Final Report

To the Faculty Policy Committee

May 10, 1999

Subcommittee on Changes to the MIT Retirement Plan

"Studying the MIT Retirement Plan is like peeling an onion: there's always another layer"

Goal: *To understand and to convey, by a written report to the Faculty Policy Committee, the effect of the proposed changes in the Retirement Plan on its members, and to make suggestions for improvement.*

Charge:

1. To analyze and understand the differences between the proposed changes and the current Plan in terms of:
   - available options and services, and
   - risks (on the upside and the downside) to members
2. To highlight any specific issues that may cause problems or present opportunities for members.
3. To identify specific suggestions, if there are any, of modifications in the proposed changes that could alleviate any of the identified problems.
4. To convey in a written report the results of this analysis.

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**The Subcommittee's Interim Report is attached at the end of this report.*

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1. Summary and Conclusions

The Benefits Office in conjunction with the Strategic Review of Benefits Committee and the Committee on Faculty Administration have developed and implemented changes to deal with issues affecting the MIT Retirement Plan (MITRP). Some of the proposed changes are required to keep the Plan tax-qualified, and were instituted on January 1, 1999; some offer increased flexibility to draw retirement benefits while working part time and offer increased benefits from a lowering of the normal retirement age to allow individuals to phase into retirement. One component of the changes is a response to concerns that for the defined-contribution 401(k) portion of the Plan, the investment options were too limited, with only the Fixed and Variable Fund available for managing participants' accounts. The changes that provide access to a wider set of options will allow participants to build an investment portfolio to meet their individual needs and to tailor withdrawals after retirement according to personal needs. Finally, since the servicing of the Plan has gotten beyond the capacity of MIT to manage, the administration of the 401(k) portion of the Plan will be outsourced.

These proposals for change have been presented to the MIT community in a variety of forums. But the issues are complex and constrained by legal and regulatory requirements. Some are highly technical, requiring considerable effort to master all the details. Therefore, the Faculty Policy Committee appointed this Subcommittee to study these proposed changes, and to recommend modifications, if necessary, to meet expressed concerns.

It is not the intention of this report to substitute for MITRP descriptions, documents and the annual reports, which are available from the Benefits Office and on their web site, http://hrweb.mit.edu/benefits. Rather we wish to lay a sufficient foundation for our observations and conclusions. We hope that the work of this Subcommittee will help in the discussion of the changes in progress. Also, we have not attempted to describe all features of the Plan in detail; we only discuss the changes from the previous Plan. Since the terms of the MIT Retirement Plan are stated in the Plan document, the legal document governing participants' rights and benefits under the Plan, if there is any conflict between this report and the Plan document, the Plan document will control.

In our review of the many changes to the Plan, six issues have received most of our attention, and our conclusions about these items can be summarized as follows. Each is discussed in more detail in the body of this report.

The Choice of Fidelity Investments to Manage the Defined Contribution/401(k) Assets. As of April 1, 1999, the management of this component of Plan assets will be carried out using the services of Fidelity Investments to manage individual investment accounts for participants. We have reviewed the steps that the Benefits Office went through, seeking bids and negotiating fees, and we are comfortable with the procedure followed.

The Shifting of 401(k) Investment Account Expenses from MIT to the Participants. For those who remain invested in the funds that have been "cloned" from the MIT Fixed and Variable Funds, this change will result in a small reduction in the growth of a participant's ultimate retirement assets. The increased option to choose other funds with possibly higher returns may make up for this loss. We also believe that this change should be considered in balance with all of the changes, several of which increase benefits to participants. All in all, it is our conclusion that this change, which puts us in line with almost all our competing institutions, is reasonable.

Required Elimination of the Fixed Fund Book Value Procedure and MIT's Method for Making the Change to Current Market Value. To calculate the "book value" of member Fixed Fund accounts a five-year smoothing procedure for crediting capital gains was used by MIT, with the objective of lowering the volatility of credited returns. With the required move of fixed fund accounting to market value, a portion of the capital gains of recent years had to be allocated to member accounts to bring them to market value as of January 1, 1999. We have reviewed the procedure used to allocate capital gains to member accounts, and its potential for creating inequities between members of long standing and those who joined only recently, and found it to be a sound approach.

The (Mandated) Choice of an Index Outside MIT's Control for Calculating Returns on Certain Accounts. In the past, the investment growth of the Fixed Fund was used to determine the growth of the notional 5% account, which is a component of the MIT-funded defined benefit component of the MITRP. Under the current IRS regulations, the continued use of the Fixed Fund appreciation, as it is managed by MIT, is not an option since IRS now requires an arm's- length method to compute account growth. Therefore, to compute the growth of the 5% account after January 1, 1999, MIT must select some market index whose growth is outside the control of MIT. MIT has chosen an alternative index for the 5% account, and specified maximum and minimum values for its growth. It is the Subcommittee's judgment that this procedure is appropriate.

The Increased Flexibility Available to Plan Participants. With the outsourcing of both the investment management and the record keeping of the 401(k) portion of the Plan, an increased range of services is available to participants for investments and withdrawals under the MITRP. We believe that this increased flexibility provides a benefit to many Plan participants. However increased options come with increased complexity. Therefore, Plan participants should re-examine their personal circumstances, as this is a complex area involving asset allocation as well as tax and estate planning.

Communications. With the move to an outside vendor and the increased flexibility provided to Plan participants, communication and precise description of Plan options and consequences become critical. We urge the Benefits Office, together with Fidelity Investments, to continue to develop material that can provide Plan participants with a better understanding of their pre- and post-retirement options. Such material as now exists does not deal adequately with the choices faced under the revised Plan.

In this report, we cover the key features of the changes made as of January 1, 1999, and further revisions made in spring 1999 and yet to come. A number of specialized terms and acronyms are used in the presentation, and these are defined in Appendix 1. We were aided in our deliberations by staff from the Benefits Office, the Personnel Office and the Treasurer's Office. We thank them for their collegial and expert input to our understanding of these issues.

2. Overview

2.1 Components of the MIT Retirement Plan

For the past ten years, the MIT Retirement Plan (**MITRP**) has consisted of two components, the **Basic Plan —** a defined benefit plan supported by contributions only from MIT, and the **Supplemental 401(k) Plan —** a defined-contribution 401(k) plan. This latter component receives member contributions, which are matched by MIT. We now describe elements of this Plan prior to the changes that were initiated on January 1, 1999. Then we highlight these changes and those made in Spring 1999.

The MIT Retirement Plan covers all employees, faculty and staff, at the Institute who work at least 1/2 time. It is the product of a merger of separate Plans in 1989: The Retirement Plan for Staff Members (**RPSM**) and the Retirement Plan for Employees (**RPE**). Some of the details of the current Plan are the result of the carryover of features and restrictions from this earlier system.

When the Plan was modified in 1989, individual accounts from the prior **RPSM** were maintained as **RPSM** 401(k) accounts and segregated from the **Supplemental 401(k)** accounts established under the new Plan. No further contributions have been made to these **RPSM** accounts but they continue to appreciate and form part of the overall defined-contribution assets for faculty and staff hired before 1989. Faculty and staff joining MIT after 1989 do not have **RPSM** accounts. At the time of retirement, the combination of the **Supplemental 401(k) Plan** and the **RPSM** accounts will provide most of the total retirement benefit of a long-term faculty member who has contributed the maximum amount over his or her career.

The benefit from the **Basic Plan** is expressed as the value of a **single-life annuity** payable at retirement, although the participant may actually choose from a variety of annuity options of equivalent value. This annuity may increase, after retirement, through the application of triennial cost of living adjustments. The Institute funds this benefit through periodic contributions to the Benefits Fund of the MITRP's Trust. Basic Plan benefits are insured by the Pension Benefit Guaranty Corporation (PBGC).

The value at retirement of an account in the **Supplemental 401(k) Plan** (where the contributions are defined, but not the benefits) depends on a number of factors. All participants have had the opportunity to voluntarily contribute 1% - 5% of salary to the

Supplemental 401(k) Plan. The Institute matches these contributions dollar-for-dollar. This account has been invested in the Fixed and Variable Funds as directed by the participant.

Accounts accumulated under the former **RPSM** are also invested in the Fixed and Variable Funds. This plan consisted of the 10% contribution from MIT plus a required 5% contribution from the participant. Under the pre-1999 rules, one half of the contribution from MIT plus its investment returns have had to be annuitized upon retirement.

Thus, the total value of an individual's account in the **Supplemental 401(k) Plan** and in the **RPSM** (if any) at retirement depends on the member's contribution to the Plan, the MIT contribution, the choices made by the participant between investments in the Fixed and Variable Funds, and the performance of the financial markets where the funds are invested.

The Institute has provided record keeping services and the trustees have guided the investment policy, even though almost all day-to-day investment decisions were made by outside firms. The Institute has picked up all of the costs associated with the Plan, such as investment, custodial, legal, and actuarial fees. The normal practice elsewhere is to deduct most of these costs from investment returns as is done by TIAA/CREF and many other 401(k) retirement plans and/or to charge participants a fee.

The Institute has provided annuities for both the Basic and Supplemental 401(k) Plan and has set annuity rates by a smoothing formula that limits the maximum increases or decreases to the fixed annuity interest rate to .25% per quarter. This smoothing can increase benefits when rates are dropping, but can lower them when interest rates are rising.

2.2 Why The Need For Change?

First, certain practices must be amended in order to preserve the tax-qualified status of the Plan and bring the Plan up-to-date with changes in IRS regulations. The advantages of preserving this status are many. Under a tax-qualified plan, participants pay no taxes on employer contributions until funds are withdrawn; participants may make pre-tax contributions; investment returns accumulate tax-deferred; certain lump-sum distributions may be taxed at reduced rates; and accrued benefits may not be attached in case of bankruptcy.

Second, some participants have viewed the investment options in the **Supplemental 401(k) Plan** and the **RPSM** as being very limited, with only a choice between the Fixed and Variable Fund and restrictions on the movement of funds between them. A greater list of options would allow participants to build investment portfolios suitable to meet their particular needs.

Finally, the servicing of the 401(k) portion of the Plan has gotten beyond the capacity of MIT to manage to the standards set by modern financial-services institutions. This includes providing responsive record keeping, managing increased investment and withdrawal options, providing up-to-date account valuation, supplying additional service to members, expanding annuity offerings, and insuring continual IRS qualification of the Plan with the frequent changes in regulations. The question also arises as to whether 401(k) record keeping should be part of the core mission of MIT.

The Benefits Office, in conjunction with the Strategic Review of Benefits Committee and the Committee on Faculty Administration, developed proposals to deal with these and other issues. Some of the proposed changes were required to keep the Plan tax-qualified, and were instituted on January 1, 1999; others occurred in the spring of 1999. The Subcommittee has reviewed these changes and we outline them below with our comments.

2.3 Highlights of Changes to the Plan

Some changes deal with the request for more investment options and better services. This is accomplished by outsourcing the administration and management of the Plan to a financial services institution, Fidelity Investments, and allowing Plan participants a much wider choice of investment options. In its decision to outsource the management and administration of individual accounts, MIT held discussions with several outside financial service organizations. We have examined the requirements established by MIT and the proposals received from several vendors. The Subcommittee also reviewed the process that was used to select Fidelity Investments as the outside vendor for the 401(k) portion of the Plan and we are comfortable with the process.

This change will be seen as a benefit by many who have asked for more investment options, but may be of concern to others who have neither the time, the experience, nor the inclination to enter into more direct management of their retirement assets. To accommodate these concerns, the investment options will include the continuation of the current Fixed and Variable Funds. The current assets of the MIT Fixed and Variable Funds were transferred to Fidelity Investments for their day-to-day management on April 1, 1999. The investment guidelines of the Fixed and Variable Funds will be set by an MIT oversight committee, following the current philosophy of these funds, but specific investment decisions will now be made by Fidelity Investments. These particular funds will be managed as mutual funds but offered only to MITRP participants. They have been referred to as "cloned" funds in some MIT literature because they are designed to match the earlier Fixed and Variable Funds in risk and return.

Although the Fixed Fund will initially contain the investment vehicles that currently make up the MIT Fixed Fund, and the investment policy oversight will be provided by MIT, it differs from the previous MIT Fixed Fund in that it will always be valued at market. Thus, during periods of rapid growth, it will show the full market increase. Conversely, during market retrenchments, its value can decrease.

In addition to the Fixed and Variable Funds, participants will have access to a variety of mutual funds across which to allocate their 401(k) assets. Each of these funds bears a specific expense ratio charge that is set by Fidelity or other provider, in some cases after negotiation with MIT. Different funds impose different expenses for fund management, which encompasses management and trading expenses, investment advisory service fees, and advertising. The expenses of the individual fund accounts will be taken out of gross investment returns, so that participant accounts receive investment returns net of these fund expenses.

Since the bulk of the investment fees on the Fixed and Variable Funds have to date been paid by MIT, charging these fees to the accounts in the future will adversely affect account balances for all participants including retired faculty who have accounts in these funds. However, the increased option to choose other funds with possibly higher returns may make up for this loss in the minds of many participants. The annual expense ratios for the universe of mutual funds are typically in the range .1% to 1.5% of assets depending on the investment option selected (see Appendix 2 for a table of annual expense ratios for various investment options).

Because of improved record keeping and economies of scale, the move to an outside financial-services vendor also offers the opportunity for increased options for withdrawal from participant accounts at the time of retirement. These options will be provided at no additional cost beyond the expense ratios charged for the individual mutual fund holdings in a participant's account. Also, because of improved record keeping, individuals will have continuous up-to-date information on their accounts through access to the web, by telephone, or by frequent account mailings.

Under the pre-1999 Plan, annuity rates were set by MIT. Under the current Plan, an additional annuity option will be added. MIT will now negotiate group rates with an outside vendor for annuities, which will be available to participants. An expressed concern has been that an outside firm would not set annuity rates using the same formula that MIT has been using to set them, and would therefore subject retiring participants to greater risk from interest rate fluctuations. To meet this concern, MIT will provide retirees with a choice, for a period of time the length of which is still under discussion, between using an MIT-set annuity rate or one that MIT negotiates at a group rate with a commercial carrier.

There are many other proposed changes. Some are designed to enable early retirement by providing increased flexibility and increased benefits. IRS regulations permit more flexibility in phasing in to retirement than is present in the pre-1999 Plan. By changing the normal retirement age (NRA) to 62, and allowing retirement benefits to be drawn while working part-time, the current MITRP will provide individuals with increased options and increased benefits.

The next two sections describe the changes in the MIT Retirement Plan in greater detail. Section 3 deals with changes to the **Supplemental 401(k) Plan**. The changes in Plan administration described for the **Supplemental 401(k) Plan** will also apply to assets contained in the **RPSM** Plan as discussed. (See Appendix 1 for a glossary of terms.) Section 4 deals with changes to the **Basic Plan**, the defined benefit plan to which MIT is the sole contributor.

3. Changes to the Supplemental 401(k)/ RPSM Plan

Changes in the 401(k) Plan fall into two categories. The first deals with the accumulation, pre-retirement phase. These features are discussed in Section 3.1. The second deals with the options for withdrawal available post-retirement. These are discussed in Section 3.2.

3.1 Changes in the 401(k) Plan Pre-Retirement

The revisions to the pre-retirement features of the **Supplemental 401(k)/RPSM Plan** fall into two rough categories. One results from changes made as of January 1, 1999. A second set of revisions came later with the completion of the transfer of Plan assets and management to Fidelity Investments, which occurred April 1, 1999. Both are discussed below.

3.1a) Increase in Allowable Employee Pre-Tax Contributions
Effective January 1, 1999, there is an increase in the amount a participant can contribute to the **Supplemental 401(k) Plan**, as a pre-tax employee contribution. The pre-1999maximum was 5%. After January 1, 1999, an individual will be able to contribute as much as 20%, up to a maximum of $10,000. The MIT match will remain at dollar-for-dollar only up to 5%.

3.1 b) Outsourcing of Fund Management to Fidelity with Additional Investment Offerings
In the spring of 1999, a number of additional options became available. Fidelity Investments now offers the Fixed and Variable Funds with investment oversight policy provided by MIT. Supplementing these options is a set of 8 to 10 Core Funds offering a variety of risk and return profiles. The Benefits Office will support these funds with informational brochures and investment analysis software. Finally, for MITRP participants who wish to have access to a still larger group of funds, Fidelity Investments offers, without additional transfer fees, access to selections from 21 Mutual Fund families through its Funds Net. The MIT Supplemental 401(k) Plan Oversight Committee has made the choice of the core funds and the Benefits Office has been negotiating the set of funds to be available through Funds Net. This information will be provided to Plan participants later this spring. Access to individual accounts became available on May 3, 1999.

Some participants have inquired whether shares in individual companies will be acceptable investment vehicles. The answer is no. IRS rules require arm's length transactions in 401(k) plans. Since it is not possible to insure that there is no "interest" in a particular stock purchase, this option will not be available to MITRP participants.

The initial transfer of a participant's retirement assets to Fidelity Investments created two separate accounts: account #1 is a combination of all current **Supplemental 401(k)** balances plus any **RPSM** member contribution account, and 50% of any **RPSM** MIT contribution account. Account #2 is the remaining 50% of any **RPSM** MIT contribution account. At initiation, assets in these accounts will be invested in the same proportions of the Fixed and Variable Fund as they were previously.

The resulting balance in account #2 may not be paid as a lump sum at retirement. However, the requirement that these funds be annuitized has been eased. Instead, retirees will be allowed to have this portion of their assets paid in any form (including annuity) that results in payments being made in installments that continue at least 10 years.

The structure of the new Plan with its use of individual accounts that are marked-to-market makes it possible for individuals to rollover funds from certain other qualified plans so that their assets can be managed in one place. Many faculty may find this an attractive option. Possibilities for rollovers include other 401(k) plans, KEOGH's, and SEP-IRAs. However, IRS regulations currently do not allow rollovers of either 403(b) plans or TDA's. Assets that are rolled over into an individual's account will be segregated from the MITRP accounts, and the individual will bear any costs from a rollover from a Keogh or IRA account.

Although these accounts will be segregated, at present there is no provision to allow participants to make separate investment decisions for these accounts prior to retirement. Investment returns from a participant's entire set of accounts will be prorated across the individual accounts. The Subcommittee recommends that policy be re-examined in 2000.

3.1c) Transfer of Investment Expenses to Participants

Under the current Plan, MIT has borne the expenses for the 8,700 employees currently in the Plan. In addition, since there is no option to treat participants differentially, MIT has borne the expenses for the 5,300 former employees who have not retired and for whom MIT continues to hold an account. After April 1, 1999, all Plan participants will pay investment expenses associated with the expense ratios of the particular investment option that they have chosen. MIT will bear the cost of the transition between MIT and Fidelity Investments. With the exception of funds invested after January 1, 1999 in the money market account, no account was charged investment expenses and received gross return on the assets until April 1, 1999. MIT will continue to pay the MIT-based expenses of operating the Plan, such as the communication and counseling that individuals receive from the Benefits Office and any on-campus record keeping.

With the transfer of funds to Fidelity Investments, participants receive net investment returns, as occurs for a traditional mutual fund investment account. Expense ratios are: for the Fixed Fund, an annual expense ratio of .22% of assets; for the Variable Fund, an expense ratio of .28% of assets. Other choices will bear other expense ratios. One option available to MIT participants as a core fund is access to the Fidelity institutional S&P 500 Index fund at an expense ratio of .1% of assets, roughly 50% below the best rate available to individual investors. Also available through Funds Net is access to the Vanguard Institutional Index Fund, at an expense ratio of .06%. (See Appendix 2 for a table of <u>Annual Expense Ratios for Various Mutual Funds</u>).

The Subcommittee has considered several issues in reviewing the transfer of MITRP investment expenses to participants. With the move to participant choice of investment options, each account will bear a specific cost, depending on options chosen by the participant. It has been suggested by some that MIT continue to pay the costs of the Fixed and Variable Funds, expecting individuals to pay the costs of the other options they choose. Another suggestion was for MIT to fund an equivalent portion of the expenses for all funds, or to pay a portion of the costs for all participants in the MITRP for a transition period. Alternatively, MIT could transfer additional funds to individual accounts as an offset against future expenses.

These suggestions must be viewed in light of the fact that the Plan's investment options will include mutual funds (and other funds that use the mutual model for funding expenses). Mutual fund accounting systems are structured to deduct expenses daily, so that net returns are reported. In addition, the daily deducting of expenses is outlined in a mutual fund's prospectus, and must apply to all account holders as outlined by the prospectus. This makes it virtually impossible to track gross returns for MIT participants.

There has been a shift away from being able to recover pension plan cost from the portion of the Employee Benefit Pool supported by federal contracts. And with the move to supporting full faculty salaries on Institute funds, MIT now pays a much greater share of the employee benefit expenses for faculty out of its general budget. We also recognize that the faculty will benefit in other ways from the cost savings to MIT if Plan participants pay investment costs, because the change will free up discretionary funds for educational and research purposes. Thus, the Subcommittee believes that this cost-shifting should not be considered in isolation, but evaluated in the context of all changes, some of which increase costs to MIT, and more generally in terms of the overall retirement benefits package. For all of these reasons, we believe this is a reasonable proposal.

3.1d) Change in Fixed Fund Accounting to Market Value

Prior to 1999, a participant's Fixed Fund account value was expressed as its "book value," defined as the sum of MIT and individual contributions plus interest and dividends and a portion of net capital gains experienced by the Fixed Fund. The aggregate of book values could differ from the aggregate market value of the fund. "Market value" is defined as the sum of MIT and individual contributions plus interest and dividends and all net capital gains experienced by the Fixed Fund. At the time of payment of the participant's account, such as at retirement, if the market value of the fund exceeds the aggregate of book values, the book value of the fund was increased by a "market value adjustment" which multiplied the book value of an individual account by the ratio of aggregate market value to the aggregate of book values. At all times since this book value-market value procedure has been used, the market value has exceeded the book value. The amount by which market value has exceeded book value is the "market value adjustment."

The possibility of crediting a benefit at a value other than the account's market value violates IRS qualification requirements. Therefore, the concept of book value and the associated smoothing procedure must be abandoned. As a result, all Fixed Fund accounts received a market-value adjustment based on returns through Dec. 31, 1998. These funds were allocated in proportion to the asset value of the individual accounts, and on January 1, 1999 all participant Fixed Fund accounts were given the market value adjustment of 17.8%. This is equivalent to allocating the funds as if everyone were retiring on this date. From now on, the accounts will be at market value each day.

Some faculty have raised the question of whether this method of allocating the unallocated funds is fair. After considerable deliberation, the Subcommittee has concluded the process used was appropriate. The Subcommittee's reasoning is described in Appendix 3.

3.1e) Addition of Immediate Vesting
As of January 1, 1999, vesting is immediate. That is, a participant will immediately have a right not only to his/her own contributions, but also to the MIT contributions to their account. This provides an obvious financial benefit to new participants. Also, under this change, the Plan will no longer be required to test pre-tax contributions to insure that high-income individuals are not overly weighted in the Plan. Therefore, there will no longer be the possibility — as has occurred — of cutbacks of the contributions of highly compensated participants. (The IRS defines highly compensated individuals as those with salaries above $80,000 for 1999.)

3.1f) Elimination of Post-Tax Contributions on January 1, 2000
Under the current Plan, contributions to the Supplemental 401(k) Plan can be either on a pre-tax or post-tax basis. Pre-tax means that you do not pay federal or state income taxes on the amounts contributed but do pay these taxes when the contributions are withdrawn. Post-tax means that you do pay federal and state taxes on amounts contributed, but not when the contributions are withdrawn.

Because MIT accepted post-tax contributions, MIT was required to test contributions across the Plan to insure that higher compensated individuals were not over-represented in the Plans benefits. Because of the complexity, expense, and effects of this requirement, MIT proposes to eliminate post-tax contributions to the MITRP as of January 1, 2000. As a result of this change, MIT will no longer be required to carry out testing.

Many participants in the Plan have taken advantage of this option through MIT provided TDAs and will need to consider what the elimination of the post-tax option will mean for them. Post-tax tax-sheltered annuities (TSA) will still be available from outside providers (TIAA, for example, sells them). Like TDAs, a TSA will also shelter earnings from taxation until withdrawal. This would allow individuals to have the maximum earnings deferred from taxation. The Benefits Office will be contacting all participants who currently contribute post-tax to the MITRP to discuss their individual needs.

3.1g) Loans available (with IRS restrictions)
Loans will be available under the new Plan for purposes such as the purchase of a home, education or medical expenses. This should encourage younger participants to put assets into the Plan knowing that they will be available under IRS restrictions for other uses. Under these rules, a loan will be available from $1,000 up to 1/2 of the value of the account, not to exceed a loan of $50,000. The loan will have a 5-year payback period and payroll

deductions will be used for repayment. A longer period for home purchase will be available. Spousal consent will be required to obtain a loan from pension assets. Payment of a reasonable interest rate is required on these loans.

3.1h) Options Initiated on January 1, 1999

As an intermediate step towards increased flexibility, on January 1, 1999, the MITRP introduced two options for Plan participants: a new investment option, and the ability to transfer funds among accounts. When the transfer of funds to Fidelity was completed, these were folded into the set of increased options.

The Employee Retirement Income Security Act (ERISA) gives advantages to retirement plans that have at least three investment options. The MITRP met this criterion on January 1, 1999 by offering a money market fund through Fidelity Investments into which participants can shift account assets. The money market fund bears an expense ratio of .42% of assets, thus reporting returns net of this charge.

ERISA also gives advantages to retirement plans that offer participants the opportunity to transfer assets among all available investment options, at least quarterly. Previously, the MIT Retirement Plan restricted transfers of assets between the Fixed and the Variable Funds. As of January 1, 1999, a participant may transfer funds monthly among three funds: Fixed, Variable and the new money market fund without any restrictions on age. After May 1999, with the new access to and information about individual accounts, daily transfers are permitted across all of the options.

3.2 401(k) Post-Retirement Withdrawals, Annuities, and Lump Sum Distributions

With the move of participant accounts to an outside vendor, Fidelity Investments, there is a significant increase in the post-retirement withdrawal options that are now available to Plan participants. For many faculty, pension assets represent an important part of their total assets. Tax and estate planning is a complex area that each individual must consider based upon his/her situation and it is not the charge of this Subcommittee to discuss these issues. The Subcommittee has explored whether the MIT Retirement Plan allows the full range of payout flexibility, with its potential for tax and estate planning, that is permitted under IRS regulations governing 401(k) plans. Also we have considered whether the communication material available to Plan participants lays out these options in a clear manner.

3.2 a) MIT 401(k) Withdrawal Options

Participants do not begin drawing assets from the MITRP until they retire; no matter at what age this occurs. This is in contrast to IRA plans, which require minimum distribution payments to begin at age 70 1/2. Plan participants who retire before age 70 1/2, have the option to take Plan assets, either in part or in total, as lump sum distributions, scheduled or flexible payments, rollovers into various IRAs or through purchase of various annuity contracts or to leave all assets in the Plan. Once the retiree is over age 70 1/2, an election of a method to begin minimum distribution payments must be made. The choice of the participant's beneficiary can determine the size of the minimum distribution payments to the participant.

Two provisions are specific to the MITRP Supplemental 401(k) Plan, and are not required by all 401(k) plans. First, the MITRP requires that 50% of the MIT contribution to the MIT RPSM remain in the Plan or be transferred to an annuity and that these assets be paid out over a period of at least 10 years. Thus, this portion is not available as a lump sum payment or for rollover into an IRA. Second, the MIT 401(k) Plan requires spousal consent for any payout plan that results in less than 50% of Plan benefits being available to the spouse.

However, with spousal consent, it is possible upon retirement, to rollover Plan assets, exclusive of 50% of the MIT contribution to the RPSM, into an IRA. The governing IRS framework for the distribution of retirement plan assets of IRAs is described in IRS publication 590. Many participants will find this option attractive.

We believe that, in general, the provisions governing the MITRP Supplemental 401(k) Plan provide the complete flexibility of withdrawal options for Plan participants and their beneficiaries that are allowed by IRS regulations governing 401(k) plans. However, there is at present no document that lays out Plan options for withdrawal in a clear and comprehensive manner.

Appendix 5 presents withdrawal options for both the MITRP 401(k) Plan and the alternative IRA options for payments to participants and beneficiaries.

3.2 b) Provision for Early Distribution of Plan Assets

Under the new Plan, distribution of Plan assets will be available to an individual who is at least 59 1/2 and who arranges to work less than 50% time.

3.2 c) Addition of New Annuity Options

An annuity is a specific contract for payout of all or a portion of plan assets. It includes a choice of either fixed payments, or variable payments that depend on the investment performance of the annuitized assets. It can include a specific time for payments or provide payments for life. It can include a specific beneficiary and additional specifications. All of these options affect the schedule of benefit payments under the annuity contract. Information about annuity options is available from the Benefits Office. Once an annuity contract has been defined, it cannot be changed.

Under the new Plan, MIT will continue to offer its traditional annuity for the defined-benefit portion of the Plan, MIT will continue to take **Supplemental 401(k)/RPSM** money back into the Benefits Fund to provide an annuity for the defined contribution portion of the Plan using the same interest rate assumptions and mortality tables as have been used in the past. MIT will also offer annuities at negotiated group rates from outside carriers to provide a choice. For its annuities, MIT's interest rate is the trailing 12 month average rate of 10 Year Treasury notes determined quarterly limited not to go up or down more than one-quarter of one percent from the rate used in the preceding quarter, so that interest rate lags market increases and decreases. . While faculty who benefited from slowing interest rate declines may have been pleased, those who were hurt by slowing interest rate increases expressed dissatisfaction. If MIT continues to offer the choice between an annuity from MIT and from an outside carrier, the difference in interest rates offered by MIT and the outside carrier could create an additional expense to MIT, since participants will likely make the choice of an MIT annuity only when the MIT rate is more favorable than the commercial rate. The issue of MIT continuing to offer annuities is currently being re-examined.

3.2 d) Death benefits
Since Plan assets can represent an important part of the total assets of Plan participants, it is important that participants give some thought to how these assets will be passed on to beneficiaries at the time of death. With spousal consent in the case of married participants, participants have considerable flexibility in designating beneficiaries to receive Plan assets at the time of death. Payout of Plan assets upon death depends upon the choice of beneficiary (spouse/non-spouse and age) and whether minimum distribution payments have begun. The choice of beneficiaries not only affects the disposition of asset after death; it can determine the size of minimum distribution payments to the participant during retirement.

Payments under an annuity contract follow the terms of the contract. Plan documents and IRS regulations govern distribution of undistributed non-annuitized Plan assets to beneficiaries. Spousal beneficiaries are allowed to rollover lump sum distributions into spousal IRAs or to continue to receive Plan distributions. Non-spouse beneficiaries of Plan participants who die before retirement or before minimum distribution payments have begun, receive a single lump sum payment. Under current IRS regulations, they may leave the assets in the Plan for five years, or for a designated beneficiary, plan assets may be distributed over the expected life of the beneficiary. However, no MIT Annuity will be available for this distribution. Non-spouse beneficiaries of Plan participants who have begun minimum distribution payments continue the payment schedule set up by the participant. (See Appendix 5.)

4. Changes Effective January 1, 1999 in The Basic Plan

The noncontributory, defined benefit portion of the Plan is referred to as the Basic Plan. It was created in 1989 with the merger of the RPE and certain benefits from the RPSM. MIT will continue to pay all of the expenses associated with the Basic Plan. Under the Basic Plan, a retiree receives the larger of the annuity calculated using two different methods of calculation. (This maximum approach is a consequence of the earlier merging of two separate Plans.) One calculation is an annuity equal to 1.65% of the sum of salaries received in all years between 1989 and the date of retirement, actuarially adjusted to provide the full benefit at normal retirement age (NRA). The second calculation is the annuity that could be purchased (given annuity pricing at the time of retirement), by the amount in a notional or shadow account, which is credited with 5% of salary each month and earns a notional rate of return. To date, the 1.65% calculation has yielded larger retirement benefits for almost all retirees since this maximum approach was initiated.

However, for those who were members of the RPSM, there is an alternative. Although a Qualified Spouse Benefit (QSB) is available to all RPSM (pre-1989 Plan) members under both the 1.65% and the 5% account methods, the QSB for the 5% account is higher. Thus to receive the higher QSB, an RPSM participant must elect the annuity from the 5% account, even if that results in lower payments than that from the 1.65% calculation.

4.1 Pre-Retirement Changes

4.1 a) Accumulation of Benefits for the 5% and the 1.65% Accounts
In the past, the investment growth of the Fixed Fund was used to determine the growth of the notional 5% account. (This account also received a market value adjustment on December 31, 1998 in the same way as the Fixed Fund as described above.) Under the current IRS regulations, the continued use of the Fixed Fund appreciation, as it is managed by MIT, is not an option since IRS now requires an arm's- length method to compute account growth. Therefore, to compute the growth of the 5% account after January 1, 1999, MIT must select some market index whose growth is outside the control of MIT.

To increase the notional balance in the 5% account each month, MIT has chosen to use the following method. The first step is to calculate the return over the previous 12 months in an index based 75% on the Lehman Bond Index and 25% on the Russell 3000 stock index. This index was chosen because it approximates the investment practice of the fixed fund, the return on which was used in the past. The second step is to apply a floor of 0% and a ceiling of 15% to this annual return. Then the annual rate of return is converted into a monthly rate of return and applied to the balances in the 5% notional accounts. A floor of at least zero is required by the IRS for a defined benefit plan such as the Basic Plan. In the presence of a floor, and without a catch-up procedure, a ceiling to balance the costs for MIT seems appropriate. The Subcommittee finds that this method is reasonable. This issue is further discussed in Appendix 4.

However, if we should have a period of prolonged moderate inflation, it is likely that there would be more trimming of high returns than of low ones and it would be appropriate for MIT to revisit the 15% ceiling and raise it, at least temporarily, or make some other adjustment such as the introduction of a catch-up provision. Continued monitoring of the workings of this system is an important part of the provision of benefits.

The Subcommittee is also concerned that the present method of calculating the 1.65% Basic benefit is subject to risk for participants in the event of significant inflation. We have examined this issue (Appendix 4) and concluded that past contributions in the 1.65% account are eroded by inflation both for a long period of moderate inflation as well as a short period of high inflation. It is not the place of this Subcommittee to recommend a particular change in this element, which is not being changed otherwise. However, we urge the MIT administration to examine and possibly redesign the 1.65% accounts.

4.1b) Benefits Accrued past Normal Retirement Age (NRA)
To avoid age discrimination, benefits must continue to be earned for participants who work past normal retirement age. Thus, during one's working life at MIT, both 5% of salary and interest on the 5% account will continue to be credited.

For the 1.65% account benefit, two calculations will be done. The first is the annual payment that would be paid with the participant's account credited with the additional 1.65% of salary for the years worked after NRA with no actuarial benefit for starting the payments at an age past the NRA. The second calculation is the benefit that would be paid if the salary contributions up to the NRA were used to fund an annuity starting at an age beyond NRA, that is payments that are increased by an actuarial adjustment. Under the Plan, the participant receives the greater of the benefit from these two calculations.

Thus, if a participant who retires past NRA receives benefit payments that are increased actuarially to reflect a later starting date, they will not also receive the benefit of the 1.65% of their salary accumulation for the years that they worked beyond NRA. On the other hand, if the payments calculated by crediting the participants account for 1.65% of salary for years worked beyond NRA are larger, they will not also receive the actuarial credit for the later start of their annuity payments.

4.1 c) Pre-Retirement RPE
Under the pre-1999 Plan, little or no RPE benefits were payable to the beneficiaries of unmarried RPE participants who die prior to beginning annuity payments. Effective January 1, 1999, the entire RPE benefits of unmarried participants are payable to their beneficiaries, as a single lump sum or as annuity payments.

4.2 Post-Retirement Changes

4.2 a) Changing of the Normal Retirement Age for the Basic Plan from 65 to 62
Under the pre-1999 MIT Pension Plan, the normal retirement date was July 1st following the 65th birthday. An individual retiring on this date who is entitled to receive the 1.65% benefit received the full sum of 1.65% of salary as an annuity. Actuarial adjustments were made for individuals who chose to retire earlier than the Normal Retirement Age (NRA).

The Executive Committee of the Corporation has approved a limited-time change to the Normal Retirement Age (NRA) for the Basic Plan from 65 to 62, effective January 1, 1999 and continuing through December 31, 2003. They also backdated the calculation of the 1.65% pension benefit with an NRA of 62 to 1989 so that benefits earned since 1989 have an effective NRA of 62. This change will be revisited before the end of the fifth year to ascertain whether the assets of the Plan continue to support the decrease in normal retirement age to 62, and to determine if the change has resulted in an increase in faculty retirement.

As a result of this change, participants may elect to retire at age 62 and receive annuity benefit payments from the accumulation in their 1.65% account since 1989 without the current reduction for early payment. Or, if participants elect to retire before age 62, the reduction for early retirement will be less than would be the case if the normal retirement age were 65. Finally, for those who retire after age 62, two calculations of the benefit will be done and the larger of the two will be paid to the participant as discussed in section 4.1b. The benefit under the 5% account is not affected by the change in NRA.

The decrease in normal retirement age from age 65 to age 62 adds a permanent increase to all benefits earned since the Basic Plan began on July 1, 1989 (January 1, 1990 for some union members) and to all benefits that will be earned as long as the NRA of 62 is in place. If the normal retirement age rises back to 65 after December 31, 2003, the higher age will apply only to benefits earned after December 31, 2003. The effect of age 62 normal retirement age on benefits earned while it is in effect will not be lost.

For all Plan participants upon their retirement, benefits will be the sum of the benefit earned during years when the NRA was 62 and that earned when the NRA was 65. Thus, this change increases permanently the Basic Plan benefit for all participants no matter when they retire. This occurs because the calculation of benefit for each year of employment will use an actuarial table adjusted to provide the full benefit at that year's NRA, with corresponding increases for those who retire later.

In addition, this change affects the Cost-of-Living Adjustments under the Basic Plan. After Basic Plan benefit payments begin, they will increase once every three years as determined by a cost-of-living formula. The first increase is scheduled three years after normal retirement age. By decreasing the normal retirement age from 65 to 62, the first cost-of-living adjustment for a person who retires at age 62 or earlier would be due at age 65, instead of at age 68 as under the current Plan.

4.2 b) Lump Sum Payout
Under the previous MITRP, a single lump sum payout was available if the value of the payment was less than $10,000. Under the current Plan, a single lump sum payment will be available if the participant was employed less than 10 years, with no dollar limit.

4.2.c) Annuity Payments
Under the previous MITRP, an MIT annuity payment option was the only option available if the value of the payment was greater than $10,000. Under the current Plan, the annuity option is used if the participant was employed for 10 years or more.

5. Participant Services

5.1 Communications

The Benefits Office has carried out seminars for participants on these retirement issues, and prepares written material in the form of annual reports and information about changes. This effort has been increased in order to keep participants apprised about the changes under way now. Also, detailed fund descriptions and descriptions of services and options are being prepared and will be mailed to participants by mid to late April.

However, it has been the experience of our Subcommittee that a great deal of time and effort is needed, given the current documentation, to master even the essential details, jargon, acronyms, etc. that are needed to understand the Plan and to make intelligent individual financial decisions. One reason for the difficulty is that the Institute lacks the written material that is needed to help busy faculty and staff members learn what they need to know to manage their retirement affairs. This report itself, is an indication of the problem, in the amount of descriptive material we have had to include in order to support our view of the changes.

It is our view that interests of faculty and staff have been well served by the MIT Administration, in the way it has managed the Plan. Perhaps lack of full understanding of its details was not so critical in the years when individual choice was limited. But now there are more options in terms of both investment choices and choices about the form in which to take benefits. With the expanded options, it is important for an individual to understand the concept of the risks associated with investing as well as the risk of inflation and to understand the basics of investing and asset allocation so the value of material carefully crafted to educate participants is greatly increased. This will be the continuing focus of the educational programs and resources that will be made available to the MIT community with the assistance of resources that will be forthcoming from Fidelity and others. Similarly, with increased options to take lump sums and to choose among annuities and scheduled payments in different forms, it is important for participants to understand the benefits and limitations from annuitization and the differences across different kinds of annuities. We need to devote resources to ensuring that those making these choices have the benefit of a good educational program.

The increased options for Plan participants within the 401(k) framework requires that increased information be available. There is a fundamental dilemma in providing precise information about 401(k) plans as contrasted with IRA and Keogh plans. For IRAs and Keogh plans, the governing plan regulations and documents are well defined. Since individuals have total discretion to change vendors for their IRA and Keogh assets, vendors have a competitive reason to provide clear and precise information to plan participants. If participants are dissatisfied with this information or with features of their plans, they are free to immediately move their assets. With respect to 401(k) plans, the situation is more complex. 401(k) plans are employer-sponsored within a framework of IRS law and regulation. 401(k) plans are not uniform, and different employers have different provisions. Thus, there is not a single set of plan descriptions and reference materials available for 401(k) plans which participants can access outside of their plan administrators. Outside financial service vendors deal with the institution and not with the individual. Therefore, financial service institutions have less incentive to provide clear and precise information to plan participants about their options.

We feel that the current information available which describes the MITRP Supplemental 401(k) Plan, is not adequate, and we recommend that the Benefits Office and Fidelity work to develop a Plan document for participants that has the level of clarity and precision that is typically available to describe IRAs.

5.2 Counseling

In the past, the Institute has guided the investment policy for Plan assets, even though almost all day-to-day investment decisions were made by outside firms. Consequently, the Institute assumed fiduciary responsibility for the risk of avoidable unsatisfactory performance. After January 1, 1999 each member of the MIT Retirement Plan is individually responsible for the management of his/her Supplemental 401(k) Plan assets. The Benefits Office and Fidelity Investments will provide information concerning investment risks and returns, but will not provide investment advice.

Fidelity Investments has made available a money market fund as well as two funds, the Fixed Fund and the Variable Fund which are intended to continue the investment strategy that the Treasurer's Office employed in the past, in exercising its fiduciary responsibility for the two funds available to participants in the Supplemental 401(k) Plan. They are intended as investment vehicles for individuals who are not experienced investors, and who have been satisfied with the past performance of the funds managed by the Institute. Each participant must decide whether these Cloned Funds are suitable investment vehicles for the long-term future.

The possibilities for investment of participants' funds are vast. Beyond the many additional mutual funds that will be available through Fidelity Investments after May 1999, the establishment of a brokerage account by a member, will permit access to any listed mutual fund as well as to securities issued by the United States Treasury. (As mentioned in 3.1b, purchase of individual stocks is not permitted.) Individuals who are not experienced investors should seek professional advice concerning appropriate investment asset allocations.

The Benefits Office will have information available on the Fixed and Variable Funds, the money market fund, and the 8-10 core funds that have been selected by the MIT Supplemental 401(k) Plan Oversight Committee. At some later time, Fidelity will provide a software package, called Portfolio Planner, which will be available to assist participants in selecting an appropriate mix of investments. This software package will be populated with information about the core funds to aid individuals in allocating assets across the risk-reward spectrum.

We urge participants to consider the spectrum of investment and withdrawal options now available and, if they feel uncomfortable about the options, to seek advice.

The Benefits Office has traditionally provided counseling to participants as they contemplate retirement. We urge participants to seek information about withdrawal options and consider their personal situation well in advance of retirement.

Appendix 1: Glossary of terms

Annuity: a promise of income, usually in the form of a contract that guarantees a fixed or variable payment to the recipient usually at retirement. In a fixed annuity, the amount will ultimately be paid out in regular installments varying only with the payout method elected. In a variable annuity, the payout depends upon the value of the underlying investments.

Annuity purchase rate: the interest rate used to determine the factor for converting an account balance to an annuity income. MIT's interest rate is the trailing 12 month average rate of 10 Year Treasury notes determined quarterly except that it will never go up or down more than one-quarter of one percent from the rate used in the preceding quarter.

Basic Plan: the Massachusetts Institute of Technology Basic Retirement Plan, a defined benefit plan fully funded by MIT.

Benefits Fund: the fund from which all fixed benefits are paid (including any cost of living increases and, for certain people who were members of the Retirement Plan for Staff Members, the qualified spouse and early retirement supplement benefits.) All Basic Plan Benefits are paid from this fund.

Book value: refers to Fixed Fund account balances prior to 1999. Contributions and credited earnings to accounts are known as the book value of the accounts.

B**ond Index**: a weighted average of the value of selected bonds.

"Cloned" funds: a term describing The Fixed and Variable Funds after transfer to Fidelity Investments management.

Defined benefit plan: plan that promises to pay a specified amount to each person who retires after a set number of years of service.

Defined contribution plan: plan whose contributions generally are defined by formula and allocated to individual participant accounts. Benefits consist of the amount accumulated. Generally, each participant decides how to invest from among options offered. Benefits consist of the amount accumulated in each participant's account.

ERISA: Employee Retirement Income Security Act, 1974 law governing the operation of most private pension and benefit plans. The law eased pension eligibility rules and established guidelines for the management of pension funds.

Expense Ratio: annual investment management fees charged to specific mutual fund accounts expressed as a percentage of account assets.

Fixed Fund: an investment option under the Supplemental 401(k) Plan. The Fund is a balanced fund consisting primarily of bonds with some stocks.

Fixed Fund "distribution rate": the monthly credited investment return to accounts in the Fixed Fund. The rate was determined by formula, and reflected all interest and dividends, realized and unrealized gains or losses on common stocks, and other equity securities, and realized gains or losses on bonds and other fixed income securities. To maintain a relatively stable distribution rate, gains and losses were distributed over five years.

Index (associated with the 5% Account Method): To increase the notional balance in the 5% account each month, MIT will use the return over the previous 12 months in an index based 75% on the Lehman Bond Index and 25% on the Russell 3000 stock index, limited by a floor of 0% and a ceiling of 15%. (See Appendix 4.)

Index Fund: mutual fund whose portfolio matches that of a broad-based index such as the Standard & Poor 500 Index and whose performance therefore mirrors the market as a whole. Many institutional investors, especially believers in the EFFICIENT MARKET theory, put money in index funds on the assumption that trying to beat the market averages over the long run is futile, and their investment in these funds will at least keep up with the market.

FundsNet: an "open window" to mutual funds made available to participants by Fidelity Investments.

IRA: Individual Retirement Accounts available under the IRS regulations described in IRS publication 590.

IRS, Internal Revenue Service: U.S. agency charged with collecting nearly all federal taxes, including personal and corporate income taxes, social security taxes, and excise and gift taxes.

Keogh. Self-employed retirement plan described in IRS publication 560.

Lump sum distribution: single payment to a participant or beneficiary covering the entire amount of an agreement. Participants in Individual Retirement Accounts, pension plans, profit-sharing, and executive stock option plans generally can opt for a lump-sum distribution if the taxes are not too burdensome when they become eligible.

Market value: fair market value price at which an asset or service passes from a willing seller to a willing buyer.

Market Value Adjustment: prior to 1999, when Fixed Fund Accounts were distributed or converted to an annuity, were credited with a one-time adjustment known as a market value adjustment. The market value of the Fixed Fund fluctuates daily and was computed monthly. If the market value of the Fixed Fund was greater than the book value of all of the accounts, the market value was divided by the book value, and this percent was applied to the book value account balance. This was known as the Market Value Adjustment. At the end of 1998, all Fixed Fund accounts were credited with the Market Value Adjustment.

Mark-to-market: adjusting the valuation of a security or portfolio to reflect current market values.

Minimum Distribution Payment. Minimum annual payments required to be withdrawn from plan assets after retirement beginning at age 70 1/2; the amount of the payment is determined actuarially by the age of the participant and any beneficiary.

Mutual Fund: fund operated by an investment company that raises money from shareholders and invests it in stocks, bonds, options, commodities or money market securities. These funds offer investors the advantages of diversification and professional management. A management fee is charged for these services.

Normal Retirement Age (NRA): a Defined Benefit term referring to the assumed retirement age used for determining full benefits.

"Open Window": an investment option, which provides for access to other mutual funds.

Outsourcing: when a third party does the record keeping of a retirement plan.

RPE: the former plan for service and support staff or the Retirement Plan for Employees.

RPSM: the former plan for faculty and staff or the Retirement Plan for Staff Members.

Rollovers: movement of funds from one investment to another without tax liability. For example, an Individual Retirement Account may be rolled over when a person retires into an annuity or other form of pension payout system.

Supplemental 401(k) Plan: the MIT defined contribution plan that includes the current Supplemental 401(k) Plan, the former RPSM plan account balances, and the pre-74 member account balances under the former RPE plan.

S&P 500 Index: a broad-based measurement of changes in stock market conditions based on the average performance of 500 (or S&P 500) widely held common stocks.

Tax-Deferred Annuity (TDA): a salary reduction plan which allows employees of not for profit organizations to elect as an alternative to receiving taxable cash in the form of compensation to contribute pre-tax dollars to a tax-deferred retirement plan.

Tax-Sheltered Annuities (TSA): An investment vehicle available from an outside vendor, which can provide tax sheltering of investment growth.

TIAA-CREF: one of the four TDA companies available to MIT employees.

Treasury Inflation Protected Securities (TIPS): an investment vehicle available on the open market.

Variable Fund: one of the MIT Supplemental 401(k) Plan investment options, which invests in stocks.

Vesting: the right an employee acquires by length of service to receive employee-contributed benefits under a retirement plan.

1.65% Pay Method: a method for determining Basic Plan benefits. Under this method, you earn an annual benefit equal to 1.65% of your pay each pay period. This annual benefit is calculated assuming benefit payments will start on your normal retirement date, and will be paid for as long as you live with no survivor benefits.

5% Account Method: a method for determining Basic Plan Benefits. Under this method, a bookkeeping account in your name is credited each month with an amount equal to 5% of your pay. This account is also credited with an investment return based previously on the return for the Plan's Fixed Fund, now to be changed to an external index. When you elect to receive your benefit, the balance in your bookkeeping account is converted to a pension (an annuity) using the Plan's assumptions about interest rates and your life expectancy.

10-year rule: for the purposes of calculating life expectancy for some purposes, the age of a non-spouse beneficiary will be taken as no less that 10 years less than the participant.

401(k) Plan: a salary reduction defined contribution plan whereby an employee may elect, as an alternative to receiving taxable cash compensation, to contribute pre-tax dollars to a qualified tax-deferred retirement plan.

403(b) Plan: also referred to as a Tax Deferred Annuity (TDA): a TDA is a salary reduction plan for not- for-profit organizations whereby an employee may elect, as an alternative to receiving taxable cash compensation, to contribute to a tax-deferred retirement plan.

Appendix 2: Annual Expense Ratios for Various Mutual Funds

Stock Funds

Fidelity Blue Chip Growth	.72%
Fidelity OTC	.76%
TIAA CREF Stock	.31%
Vanguard 500 Index Fund	.19%
Vanguard Institutional Index Fund	.06%
Vanguard Primecap	.51%
Vanguard Windsor	.27%
Vanguard Windsor II	.37%
Growth Funds Average	.145%
Growth & Income Funds Average	1.27%

Balanced Funds

Fidelity Puritan	.64%
TIAA CREF Social Choice	.29%
Vanguard Wellesley	.31%
Balanced Fund Average	1.32%

Bond Funds

Fidelity Bond Pool	.20%
TIAA CREF Bond Market	.29%
Vanguard Total Bond Market	.20%
Vanguard GNMA	.31%

Special MIT Funds

"Cloned" MIT Fixed Fund	.22%
"Cloned" MIT Variable Fund	.28%
Fidelity US Equity Index (Institutional Index S&P 500)	.10%

Appendix 3: Review Of The "Market Value Adjustment" Issue

As mentioned in Section 3.1f, all Fixed Fund accounts received a market-value adjustment based on returns through December 31, 1998. On January 1, 1999, all participant accounts were evaluated at market value. These unallocated funds were distributed to individual accounts in proportion to their asset value on December 31, 1998. This is equivalent to allocating the funds as if everyone did retire on this date.

Some faculty have raised the question of whether this method of allocating the unallocated funds is fair. There are two ways of framing the fairness issue. It is important to recognize that these two approaches have opposite implications for who gains and who loses from mark-to-market on December 31, 1998 relative to the fairness consideration.

One way is backwards looking and is really reexamining the historical fairness of the existing procedure. This way is based on asking the question of the value that the accounts would have today if the Fixed Fund had been mark-to-market historically. With an historical approach, people with large early accumulations relative to recent contributions lost when the market value adjustment was made.

The second way of framing the fairness issue is to ask the question how mark-to-market changes what would otherwise have happened if the methods of the Fixed Fund were to be continued into the future. That is, if we weren't changing the Fixed Fund, the fairness issue of not having mark-to-market would probably not be raised, since that is the way we have been treating everyone who retires. With a prospective approach, people who would have retired under the current guidelines with small accumulations relative to their final years' contributions, lose prospectively. This forward-looking approach uses the current Plan as a baseline for fairness considerations, while the backward-looking approach uses a hypothetical history of mark-to-market as a baseline for fairness considerations.

After some deliberation, the Subcommittee has concluded that it is not appropriate to revisit the historical workings of the Fixed Fund. Moreover, the Subcommittee thinks that the issue of fairness as applied to deposits that might be made in the future is not a compelling reason for changing the proposed method. Moreover, this prospective change is just one part of many changes affecting future deposits. Thus, the Subcommittee concludes that the proposed allocation is appropriate.

Appendix 4: Interest on the 5% Account

As discussed in Section 4.2 a), under the Basic Plan, a retiree receives the larger of the annuity calculated using two different methods of calculation. One calculation is an annuity calculated by the 1.65% method. The second calculation is the annuity that could be purchased (given annuity pricing at the time of retirement) by the amount in a notional or shadow account which is credited with 5% of salary each month and earns a notional rate of return. To date, the 1.65% calculation has yielded larger retirement benefits for almost all retirees since this maximum approach was initiated. Nevertheless, it is appropriate to use good rules for both methods of calculation. Also, some who were members of the RPSM may choose to retire under the 5% account to retain the larger of the RPSM Qualified Spouse Benefits.

The Basic Plan

The Basic Plan pays an annuity based on the larger of the annuity from the 5% account and the annuity from the 1.65% account. This Appendix will first consider the issue of an index for the 5% account and then consider the impact of inflation on both accounts.

5% Account

The 5% Account works like a defined contribution plan, only the crediting for the account is based on a hypothetical portfolio and MIT is free to hold a different portfolio. Moreover, there is a limit that the amount credited in any month not be negative. In the past the 5% account was treated the same way as the fixed fund. Since the fixed fund did not allocate capital gains all at once when they were earned, there was generally a pool of unallocated funds which would make it far less likely that the non-negativity constraint on monthly crediting would bind. Thus, the cost of paying for the non-negativity constraint fell on the accounts themselves. As long as the capital gains being credited to the accounts with delay were large enough, there was no cost to MIT from the non-negativity constraint.

With the change to mark-to-market, there is no pool of unallocated returns that can be used in this way. Also, under the current IRS regulations, the continued use of the Fixed Fund appreciation, as it is managed by MIT, is not an option since IRS now requires an arm's length method to compute account growth. Therefore, to compute the growth of the 5% account after January 1, 1999, MIT must select some market index whose growth is outside the control of MIT.

To increase the notional balance in the 5% account each month, MIT has chosen to use the following method. The first step is to calculate the return over the previous 12 months in an index based 75% on the Lehman Bond Index and 25% on the Russell 3000 stock index. This index was chosen because it approximates the investment practice of the fixed fund, the index that was used in the past. The second step is to apply a floor of 0% and a ceiling of 15% to this annual return. Then, the annual rate of return is converted into a monthly rate of return, and applied to the balances in the 5% notional accounts.

Choosing an index that approximates previous practice seems appropriate. While some participants might prefer an index with a heavier weighting of stocks, it should be remembered that participants who are making use of the supplementary 401(k) accounts can hold a portfolio with more stocks so that the overall portfolio balance is felt to be appropriate. Thus conservatism to protect those relying very heavily on the Basic benefits seems appropriate.

A floor of at least zero is required by the IRS for a defined benefit plan such as the Basic Plan. In the presence of a floor, a ceiling to balance the costs for MIT seems appropriate. Based on Monte Carlo simulations by consulting actuaries, a ceiling of 15% roughly balances a floor of 0%. However, it should be kept in mind that this balance is sensitive to the average return on the index, as well as to the nature of the distribution around that average. In particular, if we should have a period of prolonged moderate inflation, it is likely that returns would adapt and be higher on average. In such an event, there would be more trimming of high returns than of low ones and it would be appropriate for MIT to revisit the ceiling and raise it, at least temporarily, or make some other adjustment such as the introduction of a catch-up provision on the monthly return being credited.

This could be done based on the monthly return or the rolling average return. Also this can be done separately for the floor and the ceiling or only for the floor that is mandated by IRS. We discuss a catch-up procedure just for the floor.

The idea of the catch-up is to calculate how much a dollar deposited at the start of the new procedure would be worth if it were credited with the actual return each month, ignoring a floor of zero. The actual cumulative return would be this cumulative return adjusted by filling in all the values, so that the cumulative return never declined - it would be flat from the time the monthly return was zero until the cumulative return caught up with the credited cumulative return.

If the fund had no new deposits, then this procedure would cost MIT money. However, as with any procedure that differs from mark-to-market in a smoothing way, some dollars will earn more than market while some earn less. And the aggregate size of the accounts will grow because of new deposits, less withdrawals on retirement, as well as from credited rates of return. For example if there is a month in which the zero floor binds followed by a month with a lower crediting rate that restores the index, the following happens. Any dollar in the account before the two months and still there after the two months is back at the same place as if there were mark-to-market. Any dollar going out of the accounts in the middle, because of retirement for example, leaves with more than would have happened with mark-to-market. Any dollar deposited at the end of the first month will be worth less in the future than if there had been mark-to-market. A combination of a projection of the growth in the accounts and the stochastic properties of the return index could be used to calculate the long-run expected cost of the system and the implications for new employees relative to current ones. For dollars deposited in the future, there would probably be little cost in expected value terms. For dollars in the accounts at the start of such a procedure, however, there is a guarantee and so an expected cost to MIT.

If the simple smoothing that MIT has adopted proves unsatisfactory, consideration could be given to adding a catch-up provision. Continued monitoring of the workings of this system is an important part of the provision of benefits.

Inflation

We need to consider how the retirement system would work if we have a period with a few years of high inflation - 10-12% for example. While such inflation could happen in a variety of ways, perhaps the relevant cases to consider are a pure inflation, where wages and returns on investment keep up and a shock period where they do not.

If returns keeps up with inflation (real rates are not much affected) then the portion of 5% accounts invested in stocks, in inflation indexed bonds (TIPS) and in short term debt maintain their real value. However, holdings of long-term nominal debt do not keep up as the real value of both interest and repayment of principal decline.

If returns do not keep up with inflation, then, for stocks, (but not bonds,) we would expect that here would be a considerable increase in the value of stocks afterwards. Over the long haul, stock values should be determined by the present discounted value of real earnings. If the economy gets back on its growth path, earnings should be restored and the discount rate should be roughly where it was before, so stock values would return to a similar real value.

With inflation, the 1.65% accounts do not maintain their real value. Even if current earnings and current additions to the balance in the 1.65% account would keep up with inflation, the real value of all past contributions would be eroded. Therefore, past contributions in the 1.65% account are eroded by inflation both for a long period of moderate inflation as well as a short period of high inflation. In our report, we urge that this issue be given some attention by the MIT Administration.

APPENDIX 5: DISTRIBUTIONS FROM MIT 401(k) PLAN AND IRAs

AGE AND STATUS	payments to participant	
age < 59 1/2 working at MIT	MITRP	partial lump sum if terminally ill
IRA age <59 1/2	IRA rules	post tax contributions available. flexible withdrawals without penalty only for higher education expenses, for self, descendents, hardship, unreimbursed medical, disability etc. Scheduled annuity payments may begin before 59 1/2. Described in IRS pub 590
age < 59 1/2 not working at MIT	MITRP	MIT or commercial annuity; "2/3" of lump sum; non-annuity flexible payments or rollover into IRA with spousal consent.
IRA 59 1/2 <age<701/2	IRA rules	post tax contributions available. flexible withdrawals without penalty only for higher education expenses, for self, descendents, hardship, unreimbursed medical, disability etc. Scheduled annuity payments may begin before 59 1/2. IRS pub 590
59 1/2 <age<701/2 working at MIT	MITRP	age 59 1/2 to 65: partial lump sum if terminally ill. Age 65 to 70 1/2: One-time partial lump sum; partial lump sum if terminally ill; MIT or commercial annuity of RPSM
59 1/2 <age <701/2 retired or working at MIT <50% time	MITRP	MIT or commercial annuity; "2/3" of lump sum; non-annuity flexible payments or rollover into IRS with spousal consent.
age >70 1/2 working at MIT	MITRP	MIT or commercial annuity of RPSM; One-time partial lump sum; partial lump sum if terminally ill
age >70 1/2 retired or working at MIT < 50% time	MITRP	working < 50% at MIT: One-time partial lump sum; partial lump sum if terminally ill; MIT or commercial annuity of RPSM. Not working at MIT: IRS-prescribed minimum payment; MIT or commercial annuity at any age; "2/3" of lump sum; non-annuity periodic payments; rollover to IRA with spousal consent
IRA age >70 1/2	IRA rules	lumpsum payout or minimum distribution payouts must begin at age 70 1/2, payments determined by life expectancy of participant and beneficiary under IRS tables, pub 590. Beneficiaries more than ten years younger than participants are taken as ten years younger.
"2/3" lump sum = 100% Supplemental + 100% RPSM member + 50% MIT RPSM		

DISTRIBUTIONS FROM MIT 401(k) PLAN AND IRAs (CONT)

AGE AND STATUS	at death of participant with spouse beneficiary; prior to annuity contract	
< 59 1/2 working at MIT	MITRP	Full benefit to survivor ; spouse can rollover to IRA; spouse can transfer 401(k) assets to Basic Plan for annuity payment

IRA age <59 1/2	IRA rules	rollover into spousal IRA with redesignation of beneficiary with spouse payout rules or lump sum payment. if the spouse dies before receiving distributions, spouse's beneficiary is treated as "spouse"
age < 59 1/2 not working at MIT	MITRP	Full benefit to survivor ; spouse can rollover to IRA; spouse can transfer 401(k) assets to Basic Plan for annuity payment
IRA 59 1/2 <age<701/2	IRA rules	rollover into spousal IRA with redesignation of beneficiary with spouse payout rules or lump sum payment. if the spouse dies before receiving distributions, spouse's beneficiary is treated as "spouse"
59 1/2 <age<701/2 working at MIT	MITRP	Full benefit to survivor ; spouse can rollover to IRA; spouse can transfer 401(k) assets to Basic Plan for annuity payment
59 1/2 <age <701/2 retired or working at MIT <50% time	MITRP	Full benefit to survivor ; spouse can rollover to IRA; spouse can transfer 401(k) assets to Basic Plan for annuity payment
age >70 1/2 working at MIT	MITRP	Full benefit to survivor ; spouse can rollover to IRA; spouse can transfer 401(k) assets to Basic Plan for annuity payment
age >70 1/2 retired or working at MIT < 50% time	MITRP	working at MIT: Full benefit to survivor ; spouse can rollover to IRA; spouse can transfer 401(k) assets to Basic Plan for annuity payment. Not working at MIT: beneficiary continues to receive scheduled payments, payout must be at least as rapid as scheduled prior to participants death. 10 year rule applies. spouse may rollover undistributed assets into a spousal IRA
IRA age >70 1/2	IRA rules	beneficiary continues to receive scheduled payments, payout must be at least as rapid as scheduled prior to participants death. 10 year rule applies. or spouse may rollover undistributed assets into a spousal IRA

DISTRIBUTIONS FROM MIT 401(k) PLAN AND IRAs (CONT)

AGE AND STATUS	**at death of participant with non-spouse beneficiary; prior to annuity contract (spousal consent permits naming other beneficiaries)**	
< 59 1/2 working at MIT	MITRP	full benefit paid to survivor or estate as lump sum, may be left if plan for 5 years; for a designated beneficiary, payout over the life expectancy of the beneficiary at actual life expectancy, payments must begin within one year using commercial annuity or scheduled payments based on life expectancy
IRA age <59 1/2	IRA rules	lumpsum payment, payout over 5 years or payout over the life expectancy of the beneficiary at actual life expectancy, payment must begin within one year
age < 59 1/2 not working at MIT	MITRP	full benefit paid to survivor or estate as lump sum, may be left if plan for 5 years; for a designated beneficiary, payout over the life expectancy of the beneficiary at actual life expectancy, payments must begin within one year using commercial annuity or scheduled payments based on life expectancy

IRA 59 1/2 <age<701/2	IRA rules	lumpsum payment, payout over 5 years or payout over the life expectancy of the beneficiary at actual life expectancy, payment to begin within one year
59 1/2 <age<701/2 working at MIT	MITRP	full benefit paid to survivor or estate as lump sum, may be left if plan for 5 years; for a designated beneficiary, payout over the life expectancy of the beneficiary at actual life expectancy, payments must begin within one year using commercial annuity or scheduled payments based on life expectancy
59 1/2 <age <701/2 retired or working at MIT <50% time	MITRP	full benefit paid to survivor or estate as lump sum, may be left if plan for 5 years; for a designated beneficiary, payout over the life expectancy of the beneficiary at actual life expectancy, payments must begin within one year using commercial annuity or scheduled payments based on life expectancy
age >70 1/2 working at MIT	MITRP	full benefit paid to survivor or estate as lump sum, may be left if plan for 5 years; for a designated beneficiary, payout over the life expectancy of the beneficiary at actual life expectancy, payments must begin within one year using commercial annuity or scheduled payments based on life expectancy
age >70 1/2 retired or working at MIT < 50% time	MITRP	beneficiary continues to receive scheduled payments, payout must be at least as rapid as scheduled prior to participants death. 10 year rule applies.
IRA age >70 1/2	IRA rules	beneficiary continues to receive scheduled payments, payout must be at least as rapid as scheduled prior to participants death. 10 year rule applies.

Interim Report

Faculty Policy Committee

February, 1999

Subcommittee on Changes to the MIT Retirement Plan

"Studying the MIT Retirement Plan is like peeling an onion: there is always another layer"

"Studying the MIT Retirement Plan is like peeling an onion: there's always another layer"

Goal: *To understand and to convey, by a written report to the Faculty Policy Committee, the effect of the proposed changes in the Retirement Plan on its members, and to make suggestions for improvement.*

Charge:

1. To analyze and understand the differences between the proposed changes and the current Plan in terms of:
   - available options and services, and
   - risks (on the upside and the downside) to members
2. To highlight any specific issues that may cause problems or present opportunities for members.
3. To identify specific suggestions, if there are any, of modifications in the proposed changes that could alleviate any of the identified problems.
4. To convey in a written report the results of this analysis.

The Subcommittee membership is:

Sheila Widnall, Chair - sheila@mit.edu

Peter Diamond - pdiamond@mit.edu

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1. Summary and Conclusions

The Benefits Office in conjunction with the Strategic Review of Benefits Committee and the Committee on Faculty Administration have developed proposals to deal with issues affecting the MIT Retirement Plan (MITRP). Some of the proposed changes are required to keep the plan tax-qualified, and were instituted on January 1, 1999; some offer increased flexibility to draw retirement benefits while working part time and increased benefits from a lowering of the normal retirement age to allow individuals to phase into retirement. One component of the changes is a response to concerns that the plan's investment options are too limited, with only the Fixed and Variable Fund available for managing participants' accounts. The changes that provide access to a wider set of options will allow participants to build an investment portfolio to meet their individual needs. Finally, since the servicing of the plan has gotten beyond the capacity of MIT to manage, the plan administration will be outsourced.

These proposals for change have been presented to the MIT community in a variety of forums. But the issues are complex and constrained by legal and regulatory requirements. Some are highly technical, requiring considerable effort to master all the details. Therefore, the Faculty Policy Committee appointed this subcommittee to study these proposed changes, and to recommend modifications, if necessary, to meet expressed concerns.

The Committee presents this interim report on their findings to the Faculty Policy Committee, and will follow with a final report in the spring when individual concerns have been received and the changes have been completely specified.

It is not the intention of this report to substitute for MITRP descriptions, documents and the annual reports, which are available from the Benefits Office and on their web site, http://hrweb.mit.edu/benefits. Rather we wish to lay a sufficient foundation for our observations and conclusions. We hope that the work of this committee will help in the discussion of the changes in progress.

In our review to date, we have concentrated on those issues that for legal and regulatory reasons had to be settled to meet a January 1, 1999 deadline, and other changes that were put in place at the same time. Among the several changes, four issues have received most of our attention, and our conclusions about these items can be summarized as follows. Each is discussed in more detail in the body of this report.

The Choice of Fidelity Investments to Manage the Defined Contribution/401(k) Assets. As of April 1, 1999, the management of this component of plan assets will be carried out using the services of Fidelity Investments to manage individual investment accounts for participants. We have reviewed the steps that the Benefits Office went through, seeking bids and negotiating fees, and we are comfortable with the procedure followed.

The Shifting of Investment Account Expenses from MIT to the Participants. This change will result in a small reduction in the growth of a participant's ultimate retirement assets for those who remain invested in the funds that are "cloned" from the current Fixed and Variable Funds. The increased option to choose other funds with possibly higher returns may make up for this loss. All in all, it is our conclusion that this change, which puts us in line with almost all our competing institutions, is fair. We also believe that this change should be considered in balance with all of the changes, some of which increase benefits to participants

Required Elimination of Fixed Fund Book Value and Procedure for Accomplishing Change in Accounting for Fixed Fund Accounts to Current Market Value. To calculate the "book value" of member Fixed Fund accounts a five-year smoothing procedure for crediting capital gains was used by MIT to lower the volatility of credited returns. With the required removal of the guarantee to pay at retirement the greater of book value or market value, a portion of the capital gains of recent years had to be allocated to member accounts to bring them to market value as of January 1, 1999. We have reviewed the procedure used to allocate capital gains to member accounts, and its potential for creating inequities between members of long standing and those who joined only recently, and found it to be a sound approach.

The (Mandated) Choice of an Index Outside MIT's Control for Calculating Returns on Certain Accounts. In the past, MIT has managed the assets that lay behind one part of the MIT-funded defined benefit component of the MITRP, and the rate of return on member's accounts was based on MIT's actual investment results. The IRS now requires a non-MIT index for this purpose. MIT has chosen an alternative index, and specified maximum and minimum values, on a provisional basis. Discussion continues regarding the ultimate form of the index (which will be revised), and it is the Committee's judgment that this interim step is appropriate.

Remaining Issues. Several issues remain to be settled, and our Committee will follow them through the coming months. Key among these is the evolution of the system providing withdrawals, annuities and lump sum distributions, the ultimate selection of the market index for part of the defined-benefit assets, and possible elimination of post-tax contributions to the defined-contribution component of the plan. These issues are covered in more detail in Section 4. Also, with the greater flexibility provided in the revised plan comes greater risk so that the extent and quality of the information provided to participants takes on greater importance. This issue is also covered in Section 4.

In this interim report, we cover the key features of the changes made as of January 1, 1999, and further revisions to come in spring 1999 and beyond. A number of specialized terms and acronyms are used in the presentation, and these are defined in Appendix 1. We feel comfortable that the changes that went into effect on January 1, 1999 are fair.

We were aided in our deliberations by staff from the Benefits Office, the Personnel Office and the Treasurer's Office. We thank them for their collegial and expert input to our understanding of these issues.

2. Overview

2.1 Components of the MIT Retirement Plan

For the past ten years, the MIT Retirement Plan (**MITRP**) has consisted of two components, the **Basic Plan** -- defined benefit plan supported by contributions only from MIT, and the **Supplemental 401(k) Plan** -- contributory defined-contribution 401(k) plan. This component receives member contributions, which are matched by MIT. We now describe elements of this plan exclusive of the changes that were initiated on January 1, 1999 and then we highlight the changes.

The MIT Retirement Plan covers all employees, faculty and staff, at the Institute. It is the product of a merger of separate plans in 1989: The Retirement Plan for Staff Members (**RPSM**) and the Retirement Plan for Employees (**RPE**). Some of the details of the current plan are the result of the carryover of features and restrictions from this earlier system.

When the plan was modified in 1989, individual accounts from the prior **RPSM** were maintained as **RPSM** 401(k) accounts and segregated from the **Supplemental 401(k)** accounts established under the new plan. No further contributions have been made to these **RPSM** accounts but they continue to appreciate and form part of the overall defined-contribution assets for faculty and staff hired before 1989. Faculty and staff joining MIT after 1989 do not have **RPSM** accounts. At the time of retirement, the combination of the **Supplemental 401(k) Plan** and the **RPSM** accounts will provide most of the total retirement benefit of a long-term faculty member who has contributed the maximum amount over his or her career.

The benefit from the **Basic Plan** is expressed as the value of a **single-life annuity** payable at retirement, although the participant may actually choose from a variety of annuity options of equivalent value. This annuity may increase, after retirement, through the application of triennial cost of living adjustments. The Institute funds this benefit through periodic contributions to the Benefits Fund of the MITRP's Trust. Basic Plan benefits are insured by the Pension Benefit Guaranty Corporation (PBGC).

The value at retirement of an account in the **Supplemental 401(k) Plan** (where the contributions are defined, but not the benefits) depends on a number of factors. All participants have had the opportunity to voluntarily contribute 1% - 5% of salary to the **Supplemental 401(k) Plan**. The Institute matches these contributions dollar-for-dollar. This account has been invested in the Fixed and Variable Funds as directed by the participant.

Accounts accumulated under the former **RPSM** are also invested in the Fixed and Variable Funds. This plan consisted of the 10% contribution from MIT plus a <u>required</u> 5% contribution from the participant. Under the <u>current</u> rules, one half of the contribution from MIT plus its investment returns have to be annuitized upon retirement.

Thus the total value of an individual's account in the **Supplemental 401(k) Plan** and in the **RPSM** (if any) at retirement depends on the member's contribution to the plan, the MIT contribution, the choices made by the participant between investments in the Fixed and Variable Funds, and the performance of the financial markets where the funds are invested.

The Institute has provided record-keeping services and the trustees have guided the investment policy, even though almost all day-to-day investment decisions were made by outside firms. The Institute has picked up all of the costs associated with the plan, such as investment, custodial, legal, and actuarial fees. The normal practice is to deduct these costs from investment returns as is done by TIAA/CREF and some other 401(k) retirement plans or to charge participants a fee as a percentage of account balance, with the employer paying a flat fee per participant.

The Institute has set annuity rates by a smoothing formula that limits the maximum increases or decreases to the fixed annuity interest rate to .25% per quarter. This smoothing can increase benefits when rates are dropping, but can lower them when interest rates are rising

2.2 Why The Need For Change?

First, certain practices must be amended in order to preserve the tax-qualified status of the plan and bring the plan up-to-date with changes in IRS regulations. The advantages of preserving this status are many. Under a tax-qualified plan, substantial benefits flow to plan participants: participants pay no taxes on employer contributions until funds are withdrawn; participants may make pre-tax contributions; investment returns accumulate tax-deferred; certain lump-sum distributions may be taxed at reduced rates; and accrued benefits may not be attached in case of bankruptcy.

Second, many view the investment options in the Supplemental 401(k) Plan and the RPSM as being very limited, with only the choice between the Fixed and Variable Fund and restrictions on movement of funds between them. Some feel they do not have sufficient options that would allow them to build an investment portfolio to meet their needs.

Finally, the servicing of the plan has gotten beyond the capacity of MIT to manage to the standards set by modern financial-services institutions. This includes providing responsive record keeping, managing increased investment options, providing up-to-date account valuation, supplying additional service to members, expanding annuity offerings, and insuring continual IRS qualification of the plan with the frequent changes in regulations. The question then arises as to whether the core mission of MIT should include being in the business of 401(k) record keeping.

The Benefits Office in conjunction with the Strategic Review of Benefits Committee and the Committee on Faculty Administration has developed proposals to deal with these and other issues. Some of the proposed changes are required to keep the plan tax-qualified, and were instituted on January 1, 1999; others will occur in the spring of 1999. The Committee has reviewed these changes and we outline them below with our comments.

2.3 Highlights of Changes to the Plan

Some changes deal with the request for more investment options and better services. This is accomplished by outsourcing the administration and management of the plan to an outside financial services institution, Fidelity Investments, and allowing plan participants a much wider choice of investment options. In its decision to outsource the management and administration of individual accounts and offer a wider choice of investment options, MIT held discussions with several outside financial service organizations. We have examined the requirements established by MIT and the proposals received from several vendors. The Committee also reviewed the process that was used to select Fidelity Investments as the outside vendor for the 401(k) portion of the plan and we are comfortable with the process.

This change will be seen as a benefit by many who have asked for more investment options, but may be of concern to others who have neither the time, the experience nor the inclination to enter into more direct management of their retirement assets. To accommodate these concerns, the investment options will include the continuation of the current Fixed and Variable Funds. By April 1, 1999, the current assets of the MIT Fixed and Variable Funds will be transferred to Fidelity Investments for their day-to-day management. The investment guidelines of the Fixed and Variable Funds will be set by an MIT oversight committee, following the current philosophy of these funds, but specific investment decisions will now be made by Fidelity Investments. These particular funds will be managed as mutual funds but offered only to MITRP participants. They have been referred to as "cloned" funds in some MIT literature.

Although the Fixed Fund will initially contain the investment vehicles that currently make up the MIT Fixed Fund, and the investment policy oversight will be provided by MIT, it differs from the previous MIT Fixed Fund in that it will always be valued at market. Thus during periods of rapid growth, it will show the full market increase. Conversely, during market retrenchments, its value can decrease.

In addition to the Fixed and Variable Funds, participants will have access to a variety of mutual funds. Each of these funds bears a specific expense ratio charge that is set by Fidelity, in some cases after negotiation with MIT. Different funds incur different expenses for managing the fund including management and trading expenses, investment advisory service fees and advertising. The proposal is for the expenses of the individual fund accounts to be taken out of gross investment returns so that participant accounts receive investment returns net of these fund expenses.

Since the bulk of the investment fees on the Fixed and Variable Funds have to date been paid by MIT, charging these fees to the accounts in the future will adversely affect account balances for all participants including retired faculty who have accounts. The annual expense ratios for the universe of mutual funds are typically in the range .1% to 1.5% of assets depending on the investment option selected (see Appendix 2 for a table of annual expense ratios for various investment options.).

Also in the future, MIT will negotiate group rates for annuities, which will be available to participants. An expressed concern has been that an outside firm would not set annuity rates using the same formula that MIT has been using to set them, and would therefore subject retiring participants to greater risk from interest rate fluctuations. To meet this concern, MIT will provide retirees with a choice, for a period of time the length of which is still under discussion, between using an MIT-set annuity rate or one that MIT negotiates at a group rate with a commercial carrier.

There are many other proposed changes. Some are designed to enable early retirement by providing increased flexibility and increased benefits. IRS regulations permit more flexibility in phasing in to retirement than is present in the current plan. By changing the normal retirement age (NRA) to 62, and allowing retirement benefits to be drawn while working part time, the MITRP will provide individuals with increased options and increased benefits. The next section lays out the various changes in more detail.

3. Changes in the MIT Retirement Plan

This section describing the changes is divided into two parts. The first part deals with changes to the **Supplemental 401(k) Plan**. The changes in plan administration for the **Supplemental 401(k) Plan** will also apply to assets contained in the **RPSM** Plan as discussed. (See Appendix 1 for a glossary of terms).

The second part deals with changes to the **Basic Plan**, the defined benefit plan to which MIT is the sole contributor.

3.1 Changes to the Supplemental 401(k)/ RPSM Plan

The revisions to the **Supplemental 401(k)/RPSM** Plan fall into two rough categories. One set results from changes made as of January 1, 1999. A second set of revisions will come later with the completion of the transfer of plan assets and management to Fidelity Investments, expected sometime in spring 1999. Both are discussed below.

3.1a) Increase in Allowable Employee Pre-Tax Contributions

An immediate change will be an increase in the amount a participant can contribute to the **Supplemental 401(k) Plan**, as a pre-tax employee contribution. The current maximum is 5%. After January 1, 1999, an individual will be able to contribute as much as 20% up to a maximum of $10,000. The MIT match will remain at dollar-for-dollar only up to 5%.

3.1b) Initiate Third Investment Option

ERISA gives advantages to retirement plans that have at least three investment options. The MITRP will meet this criterion by immediately offering a money market fund through Fidelity Investments into which participants can shift account assets. The money market fund will bear an expense ratio of .42% of assets effective January 1, 1999, thus reporting returns net of this charge. There will be no cost for Fixed or Variable Fund assets until April 1, 1999 after full transfer to Fidelity Investments at which point they will bear expense ratios of .22% and .28% respectively.

3.1c) Freer Exchange between Investment Funds

ERISA gives advantages to retirement plan that offer participants the opportunity to transfer assets among all available investment options at least quarterly. Previously, the MIT Retirement Plan restricted transfers of assets between the Fixed and the Variable Funds. In order to transfer assets, the participant had to be above age 55, and then assets could only be transferred from the Variable to the Fixed Fund. As of January 1, 1999, a participant may transfer funds monthly among three funds, Fixed, Variable and the new Money Market Fund without any restrictions on age. And after April 1999, with the new access to and information about individual accounts, daily transfers will be permitted across all of the options.

3.1d) Outsourcing of Fund Management to Fidelity With Additional Investment Offerings Available Spring 1999

In the spring of 1999, a number of additional options will be available. Fidelity Investments will offer the Fixed and Variable Funds with investment oversight policy provided by MIT. Supplementing these options will be a set of 8 to 10 Core Funds offering a variety of risk and return profiles. The Benefits Office will support these funds with informational brochures and investment analysis software. Finally, for MITRP participants who wish to have access to a still larger group of funds, Fidelity Investments will offer, without additional transfer fees, access to selections from 21 Mutual Fund families through its FundNet.

Some participants have inquired whether shares in individual companies will be acceptable investment vehicles. The answer is no. IRS rules require arm's length transactions in 401(k) plans. Since it is not possible to insure that there is no "interest" in a particular stock purchase, this option will not be available to MITRP participants.

The initial transfer of a participant's retirement assets to Fidelity Investments will create two separate groups of accounts: group#1 will be a combination of all current **Supplemental 401(k)** balances plus any **RPSM** member contribution account, and 50% of any **RPSM** MIT contribution account. Group#2 will be the remaining 50% of any **RPSM** MIT contribution account. At initiation, assets in these account groups will be invested in the same proportions of the Fixed and Variable Fund as they are now.

The resulting balance in group #2 may not be paid as a lump sum at retirement. However, the requirement that these funds be annuitized will be eased. Instead, retirees will be allowed to have this portion of their assets paid in any form (including annuity) that results in payments being made in installments that continue at least 10 years. The participant will have the full choice of investment options for all accounts.

The structure of the new plan with its use of individual accounts that are marked-to-market makes it possible for individuals to roll over funds from certain other qualified plans so that their assets can be managed in one place. Many faculty may find this an attractive option. Possibilities for rollovers include other 401(k) plans, KEOGH's, and SEP-IRA's. However, IRS regulations currently do not allow rollovers of either 403(b) plans or TDA's. Assets that are rolled over into an individual's account will be segregated from the MITRP accounts and the individual will bear any costs from a rollover from a Keogh or IRA account.

3.1e) Transfer of Investment Expenses to Participants

Under the current plan, MIT has borne the expenses for the 8700 employees currently in the plan. In addition, since there is no option to treat participants differentially. MIT has borne the expenses for the 5300 former employees who have not retired for whom MIT continues to hold an account. After April 1, the proposal is to have all plan participants pay investment expenses associated with the expense ratios of the particular investment option that they have chosen. MIT will bear the cost of the transition between MIT and Fidelity Investments. With the exception of funds invested after January 1, 1999 in the money market account, no account will be charged investment expenses and will continue to receive the gross return on the assets until April 1, 1999. MIT will continue to pay the MIT-based expenses of operating the plan, such as the communication and counseling that individuals receive from the Benefits Office and any on-campus record keeping.

Thus, after the plan is set up, participants will receive net investment returns, as occurs for a traditional mutual fund investment account. Expense ratios are: for the Fixed Fund, an annual expense ratio of .22% of assets; for the Variable Fund, an expense ratio of .28% of assets. Other choices will bear other expense ratios. One option available only to MIT participants will be an institutional S&P 500 Index fund at an expense ratio of .1% of assets, roughly 50% below the best rate available to individual investors. Since these funds accumulate tax free, these expenses are paid with before tax assets. (See Appendix 2 for a table of Annual Expense Ratios for Various Investment Options.)

In considering this change in the charging of MITRP investment expenses the Committee has considered several issues. With the move to participant choice of investment options, each account will bear a specific cost, depending on options chosen by the participant. It has been suggested by some that MIT fund the Fixed and Variable Fund charges, expecting individuals to pay the costs of their choices of other options. Another suggestion would be to fund an equivalent portion of the expenses for all funds. Another option would be for MIT to pay a portion of the costs for all participants in the MITRP for a transition period.

These suggestions must be viewed in light of the fact that the plan's investment options will include mutual funds (and other funds that use the mutual model for funding expenses).

Mutual fund accounting systems are structured to deduct expenses daily, so that net returns are reported. In addition, the daily deducting of expenses is outlined in a mutual fund's prospectus, and must apply to all account holders as outlined by the prospectus. This makes it virtually impossible to track gross returns for MIT participants.

There has been a shift away from being able to recover pension plan cost from the portion of the Employee Benefit Pool supported by federal contracts. And with the move to supporting full faculty salaries on Institute funds, MIT now pays a much greater share of these employee benefit expenses out of its general budget.

We raise the issue that the faculty benefits in other ways from the cost savings experienced by MIT by having plan participants pay investment costs, thus freeing up discretionary funds for educational and research purposes. As mentioned above, there are good reasons for shifting this cost from MIT to plan participants. The Committee believes that this cost shifting should not be considered in isolation, but evaluated in the context of all changes, some of which increase costs to MIT, and more generally in terms of the overall retirement benefits package. For all of these reasons, we believe this is a fair proposal.

3.1f) Change in Fixed Fund Accounting to Market Value

Prior to 1999, a participant's Fixed Fund account value was expressed as its "book value," defined as the sum of MIT and individual contributions plus interest and dividends and a portion of net capital gains experienced by the Fixed Fund. The aggregate of book values could differ from the aggregate market value of the fund. "Market value" is defined as the sum of MIT and individual contributions plus interest and dividends and all net capital gains experienced by the Fixed Fund. At the time of payment of the participant's account, such as at retirement, if the market value of the fund exceeds the aggregate of book values, the book value of the fund is increased by a "market value adjustment" which multiplies the book value of an individual account by the ratio of aggregate market value to the aggregate of book values.

At all times since this book value-market value comparison has been performed, the market value has exceeded the book value. The amount by which market value has exceeded book value is the "market value adjustment." During 1998, in response to the growth in the market, the following market value adjustments have been experienced.

- August 12.3637%
- September 15.6972%
- October 16.2831%
- November 16.9393%
- December 17.7933 (subject to review)

The possibility of paying a benefit at a value other than the account's market value violates IRS qualification requirements. Therefore, the concept of book value must be abandoned. As a result, all Fixed Fund accounts received a market-value adjustment based on returns through December 31, 1998, and on January 1, 1999 all participant accounts were given the market value adjustment, as described above. From now on, they will be at market value each day. The proposal is -- and the IRS requires -- that these funds be allocated in proportion to the asset value of the individual accounts on December 31, 1998. This is equivalent to allocating the funds as if everyone were retiring on this date.

Some faculty have raised the question of whether this method of allocating the unallocated funds is fair. After considerable deliberation, the Committee has concluded the process used was appropriate. The Committee's reasoning is described in Appendix 3.

3.1g) Addition of Immediate Vesting

Under the new plan, vesting will be immediate. That is, a participant will immediately have a right not only to his/her own contributions, but also to the MIT contributions to their account. This provides an obvious financial benefit to new participants. It also provides benefits to other participants of the plan and eases the management of the plan itself. Under this change, the plan will no longer be required to test pre-tax contributions to insure that high-income individuals are not overly weighted in the plan. Therefore, there will no longer be the possibility -- as has occurred of cutbacks of the contributions of highly compensated participants. (The IRS defines highly compensated. The boundary for 1999 is $80,000.)

3.1h) Addition of New Annuity Options

Under the new plan, MIT will continue to offer its traditional annuity for the defined-benefit portion of the plan, for a time to be determined, subject to review. MIT will also offer annuities at negotiated group rates from outside carriers to provide a choice. MIT will continue to take Supplemental 401(k)/RPSM money back into the Benefits Fund to provide an annuity for the defined contribution portion of the plan using the same interest rate assumptions and mortality tables as have been used in the past. If MIT continues to offer such choice in annuities, this could create an additional expense to MIT since participants will likely make the choice of an MIT annuity only when the MIT rate is more favorable than the commercial rate. The issue of annuities is further discussed in Section 4 and remains a future issue for the committee.

3.1i) Provision for Early Distribution of Plan Assets

Under the new plan, distributions of assets will be available at age 59 1/2 if the plan participant is working less than 50% time. Such arrangements require the approval of the department head. On the date a participant begins working at less than half time, the participant is eligible for MIT subsidized health insurance, life insurance and other benefits under specific conditions spelled out in Benefits Office documents.

3.1j) Proposed Elimination of Post-Tax Contributions on January 1, 2000

Under the current plan, contributions to the Supplemental 401(k) Plan (SP) can be either on a pre-tax or post-tax basis. Pre-tax means that you <u>do not</u> pay federal or state income taxes on the amounts contributed but do pay these taxes when the contributions are withdrawn. Post-tax means that you do pay federal and state taxes on amounts contributed, but not when the contributions are withdrawn. MIT proposes to eliminate post-tax contributions to the MITRP. As a result of this change there will be no after-tax contributions which have previously been subject to Federal discrimination tests, designed to ensure that high-income individuals are not overly weighted in the plan. Therefore, there will no longer be the possibility -- as has occurred -- of cutbacks in the contributions of highly compensated participants. This issue is further discussed in Section 4, future issues.

3.1k) Loans available (with IRS restrictions)

Loans will be available under the new plan for purposes such as the purchase of a home, education or medical expenses. This should encourage younger participants to put assets into the plan knowing that they will be available under IRS restrictions for other uses. Under these rules, a loan will be available from $1,000 up to 1/2 of the value of the account, not to exceed a loan of $50,000. The loan will have a 5-year payback period and payroll deductions will be used for repayment. A longer period for home purchase will be available. Spousal consent will be required to obtain a loan from pension assets. Payment of a reasonable interest rate is required on these loans.

3.2 Changes Effective January 1, 1999 in The Basic Plan

The noncontributory, defined benefit portion of the plan is referred to as the Basic Plan. It was created in 1989 with the merger of the RPE and certain benefits from the RPSM. Under the Basic Plan, a retiree receives the larger of the annuity calculated using two different methods of calculation. (This maximum approach is a consequence of the merging of two separate plans earlier.) One calculation is an annuity equal to 1.65% of the sum of salaries received in all years between 1989 and the date of retirement, actuarially adjusted to provide the full benefit at normal retirement age (NRA). The second calculation is the annuity that could be purchased (given annuity pricing at the time of retirement) by the amount in a notional or shadow account, which is credited with 5% of salary each month and earns a notional rate of return. To date, the 1.65% calculation has yielded larger retirement benefits for almost all retirees since this maximum approach was initiated.

3.2a) Revision of Crediting Procedure for the 5% Account

In the past, the investment growth of the Fixed Fund was used to determine the growth of the notional 5% account. (This account also received a market value adjustment on December 31, 1998 in the same way as the Fixed Fund as described above.) Under the current IRS regulations, the continued use of the Fixed Fund appreciation, as it is managed by MIT, is not an option since IRS now requires an arm's length method to compute account growth. Therefore, to compute the growth of the 5% account after January 1, 1999, MIT must select some market index whose growth is outside the control of MIT.

The Committee met with the Treasurer's Office and discussed this issue. The Treasurer's Office proposed a temporary resolution to carry us through the January 1, 1999 transition with final details to be resolved this spring. In order to file with the IRS (which was done in December), the Treasurer's Office has selected an external index and a method to comply with IRS regulations such as a floor and or smoothing that prevents any decrease in the value of defined-benefit assets in the 5% account. The Treasurer also proposed that by a date certain of March 1, 1999 a choice of index and method (floor, smoothing) will be made with a retroactive adjustment to participants' accounts if the adjustment is positive. The Committee expects to be actively involved in this issue. See Section 4. Future Issues for a more complete discussion.

3.2b) Changing of the Normal Retirement Age from 65 to 62

Under the current MIT Pension Plan, the normal retirement date is July 1st following the 65th birthday. An individual retiring on this date who falls under the 1.65% benefit receives the full sum of 1.65% of salary as an annuity. Actuarial adjustments are made for individuals who chose to retire earlier or later than the Normal Retirement Age (NRA.)

The Executive Committee of the Corporation has approved a limited-time change to the normal retirement age (NRA) from 65 to 62, effective immediately and continuing through December 31, 2003. This effectively backdates the calculation of the pension benefit with an NRA of 62 to 1989. This change will be revisited before the end of the fifth year to ascertain whether the assets of the plan continue to support the decrease in normal retirement age to 62 and to determine if the change has resulted in an increase in faculty retirement. Even if the change is not continued past 2003 this change provides an increase in the benefit from the Basic Plan.

As a result of this change, participants may elect to retire at age 62 and receive annuity benefit payments from the 1.65% account without the current reduction for early payment. Or, if participants elect to retire before age 62, the reduction for early retirement will be less than it would be if normal retirement age were 65. The benefit under the 5% account is not affected by the change in NRA.

The decrease in normal retirement age from age 65 to age 62 adds a permanent increase to all benefits earned since the Basic Plan began on July 1, 1989 (January 1, 1990 for some union members) and to all benefits that will be earned as long as the NRA of 62 is in place. If the normal retirement age rises back to 65 after December 31, 2003, the higher age will apply only to benefits earned after December 31, 2003. The effect of age 62 normal retirement age on benefits earned while it is in effect will not be lost.

For all plan participants upon their retirement, benefits will be the sum of the benefit earned during years when the NRA was 62 and that earned when the NRA was 65. Thus, this change increases permanently the Basic Plan benefit for all participants no matter when they retire. This occurs because the calculation of benefit for each year of employment will use an actuarial table adjusted to provide the full benefit at that year's NRA, with corresponding increases for those who retire later.

In addition, this change affects the Cost-of-Living Adjustments under the Basic Plan. After Basic Plan benefit payments begin, they will increase once every three years as determined by a cost-of-living formula. The first increase is scheduled three years after normal retirement age. By decreasing normal retirement age from 65 to 62, the first cost-of-living adjustment for a person who retires at age 62 or earlier would be due at age 65, instead of at age 68 as under the current plan.

3.2c) Benefits Accrued past Normal Retirement Age (NRA)

To avoid age discrimination, benefits must continue to be earned for participants who work past normal retirement age. Thus during ones working life at MIT, interest will continue to be credited to the 5% Account. And the 1.65% benefit will continue to be accrued to participants' accounts. The 1.65% Benefit will be actuarially adjusted for late commencement so that the participant receives the full value that is in their account at retirement. The annuity payments will be increased to reflect the later start.

4. Future Issues

The Committee plans to complete its work this spring, with a goal to produce a final report by April 1, 1999 which will incorporate all of our findings and conclusions. We have identified several important issues for future concern that the Committee will take up in some detail for its final report. These are discussed below. We welcome faculty input on these and other issues.

4.1 Withdrawals, Annuities, and Lump Sum Distributions

To date, we have focused on how participants and MIT contributions are credited to the plan, and how the plan and the assets will be managed. Also of great importance, is the question of how participants will get their money out. For many faculty, pension assets represent an important part of their total assets.

Tax and estate planning is a complex area that each individual must consider based upon his or her situation. Questions the Committee will explore and lay out for the faculty deal with whether the MIT Pension Plan will allow the range of payout flexibility with its potential for tax and estate planning that is permitted under IRS regulations.

Also, there are serious questions as to whether MIT should continue to bear the risk and the expense to remain in the annuity business. This issue is currently under examination by the MIT administration. We will continue to be engaged in this issue.

4.2 Interest on the 5% Account

As discussed in Section 3.2a, under the Basic Plan, a retiree receives the larger of the annuity calculated using two different methods of calculation. One calculation is an annuity calculated by the 1.65% method The second calculation is the annuity that could be purchased (given annuity pricing at the time of retirement) by the amount in a notional or shadow account which is credited with 5% of salary each month and earns a notional rate of return. To date, the 1.65% calculation has yielded larger retirement benefits for almost all retirees since this maximum approach was initiated. Nevertheless, it is appropriate to use good rules for both methods of calculation.

In the past, the 5% notional accounts were credited with a rate of return in the same way that the fixed fund accounts were credited (a smoothed return and a market value adjustment at retirement). This method is not allowed by the IRS, which requires use of a rate of return calculation over which MIT has no control once a method is selected. In addition, there is the requirement that a defined benefit not decrease in nominal terms, which can be avoided by choosing a formula for crediting the 5% account which never results in a negative rate of return.

There are two issues in picking a notional return rule. One issue is having a suitable expected rate of return. The second is using a formula that avoids negative rates of return while preserving roughly the suitable expected rate of return for the accounts. There are several approaches that can be taken to accomplishing these ends. One approach is to select a return index that is rarely negative, such as the yield on 10-year Treasury bonds, and to add to it a fixed amount, reflecting the expected difference between the returns on a portfolio just of Treasury bonds and a diversified portfolio that makes a more appropriate choice of risk and return. For example, a portfolio 40% in stocks and 60% in bonds (or 50-50) might be appropriate. One could take the historical difference in long-run return on such a portfolio and on Treasury bonds and add this to the Treasury bonds return index (with the credited amount subject to a floor of zero return). A second approach is to base the return directly on the index associated with a suitable portfolio (e. g. 40% weight on the monthly return on the S&P 500 or Russell 3000 and a 60% weight on the monthly return on an index of all taxable long-term bonds outstanding in the market, or 50-50). Since an index like this is very volatile on a monthly basis, there would then need to be a smoothing formula to comply with the non-negativity constraint and yet roughly retain the expected rate of return. There are several approaches to such smoothing formulas.

While MIT did need to file a statement with the IRS before the end of the year declaring its choice of an index and method of smoothing for the 5% account, MIT has not yet made a selection that is meant to apply for the longer term. Such a choice will be made this spring, with a retroactive upward adjustment for the early months of the year if the choice has a higher return than the index filed with the IRS. The committee is discussing with MIT how to select a suitable index and smoothing formula and will report on the choice once it is made.

The committee is also concerned that the present method of calculating the 1.65% basic benefit is subject to risk for participants in the event of significant inflation and the committee wants to explore whether this method should be modified in the future.

4.3 Proposed Elimination of Post-Tax Contributions on January 1, 2000

Under the current plan, contributions to the Supplemental 401(k) Plan (SP) can be either on a pre-tax or post-tax basis. Many participants in the plan have taken advantage of this option and will need to consider what the elimination of the post-tax option will mean for them. Pre-tax means that you <u>do not</u> pay federal or state income taxes on the amounts contributed but do pay these taxes when the contributions are withdrawn. Post-tax means that you <u>do</u> pay federal and state taxes on amounts contributed but not when the contributions are withdrawn. In both the pre- and post-tax cases all <u>earnings</u> are <u>not</u> taxed until withdrawn. Contributions to the 403(b) Tax Deferred Plan (TDA) can <u>only</u> be on a pre-tax basis. The overall limit on pre-tax contributions to the SP and TDA combined is $10,000 with some exceptions. MIT proposes to eliminate post-tax contributions to the MITRP. As a result of this change there will be no after-tax contributions which have previously been subject to Federal discrimination tests designed to ensure that high-income individuals are not overly weighted in the plan. Therefore, there will no longer be the possibility -- as has occurred -- of cutbacks in the contributions of highly compensated participants.

Why would one ever use the post-tax option for the SP? Under pre-tax the <u>earnings</u> on a maximum of $10,000 can be deferred from taxation. By putting the maximum allowed post-tax contribution of $8000 in the SP, and the maximum allowed pre-tax contribution of $10,000 in the TDA, the <u>earnings</u> on a total of $18,000 can be deferred from taxation. This can be a significant advantage.

There is an alternative approach. Put $10,000 pre-tax in the SP. Then buy an after-tax tax-sheltered Annuity (TSA) for $8000 on your own from an outside provider (TIAA, for example, sells them). The TSA will also shelter earnings from taxation until withdrawal. Again you would have the <u>earnings</u> on $18,000 deferred from taxation.

Typically, TSA contracts have an insurance component that guarantees that upon the death of the investor all contributions (not necessarily earnings) will be paid to the beneficiary or estate even if their market value has declined below the original contribution. Some typical costs of this insurance are TIAA (.23%), Vanguard (.38%), and Fidelity Investments (.80% or 1.50%). Fidelity Investments also imposes surrender charges of up to 7% during the first five years. All these fees are on top of the usual fund management fees that are often somewhat higher for TSA plans than for TDA plans. For most people, this insurance option is of little value and relatively expensive.

TDAs do not have to have this insurance component and there are many TDA options at MIT that do not have insurance or surrender charges. Therefore, it is more expensive to buy outside TDA's rather than stay inside MIT and buy TDA's.

The above discussion implies that there is no advantage to eliminating the post-tax option for SP contributions.

However, there is a drawback to allowing the post-tax option to continue. Federal law says that post-tax contributions have to be monitored (at some cost to MIT) to insure that highly compensated individuals (incomes over $80,000) are not over-represented among all members using the post-tax option. If they are, then the post-tax option cannot be used. This monitoring goes on throughout the year and thus the post-tax option could be withdrawn during the plan year.

At the time of withdrawal of the post-tax option, highly compensated individuals would have to revert to pre-tax contributions to the SP and then make their own outside (e.g., TSA) arrangements for future post-tax contributions. At the present time, highly compensated individuals are not over-represented in the group electing the post-tax SP option. This situation will likely change when the Benefits Office is able to contact those lower paid individuals who may have elected post-tax contributions because of a misunderstanding of their options. The Committee will continue to discus this issue with the Benefit's Office.

4.4 Participant Services

4.4 a) Communications

The Benefits Office has carried out seminars for participants on these retirement issues, and prepares written material in the form of annual reports and information about changes. This effort has been increased in order to keep participants apprised about the changes under way now. However, it has been the experience of our Committee that a great deal of time and effort is needed, given the current documentation, to master even the essential details, jargon, acronyms, etc. that are needed to understand the plan and to make intelligent individual financial decisions. One reason for the difficulty is that the Institute lacks the written material that is needed to help busy faculty and staff members learn what they need to know to manage their retirement affairs. This interim report itself is an indication of the problem, in the amount of descriptive material we have had to include in order to support our view of the changes.

It is our view that interests of faculty and staff have been well served by the MIT Administration, in the way it has managed the plan, and perhaps lack of full understanding of its details were not so critical in the years when individual choice was limited. With the expanded options, it is important for an individual to understand the concept of the risks associated with investing as well as the risk of inflation and to understand the basics of investing and asset allocation so the value of material carefully crafted to educate participants is greatly increased. This will be the continuing focus of the educational programs and resources that will be made available to the MIT community with the assistance of resources that will be forthcoming from Fidelity and others.

Our Committee will continue to work with the Benefits Office, the Treasurer's Office, and other parts of the Administration, to discuss what is needed, and to seek the additional specialized resources to produce it.

4.4b) Counseling

In the past, members' assets were invested and managed by the Institute through the office of the Treasurer. Consequently, the Institute assumed fiduciary responsibility for the risk of avoidable unsatisfactory performance. After January 1, 1999 each member of the MIT Retirement Plan is individually responsible for the management of his or her Supplemental 401(k) Plan assets. The Benefits Office and Fidelity Investments will provide information concerning investment risks and returns, ***but will not provide investment advice***.

Fidelity Investments has made available a money market fund as well as two funds, the Fixed Fund and the Variable Fund which are intended to continue the investment strategy the Treasurer's Office employed in the past in exercising its fiduciary responsibility for the two funds available to participants in the Supplemental 401(k) Plan. They are intended as investment vehicles for individuals who are not experienced investors and who have been satisfied with the past performance of the funds managed by the Institute. Each participant must decide whether these Cloned Funds are suitable investment vehicles for the long-term future.

The possibilities for investment of participants' funds are vast. Beyond the many additional mutual funds that will be available through Fidelity Investments after April 1999, the establishment of a brokerage account by a member will permit access to *any listed mutual fund* as well as to securities issued by the United States Treasury. Individuals who are not experienced investors should seek professional advice concerning appropriate investment asset allocations.

The Benefits Office will have information available on the Fixed and Variable Funds, the money market fund and the 8-10 core funds. Fidelity will provide a software package, called Portfolio Planner, to assist participants in selecting an appropriate mix of investments. This software package will be populated with our selection of core funds to aid individuals to allocate assets across the risk-reward spectrum.

Our committee will continue to discuss this issue.

Appendix 1: Glossary of terms

1. Annuity: a promise of income, usually in the form of a contract that guarantees a fixed or variable payment to the recipient usually at retirement. In a fixed annuity the amount will ultimately be paid out in regular installments varying only with the payout method elected. In a variable annuity, the payout depends on the value of the underlying investments.
2. Annuity purchase rate: means the interest rate used to determine the factor for converting an account balance to an annuity income. MIT's interest rate is the trailing 12 month average rate of 10-year Treasury notes determined quarterly except that it will never go up or down more than one-quarter of one percent from the rate used in the preceding quarter.
3. Basic Plan: the Massachusetts Institute of Technology Basic Retirement Plan, a defined benefit plan fully funded by MIT.
4. Benefits Fund: the fund from which all fixed benefits are paid (including any cost of living increases and, for certain people who were members of the Retirement Plan for Staff Members, the qualified spouse and early retirement supplement benefits.) All Basic Plan Benefits are paid from this fund.
5. Book value: refers to Fixed Fund account balances prior to 1999. Contributions and credited earnings to accounts are known as the book value of the accounts.
6. Bond Index: a weighted average of the value of selected bonds.
7. "Cloned" funds: a term describing The Fixed and Variable Funds after transfer to Fidelity Investments management.
8. Defined benefit plan: plan that promises to pay a specified amount to each person who retires after a set number of years of service.
9. Defined contribution plan: plan that promises to contribute a specified amount. Generally, each participant decides how to invest from among options offered.
10. ERISA: Employee Retirement Income Security Act, 1974 law governing the operation of most private pension and benefit plans. The law eased pension eligibility rules and established guidelines for the management of pension funds.
11. Expense Ratio: annual investment management fees charged to specific mutual fund accounts expressed as a percentage of account assets.
12. Fixed Fund: an investment option under the Supplemental 401(k) Plan. The Fund is a balanced fund consisting primarily of bonds with some stocks.
13. Fixed Fund "distribution rate": the monthly credited investment return to accounts in the Fixed Fund. The rate was determined by formula and reflected all interest and dividends, realized and unrealized gains or losses on common stocks and other equity securities, and realized gains or losses on bonds and other fixed income securities. To maintain a relatively stable distribution rate, gains and losses are distributed over five years.
14. Index (associated with the 5% Account Method): -- still to be defined
15. Index Fund: mutual fund whose portfolio matches that of a broad-based index such as Standard & Poor's Index and whose performance therefore mirrors the market as a whole. Many institutional investors, especially believers in the EFFICIENT MARKET theory, put money in index funds on the assumption that trying to beat the

market averages over the long run is futile, and their investment in these funds will at least keep up with the market.

16. FundsNet: an "open window" to mutual funds made available to participants by Fidelity Investments.
17. IRS, Internal Revenue Service: U.S. agency charged with collecting nearly all federal taxes, including personal and corporate income taxes, social security taxes, and excise and gift taxes.
18. Lump sum distribution: single payment to a participant or beneficiary covering the entire amount of an agreement. Participants in Individual Retirement Accounts, pension plans, profit-sharing, and executive stock option plans generally can opt for a lump-sum distribution if the taxes are not too burdensome when they become eligible.
19. Market value: fair market value price at which an asset or service passes from a willing seller to a willing buyer.
20. Market Value Adjustment: prior to 1999, Fixed Fund Accounts, when they were distributed or converted to an annuity, were credited with a one-time adjustment known as a market value adjustment. The market value of the Fixed Fund fluctuates daily and was computed monthly. If the market value of the Fixed Fund was greater than the book value of all of the accounts, the market value was divided by the book value and this percent was applied to the book value account balance. This was known as the Market Value Adjustment. At the end of 1998 all Fixed Fund accounts were credited with the Market Value Adjustment.
21. Mark-to-market: adjusting the valuation of a security or portfolio to reflect current market values.
22. Mutual Fund: fund operated by an investment company that raises money from shareholders and invests it in stocks, bonds, options, commodities or money market securities. These funds offer investors the advantages of diversification and professional management. For these services they charge a management fee.
23. Normal Retirement Age (NRA): a Defined Benefit term referring to the assumed retirement age used for determining full benefits.
24. "Open Window": an investment option which provides for access to other mutual funds.
25. Outsourcing: when a third party does the record keeping of a retirement plan.
26. RPE: the former plan for service and support staff or the Retirement Plan for Employees.
27. RPSM: the former plan for faculty and staff or the Retirement Plan for Staff Members.
28. Rollovers: movement of funds from one investment to another. For instance, an Individual Retirement Account may be rolled over when a person retires into an annuity or other form of pension payout system.
29. Supplemental 401(k) Plan: the MIT defined contribution plan that includes the current Supplemental 401(k) Plan, the former RPSM plan account balances and the pre-74 member account balances under the former RPE plan.
30. S&P 500 Index: a broad-based measurement of changes in stock market conditions based on the average performance of 500 (or S&P 500) widely held common stocks.

31. Tax-Deferred Annuity (TDA): a salary reduction plan which allows employees of not for profit organizations to elect as an alternative to receiving taxable cash in the form of compensation to contribute pre-tax dollars to a tax-deferred retirement plan.
32. TIAA-CREF: one of the four TDA companies available to MIT employees.
33. Variable Fund: one of the MIT Supplemental 401(k) Plan investment options which invests in stocks.
34. Vesting: the right an employee acquires by length of service to receive employee-contributed benefits under a retirement plan.
35. 1.65% Pay Method: a method for determining Basic Plan benefits. Under this method, you earn an annual benefit equal to 1.65% of your pay each pay period. This annual benefit is calculated assuming benefit payments will start on your normal retirement date and will be paid for as long as you live with no survivor benefits.
36. 5% Account Method: a method for determining Basic Plan Benefits. Under this method, a bookkeeping account in your name is credited each month with an amount equal to 5% of your pay. This account is also credited with an investment return based previously on the return for the Plan's Fixed Fund, now to be changed to an external index. When you elect to receive your benefit, the balance in your bookkeeping account is converted to a pension (an annuity) using the plan's assumptions about interest rates and your life expectancy.
37. 401(k) Plan: a salary reduction defined contribution plan whereby an employee may elect, as an alternative to receiving taxable cash compensation, to contribute pre-tax dollars to a qualified tax-deferred retirement plan.
38. 403(b) Plan also referred to as a Tax Deferred Annuity (TDA): a TDA is a salary reduction plan for not for profit organizations whereby an employee may elect, as an alternative to receiving taxable cash compensation, to contribute to a tax-deferred retirement plan.

Appendix 2: Annual Expense Ratios for Various Investment Options

Stock Funds

Fidelity Blue Chip Growth .72%

Fidelity OTC .76%

TIAA CREF Stock .31%

Vanguard Index Trust 500 .19%

Vanguard Primecap .51%

Vanguard Windsor .27%

Vanguard Windsor II .37%

Growth Funds Average 1.45%

Growth & Income Funds Average 1.27%

Balanced Funds

Fidelity Puritan .64%

TIAA CREF Social Choice .29%

Vanguard Wellesley .31%

Balanced Fund Average 1.32%

Bond Funds

Fidelity Bond Pool .20%

TIAA CREF Bond Market .29%

Vanguard Total Bond Market .20%

Vanguard GNMA .31%

Special MIT Funds

"Cloned" MIT Fixed Fund .22%

"Cloned" MIT Variable Fund .28%

Fidelity Institutional Index S&P 500 .10%

Appendix 3: Review Of The "Market Value Adjustment" Issue

As mentioned in Section 3.1f, all Fixed Fund accounts received a market-value adjustment based on returns through December 31, 1998, and on January 1, 1999 all participant accounts were given a market value adjustment so that these accounts will be at market value. These unallocated funds were distributed to individual accounts in proportion to their asset value on December 31, 1998. This is equivalent to allocating the funds as if everyone were retiring on this date.

Some faculty have raised the question of whether this method of allocating the unallocated funds is fair. There are two ways of framing the fairness issue. It is important to recognize that these two approaches have opposite implications for who gains and who loses from mark-to-market on December 31, 1998 relative to the fairness consideration.

One way is backwards looking and is really reexamining the historical fairness of the existing procedure. This way is based on asking the question of the value that the accounts would have today if the Fixed Fund had been mark-to-market historically. With a historical approach, people with large early accumulations relative to recent contributions lose.

The second way of framing the fairness issue is to ask the question how mark-to-market changes what would otherwise have happened if the methods of the Fixed Fund were to be continued into the future. That is, if we weren't changing the Fixed Fund, the fairness issue of not having mark-to-market would probably not be raised, since that is the way we have been treating everyone who retires. With a prospective approach, people who would have retired under the current guidelines with small accumulations relative to their final years' contributions lose. This forward-looking approach uses the current plan as a baseline for fairness considerations, while the backward-looking approach uses a hypothetical history of mark-to-market as a baseline for fairness considerations.

After some deliberation, the Committee has concluded that it is not appropriate to revisit the historical workings of the Fixed Fund. Moreover, the Committee thinks that the issue of fairness as applied to deposits that might be made in the future is not a compelling reason for changing the proposed method. Moreover, this prospective change is just one part of many changes affecting future deposits. Thus the Committee concludes that the proposed allocation is appropriate.