendations on how to allocate rooms in Bechtel-Marks-Braun to continuing students

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INTRODUCTION

The launch of the Bechtel residence in Fall 2018 raises the question of how to update the various room pick processes in order to accommodate this change. The ACRL was tasked by Joseph Shepherd with making recommendations on how to update this process.

This report describes the committee’s consensus recommendations on how to allocate rooms in Bechtel and Marks-Braun to continuing students. The committee is also working on an updated process for allocating rooms to new students, which will be addressed in a future report.

Three guiding principles have played a key role in shaping these recommendations. First, our desire is to identify a process that maximizes the residential life experience for Caltech undergraduates. Second, given the important role that Bechtel will play in undergraduate residential life going forward, we have favored policies that give the new residence a good chance at being successful in the initial years. Third, the ACRL is committed to using data and experimentation to find out what is working and what is failing in our residential life system, and to carry out experiments to explore how to improve the system. Thus, the process proposed here will be re-evaluated yearly and we expect that the process will suggest ways to improve it further.

Our report provides recommendations for key features of the updated process, but leaves many execution details to the Housing Office, since they will be the ones implementing it.
OUTLINE OF RECOMMENDED PROCESS

| Step 1: Housing Office randomly assigns a unique priority number (uPN) for every continuing student | The goal of this number is to facilitate the house and room-pick processes. In the past, houses have used these uPNs to determine their internal room pick lottery numbers. uPNs will not be used for the first opt-in Bechtel-Marks-Braun application process.  
We encourage the houses to determine and release their internal room-pick lottery numbers shortly after the uPNs are released, and sufficiently before the deadline for step 2, in order to inform students’ choices. |
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<td>Target date for 2018 = April 6</td>
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| Step 2: Deadline to submit applications for eligibility to participate in round 1 of Bechtel-Marks-Braun room picks | The goal of these applications is to identify students who are interested in participating in the first round of room picks in Bechtel and Marks-Braun, as well as their preferences for different types of living arrangements within those locations.  
See below for details on the application process. |
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<td>Target date for 2018 = April 15</td>
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**IMPORTANT:**
- Students will be able to participate in round 1 of Bechtel-Marks-Braun room picks only if they submit an application by the April 15 deadline.
- Applications are not required to participate in house room picks or in round 2 of Bechtel-Marks-Braun room picks.

| Step 3: Housing Office releases lottery numbers for round 1 of Bechtel-Marks-Braun room picks | These lottery numbers determine the order of room selection for the first round of room picks in Bechtel-Marks-Braun.  
Note that these lottery numbers are independent of the uPNs and apply only to round 1 of the Bechtel-Marks-Braun room pick process.  
See below for details on how these lottery numbers are determined. |
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<td>Target date for 2018 = April 23</td>
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| Step 4: Housing implements round 1 of Bechtel-Marks-Braun room picks | Selection of rooms in Bechtel-Marks-Braun, based on the lottery numbers.  
The number of rooms available for continuing students at all locations, including the houses, will be determined before |
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this step by the ACRL, in consultation with the Admissions, Housing, and Deans offices.

See below for rules and details on the room pick process.

**IMPORTANT:**
- Students who select a room at this stage are not eligible to participate in later steps or switch their assignment, including the house room picks.
- Students can pass on selecting a room when their time comes, and thus remain eligible to participate in house room picks or round 2 of Bechtel-Marks-Braun room picks.

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<th>Step 5: Houses implement internal room picks</th>
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<tr>
<td>Target date for houses submitting info to Housing in 2018 = May 11</td>
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<tr>
<td>Students who are affiliated with one of the houses and have not received an assignment in Step 4 are eligible to participate in the internal house room picks.</td>
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<td><strong>IMPORTANT:</strong></td>
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<td>- Students with a confirmed assignment in Bechtel, Marks, or Braun will not be able to participate in the internal house room picks nor switch their assignment.</td>
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<tr>
<td>- Students can pass from selecting a room at this step, and thus remain eligible for participate in round 2 of Bechtel-Marks-Braun room picks.</td>
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<tr>
<th>Step 6: Housing implements round 2 of Bechtel-Marks-Braun room picks</th>
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<td>Target date for 2018 = <strong>TBD</strong></td>
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<td>Students who have not received a room assignment through Steps 4 or 5 are eligible to participate in a second round of Bechtel-Marks-Braun room picks, provided that there are still available rooms after Step 4.</td>
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<tr>
<td>Eligible students select rooms in Bechtel-Marks-Braun, based on their uPNs and according to the rules described below.</td>
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<tr>
<td>See below for details on the round 2 room pick process.</td>
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**IMPORTANT:**
- Students with a confirmed assignment from round 1 of Bechtel-Marks-Braun room picks, or from the house room picks, will not be able to participate in this round nor switch their assignment.
- Students who have not been assigned a room at the beginning of this stage are able to participate even if
they did not submit an application to the first round of Bechtel-Marks-Braun room picks.

- Students without a confirmed room assignment at the end of this step cannot be guaranteed on-campus housing for the next academic year.
- However, if rooms are still available at the end of the rotation process, and after new students have chosen their rooms, continuing students who remain unassigned to a room will be eligible to participate in another round of room picks.
- The details of that process will be discussed by the committee as part of the recommendations on how to revamp the rotation process.

**NOTE:** Target dates above apply only to 2018. The expectation is that dates for future years will be chosen by Housing, in consultation with the ACRL, in order to optimize the process while respecting the key features described here.

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**APPLICATION TO THE ROUND 1 BECHTEL-MARKS-BRAUN ROOM PICKS**

The goal of the application is to allow the Housing Office to determine who wants to participate in the first round of Bechtel-Marks-Braun room picks and to learn about students’ room preferences, in order to implement and facilitate the process described below.

The application will require the following information:

- **Preferred room-type among the following categories:**
  - single room in Bechtel, Marks or Braun
  - room in Bechtel suite, group of size 4
  - room in Bechtel suite, group of size 6
  - room in Bechtel suite, group of size 8
  - room in Bechtel suite, group of size 12
  - room in Bechtel suite, group of other size (= 2,3,5,7,9,10,11)

- If applying as part of a group, students must provide the first and last names of all members of the group. In addition, every member of a group must submit an individual application and list the same set of students as their proposed suite-mates.

The application will also request the following non-mandatory information:

- **Ranking among the following three types of rooms, for students indicating a preference for single rooms:**
  - single in Bechtel (not part of suite)
  - single in Bechtel (part of a suite)
  - single in Marks-Braun

- **Preference for the following life-style accommodations:**
  - quiet suite
  - substance-free suite
  - gender specific suite
In order to help students make informed choices during the application and room picking process, especially during the initial transition to Bechtel, the committee recommends that the Housing Office take the following steps as far in advance as possible from the application due date:

- Provide detailed information about the entire room pick process for continuing students.
- Provide a sample of the application form that students will have to fill out.
- Provide detailed information about the accommodations that will be available in Bechtel and Marks/Braun.
- If feasible, provide Bechtel tours to interested undergraduates.

**LOTTERY NUMBERS FOR ROUND 1 BECHTEL-MARKS-BRAUN ROOM PICKS**

Every student submitting an application receives a random lottery number, which determines the order in which they are able to select rooms during the room pick process.

All of the members of a group receive the same lottery number.

In order to facilitate the formation of groups in suites, the lottery numbers are chosen using the following randomization algorithm:

- Students are divided into three categories: (1) those applying as groups of size 4, 6, 8 or 12, (2) those applying as groups of other sizes, and (3) those applying for single rooms.
- Students in the first category have the highest priority. Students in the second category have the next priority. Students applying for singles have the lowest priority.
- Note that groups in the first category match the size of some Bechtel suites, and thus can fill out a suite by themselves, whereas groups in the second category do not.
- Lottery numbers are assigned randomly within each category, while preserving the order across categories.

**PROPOSED PROCEDURES FOR ROUND 1 BECHTEL-MARKS-BRAUN PICKS**

Students will make picks in the order determined by their lottery numbers.

During their turn, students can pick any available room subject to the following constraints:

- Students who applied as a group of size X must:
  - choose a suite of size X, if at least one suite of that size is available
  - otherwise, choose rooms in another suite capable of accommodating the entire group if such a suite is available.
- If a suite capable of accommodating the entire group is not available, students who applied as a group of size X are allowed to divide into sub-groups capable of filling spaces in any partially open suites, or in any fully open suite provided that they fill it up, even if only a subset of the group can be accommodated in this way. Each such sub-group must have at least two members.
- Students who applied for a single room are allowed to choose any single room (including empty rooms in partially-filled suites).
There are two additional constraints in the set of rooms available for choice at every round:

- The total number of assigned Bechtel rooms cannot exceed the total number of rooms available for continuing students (which equals to total number of Bechtel beds minus the number of rooms reserved for incoming students).
- The Dean’s Office, following rules established by the Americans with Disabilities Act, as well as other laws and regulations, will identify students who have asked for housing accommodations. This list will be shared with the Housing Office. During the implementation of the room pick process the Housing Office will ensure that enough rooms remain unassigned at every step of the process to accommodate the needs of these students. Thus, while students with special housing needs will pick rooms using the regular priority order, the process guarantees that their specific housing needs can be met regardless of their priority number.

The Housing Office should reserve specific non-suite single rooms for the student members of the Bechtel PA program. The location of these rooms will be chosen to maximize the accessibility of PAs to Bechtel students. The students serving as PAs will be required to make their room selections out of these locations, in the order of their lottery numbers.

In order to help students who applied as a group but were not able to find a room, an additional round of single room picks among those students will be carried out at the end. To keep things simple, the priority order for this final round will be determined by the uPN.

Finally, we encourage the Housing Office to experiment with novel ways of facilitating the discovery of room picks that enhance students’ quality of life. One promising idea, suggested by Housing, is providing easy-to-use information during the picks process about the life-style preferences of students who have already been assigned to different rooms.

**ROUND 2 BECHTEL-MARKS-BRAUN ROOM PICKS**

If at the end of Step 4 there are still available beds in Bechtel or Marks-Braun for continuing students, the Housing Office will implement a second round of room picks at these locations.

The process is similar to the first round, except for the following differences:

- There are no group picks at this stage.
- The pick order will be based on the uPNs assigned by Housing in step 1.

**UNEXPECTED EVENTS**

If a group who was assigned part or a full suite loses one of its members, the group will be given a reasonable amount of time to pull in a new suitemate, but the Housing Office will reserve the right to assign that vacancy to any student after that period. If applicable, in filling these vacancies Housing should give preference to students that fit the group’s stated life-style preferences.
FUTURE EVALUATION AND OPEN QUESTIONS

One of the main charges of the ACRL is to use data and experiments to find out what is working and what is failing in our residential life, and to carry out experiments to figure out how to improve the system. Thus, going forward we hope to carry out yearly evaluations of each component of the residential life system, including the process outlined here. A key component of these evaluations will be to evaluate the extent to which the outcomes are consistent with the goal of maximizing the quality of residential experience at Caltech.

This is especially important in the early years of the transition to Bechtel because there are open questions that this report did not have the time to address, and that we want to consider in the near future. Examples include whether to give priority to seniors who are interested in living in Bechtel before graduating but have not had a chance to do so yet, and how to facilitate the formation of valuable themed options in Bechtel.