



**Institute-wide Planning Task Force
Student Life Working Group**

Final Report

December 16, 2009

Report of the Working Group on Student Life of the Institute Task Force

Executive Summary

The Working Group on Student Life of the Institute Task Force was charged to consider issues pertaining to student life broadly understood. This working group was led by Professors Medard and Lerman, with participation from faculty, staff and both undergraduate and graduate students. Its guiding principles were to examine carefully MIT's use of resources in the area of student life, while preserving and nurturing the aspects of student life that make MIT a unique community in which living and learning are successfully integrated. Our task was to consider both expenditures for student life and possible new or increased revenue sources.

The group intentionally considered a wide range of options, many of which are major departures from established practices and customs at MIT. We recognize that some of these changes, if implemented, would have significant consequences for students, faculty and the administration that will require further study and will have to be weighed against their potential financial benefits (either in terms of cost reductions or increased revenues). Wherever possible, we have tried to highlight both the likely benefits and the possible first and second order non-financial consequences of our ideas.

Since, along with education and research, student life lies at the core of the mission of MIT, our group undertook substantive engagement with members and constituencies of our student community, as well as with staff and faculty members who are deeply involved in various aspects of student life. The working group conducted its work in an open and consultative manner. It also worked collaboratively with other working groups of the task force on issues which overlapped the mandates of those groups as well.

The working group's goal was not to establish a new vision for student life at MIT, which had been extensively and successfully considered in the Task Force of Student Life and Learning. Instead, its goal was to examine several concrete and actionable ideas generated by the working group after extensive engagement with the student community, in accordance with the guiding principles set above. The goal was to provide, for each of these ideas, a succinct description, a first order quantification of the financial impact, and a balanced discussion of the effects of the idea upon the community, including implementation concerns.

The main ideas we propose that the senior leadership of MIT consider are the following:

- A change in the fee structure for visiting students at MIT. This proposal would increase the fees required from students visiting MIT and ensure that these fees are uniformly levied. This proposal would bring increased income in the range of 2-7 million dollars per year.
- A rationalization of our summer undergraduate housing use. Currently, much of our undergraduate housing stock lies vacant during the summer. (Graduate housing is generally rented to students on a 12 month/year basis, and hence yields rents throughout the year.) This proposal would bring a benefit, in terms of decreased costs and increased revenue, of on the order of 1-5 million dollars per year.
- The postponement, until further resources can be raised, of the renovation of W1. This proposal would provide savings of about 2.5 million dollars per year. Obtaining a gift of on the order of 40 million dollars would render the W1 project revenue neutral.
- The reconciliation of financial aid with the food cost estimates reported by the students. This could reduce the annual amount of aid by as much as 2.4 million dollars, while allowing the level of self-help required of students to be reduced.
- The individual metering of energy use by dormitories. Currently, the Institute levies the cost of utilities according to the floor area of buildings. Depending on assumptions about how students might respond to dorm level metering, this change could allow savings of the order of 0.75 million dollars, which we propose to be shared with the students as incentives.
- Phasing in a meal plan in those dorms with dining facilities. MIT currently spends approximately \$600K annually subsidizing student dining. This subsidy could be reduced or eliminated by phasing in recommendations of the Blue Ribbon Commission on Dining

The organization of this report is as follows. We first describe the guiding principles of the working group and the manner in which it conducted its work. Next, we provide descriptions of the ideas mentioned above. For each of these ideas, we summarize the main benefits, risks and challenges. We conclude our report with a summary and with thoughts for implementing the recommendations of this report with continuing community involvement. Our appendix provides background material that presenting one idea that did not the working group explicitly does not recommend be pursued further.

I. Basic Principles and community involvement in our process

The recommendations of the Working Group on Student Life are guided by some of the key principles set forth by the Task Force on Student Life and Learning issued in 1998. We believe that our work should not undermine the principle that the education of our students be based on MIT's ability to effectively support "an educational triad composed of academics, research, and community." In particular, we endorse the element of the report of the Task Force on Student Life and Learning which argued that, "Through interaction with faculty and students within the community, students become familiar with the responsibilities of citizenship, hone communication and leadership skills, and gain self-mastery."

We believe that any budget saving ideas must not undermine the Institute's ability to support all three elements of the educational triad. MIT's success in improving our support for the community element of the triad has helped us attract the best students and provide them with opportunities that enhance their overall education. To the greatest extent possible, these successes in the last decade should not be lost in budget reductions.

Support for the community element of the triad is provided through several organizations. The single largest of these is the Division of Student Life (DSL) that provides housing, dining, athletics, student support services, student activities and student life programs in areas such as leadership. Other organizations such as the Office of the Dean for Graduate Education provide support for graduate student government, some graduate-oriented activities and advising graduate students who experience various difficulties in the course of their education. Similarly, the Office of the Dean for Undergraduate Education, has some programs that influence undergraduate student life, particularly in providing international learning experiences and leadership opportunities. The Medical Department provides educational and other services (both physical and mental) that support a healthy environment for student life.

MIT has made major budget investments in the past decade to improve the services from all these units. Any budget reductions should be made in ways that, to the greatest extent possible, do not undermine the tangible progress we have made in the student life area. Wherever possible, budget reductions should either improve the efficiency with which services are delivered (thereby allowing the same quality of service to be provided but at lower cost) or only eliminate activities and programs that are least valued by the community and do not fundamentally undermine the quality of the students' experience while studying at MIT.

II. Operation and methodology

The working group was co-chaired by Professors Steve Lerman and Muriel Médard. The full list of our working group's members is:

Michael Bennie (undergraduate, Class of '10 and President of the Undergraduate Association)
Robert Berwick (Professor, Course 6 and Chair, Committee on Student Life)
Chris (Costantino) Colombo (Dean for Student Life)
Peter Cummings (Director of Financial Planning and Management, DSL)
Elizabeth Denys (undergraduate, Class of '11)
John Donnelly (Assistant Director; Budget, Finance and Treasury)
Sandra Harris (Housemaster, New House)
Steven Lerman (Vice Chancellor and Dean for Graduate Education, co-chair)
Anne McCants (Professor and Section Head, 21H)
Kevin McComber (graduate student, Course 3 and Vice President of the Graduate Student Council)
Muriel Medard (Professor, Course 6 and co-chair)
Eleni Orphanides (undergraduate, Class of '10)
Pamela Schickling (Administrative Officer, DGE)
Robert Silbey (Professor, Course 5)
David Singerman (graduate student, Science Technology & Society)
Julie Soriero (Professor and Department Head, DSL)
Blanche Staton (Senior Associate Dean for Graduate Students, DGE)
Charles Stewart III (Professor and Department Head, Course 17)
Kim Vandiver (Dean for Undergraduate Research and Professor, Course 2)

The working group met regularly to develop and discuss the proposals detailed in the next section. Moreover, the work of our committee relied heavily on meeting with a broad set of groups representing MIT students, faculty and staff involved in student life. These meetings complemented the representation on our committee of students, DSL staff and faculty with considerable student life experience (including six current or former housemasters, as well as the current, past and incoming chairs of the Faculty Committee on Student Life). The purpose of this extensive series of meetings was twofold. Firstly, it was to inform different subgroups of our working group and of the Task Force at large about the state of student life services at MIT and various stakeholders' perspectives on those services. Secondly, it was to gather information about the elements that students and staff saw as being essential to the unique quality of student life at MIT, and thus shape our priorities as we developed our proposals for changes, and guide our thinking in terms of effective means of implementation. We consider that these two goals were well met. The discussions we led provided us with a consistent but rich picture of what our students value and appreciate in their MIT experience on the student life side. These meetings produced interesting insights and ideas, which effectively complemented the input received from the entire

community via the Idea Bank as well as the ideas generated internally by our committee. These conversations also provided us with valuable material regarding possible implementation challenges.

In line with our desire to have a highly participatory process with our student community and the staff serving it, we organized meetings with varied groups. We organized separate meetings with much of the elected student leadership, such as the Undergraduate Association, the Interfraternity Council and the Panhellenic Association. We also sought to meet students in their living groups and organized meetings at Sidney-Pacific, Simmons Hall and East Campus. We held meetings with the athletic staff and the head of Performing Arts program, which straddles curricular and extra-curricular activities. The committee held a meeting with the International Student's Office. The committee also addressed the Housemasters and the Faculty Committee on Student Life. Minutes from these meetings will be available on our wiki, since they contain useful feedback from different members of our community. We do not include these meetings as appendices, since they would lengthen the report considerably, but the input from these meetings was incorporated into our report.

We found through these meetings that our community is very open to discussing difficult choices and deeply appreciates being consulted. Our community is eager to help in strengthening the Institute's financial position. Another theme that emerged was the desire for transparency and the necessity, for a successful implementation, to involve early all relevant groups. We believe that our outreach was beneficial not only in guiding our process, but also that it may serve as a very helpful initial step in future community discussions surrounding possible implementation of any of our proposals.

III. Proposals

The work we describe above led to the development of several specific ideas which the working group deemed to be consistent with our guiding principles and of sufficient financial impact to merit rising to the level of proposal. Each proposal is treated separately according to a format originally proposed by the Task Force. We first describe briefly the proposed idea. This description is followed by a quantitative evaluation of the financial impact of the proposal. Finally, we provide discussion of the idea's possible impact, and we present issues concerning implementation challenges.

III.1 Fee structure for visiting students

Faculty currently pay a one-time \$1,000 fee per visiting student (or \$500 for visits shorter than five weeks), regardless of a student's duration of stay at MIT. We propose some new and higher fee structures that would cover more of the actual costs MIT incurs in hosting visiting students and that are pro-rated by the duration of students' visits.

The number of registered visiting students passing through MIT annually has risen dramatically in the past several years. The estimates vary according to the sources one consults, in part because some measurements are taken at a single point in time (typically the fifth week of October each year) and others measure the total number of visiting student appointments made in a year. Other differences in reported numbers of visiting students may be attributed to having some number of students visiting informally, and therefore receiving visas with the assistance of the International Students Office but not being formally registered as visiting students in our student database. One aspect of our recommendation is that we develop a process for accurately measuring the number of such students.

The official numbers from our human resources show the latest number of visiting students to be 271, an increase of over 100% since 2005. Other numbers presented to the working group had estimates from ~200 in 2003 to ~650 in 2008. These numbers imply that there is a significant community of students working and often living at MIT who are formally part of our community.

A considerable number of our visiting students are international students and all visiting students are handled through the International Students Office (ISO). Discussion with this office indicate that, besides the considerable increase in visiting students present on campus through formal channels, there exists a considerable community of students who are on campus informally, yet are able, with faculty permission, to obtain access to lab space and are *de facto* part of research groups. These students are still seen by ISO when issues arise during

their stay at MIT. Informal estimates, gleaned from ISO, are that the number of students here informally for prolonged periods of time may match or exceed the number of students here under a formal arrangement. Students under such informal arrangements may be placing an unaccounted and possibly unjustified burden on our resources and our risk management.

Our peer institutions generally charge visiting students far greater fees than the Institute currently does. Practices range from full tuition to some prorated arrangement. We consider several possibilities.

1. Charging fees that are equivalent to the total F&A charges that would be paid on a full time graduate research assistant (68% of stipends).
2. Charging full tuition.
3. Charging a flat monthly “bench/desk/space fee” or “research training fee”- As with the current fee, visiting students would not be allowed to courses.
4. Charging a bench/desk/space fee or research training fee plus an amount equivalent to the F&A that would be charged had the visitor been paid from sponsored research funds. This additional charge would be a approximation of the various overhead costs MIT incur when we provide space and other services.
5. Separating our visiting students into two groups: those contributing to ongoing, MIT-based research and those who are visiting for other reasons. Fees would be considerably lower for the first group (though greater than the current \$1,000) and much higher for the second group.

The first four possible fee structures give the following revenues, assuming that there would be, on average, 200 visiting students on campus year-round:

1. $200 * (\$21,150 * 0.68) = \2.88 million per year
2. $200 * \$37,510 = \7.50 million per year
3. $200 * \$12,000 = \2.40 million per year
4. $200 * \$12,000 * 1.68 = \4.03 million per year

Quantification of the fifth option depends on a careful study of the activities of visiting students, which would require taking into account students here under formal and informal arrangements.

Note that the current revenue we now receive from the \$1,000 flat fee (or \$500 for stays of 5 weeks or less) would have to be subtracted from these amounts to find the net change in revenue, decreasing the above estimate by what we currently receive from the existing fee.

The fifth option of having differential fees for “casual” visiting student and those involved and contributing to research here is one favored by the working group subcommittee; however, we have not yet developed specific numbers for the two fee structures. This will require some further analysis of data on visiting students

to estimate the numbers of each type of visiting student.

We realize that charging more to have a visiting student will likely cause more faculty members to bring in “off-the-record” visiting students. For that reason, we suggest that the importance of declaring visiting students should be thoroughly explained to faculty, departments and research units. Incentives for declaring a student or sanctions if an undeclared student is discovered may help control the issue. Moreover, current practices allowing access to MIT facilities to be provided to visitors simply by having a faculty make a request, without any verification of the type of affiliation of the visitor with MIT, should be discontinued.

Raising fees may also cause some departments’ numbers of visiting students to decline significantly. However, the program as a whole is currently larger than our working group believes is healthy, so a lessening of demand would, in our view, not be problematic.

We also think that there is a need for clearly stated basic principles that should be applied in allowing all visitors. These should include:

- A faculty member should be responsible for every visiting student. This responsibility includes mentoring that visiting student and making sure that he or she is integrated into some aspects of the department or research unit.
- Visiting students should not be used in a way that substitutes for our regular graduate (as either RAs or TAs) or undergraduate students (as UROPs).
- DLCs with visiting students should provide space for them (desk or lab space) within their current space allocations.
- We should retain current limits on the duration of visiting students’ stay at MIT, ideally a period of a year or less, but not to exceed 18 months.

Our working group has considered several issues pertaining to the proposed fee structures, detailed here in the order of the five fee proposals listed above.

1. This option can be justified by observing that visiting students often function as graduate students and should be assessed similar overhead that would be associated with a graduate research assistant. However, for some departments, students are not paid a stipend and thus the fee’s payment source may be difficult to determine.
2. Charging full tuition would mean that visiting students could take classes, which is against current policy, and it may strain the class resources and lessen the degree of revenue enhancement. Charging a reduced tuition and not allowing visiting students to register for courses (in effect a research training fee) would obviate this concern.
3. The assessment of a monthly fee based on bench/space/desk usage or

- research training fee is similar to idea #1, but the amount is not easily justified if it deviates much from the amount of option #1.
4. This option seems to be double-dipping in that, if the cost of the visiting student's space is already in the F&A base, it is charging overhead on a charge that is already supposed to be paying for overhead. MIT's Office of the General Counsel should be consulted before this option is adopted.
 5. One variant of this option is for MIT to charge a fixed fee and to allow individual departments to levy additional fees that would be shared equally between the department and the central administration. This would allow different departments the flexibility to set fees that match their goals and visitors' willingness-to-pay.

The working group also discussed the fact that there should be flexibility and fairness in our approach. For instance, waivers for fees could be sought for students in certain programs, such as programs geared towards students from underdeveloped countries. Moreover, in the case where an institution may waive fees for our students and the number of our students visiting that institution matches the number of students visiting MIT from that institution, a waiving of our fees would be fair and sensible.

III.2 Improvement of housing utilization during the summer

Currently, undergraduate housing utilization during the summer is low. We keep all dormitories open, although our needs for housing our undergraduates would require only two dormitories to remain open and housing the various summer programs we currently host would require the beds corresponding to one dormitory. Our use of dormitories for outside programs that pay full summer rent is very low. A proposal of improving summer housing use was presented to the Dean for Student Life in February 2004. Our recommendations follow the spirit of those recommendations, which will be available on our wiki.

We propose a more rational utilization of our housing stock during the summer by defragmenting the use of our dormitories so that dormitories either are fully used by our students, by MIT programs or by outside programs, or are closed to residents other than year-round residents such as GRTs and housemasters. The savings accrued would come from reductions in maintenance costs and utilities. Any dormitories that would remain open during the summer would generate revenue through housing new remunerative programs such as new MIT academic or athletic programs, or outside high school programs such as those run by the Center for Talented Youth. If we expand the use of undergraduate dormitory space by high school or other programs, the working group recommends that we consolidate MIT students into a subset of the current dorms and place these programs in different dorms.

We consider three scenarios. The most conservative assumes no new programs and only accounts for the benefit of shuttering unused dormitories. The

intermediate scenario assumes that two dormitories are used for new outside revenue generating programs. The most aggressive scenario assumes almost full utilization of our housing stock during the summer.

		Close 8 Dorms No new renters	Close 6 Dorms New Renters 600 Beds @ \$70/night for 56 nights	Close 4 Dorms New Renters 1000 Beds @ \$70/night for 56 nights
Reduce Expenses	Consolidate MIT Students into 2 Dorms of ~600 beds	\$1,060,000	\$850,000	\$560,000
	Move service staff into 9 month positions			
New Revenue	Closing 8 Dorms for summer yields 1500 available beds			
	Rent housing to a mix of: - summer School residents - Academic Programs similar to Johns Hopkins CTY - Sports Affinity Camps	\$ -	\$2,350,000	\$3,920,000
TOTAL		\$1,060,000	\$3,200,000	\$4,480,000

There would be human resource challenges in reducing housing maintenance staff over the summer unless all dormitories were occupied by programs or our students. Student and house team involvement in summer plans would be very important. For instance, there would be a need for discussion of issues such as allowing some storage of student belongings, ensuring that equipment or decorations paid for or created by students in dormitories not be damaged by summer programs, and fairness of impact across communities. Significantly increasing dormitory utilization would require effective development of MIT programs or recruitment of outside programs. Our intermediate projection assumes attracting the equivalent of two programs of a size similar to CTY, to fill one dormitory, which should not require very aggressive marketing of our summer housing stock. For graduate dormitories, we also propose to consider the issuance of some 11 month leases, without the month of July. July is a month in which our graduate dormitories are underutilized because of the natural transitions of graduate students. Since July is also a prime month for conferences, we may consider using graduate dormitories for conference

housing then. Finally, summer programs may use dining services which we would not subsidize and which could therefore bring further income.

III.3 Postponement of W1 renovation.

Currently, our undergraduates have been *de facto* always had available four year on campus housing. This availability, which has been confirmed orally by administrators and is part of student expectations, could not be met if all our students chose to live on campus since we do not have sufficient on-campus housing for our undergraduate population. Instead, we rely on the fraternities, sororities and independent living groups to house a significant fraction of our undergraduates. The efforts that have been made to attempt to provide on demand four-year on-campus housing, when combined with the requirement for freshmen to live on campus, have led to limitations on our admissions, as well as overcrowding of our dormitories, particularly in the fall term. This overcrowding predominantly affects freshmen, who bear the combined effect of having the lowest priority for housing in dormitories and of being required to remain in these dormitories.

Our commitment to graduate housing has, in the meantime, increased, with considerable new graduate dormitory space having been developed over the last ten years. Some sharing of graduate dormitories by undergraduates has occurred, for instance with the housing of sororities in graduate housing, the current Phoenix group housed in Ashdown, or with the earlier senior segue program that allowed a small number (80-100) seniors to live in graduate housing paying undergraduate rental rates.

We consider here to the option of delaying the construction of W1 until a donor can be found to make the building of W1 financially attractive. Alternatively, W1 could be used for purposes other than housing, such as offices or laboratory space, obviating the need to purchase land in the vicinity of the MIT campus for such purposes.

We consider only the benefit of not going forward with the W1 project. Ancillary benefits, such as potential income from different uses of W1, which may be considerable, or the financial benefits of having flexibility in designing the size of the incoming freshman class, are not included below. We consider three scenarios, corresponding to not receiving significant further donations, to finding large donations, and to finding an exceptional donation to cover most of the cost of the project. Readers should understand that we have used estimates of the renovation and financing costs for the renovation; the true costs of these items wouldn't be known until the project is put out to bid and MIT seeks financing.

	Scenario 1 No additional Gifts	Scenario 2 \$35M in Additional Gifts	Scenario 3 \$45M in additional Gifts
Close W1			
Est. Remaining Renov. Cost:	\$70M	\$70M	\$70M
Amount to finance:	\$70M	\$35M	\$25M
Annual debt (30 years, 5%):	\$(4.40)M	\$(2.20)M	\$(1.60)M
Annual Revenue:	\$2.70M	\$2.70M	\$2.70M
Operating Costs:	\$(0.80)M	\$(0.80)M	\$(0.80)M
Annual Operating Surplus/Deficit	\$2.50M	\$0.30M	\$(0.30)M

We find that abandoning the W1 project alone will provide \$2.5 M in yearly savings in the future over the current plan that involves renovating W1.

In effect, postponing the renovation of W1 entails one of three possibilities:

1. Abandoning the practice of providing four-year on-campus housing on demand
2. Continuing the status quo with a probabilistic quasi-guarantee of on-campus housing
3. Replacing some graduate housing with undergraduate housing.

We discuss these different possibilities below.

1. There will be significant added flexibility for admissions in terms of admitted students and yield management by not guaranteeing that students remain on campus for four years. Note that this does not mean that the “all freshmen on campus” policy will need to be changed. The first year experience in the dorms should be improved by reducing or eliminating the need for freshman crowding.

There will be significant cultural challenges associated with not providing on-campus housing for four years. In our community discussions, we have found that fraternities were very positive towards this idea, since it is likely to improve their current utilization, which currently stands only at around 70%. The implementation of this proposed change would strengthen the FSILG system, which in for some houses is financially fragile. Note that this fragility exposes the Institute to further residential worries under the current four-year on-campus housing on demand. Indeed, the closing of even a few fraternities would seriously stress the on-campus residential system, which would have to absorb those students. This has been evidenced by past experience with even temporary closings of fraternities.

Our discussions with dormitory residents and the Undergraduate Association leadership, on the other hand, indicated that they would strongly prefer maintaining the current system and it is reasonable to assume we should consider grandfathering those students by gradually managing the class size upwards, if an increase in class size is sought. This opinion seemed to be shared by our housemasters. Both dormitory residents and housemasters believe that the strength of our dormitory communities would be considerably lessened if students were not able to remain in term entirely at will. Students and the Dean for Student Life have also expressed a concern that weakening the four-year guarantee will weaken our recruitment efforts, since many students and parents deem the four-year guarantee to be a very attractive part of an MIT education.

Since many of our students do remain in their dormitories for their four years on campus, there is a very strong community bond that develops in the dormitories, which is important for us to preserve. Under the relaxed policy we consider here, we still expect that the vast majority of students wishing to remain in their dormitories should be able to do so, as currently. In order to maintain those strong bonds, we could consider improving students' chances for remaining in the dormitories by involvement in the dorm community through government, freshman advising and other service. In this way, the students with the strongest ties to the dormitory will be able to maintain their residence, whereas students who uniquely use the dormitory for housing may find other options for some portion of their undergraduate career. Similar policies have been implemented in graduate dorms, with good outcomes. It is also recommended that students who enrolled at MIT with the understanding that they were guaranteed four years of housing be allowed to remain on campus, being in effect "grandfathered."

2. The status quo seems to meet the needs of our students well and leads to strong dormitory cultures, which are a hallmark of MIT. However, it does lead to freshman crowding and may lead to more crowding if demand for on-campus housing rises. Moreover, possible increases in the

undergraduate body considered by other working groups of the Institute Task Force cannot be accommodated under the current policy.

3. The possibility of replacing some graduate housing with undergraduate housing would be detrimental to graduate students. However, graduate students generally tend to have a weaker identification with their dormitory than do undergraduates, and many already live off campus. Spending some part of their years at MIT off-campus is thus an expectation. Some of the graduate dormitories currently are also housing visiting students (particularly in the spring semesters) and thus are not fully used by our regular students. A partial replacement of graduate housing by undergraduate housing would require careful consideration of social issues, particularly if dormitories were to be shared. In addition, graduate rents per bed are considerably higher than undergraduate rents, and almost all graduate residential license agreements are for 12 months rather than, as for undergrads, just the 9 academic months. Hence, displacing graduate residents with undergraduates is likely to cost more than the incremental net revenue of having more enrolled undergraduates.

III. 4 Adjusting financial aid to true food costs

Student financial aid budgets are currently based on an estimate of total cost of attending MIT each year.⁽¹⁾ This total cost currently includes \$4,460 per academic year as an allowance for food. In a recent survey, student self-reported expenditures on food ranged from \$1,700 per year to \$2,240 per year. The lowest amount was for students who cooked for themselves and the highest amount was for those students who are currently on a meal plan at a residence hall with a dining facility.

While there may be some reporting error in the data cited above, it is very likely that the food allowance component we use in our financial aid calculations does not accurately reflect the amount spent on food for students who elect to cook for themselves. We believe that the financial aid computation method could beneficially affect the profitability of the dining system and result in better nutrition for our students while simultaneously reducing the cost of financial aid for the Institute and the amount of “self-help” required from students. In other words, financial aid packages could reflect more accurately the costs of dining. The higher aid package for students opting for the dining option may encourage students to opt for dining plans, which will help the dining system to operate in the black. Moreover, participation in our dining plan may encourage students to eat better, which ultimately impacts the performance and overall well-being of our students. Since MIT is currently considering changing dining plan options for students, such changes should be coordinated with changes in the financial aid computation so as to encourage students to use the dining plan. We are suggesting in this proposal that, for students on financial aid, the cost of board that is included in the aid computation be less for students who decline a meal

plan and more for students who sign up for a meal plan. An example analysis is shown below to illustrate the consequences.

The following example gives some rough estimates of savings that might be possible by adjusting the board computation as part of the overall cost of education. These assumptions indicate that, if 80% of students elected to decline a meal plan, MIT could save \$2.4M⁽²⁾ in undergraduate financial aid expense while at the same time reducing required self-help from students by a similar amount. If a student elects not to sign up for the meal plan, his or her board would be set at \$3,000. If a student does elect the meal plan, then the board would be set at \$4,460, its current level. These estimates and a full evaluation of the pros and cons of such a proposal should be reviewed more closely with CUAFA (the Committee on Undergraduate Admissions and Financial Aid), the Student Financial Aid Office and the Enrollment Management Group.

<i>\$'s in thousands</i>	FY09 Budget	FY09 with Proposed Adjustment	\$ Δ
Total Cost of Education [1]	122,343	117,514	4,829
Family Contribution, Self-Help, and Private Grants [2]	(46,045)	(43,631)	(2,414)
Total Need	76,298	73,884	2,414
# of Undergraduates Qualifying for MIT Grants	2,453	2,453	-
Average Need per Student	31.1	30.1	1.0
<u>Source of Financial Aid</u>			
External	2,100	2,100	-
Internal	74,198	71,784	2,414

[1] FY09 budget per MIT Budget Book. FY11 proposed takes FY09 budget then subtracts the following:

Want a Meal Plan?	Yes	No	\$ Δ
Undergraduate Board Cost	\$4,460	\$3,000	\$1,460
# of Students Assumed to Elect "No" (80% of Budgeted Amount - 4,134)			3,307
Estimated Reduction in the Cost of Education			4,828,512

[2] Assumes 1/2 of cost of education decrease will go towards reducing student's required "self-help." Undergraduate financial aid recipients are expected to meet a portion of their need through a part-time job, a loan, or both. This is "self-help."

The above example assumed only 20% of students would opt for a meal plan. If more than 20% elect to go on a meal plan the savings in financial aid would decrease in proportion to the decline in the number of students rejecting the meal plan. However, with more students on a meal plan, the dining program would require less of a subsidy or provide some positive net revenue, and students would have more nutritious eating habits. In either scenario, MIT would benefit.

III.5 Metering of Dormitories

Currently, energy bills for different buildings are computed by considering simply the floor area of those buildings. Thus, DSL pays for its dormitories a share of the total MIT bill corresponding to its share of square footage. This arrangement is not conducive to being able to track energy use and thus modify behavior to improve such use. Moreover, it does not create incentives to improve energy efficiency of dormitories, since the possible gains from such efficiency improvements would be diluted by being averaged over the entire Institute. We consider establishing individual metering of dormitories in order to track energy consumption and involve the communities in managing energy use. The dormitory residents will share in the energy savings they are able to produce through rent reductions or rebates.

The working group does not believe that charging each individual student for his or her energy use is fair or workable. The existing dorms vary widely in energy efficiency, and it would be seen as unfair for students who happen to live in an energy-inefficient structure to pay more as a result of design and maintenance decisions over which they had no control. Instead, we believe that the incentives should be structured to encourage energy efficiencies relative to the current baseline so that all students have equal incentives to modify their energy consumption and to encourage their fellow residents to do likewise.

The cost of metering the remainder of the dorms not already metered is estimated to be \$790,000. The current energy bill for the dormitories is on the order of \$8M per annum. While it is not possible to predict the savings that may accrue from permitting communities to monitor their savings, the experience with Google metering has been that the savings range from 5 to 15%. A midpoint of 10% would entail that we may expect savings of the order of \$800,000 per annum. In order to provide the type of incentives that have led to the range of savings witnessed in the Google project, we may consider sharing the savings equally between the students and the Institute. Thus, the Institute would garner on the order of \$400,000 per annum, which would pay for the cost of metering in two years, while the students in the dormitory system would obtain a similar benefit, which amounts to a rebate on the order of \$100 per student per year in the dormitories.

In order to assess better the effect of metering on student behavior, implementation might occur in a gradual fashion. A pilot program over a subset of the dorms could first be envisaged and different incentives for communities experimented with before a roll-out over the entire dormitory system is undertaken. We believe that our students' creativity and enthusiasm for energy conservation may lead to very innovative and effective approaches that may even outperform the Google experiment, which was done with individual homeowners. There may be interesting synergistic activities with efforts under the Energy Initiative. Metering will also be a useful tool for DSL to establish

judiciously how to perform upgrades and repairs with energy efficiency in mind at different dormitories.

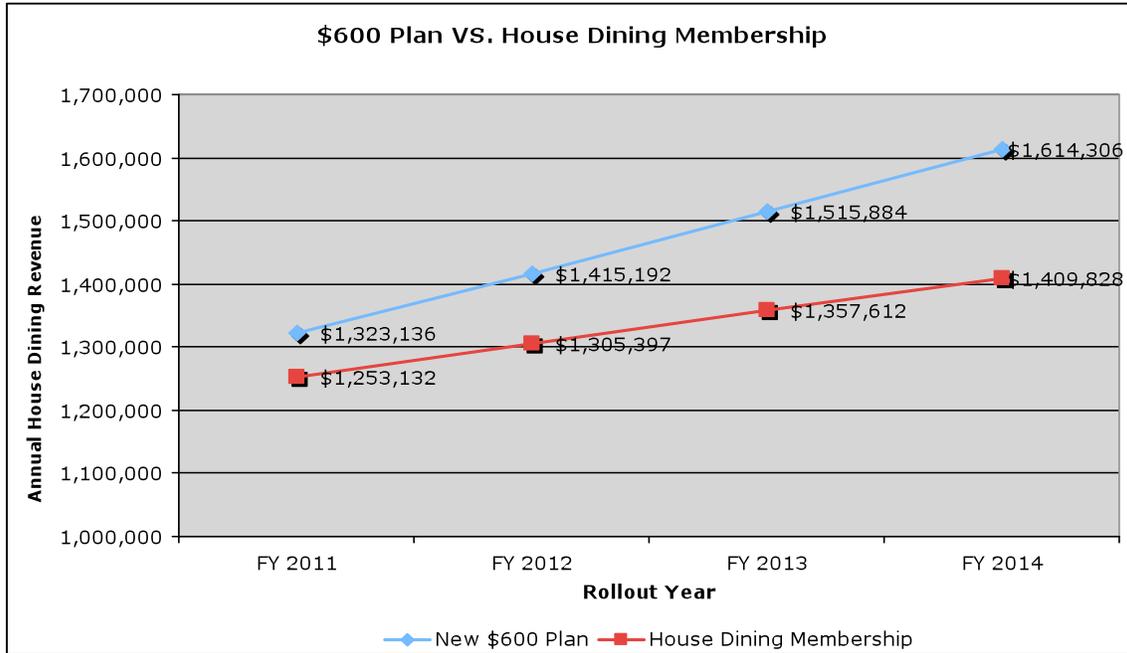
III.6. Implementation of meal plan changes in House Dining - fall 2010

With the work of the Blue Ribbon Committee (BRC) complete and its recommendations submitted to Dean Colombo, the Budget Task Force subcommittee on dining examined the question of implementation and the financial impact of putting the BRC's recommendations into effect. Though the BRC did not recommend a specific dollar amount for the new meal plan to replace the current House Dining Membership "discount plan", we chose to use the minimum dollar amount used in the BRC report's illustration of \$600, equal to the intended student commitment for the current House Dining Membership.

Though the intended dollar commitments are the same, the expected financial and program results are very different. One distinct advantage we expect is that the \$600 plan, which must be used by the end of each academic term, will create revenue stability and attendance predictability. Each student would commit at least \$600 in support of the House Dining program. This is on average \$76 per semester more than the current House Dining Membership. It also smoothes usage whereby one student might pay the \$300 House Dining Membership fee and never eat in residential dining, while an athlete might purchase meals for which their realized discounts far exceed their \$300 fee.

To roll out this plan, yet allow those happy with the current system to continue to engage Campus Dining, we projected finances based on grandfathering students in the current system and rolling out the new requirement to freshman starting in the fall of 2010. Over a four year period, the old House Dining Membership would be phased out. At the end of the four years the system would reach steady state. A certain number of upperclassmen might be expected to transition to the new plan sooner as well, but this is not in our projection.

The following example shows the impact on house dining revenue if the current dining plan, referred to here as "the \$300 plan" were changed to a \$600 per term dining plan. At present both plans are dinner-only plans. The current system requires a subsidy of approximately \$600K per year. By increasing the cost of the plan, the required subsidy is potentially reduced. As is detailed in the BRC report, the more flexible structure of the new \$600 minimum plan allows meal purchases for family, friends and other visiting guests. This should create additional deposits above the minimum \$600 level that are not reflected in our projection.



The exhibit above illustrates the financial impact of our recommendation, if the charge for the dining plan is increased to \$600 per term, according to the BRC proposal. The BRC proposal should be consulted for the precise details of the plan. The graphic above shows that, by FY2014, Campus Dining will net an additional \$200K in revenue by implementing the new \$600 meal plan. This should help us reduce the \$600K annual net loss residence dining experiences under its current operating parameters. The above assumes that the percentage of students from each class in each residence with a dining operation is stable over the four year rollout period. Most residences have the largest percentage of students in the freshman class. It was assumed that both plans would increase by \$50per year. The utilization rate for the House Dining Membership plan was kept constant at 85.67%.

The illustration is for a dinner-only plan. There are many possible variations on this plan. In general, as one increases the cost of the plan, the net loss in the residence dining system decreases. For a dinner-only plan, the approximate breakeven point occurs when the cost of the plan is \$768. For a dinner and breakfast plan, the breakeven point would require that \$850 per term be the charge for the meal plan. We have chosen to illustrate the \$600/term plan because it is perhaps the most likely compromise that is possible on campus at this time. Other variations can be evaluated by the MIT Campus Dining Office when needed.

IV. Conclusions

We have set forth several proposals, guided by the principles established by our working group, for sustaining the enormous progress MIT has made in the quality of student life. We believe that the adoption of some, or all, of these proposals will allow the Institute to use resources carefully in a way that supports students and the faculty and staff who work with them. We also believe that it is important for there to be some role for the working group or parts thereof in advising the implementation of the proposals. While this report and the supporting documents on the wiki reflect accurately the work of the working group, the collective wisdom developed by the group may be of use to the Institute as it seeks to implement different proposals.

Appendix - Reassessment of the residential program of housemasters and graduate resident tutors

We include as an appendix the description of one proposal that the working group concluded should not be implemented. Specifically, we examined a shift from MIT's current housemaster, Residential Life Association and GRT system to a system of residence hall directors.

MIT staffs its dormitories with a faculty-in-residence system that is similar to programs in other elite institutions, but which is significantly more expensive than the typical staffing programs at other universities that rely on student service professionals. Reconsideration of the housemaster program could move in two directions. First, MIT could consider the pros and cons of adopting a more common system. Second, MIT could consider changes to the current system to ensure that the additional cost is justified by offsetting educational gains. Note that because either system would be funded through dormitory rents, the effect on the GIB would be indirect.

To quantify our idea, we start with the costs of the current system, which could be summarized as follows:

Direct costs total \$1.56M

Housemaster Stipend: \$324k

GRT Stipend: \$112k

RLA Salaries: \$312K

Housemaster +RLA programming: \$544k

Housemaster suite maintenance: \$270k

Indirect costs \$1.69M

Loss of revenue, Housemaster apartments: \$1.05M

Loss of revenue, GRT apartments: \$529k

Loss of revenue, RLA apartments: \$110k

Total costs: \$3.25M

Now, consider the costs of a traditional system. Instead of housemasters, we would have live-in residence hall directors who would have annual salaries of roughly \$60k (with employee benefits). Rather than GRTs, we would have undergraduate RA's. The RLA positions would also be shifted to residence hall directors. The housemaster apartments would be significantly downsized, or eliminated altogether, and converted into student rooms. GRT apartments would likely be converted, also, since RAs would presumably be living in the student rooms.

The cost would be something the following:

Direct costs \$1.61M

Residence hall director salaries: \$840k (=14 x \$60k)

RA stipends: \$224k (double the density of current coverage)

Residence hall programming: \$544k (same as now)

Indirect costs: \$306k

Loss of revenue, Residence hall director apartments: \$306k (pro-rated from current RLA apartments)

Total costs: \$1.92M

Difference between total traditional system costs and total current system cost: \$1.33M

Transitioning to the new system would be costly, since it would involve the construction of new apartments for the residence hall directors and conversion of the saved space into dormitory rooms. Space that is currently taken up by the GRT and housemaster apartments could be repurposed to provide approximately 210 residence hall beds. Space corresponding to approximately 30 beds would need to be taken up by the new residence hall directors. Therefore, there would be the construction of dormitory rooms with 180 new beds. At the estimated cost of \$100,000 per bed for this sort of construction, this would work out to \$18M in up-front construction cost, in addition to the construction costs for the new residence hall director apartments. A conservative estimate is that it would cost \$20M to make the conversion, once the residence hall director apartments are taken into account. The debt service of such a project would be of the order of \$1.25M, in effect offsetting any financial gains.

Even if there were some potential savings, shifting from a housing system primarily staffed by educators (faculty and graduate students) would have profound changes on the policy and culture at the Institute. In terms of policy, it would represent a major repudiation of the direction laid out in the mid-1990s by the Task Force on Student Life and Learning, a template that has enjoyed significant buy-in at MIT. In terms of culture, it would deepen the divide between “both sides of Massachusetts Avenue.” While residence hall directors are educational professionals too, the collective experience of our peer institutions is that the dormitories are an important site for the leadership development of our students, and that such development is best led by faculty.

We also anticipate significant problems in replacing GRTs with undergraduate RAs. (It is hard to imagine GRTs, who are generally PhD candidates, being willing to be supervised by residence hall directors.) The experience of other institutions is that undergraduate RAs cannot be given as much discretion as we

currently give our GRTs in exercising judgment about how to respond to various types of student behavior. But, we have a hard time imagining our undergraduates willingly taking on roles as rule-enforcers, reporting to residence hall staff.

Estimating the “value added” to the educational mission of MIT by the ~\$1M differential between the cost of the current system and a more traditional one is admittedly difficult. However, we believe that with this amount identified, it will provide an inducement to the current housemasters and GRTs to work to ensure that their program integrates more directly with educational support functions (e.g., first-year advising), most of which will be facing budgetary cutbacks, because they are supported through the GIB.