Institute-wide Planning Task Force
Procurement @ MIT Working Group

Final Report

December 16, 2009
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Procurement Task Force Executive Summary

Introduction

Much of what we do at MIT – teaching, research, student life, operating, maintaining, and even building our facilities – relies on and is supported by the procurement process. What we buy, how much we buy, from whom, for what purposes, at what costs and levels of quality, fundamentally shapes the core activities of the Institute. Yet, with the exception of a few people intricately involved in the actual procurement process, most of us have little understanding of, and appreciation for, the various processes underlying the basic goods and services we rely on in our everyday lives at MIT.

In order to better educate ourselves about the basic contours of the MIT procurement process, our working group dedicated a fair amount of time understanding how goods and services actually get purchased at MIT. We were particularly interested in learning more about both the costs, composition, contractual terms, and suppliers of key items MIT purchases on a regular basis (i.e., laboratory supplies, office supplies, travel, computers, etc.) as well as the processes underlying these purchases. In addition, we sought to better understand the drivers underlying the purchasing choices members of the MIT community make every day. To do so, we interviewed several staff members of the MIT and Lincoln Laboratory procurement offices, conducted a survey of MIT faculty, research scientists, administrative and support staff, and graduate students in engineering and science who purchase goods as part of their ongoing research and work. In addition, we conducted interviews with the Chief Procurement Officers of Yale University and the University of Pennsylvania. We also mined the IdeaBank for suggestions on how we could improve current procurement practices.

What we learned was striking. MIT’s procurement process, like that of most of our peer institutions, is highly fragmented, disorganized, redundant, out-dated, and hence inefficient. The working group is very impressed with the dedication and professionalism of the senior staff dedicated to MIT’s procurement process. This team has already undertaken a number of changes and innovations that will certainly lead to more efficient and cost-effective purchasing practices. But enormous opportunities for cost savings, improved service levels, greater transparency, and more sustainable practices exist and need to be exploited not simply to help reduce our current budget deficit but also to create a more efficient, responsive, and sustainable university in the future.

Principles Guiding our Working Group

Our work was guided by two separate but interdependent principles:

1. Identify savings in both the cost of items/services being purchased by MIT, as well as the processes/structure underlying these purchases without negatively impacting the excellence of MIT’s research, teaching and sense of community.

2. Advance the long-term goal of transforming MIT into a sustainable campus.
**Process**

Based upon our research, our group generated a list of ideas or proposals for changes in current procurement practices and then estimated potential savings and costs to implement. Ideas could be implemented to varying degrees (e.g. administrative areas only as opposed to MIT wide). Where possible we tried to show savings by the degree of implementation. In all cases a more rigorous analysis should be conducted before making the final go-ahead decision.

When analyzing the procurement process, three elements are important:
1. End item or service
2. Procurement process and support structure
3. End user or customer

The relationships among the three elements drive the cost of the procurement process. End items are sensitive to several factors:
- **Size** or volume of purchasing order, where large quantities and/or concentrated purchases generate preferential pricing whereas smaller, more fragmented orders increase costs;
- **Personal preference** for brands, computer systems, or travel agents;
- Whether the supplier base for particular items is broad or concentrated and how this can impact prices (either through competitive bidding or long-terms relational contracts)
- **Specialty items** requiring complex procurement processes such as source selections or negotiations for terms and conditions

Procurement processes are sensitive to Institute regulations and policies and customer needs. These include:
- Approval levels for certain dollar values
- Audit and documentation requirements
- Type of end item or service
- Degree of automation
- Urgency of the requirement

End users are sensitive to both the end item and the process. These include:
- **Velocity** of the process from requisition to delivery
- **Personal preference** – limiting preferences can increase volume to produce savings and simplify the procuring process to reduce costs
- Past performance of the vendor
- Administrative burden
- Bad procurement service experience – drive customers to non-standard procurements
- **Awareness** of procurement services

These three elements were used to guide our work as we focused on key items regularly purchased at MIT. For each of these key items, we formed subgroups that would focus on
end items and the associated procurement process. Unique items such as construction, facility leases and specialized services (e.g. medical, insurance, legal, etc.) were considered beyond the scope of this group and some of these were addressed in other Task Force groups. A separate team was formed to address the processes from the end user perspective or “Voice of the Customer” and designed and analyzed the survey of the MIT campus.

**Procurement Process Subgroups**

The procurement subgroups are listed below:

- **IT Services subgroup**
  Teresa Regan ([tregan@mit.edu](mailto:tregan@mit.edu)), Lead
  Tony Sharon ([sharon@LL.mit.edu](mailto:sharon@LL.mit.edu))
  Jeanne Hillery ([hillery@mit.edu](mailto:hillery@mit.edu))
  Tom Malone ([malone@mit.edu](mailto:malone@mit.edu))
  Wilson D’Souza ([wdsouza@mit.edu](mailto:wdsouza@mit.edu))

- **Administrative Supplies and Travel**
  Diane Shea ([dshea@mit.edu](mailto:dshea@mit.edu)), Lead
  Rick Locke ([rlocke@mit.edu](mailto:rlocke@mit.edu))
  Derek Welcome ([welcomed@mit.edu](mailto:welcomed@mit.edu))

- **General Equipment and Furniture**
  Paul Conroy ([conroy@LL.mit.edu](mailto:conroy@LL.mit.edu)), Lead
  Harry Lee ([hslee@MTL.mit.edu](mailto:hslee@MTL.mit.edu))
  Chris Sims ([christopher.sims@LL.mit.edu](mailto:christopher.sims@LL.mit.edu))

- **Professional Consultants and Temps**
  Michelle Carmichael ([maustin@mit.edu](mailto:maustin@mit.edu)), Lead
  Larry Gallagher ([ldg@mit.edu](mailto:ldg@mit.edu))
  Patrick Jaillet ([jaillet@mit.edu](mailto:jaillet@mit.edu))

- **Facilities Modifications**
  Michael Kearns ([kearnsm@mit.edu](mailto:kearnsm@mit.edu)), Lead
  Rebecca Uchill ([ruchill@mit.edu](mailto:ruchill@mit.edu))
  Eileen Ng-Ghavidel ([ghavidel@mit.edu](mailto:ghavidel@mit.edu))
  Olga V Parkin ([toxop@mit.edu](mailto:toxop@mit.edu))

- **Laboratory Supplies**
  Paul Conroy ([conroy@LL.mit.edu](mailto:conroy@LL.mit.edu)), Lead
  Diane Shea ([dshea@mit.edu](mailto:dshea@mit.edu))
  Derek Welcome ([welcomed@mit.edu](mailto:welcomed@mit.edu))
  Chris Sims ([christopher.sims@LL.mit.edu](mailto:christopher.sims@LL.mit.edu))

- **Voice of the Customer**
  Susan Silbey ([ssilbey@mit.edu](mailto:ssilbey@mit.edu)) Co-Lead
  Rick Locke ([rlocke@mit.edu](mailto:rlocke@mit.edu)), Co-Lead
  Patrick Jaillet ([jaillet@mit.edu](mailto:jaillet@mit.edu))
  Diane McLaughlin ([laugh@mit.edu](mailto:laugh@mit.edu))
  Larry Galagher ([ldg@mit.edu](mailto:ldg@mit.edu))
  Eileen Ng-Ghavidel ([ghavidel@mit.edu](mailto:ghavidel@mit.edu))
  Zina Queen ([zqueen@mit.edu](mailto:zqueen@mit.edu))
Summary of Results

Below is a table that summarizes the projected savings of our various proposals. Yet cutting across each of these individual suggestions are a set of common process improvements that we recommend as well. These include:

1. **Reduce the range of purchasing choices.** Currently the MIT community has an over-abundance of choice in which goods and services they order, which vendors supply these goods and services, how large or small these orders can be, and how (purchase order, credit card, electronic commerce) they procure basic goods and services. Choice is key to MIT’s culture and we do not recommend the elimination of choice or a top-down approach to procurement. Rather, we recommend that choices in our electronic catalogues and service providers be reduced in ways that aggregate purchases and thus drive down costs and drive towards greater sustainability.

2. **Automate and Stream-line Key Processes.** Many procurement processes are still based upon paper requisitions, reimbursement forms, manual filing and audits, etc. Wherever possible (i.e., travel booking, reporting, reimbursements; the ordering of office and laboratory supplies; the matching of temporary workers to temporary jobs, etc.) we recommend that these processes be automated. This will not only reduce costs significantly but also enhance the transparency and even accuracy of the entire procurement process.

3. **Educate the Community about Procurement Processes.** Many people involved in the ordering of goods and services have never been formally trained in how best to use MIT’s electronic catalogues, purchasing cards, take advantage of special deals with particular vendors, or even accurately allocate the correct account number or code for individual purchases. This creates significant inaccuracies to our purchasing orders and hence substantial re-work. Promoting focused training to administrative/support staff and faculty/graduate students engaged in procurement as part of their regular jobs would eliminate these problems. In addition, we recommend that the Procurement Office visit all MIT departments, centers, laboratories and both educate the community of what they do but more importantly, listen to these customers so as to better understand and hence better serve their needs.

4. **Renegotiate and Bid Out Contracts for Key Goods and Services but afterwards, Develop Strong, Transparent, Long-terms relations with a small number of key vendors who have demonstrated a genuine interest in reducing costs, enhancing quality and improving service to MIT.** MIT already enjoys several such relationships with key vendors. These relationships have generated significant savings to the Institute. Thus, while the current economic situation favors the revisiting/renegotiating of contracts with most vendors, we caution against trying to overly squeeze these suppliers as this could cause long-term problems and undercut the reliability and mutual trust that characterize best in class buyer-supplier relations.
5. **Promote Sustainable Purchasing Practices** by reducing small orders (and hence additional packaging/deliveries), automating processes wherever possible (eliminating excess use of papers), migrating towards multifunctional machines (hence reducing separate fax machines, scanners, and printers – all consuming energy and relying on separate supplies), promoting videoconferencing vs. frequent travel, and simply reducing the amount of goods we consume on campus every day. These changes are good not only for our budget but also for our future.

6. **Ensure that costs savings for certain goods and services (i.e., temporary workers) not result in “sweating” the workers who provide our goods and services. Enhancing our well-being (through cost savings) at the expense of other, perhaps more vulnerable individuals or groups would violate the core values and mission of MIT.**

7. **Develop creative solutions (i.e., internal job banks) and fair policies for the numerous employees who will be impacted by our proposed changes. Many of our individual recommendations will result in FTE reductions. Managing this process in a fair and transparent manner is key and once again reflects our core values and mission.**

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**Summary Table Matrix**

<table>
<thead>
<tr>
<th>Savings and Revenues ($K)</th>
<th>Once</th>
<th>Yearly</th>
<th>Includes Research, GIB, Designated and Other Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Information Services</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standardize institute personal computing purchases</td>
<td></td>
<td></td>
<td>$800</td>
</tr>
<tr>
<td>TBD</td>
<td></td>
<td></td>
<td>TBD</td>
</tr>
<tr>
<td>TBD</td>
<td></td>
<td></td>
<td>TBD</td>
</tr>
<tr>
<td>Reduce the number of fax machines throughout MIT</td>
<td></td>
<td>$300-$550</td>
<td>$150-$250</td>
</tr>
<tr>
<td>Purchase only MIT recommended desktop and laptop configurations</td>
<td></td>
<td>$1,370</td>
<td>TBD</td>
</tr>
<tr>
<td>Change purchasing card rules to buy computers directly on purchasing card</td>
<td></td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>TBD</td>
<td></td>
<td></td>
<td>TBD</td>
</tr>
<tr>
<td>Purchase Credit Card</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>Examine the impact of the $3K capital equipment rule on computer purchases</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td><strong>Facilities</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consolidate of Design Services Leading to Partnering Agreements</td>
<td>$276-$353</td>
<td></td>
<td>TBD</td>
</tr>
<tr>
<td>Leveraging MIT’s Facilities Related Purchasing Power Across Departmental Boundaries</td>
<td></td>
<td>$450</td>
<td>TBD</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th><strong>Furniture &amp; Lab Supplies</strong></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Combine MIT Campus and MIT</td>
<td>$42</td>
<td>$75</td>
<td>$26</td>
</tr>
<tr>
<td>Lincoln Laboratory Furniture Procurement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eliminate Independent Buying</td>
<td>$6</td>
<td>$6</td>
<td>N/A</td>
</tr>
<tr>
<td>Convert Lab Supply and Equipment orders &lt;5K to eCAT/Sciquest</td>
<td>$30-$96</td>
<td>$500-$1,700</td>
<td>TBD</td>
</tr>
<tr>
<td>P-CARD rebate</td>
<td>$100K+</td>
<td>$100K+</td>
<td>N/A</td>
</tr>
<tr>
<td>Renegotiate existing Lab Supply and Equipment contract</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>Renegotiate scientific equipment contracts with suppliers with GIB spend &gt; 100K</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>Renegotiate scientific equipment contracts with existing eCAT suppliers</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Admin Supplies &amp; Travel</strong></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Standardize on a corporate travel card</td>
<td>$500K+</td>
<td>$500K+</td>
<td>TBD</td>
</tr>
<tr>
<td>Expense reporting and online travel booking tool</td>
<td>$85-$127</td>
<td>$85-$127</td>
<td>$59-$75</td>
</tr>
<tr>
<td>Move to a single Consolidated Travel Agency</td>
<td>TBD</td>
<td>$1,000</td>
<td>TBD</td>
</tr>
<tr>
<td>MIT negotiates its own direct contracts with Air and Hotel providers, and utilizes the MASCO agreement or other if/when more favorable</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>Utilize Electronic Travel Reimbursements</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>Accelerating Green Procurement</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>Onsite Life Science Operation</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>Cylindered Gas Partnership</td>
<td>TBD</td>
<td>$70-$80</td>
<td>TBD</td>
</tr>
<tr>
<td>Clerical Help</td>
<td>$600</td>
<td>$600</td>
<td>TBD</td>
</tr>
<tr>
<td>Buy Multifunction printers</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>Minimum order value of $50</td>
<td>$19</td>
<td>$19</td>
<td>TBD</td>
</tr>
<tr>
<td>Update core Contract List</td>
<td>$43</td>
<td>$43</td>
<td>TBD</td>
</tr>
<tr>
<td>Limited View Catalog</td>
<td>$372</td>
<td>$372</td>
<td>TBD</td>
</tr>
<tr>
<td>Rebid Office Supplies</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>Reduce PO's under 5K</td>
<td>$120-$180</td>
<td>$120-$180</td>
<td>TBD</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Temporary Staff &amp; Consultants</strong></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Job Share Bank</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
</tr>
</tbody>
</table>

| Convert casual labor workforce from outside placement agencies including bring the program in-house | TBD | TBD | TBD |
| Use a single vendor management system for purchasing temporary staff services | TBD | TBD | TBD |
| TBD | TBD | TBD |

| **Total** | $600+ | $1,797-$2,205 | $23,867-$31,406 | $235-$351 |
**Items needing further review**

Source of funding [Who pays]

Managing procurement costs generate different types of savings dependent on the source of funding: the General Institute Budget (GIB) and/or sponsored research. Reducing cost for GIB items results in a direct savings to the institute. Reducing for sponsored research items is more a cost avoidance. Since the sponsor typically covers the cost, the savings is realized as a reduction in overhead. In the case where the recovery does not cover the entire cost of the procurement service, there is a direct savings to the GIB. Regardless of the savings, a lower overhead rate is itself a benefit to the Institute in that it makes our research more competitive.

Awareness of Procurement Services

The survey and informal conversations indicate the general Institute buying community is not aware of the range of procurement services or the cost impact of not using the appropriate service. This lack of awareness extends to the impacts of buyers choice (e.g. name brand versus private label); of inefficient order quantities; and of longer term sustainability.

Data

Sound decisions for changing procurement processes require good data. Several of our subgroup noted the inconsistency in assignment of accounting codes. Additional training or buyer friendly interfaces would help improve the usability of the data.
Information Services SPI’s

Standardize Institute personal computing purchases

Summary Description: MIT currently purchases the majority of its personal computers from two suppliers. Supplier A and Supplier B each had a relatively even 50/50 split of the total laptop purchased last fiscal year by MIT (955 for Supplier A to 883 for Supplier B), but it is also notable that over 70% (2259 for Supplier A to 836 for Supplier B) of the desktop computers purchased by MIT last fiscal year were Supplier A. Supplier A computers at MIT are used primarily with the Microsoft Windows operating system, for which MIT offers a broad set of campus-wide software and services. MIT’s Microsoft campus agreement provides for future Microsoft Windows operating system upgrades for all MIT owned computers, whereas Supplier B does not offer such favorable campus-wide agreements and each successive operating system upgrade must be purchased separately for each MIT owned Supplier B computer. Repair and maintenance of the personal computer is an important part of the computer lifecycle and Supplier A computers purchased by MIT are provided with a three-year warranty at no additional charge, but Supplier B only provides 90-day warranties on their laptop and desktop products with an additional three-year warranty available for an additional $280 at the time of purchase. Finally all Supplier A warranty repairs can be accomplished on-campus through IS&T’s PC service, with Supplier A reimbursing IS&T’s PC service for the cost of the repair. All Supplier B warranty repairs must be handled by Supplier B directly by shipping the failed device to their location and the device is shipped back to MIT upon repair.

A standardization of MIT’s personal computing purchases with Supplier A PCs would allow MIT to better utilize the significant campus agreements in place for Microsoft Windows and Office software, leverage more time/cost effective repair and maintenance over the lifecycle of the computer hardware, and allow MIT to take better advantage of the substantial volume of business transacted with Supplier A. While Supplier A is used as the vendor for this example, standardization on other PC vendors should be explored. Opening this service to competition may produce additional savings.

Quantify the Idea: In FY08 MIT purchased 1838 laptop computers (955 Supplier A and 883 Supplier B) at an average price per Supplier A laptop of $1700 and an average price per Supplier B laptop of $2100. As a rough estimate if MIT were to convert those Supplier B laptop purchases into Supplier A laptop purchases it could have saved an estimated $160k on the initial purchases for the last fiscal year.

In FY08 MIT purchased 3095 desktop computers (2259 Supplier A and 836 Supplier B) at an average price per Supplier A desktop of $1300 and an average price per Supplier B desktop of $2000. As a rough estimate if MIT were to convert those Supplier B desktop purchases into Supplier A desktop purchase it could have saved an estimated $600k on the initial purchases for the last fiscal year.
MIT could have saved approximately $800k on the initial hardware purchases alone, and this does not include additional savings over the lifetime of the computer that could be realized through the Supplier A three year warranty as compared to the Supplier B 90 day warranty.

Costs for implementation would be related to developing, implementing and ensuring policy changes to standardize MIT personal computing purchases on Supplier A PCs. These changes could likely be implemented in a short time period based on the necessary changes to our electronic purchasing system (ECAT) and vendor partners.

**Implementation Considerations:** MIT is a fairly diverse environment and an incredible amount of effort and focus has been made in providing the MIT community choices in how they do their computing. At the same time it also presents challenges as we spend the same resources or more supporting the smaller segments of the community than we do supporting the majority of our community.

SAVINGS SUMMARY: Approximately $800K per year

**Standardize on a single conferencing provider for all Web/Audio/Video conferencing services at MIT.**

**Summary Description:**
MIT uses a variety of Web, Audio and Video conferencing services for meetings, collaborations, events and conferences. MIT IS&T has secured agreements with several conferencing providers, but the overall management and planning necessary for the use of these services makes it difficult to fully integrate this method into work processes. For example, a majority of the meetings/conferencing is often ad-hoc or scheduled in advance within a relatively short time period. The conferencing services offered today require at least one to two days of advance planning to ensure the setup is available for the event. These types of challenges create an artificial barrier to entry when trying to use these services.

Rising fuel costs, greater focus and awareness on energy usage and environmental impacts has led many organizations to curtail business travel for meetings. Web, audio and video technologies and their widespread adoption have allowed many organizations to significantly reduce their work related travel, thereby saving time, reducing their carbon footprint, and gaining overall greater efficiency in collaboration.

The establishment of a single Web/Audio/Video conferencing solution for MIT will allow it to focus its efforts around a single platform and obtain savings through consolidated volume usage. The selection of one provider as MIT’s standard Web/Audio/Video conferencing solution will allow MIT to leverage the existing community around a single provider, establish better volume pricing, and centralize our conferencing services so that it is available through a single click of a web page without the need for the coordination and planning of today’s solutions.
**Quantify the Idea:**

Providing overall cost savings is difficult in this area as the use of this technology represents a paradigm shift in how people collaborate. This technology is offered as “toll” service and prices are based on per minute per user rates. We can compare the per minute per user rates MIT is paying for such services today with the rates available through the high volume, low cost provider.

It is important to note that conferencing costs are broken down into two components: Audio and Web, for example if you have a Web conference with phone audio then you are actually paying for both audio and web charges.

Today MIT has contracts with two providers, Provider A and Provider B:

Provider A rates for Audio conferencing are approximately $0.10 per minute per user for audio conferencing and approximately $0.20 per minute per user for web conferencing.

Provider B rates for Audio conferencing are approximately $0.06 per minute per user for audio conferencing and approximately $0.16 per minute per user for web conferencing.

By standardizing on our low cost provider MIT would be able to achieve per user per minute rates for audio conferencing of $0.04 per user per minute and $0.16 per user per minute for web-conferencing.

So for per minute per user audio charges MIT would be able to save $0.06 per minute per user as compared to audio charges from Provider A and $0.02 per user per minute as compared to audio charges from Provider B.

Pricing data and savings information are listed in the table below.

<table>
<thead>
<tr>
<th>Vendor</th>
<th>Audio Conferencing – cost per minute</th>
<th>Web Conferencing – cost per minute</th>
<th>Video Conferencing – cost per minute</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provider A</td>
<td>$0.10</td>
<td>$0.20</td>
<td>Not available</td>
</tr>
<tr>
<td>Provider B</td>
<td>$0.06</td>
<td>$0.16</td>
<td>Not available</td>
</tr>
<tr>
<td>Low Cost Provider</td>
<td>$0.04</td>
<td>$0.16</td>
<td>$0.01</td>
</tr>
<tr>
<td>Savings</td>
<td>$0.06 compared to Provider A</td>
<td>$0.04 compared to Provider A</td>
<td>These services are not available today and would be new services for the MIT community.</td>
</tr>
</tbody>
</table>

This idea would be very straightforward from an implementation standpoint and actual setup required by MIT would be fairly minimal. Implementation could range from one to three months in time.
Implementation Considerations:
Our low cost provider today is an external software offering provided by a service provider. MIT would have the option in the future of bringing audio and web conferencing technology in house if analysis showed it was desirable and would provide additional savings based on MIT’s overall usage. This option is not available as it stands today, but our low cost provider is looking to offer this type of option in the coming year.

SAVINGS SUMMARY: Additional data required to estimate savings

Reduce the number of fax machines throughout MIT

Idea/Objective: Leverage MIT’s VoIP infrastructure to move stand alone fax machines to new centralized services that allow members of the MIT community to send and receive faxes through email.

Summary Description:
The increase in the use of Internet based technologies has lead to an overall decline in the use of Fax devices for transmitting and receiving documents at MIT. Despite this overall reduction in the use of Fax devices, MIT still maintains a significant number of Fax machines on-campus simply for occasional use. It should be noted that there are select departments where faxing is a frequent and integral part of how they do business, such as the activities in procurement. Fax devices despite only occasional use require valuable MIT resources such as paper and toner supplies, space and power. This proposal would seek to reduce the number of Fax machines across the MIT campus and also reduce future expenditures on such devices through the use of new Internet based technologies and services to send and receive their faxes as email messages without the need for a physical Fax device.

MIT’s new VoIP system provides the technology to allow for the receipt and transmission of Faxes via email.

Quantify the Idea:
It is a challenge to get a precise figure on the number of Fax devices in use at MIT, but we will develop estimates based on information available through the MIT on-line directory and published Fax numbers, which are also MIT telephone numbers. Currently there are approximately 550 unique MIT telephone numbers listed in the MIT on-line directory as Fax numbers. This would translate to approximately 550 physical Fax devices. The average cost for a Fax device is in the range from $500 - $1000, so if we take $750 as the average price for a Fax machine, these 550 devices represent approximately $410k in cost. This does not count the cost of the supplies or the space and power ([http://www1.eere.energy.gov/femp/procurement/eep_fax_machine.html](http://www1.eere.energy.gov/femp/procurement/eep_fax_machine.html)) to provide to these devices.
### Recommendation

| Migrate fax machines to centralized services that allow sending and receiving faxes via email | $300k - $550k |

### Implementation Considerations:

The implementation costs would be focused upon moving to an outbound faxing solution, as our MIT VoIP system has the ability to receive faxes through its voicemail platform and deliver those faxes to the user as an email with an attachment. There would be some initial costs to establish accounts and to migrate these fax devices over to the MIT VoIP system, but those costs are relatively minimal. Estimates for the cost to implement an outbound faxing solution are $150K – 250K and approximately three to six months for implementation. Also the savings would be realized over time as fax machines were no longer replaced and existing machines were retired saving money on supplies and power.

SAVINGS SUMMARY: Approximately $300-550K one time savings. Additional annual savings possible through reduced use of fax machine consumables.

### Purchase only MIT recommended desktop and laptop configurations

#### Summary Description:

MIT has worked to develop a set of desktop and laptop recommended configurations and standards that are the most cost effective to meet MIT’s utility computing needs. Today each of the recommended configurations allows the customer to further customize a variety of the recommended items in the configuration such as processor speed, memory, and hard drive. Altering these items adds cost to the overall computer purchase for little or no additional improvement in the overall computing performance. We propose to reduce the amount of customization within the MIT recommended desktop and laptop configurations, and also to reduce the amount of models and choices available in the MIT recommended choices.

#### Quantify the Idea:

An analysis of purchases of the MIT recommended laptop and desktop configurations made to date in FY09 shows that if we restrict customization, the potential for savings is approximately $230K of savings on desktops and $90K of savings on laptop. Please note these numbers are for FY09 year to date. Using FY08 purchasing data to obtain a full year estimate, the FY09 savings would be $480K.

The majority of desktop purchases (70%) made at MIT are actually for the recommended MIT desktop model, but there is still a portion (30%) of MIT’s desktop purchases that are for non-recommended models. The potential savings from converting those non-recommended purchases into purchases for the MIT recommended desktop configuration would have provided an additional $550K of savings in FY09, and for the MIT recommended laptop configuration $60K. Again these numbers are FY09 year to date
numbers. Using FY08 purchasing data to obtain a full year estimate, the FY09 desktop savings would be approximately $790K and the laptop savings would be approximately $100K for an overall total savings in FY09 of $890K.

The costs for implementing the idea would be the MIT staff time to work with our recommended vendor and their team to ensure that ECAT purchases for general MIT laptop and desktop purchases are limited to the MIT recommended configurations. The timeframe to implement such changes would be one to three months and ideally could be in place by the beginning of a new fiscal period.

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Projected Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restrict customization of the MIT standard configuration</td>
<td>$480k</td>
</tr>
<tr>
<td>Require laptop and desktop computer purchases to be from a set of MIT recommended configurations for processor, memory, hard drive, etc</td>
<td>$890k</td>
</tr>
<tr>
<td><strong>Total savings</strong></td>
<td><strong>$1370k</strong></td>
</tr>
</tbody>
</table>

Please note this analysis only included Supplier A, as Supplier B was unable to provide us any level of informational detail about MIT’s Supplier B purchases, so there could potentially be even greater savings than anticipated in this analysis. While Supplier A is used as the vendor for this example, standardization on other PC vendors should be explored. Opening this service to competition may produce additional savings.

**Implementation Considerations:**
MIT has always been an environment that has favored informed choice over mandated standards, and there is concern that the MIT culture will make this type of change difficult to implement.

SAVINGS SUMMARY: Approximately $1,370K per year

The following two ideas were provided by the IS&T Task Force

**Change purchasing card rules to make it possible to buy computers directly on a purchasing credit card.**

**Summary Description:** At present it is not permitted to buy computers directly using an MIT purchasing credit card. A researcher who wants to buy a computer from sponsored research dollars must make this purchase through an MIT purchase order. This is time consuming and means the purchasing card system (which is generally very efficient) cannot be used.
**Quantify the Idea:** The credit card based purchasing and verification system takes much less time and human effort that the purchase order system. This change would also be beneficial to researchers who need a brand new product and would like to walk into a store and make the purchase on their purchasing card.

**Implementation Considerations:** Consultation with OSP to learn if there are any general or specific sponsor, government, industrial and foundation, rules on charging of computing expenses to grants and contracts.

SAVINGS SUMMARY: TBD

**Examine the impact of the $3K capital equipment rule on computer purchases**

**Summary Description:** Computer purchases under $3K are subject to F&A cost recovery charges. Computer purchases greater than $3K are treated as capital equipment to be depreciated and therefore not subject to F&A charges. This creates a dead-zone price range in which it is not sensible to purchase computers and accordingly it is sometimes more cost effective for a researcher to buy a more expensive computer than needed.

**Quantify the Idea:** We believe that researchers have every incentive to purchase the best equipment for their research at the best prices. The artificial $3K line creates an incentive to pad purchases with unnecessary products, some of which, like cheap printers, end up creating new costs, such as expensive ink replacements.

**Implementation Considerations:** Consultation with OSP, audit, etc. to insure that there would be no unintended consequences, for example creating the need for additional bureaucratic steps before a purchase could be made. Any changes should avoid increasing F&A in some other way or creating an alternate set of unintended consequences.

SAVINGS SUMMARY: TBD

**Facilities SPI’s**

**Consolidation of Design Services Leading to Partnering Agreements**

**Summary Description:** In most cases, Facilities Project Management Division (PMD) bids design services for each renovation project resulting in 43 separate firms working on 135 projects in 2008. Design services on renovation projects represented $6.34M in FY 2008. Of this amount 61% or $3.9M in 2008, was for repetitive renovation projects that could have benefited from a partnership approach.
**Quantify the Idea:** Reducing the number of consultants and moving toward partnering with select firms in the form of continuing services agreements can benefit MIT in the form of cost reduction, cost control and also bring efficiency and customer service improvements.

If a one percent savings (a conservative estimate) over the 2008 expenses is achieved by reducing the number of bidding firms and leveraging “best players”, the year one, FY 2010, savings would be $38K. While this effort is occurring, PMD will structure, bid out and contract for partnering relationships to be implemented in FY 2011.

In FY 2011, a two to four percent reduction in design service fees could result in savings of $76K to $153K. In addition, the reduction of internal project management and administrative hours for bidding and contracting on the previous volumes could result in savings of $200K annually.

**Implementation Considerations:**
Lower project volumes may occur in FY2010 and 2011. Savings will still be realized but on a smaller scale and PMD will be positioned better for when project volumes increase. The improved service benefits will be realized regardless of the volume of projects.

SAVINGS SUMMARY: Approximately $276K-$353K per year

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**Leveraging MIT’s Facilities Related Purchasing Power Across Departmental Boundaries**

**Summary Description:** Currently, many entities across the campus purchase facilities related services and supplies such as pest control, window washing, cleaning products, painting, paint and plumbing. With multiple vendors and individual smaller contracts it is expected that consolidating contracts to leverage a larger volume will yield savings.

**Quantify the Idea:** Reviewing purchase order expenses by commodity group for FY08, shows that, excluding construction, approximately $15M was purchased outside of the Dept of Facilities (DOF) on facilities related services and supplies while the DOF purchased an additional $8M. It is noted that an unknown portion of the $15M is likely research specific. However, the essence of the idea still applies. If two percent (a conservative industry estimate) of the overall purchase costs could be saved by leveraging the buying power across the institute, approximately $450k could be saved annually. The summary chart shows the commodity groups included in the analysis and includes the breakdown of purchases made within and outside of DOF.
### Fiscal Year 2008 Purchases By Commodity Group

#### 2008

<table>
<thead>
<tr>
<th>Commodity</th>
<th>EVP</th>
<th>Provost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cleaning Supplies</td>
<td>$35,052.84</td>
<td>$35,052.84</td>
</tr>
<tr>
<td>Const Expense</td>
<td>$215,995,833.71</td>
<td>$5,817,679.17</td>
</tr>
<tr>
<td>Cust Services</td>
<td>$1,350,716.34</td>
<td>$1,824,727.25</td>
</tr>
<tr>
<td>Elec Systems</td>
<td>$1,667,188.32</td>
<td>$405,799.47</td>
</tr>
<tr>
<td>Fire Prot</td>
<td>$10,954.07</td>
<td>$21,438.08</td>
</tr>
<tr>
<td>Hardware</td>
<td>$17,158.80</td>
<td>$513,564.85</td>
</tr>
<tr>
<td>Heat and Vent</td>
<td>$11,866.39</td>
<td>$25,297.97</td>
</tr>
<tr>
<td>M &amp; Repair</td>
<td>$272,870.78</td>
<td>$442,910.90</td>
</tr>
<tr>
<td>Maint Contract</td>
<td>$1,498,039.46</td>
<td>$7,064,387.55</td>
</tr>
<tr>
<td>Mech Supplies</td>
<td>$663.36</td>
<td>$1,172,742.06</td>
</tr>
<tr>
<td>Mech Systems</td>
<td>$3,004,576.28</td>
<td>$94,120.24</td>
</tr>
<tr>
<td>Painting &amp; Decorating</td>
<td>$0.00</td>
<td>$5,810.00</td>
</tr>
<tr>
<td>Painting Supplies</td>
<td>$3.43</td>
<td>$37,031.30</td>
</tr>
<tr>
<td>Pest Control</td>
<td>$800.00</td>
<td>$64,924.70</td>
</tr>
<tr>
<td>Plumbing Supplies</td>
<td>($8.80)</td>
<td>$11,908.43</td>
</tr>
<tr>
<td>Repairs</td>
<td>$133,276.59</td>
<td>$2,808,620.27</td>
</tr>
<tr>
<td>Trash and Waste</td>
<td>$38,709.73</td>
<td>$158,122.52</td>
</tr>
<tr>
<td>Windows and Doors</td>
<td>0</td>
<td>$72,026.43</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>$224,037,701.30</strong></td>
<td><strong>$20,576,164.03</strong></td>
</tr>
<tr>
<td><strong>Totals without Const</strong></td>
<td><strong>$8,041,867.59</strong></td>
<td><strong>$14,758,484.86</strong></td>
</tr>
<tr>
<td><strong>2%</strong></td>
<td><strong>$160,837.35</strong></td>
<td><strong>$295,169.70</strong></td>
</tr>
</tbody>
</table>

For example, pest control services campus wide has averaged $151,265 annually over FY06, 07 and 08. DOF, Dining Services, Housing, and the Child Care Centers all maintain their own pest control contracts. Three of the four entities all happen to use the same vendor. These entities are currently forming a single team to bid a new aggregated campus wide contract for pest control services. The team hopes that greater competition and market interest will result given the large value of this contract.

**Implementation Considerations:**

Implementation would require thorough analysis and categorization of the types of purchases, agreement among the distinct purchasing entities, and negotiation with the preferred vendors. This Institute-wide effort could result in restricted choices as bundling the purchases may limit the number of vendors.

**SAVINGS SUMMARY:** Approximately $450K per year
Furniture and Laboratory Supplies SPI’s

**Combine MIT Campus and MIT Lincoln Laboratory Furniture Procurement**

**Summary Description:** In CY2008 Campus purchased $1.5M in furniture, and Lincoln Laboratory spent $1.2M (excluding technical furniture). Currently, Lincoln and Campus have separate contracts for furniture. Combining Campus and Lincoln furniture procurement would create greater buying power for MIT.

**Quantify the Idea:** There would be an estimated savings of $135K per year. Based on the 2008 volume, MIT savings could be $75K. The savings category would be GIB. It would take a few months to implement the idea and an estimated $26K cost (300-400 labor hours) for updating procurement and facilities contracts and policies.

**Implementation Considerations:** Savings would only occur if both Campus and Lincoln used one furniture broker and one line of product. This would severely limit choice.

SAVINGS SUMMARY: Approximately $75K per year. This does not include implementation costs.

**Eliminate independent buying from non-Procurement Office Suppliers**

**Summary Description:** In CY2008 Campus had $63K in furniture purchases with non-Procurement Office Suppliers. Moderate efficiencies could be realized if independent buying from non-Procurement Office Suppliers was eliminated. Purchases from Procurement Office suppliers are deeply discounted and the quality of furniture from Procurement Office suppliers is superior making it last longer.

**Quantify the Idea:** An estimated 10% savings of total spending or $6K per year could be realized. The savings category would be GIB and it could be implemented right away. There is no personnel impact for this idea but there would be less choice for MIT employees.

**Implementation Considerations:** Strict enforcement to eliminate “maverick” buying would be required.

SAVINGS SUMMARY: Approximately $6K per year.
Convert Lab Supply and Equipment orders <$5K to eCAT/Sciquest or Procurement Card transactions

**Summary Description:** DLC’s often place lab supply and equipment orders less than $5K themselves primarily to confirm purchase orders via paper and SAPWeb requisitions. This practice requires manual data entry and PO assignment by Procurement staff without any purchasing value added.

The manual processing of orders less than $5K can be automated to streamline the ordering experience for the DLC’s. This process would also reduce
- order errors and repetitive data entry
- manual order processing in VPF Procurement
- the number of internal paper requisitions processed
- paper invoicing

Orders could be placed 24 hours/day by the DLC’s electronically.

**Quantify the Idea:** FY08 MIT purchase data on Laboratory Supplies and Equipment is $74.37M. The data shows $9.1M was spent on 15,176 orders processed via orders with total amounts less than $5K.

The estimated savings for the conversion of these orders to electronic order processing is as follows:

<table>
<thead>
<tr>
<th></th>
<th>Orders &lt;$5000</th>
<th># of MIT PO’s &lt;$5K</th>
<th>Average Cost per Manual PO</th>
<th>Average Cost per Electronic PO</th>
<th>Potential savings W/100% Compliance</th>
<th>Potential savings W/75% Compliance</th>
<th>Potential savings W/50% Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIB</td>
<td>$849,653</td>
<td>838</td>
<td>$75 - $125</td>
<td>$5 - $10</td>
<td>$58.6k - $96.3k</td>
<td>$43.95K - $72.25K</td>
<td>$29.3K - $48.15K</td>
</tr>
<tr>
<td>Designated</td>
<td>$1,335,322</td>
<td>2,032</td>
<td>$75 - $125</td>
<td>$5 - $10</td>
<td>$142k - $234k</td>
<td>$106.5K - $175.5K</td>
<td>$71K - $117K</td>
</tr>
<tr>
<td>Research</td>
<td>$6,504,656</td>
<td>11,848</td>
<td>$75 - $125</td>
<td>$5 - $10</td>
<td>$829k - 1,362M</td>
<td>$621.75K - $1,02M</td>
<td>$414.5 - $681K</td>
</tr>
<tr>
<td>Other</td>
<td>$465,747</td>
<td>458</td>
<td>$75 - $125</td>
<td>$5 - $10</td>
<td>$32k - $53k</td>
<td>$24K - $39.75K</td>
<td>$16K - $26.5K</td>
</tr>
<tr>
<td>Total</td>
<td>$9,155,379</td>
<td>15,176</td>
<td>$1,138,200 - $1,897,000</td>
<td>$75,880 - $151,760</td>
<td>$1.062M - $1.745M</td>
<td>$796.5K - $1.3M</td>
<td>$531K - $872.5K</td>
</tr>
</tbody>
</table>

**Implementation Considerations:**
- IS&T Resources required to implement new suppliers to eCAT
- Educating and informing the community on the use of eCAT vs. existing order methods
- Evaluate current workflow release strategies
  - Radioisotopes, must be routed to MIT Radiation Safety for approval prior to being ordered
  - Toxins/Poisons – must be ordered by EHS
  - Alcohol/Needles/Syringes – Re-evaluate all restricted items

**SAVINGS SUMMARY:** Approximately $30K-$96K to the GIB per year depending on compliance rate. $500K-1,700K Total
**PCARD/ eCAT Rebate**

**Summary Description:** DLC’s often place lab supply and equipment orders less than $5K themselves primarily to confirm purchase orders via paper and SAPWeb requisitions. This practice requires manual data entry and PO assignment by Procurement staff without any purchasing value added. Additionally, all procurement card rebates and eCAT e-payables (implementation in process) are applied to the GIB.

**Quantify the Idea:** Place Lab Supply and Equipment orders less than $5K on the Procurement Card or with eCAT to create revenue ($100K+) in the form of a rebate that will be applied to the Institute’s General Institute Budget (GIB).

**Implementation Challenges:**
- The re-evaluation of current MIT policy regarding allowable procurement card purchases
- Risk/Reward analysis of increasing the procurement card per transaction limit from $3K to $5K
- Evaluation of the impact on DLC internal workflow and inter departmental procurement roles/responsibilities
- Reporting – Merchants do not generally provide transaction line item detail to the procurement card provider

**Implementation Considerations:**
- Full utilization requires successful implementation of e-payable for eCAT purchases
- The maximum rebate can be realized if all SAP and Paper (non-ECAT/Sciquest) orders <$5K are to be processed via the MIT Procurement Card
- Senior Management endorsement/support of 100% compliance

SAVINGS SUMMARY: Approximately ($100K+) rebate per year depending on compliance rate. All savings go to GIB account.

**Renegotiate existing Lab Supply and Equipment contract with a leading supplier**

**Summary Description:** The Strategic Sourcing team in Procurement will be analyzing our supplier list price reductions to identify other opportunities within the current business model for price reductions. Targeting competitive bidding will be analyzed.

**Quantify the Idea:** FY08 data on GIB spending for Laboratory Supplies and Equipment is $4.7M. For example, one leading supplier with an annual spend of $540K of the GIB spend and number of PO’s processed (1644) within the data report has offered a significant onetime rebate.

<table>
<thead>
<tr>
<th>Supplier</th>
<th>Total PO’s</th>
<th>GIB Spend</th>
<th>Designated Spend</th>
<th>Research Spend</th>
<th>Other Spend</th>
<th>Total Spend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leading Supplier</td>
<td>1644</td>
<td>$540,036</td>
<td>$1,724,018</td>
<td>$3,093,648</td>
<td>$606,416</td>
<td>$5,942,210</td>
</tr>
</tbody>
</table>
Implementation Considerations:
- Evaluation of the stockroom model vs. Sciquest ordering
- Understanding leading suppliers’ supply chain/distribution model
- Understanding leading suppliers’ direct pricing model vs. consortium pricing
- Creating MIT savings while maintaining leading suppliers’ profitability

SAVINGS SUMMARY: A onetime substantial rebate

Create savings by negotiating scientific equipment contracts with suppliers that currently have a GIB spend greater than $100K.

Summary Description: Although suppliers often issue discounted equipment quotations to the MIT DLC’s (Professor, Lab Manager or other) prior to purchase, the Strategic Sourcing team in the Office of the Vice President for Finance (VPF) Procurement is developing a plan to:

- Evaluate each MIT supplier
- Understand current and explore new scientific equipment contract opportunities
- Develop Strategic Supplier Relationships
Quantify the Idea: FY08 data on GIB spending for Laboratory Supplies and Equipment is $4.7M. Of the $4.7M spend, the following scientific equipment suppliers had greater than $100K GIB spending within the data report:

<table>
<thead>
<tr>
<th>Supplier</th>
<th>Total PO’s</th>
<th>GIB Spend</th>
<th>Contract Supplier</th>
<th>Average Spend/Order</th>
<th>Primary Commodity</th>
<th>Potential GIB Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>24</td>
<td>$412,077</td>
<td>New</td>
<td>$17,169</td>
<td>Equipment</td>
<td>TBD</td>
</tr>
<tr>
<td>2</td>
<td>11</td>
<td>$227,177</td>
<td>New</td>
<td>$20,652</td>
<td>Equipment</td>
<td>TBD</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>$199,278</td>
<td>New</td>
<td>$199,278</td>
<td>Equipment</td>
<td>TBD</td>
</tr>
<tr>
<td>4</td>
<td>6</td>
<td>$147,414</td>
<td>New</td>
<td>$24,569</td>
<td>Equipment</td>
<td>TBD</td>
</tr>
<tr>
<td>5</td>
<td>30</td>
<td>$143,057</td>
<td>New</td>
<td>$4768</td>
<td>Equipment</td>
<td>TBD</td>
</tr>
<tr>
<td>6</td>
<td>27</td>
<td>$133,904</td>
<td>New</td>
<td>$4959</td>
<td>Equipment</td>
<td>TBD</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
<td>$128,975</td>
<td>New</td>
<td>$16,121</td>
<td>Equipment</td>
<td>TBD</td>
</tr>
<tr>
<td>8</td>
<td>1</td>
<td>$116,078</td>
<td>New</td>
<td>$116,078</td>
<td>Equipment</td>
<td>TBD</td>
</tr>
<tr>
<td>9</td>
<td>1</td>
<td>$114,996</td>
<td>New</td>
<td>$114,996</td>
<td>Equipment</td>
<td>TBD</td>
</tr>
<tr>
<td>Totals</td>
<td>1753</td>
<td>$1,622,956</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Implementation Considerations:
- Senior Management support of Strategic Sourcing Team recommendations
- Direct negotiations vs. benchmarking educational consortium discounts (MHEC, E&I, US Communities, etc) to determine the best model for MIT

*Educational and Institutional Cooperative (E&I Coop) negotiated pricing is currently in place

SAVINGS SUMMARY: TBD

Renegotiate existing Lab Supply contracts for Sciquest/ECAT suppliers with high volume

Summary Description: The Strategic Sourcing team in Procurement is currently developing a plan to review opportunities to negotiate new and renegotiate all existing Sciquest supplier agreements. Procurement is currently meeting with its strategic suppliers and reviewing their cost savings proposals, and will report those savings to VPF Procurement Senior Management
**Quantify the Idea:** FY08 data on MIT spending for Laboratory Supplies and Equipment is $74M among the following funding sources:

<table>
<thead>
<tr>
<th></th>
<th>Spend</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIB</td>
<td>$4,707,937</td>
</tr>
<tr>
<td>Designated</td>
<td>$25,996,098</td>
</tr>
<tr>
<td>Research</td>
<td>$24,215,243</td>
</tr>
<tr>
<td>Other</td>
<td>$19,451,483</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$74,370,762</strong></td>
</tr>
</tbody>
</table>

Three of the MIT Sciquest suppliers have been identified for review.

<table>
<thead>
<tr>
<th>Supplier</th>
<th>Total GIB Spend</th>
<th>Contract Supplier</th>
<th>Primary Commodity</th>
<th>Potential GIB Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$318,739</td>
<td>Existing</td>
<td>Chemicals</td>
<td>TBD</td>
</tr>
<tr>
<td>2</td>
<td>$520,818</td>
<td>Existing</td>
<td>Chemicals</td>
<td>TBD</td>
</tr>
<tr>
<td>3</td>
<td>$624,846</td>
<td>Existing</td>
<td>Chemicals</td>
<td>TBD</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>$1,464,375</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Implementation Considerations:**

- Re-negotiation of the existing contracts during active contract term periods
- Negotiating a 3 year savings plan for suppliers that generally have a one year contract term

SAVINGS SUMMARY: TBD

**Administrative Supplies and Travel SPI’s**

**The use of a Travel Card with corporate liability**

**Summary Description:**
In the current model, MIT and Lincoln Lab travelers request travel advances to pay hotel and car rental expenses, or they incur them as an out of pocket expense and seek reimbursement.

**Quantify The Idea:**
The implementation of a corporate liable credit card will eliminate travel advances ($3.8M/month), and minimize the use of personal funds for MIT travel related expenses. It is estimated that revenue ($500k+) can be generated in the form of a travel card rebate.
based on a conservative campus spend of $17M through $41M (Actual total), and through rebate (@3%) earned on $3.8M ($114k).

The subgroup estimates that the following potential savings exist:

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Rebate/Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus Travel Card Rebate (based on $17M - $41M Spend)</td>
<td>$200k - $600k+/yr</td>
</tr>
<tr>
<td>Lincoln Lab Travel Card Rebate (based on $10M Spend)</td>
<td>$150k+/yr</td>
</tr>
<tr>
<td>Eliminate Travel Advances</td>
<td>$110k+/yr</td>
</tr>
<tr>
<td>Total Projected MIT Revenue/Savings</td>
<td>$500k+</td>
</tr>
</tbody>
</table>

**Implementation Considerations:**
The Travel Card will be piloted in July/August 2009 with 50-60 high volume MIT travelers, and it is tentatively scheduled for a September - October 2009 implementation and rollout.

**Pros:**
- Corporate liability vs. individual
- Elimination of paper travel advice requests (improves internal processes)
- Revenue

**Challenges:**
- Implementation and education about the new process

**SAVINGS SUMMARY: $500k+**

**Software Expense reporting and online travel booking tool**

**Summary Description:**
In the current model, MIT and Lincoln Lab travelers reconcile travel expenses with manual processes that are paper driven, time consuming, and challenging to manage. Presently, MIT Travel processes about 31,000 reimbursements per year, auditing, and filing these paper records. Paper receipts are maintained by the traveler, and attached to a paper form for reconciliation of personal vs. institutional expenses. In addition, campus travel is arranged by three travel agencies. Lincoln lab Travel is managed by their in house Corporate Travel Department (CTD). Campus travel is not currently receiving the lowest available fares that can be obtained through the use of an on-line booking tool.

**Quantify The Idea:**
The software expense reporting solution maintains Institute compliance for allowable travel expenses, and provides electronic receipts and a fully automated and completed travel expense form upon return of the MIT traveler. The use of an online booking tool provides the MIT
traveler with the flexibility to confirm travel directly, or utilize a consolidated travel agency to provide that service. Online booking tools provide:

- Low technology implementation costs
- Greater discounts, visibility, and comparison of airline rates for most commonly traveled routes/city pairs

The utilization of software tools results in process improvements that could potentially automate the current manual paper intensive process.

**Implementation Considerations:**
The Travel Card and software expense reporting will be piloted in July/August 2009 with 50-60 high volume MIT travelers, with a target date of September - October 2009 for implementation and rollout.

**Cost of implementation:**
- Expense Reporting ($56k-$70k)
- Online Booking ($3k - $5k)

**SAVINGS SUMMARY:** $85K-$127K

**Consolidated Travel Agency Model**

**Summary Description:**
This proposal has two parts. One concerns the consolidation of our external travel vendors and the introduction of a complementary on-line booking system. The other focuses on the consolidation of the MIT and Lincoln Laboratory travel offices.

MIT (campus) and MIT Lincoln Laboratory currently maintain independent resources and unique processes to manage travel at each location. The MIT campus model utilizes three independent travel agencies with a $30M total air and hotels spend that can be sourced and a $1.026M total cost of operations. The Lincoln Laboratory model maintains a Corporate Travel Department (CTD) which functions as a full service on site travel agency complete with ticketing capability. Lincoln Lab has an $8M total air/hotel spend, and a $900K total cost of operations.

**Quantify the Idea:**
The Administrative Supplies and Travel Subgroup proposes the use of one (1) consolidated travel agency model that can accommodate MIT’s unique requirements. As a result, members of VPF Travel and VPF Procurement are negotiating with the existing travel agencies serving MIT, and exploring the use of other agencies to determine the best agency/booking model for campus and LL combined.

We estimate that campus/Lincoln Lab travel operations consolidation would produce an estimated annual savings of $700,000.
In addition, we estimate the direct potential savings from consolidating our external travel vendors to one agency and introducing a complementary on-line booking system at both MIT campus and Lincoln Lab could generate a estimated annual savings in transaction fees of about $300,000 at MIT campus. The savings at Lincoln Lab still need to be estimated, given that it operates its own travel agency.

This estimate is based upon the following assumptions. Currently, MIT campus pays about $792,000 per year in travel transaction fees. If we assume that 50% of current travelers at MIT continue to book travel with a travel agent and pay a somewhat reduced fee but that the other 50% of travelers either book directly on line or use some hybrid system where they book on line but are assisted by a travel agent, MIT would generate significant annual savings. If we add to this the 9000 annual travel transactions from Lincoln Lab, the savings would increase.

An RFI has been issued and responded to by several travel agencies (our current three and other, national travel providers) and the Travel Office and Procurement are in the process of analyzing the options. Negotiations are on-going with multiple agencies. The intangible savings are in the visibility of the one-stop shopping experience that will serve the needs of the community and the program savings with newly negotiated contracts.

Pros:
- Newly negotiated contracts with better pricing structure
- Potential savings on travel booking fees
- More efficient and streamlined travel experience

**Implementation Considerations:**
- Mitigation of the risks associated with an overhaul of Travel management
- Exploring the LL and MIT Campus Travel consolidation of services

SAVINGS SUMMARY: Estimated Annual Savings of $1M

**Direct Air and National Hotel Contracts**

**Summary Description:**
MIT is a member of the Medical Academic and Scientific Community Organization (MASCO), and has adopted its airline contract pricing structure. The Administrative Supplies and Travel Subgroup propose that MIT negotiate its own direct contracts with Air and Hotel providers, and utilize the MASCO agreement or other if/when more favorable.
Quantify The Idea:
Market data suggests that the use of MIT negotiated air and hotel rates/services could produce a 15% to 20% savings on MIT Campus and Lincoln Lab air/hotel spend combined ($38M). More review is needed on the adoption of MASCO pricing when more favorable within an MIT newly negotiated travel model. The Subgroup proposes the use of one (1) consolidated travel agency model that can accommodate MIT’s unique requirements.

Several models of campus adoption (compliance) were reviewed, and we estimate the following savings:

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>50% Compliance</th>
<th>70% Compliance</th>
<th>100% Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Air/Hotel Contracts ($38M)</td>
<td>$2.85M-$3.8M</td>
<td>$3.99M – $5.32M</td>
<td>$5.7M – $7.6M</td>
</tr>
<tr>
<td>Total Projected Savings</td>
<td>$2.85M - $3.8M</td>
<td>$3.99M – $5.32M</td>
<td>$5.7M - $7.6M</td>
</tr>
</tbody>
</table>

A direct report of the potential savings for each model has not yet been obtained, but will be provided when secured. Early indications are that market and internal data on projected savings may be accurate.

Pros:
- Better airline pricing and increased savings
- New and national hotel chains (Starwood) agreements with MIT discounts
- Contract management will be internal (current model is external)

Implementation Considerations:

Members of VPF Travel and VPF Procurement are currently negotiating with multiple air carriers

SAVINGS SUMMARY $5.7M-$7.6M depending on compliance rate

Electronic Travel Reimbursements

Summary Description:
In the current model, paper forms are completed to request reimbursement for out of pocket expenses incurred for MIT business travel. Paper checks are issued for travel advances and travel reimbursements by the MIT Accounts payable department. Paper forms and used by the DLC, MIT Travel, and MIT Accounts Payable, and we estimate that it takes 5-10 minutes to prepare the reimbursement request, 1-2 days to receive inter-departmental approval of the form, 1-2 days for accounts payable to receive the form, and
5-10 days for A/P to process payment, 1-2 days for the traveler to receive the check, an undetermined amount of time for the traveler to deposit the check, and 3-5 business days for the check to clear.

**Quantify The Idea:**
Travel reimbursements are often lost via inter-office mail or never deposited by the traveler prompting a level of paper review internally to re-issue checks and resolve. The process has a backlog and 1 campus FTE has been assigned to this task. We estimate 1 hour of FTE time per reimbursement request ($25.00) for the completion and review of paper forms to facilitate payment via paper check. The number of travel reimbursement checks issued is not currently known at this time. The implementation of direct deposit (Dec 2009) for travel reimbursements will eliminate the paper driven process currently in place, and provide a more efficient and timely (immediate) reimbursement process directly into a traveler’s checking account. The payment frequency becomes immediate and the funds are released by the Institute.

**Implementation Considerations:**
None – Rollout is confirmed

**Challenges:**
- Implementation and education about the new process

SAVINGS SUMMARY: TBD

**Accelerating Green Procurement @ MIT**

**Summary Description:** During the winter months, VPF Procurement worked with Sloan School students to review purchasing behaviors which could have the most impact on reducing MIT’s environmental footprint with a concentration on office supplies. The projects aim was to build a database detailing the environmental impacts of products commonly purchased at MIT, identify a list of high-impact changes in purchasing behavior, and propose recommendations for informing and motivating behavior change among the MIT community.

**Quantify the Data:**
The students looked at the top 10 campus buildings (in terms of purchase volume) to understand the products ordered, and the product and building matrix. The top two MIT items ordered in this area are copier paper and toner cartridges. The Sloan students conducted a survey to learn about the office supply purchasing behaviors.
Survey results showed an increase in cost for paper products with higher recycled content, and that cost was the most important factor affecting purchasing decisions as opposed to quality. Our office supply pricing is reviewed quarterly. Although the best value for recycled paper is at the 30-35% recycled content, we currently offer a variety of paper options and should consider reducing the number of options.

**Recommendations:**
- Increasing Awareness - Establish an Institute mission/policy statement towards green procurement
- Leadership - Create one green purchasing committee to include procurement, internal departments, copy tech, faculty, staff, students and supplier. There hasn’t been enough effort conducted to change people’s purchasing habits
- Reduce printing of internal documents
- Support 100% recycled product purchases

**Implementation Considerations:**
Economic impact of purchasing the most costly items (100% recycled content) Actions are required for paper use reduction and recycling increase.

SAVINGS SUMMARY: TBD

**Onsite Life Science Operation**

**Summary Description:**
A state of the art cryogenics facility utilizing an existing, though dormant, MIT owned commercial property. A vendor for cylinder management has proposed an onsite solution encompassing products, services and value added efficiencies geared to reducing MIT’s costs, streamlining mission critical processes and shrinking the Institute’s carbon footprint.

The broader components of this proposal are as follows:
- Liquid Nitrogen (LN2) supply stored in a bulk tank on premises.
- Cryogen fill station for office/lab dewar filling
- Cryo-repository service onsite
- Storage of compressed gases onsite
- Retail store for cryogen gas, freezer and lab supplies

**Quantify the Idea:**
Liquid Nitrogen (LN2), the life blood of the research community will be purchased in bulk quantities and stored onsite for distribution to DLC’s. Bulk product pricing will be under contract and savings will be significant over the “retail” purchase method in place at present. Service levels will also be upgraded from ‘next day’ to ‘same day’ due to a local LN2 source and a modified supply chain measured in city blocks rather than highway miles.
Cryo-repository Onsite
Laboratory space is costly, freezer space is at a premium. On average, it costs $3,600 per year to power a standard mechanical freezer. Mechanical freezers sometimes fail, causing egregious losses of time and data. The onsite operation would contain a Cryo-repository, a neat, organized and secure facility where samples and data can be stored at researchers’ fingertips. Cryogenic dewar movement traffic is eliminated. Redundancies are built in to ensure security and proper data capture. The vendor assumes total liability for samples in their custody.

Storage of compressed gases onsite raises service levels and lowers anxiety for researchers and lab administrators. Specialty gases, precise gas mixtures, and ultra high purity gases often have long manufacturing lead times due to testing and quarantine procedures. Stored onsite, many of these specialty gas items could be delivered immediately, ensuring no disruption of the research effort.

**Implementation Considerations:**
Sustainability is a team effort coordinated up and down entire supply chains. The onsite facility will shorten distribution channels significantly. Our current supplier, on average, makes 2.5 nominal heavy trucks visits to MIT’s campus every business day. The proposed onsite operation will reduce those visits by one half to two thirds immediately. Those new vehicles used to distribute on campus would be smaller, more fuel efficient and perhaps powered by alternative fuels entirely.

SAVINGS SUMMARY: TBD

**Cylindered Gas Partnership Proposal**

**Summary Description:**
The cylindered gas partnership was originally developed to replace the services provided by the now defunct MIT Office of Laboratory Supplies. The advantages of having established this partnership are:
- Reduced costs associated with gas cylinders and running of the gas cylinder management program.
- Reduced costs due to a decrease in the number of invoices processed by MIT.
- Reduced costs due to a reduction in the cylinder inventory on campus.
- Reduced interaction with multiple gas vendors
- Improved environment, health and safety issues surrounding gas cylinder management.

**Quantify the Data:**
MIT’s cylindered gas partner has proposed extending the existing partnership agreement, duration, to be determined. There is little risk in negotiating an extension to this agreement, and no implementation costs whatsoever. In cost savings, MIT’s cylindered gas partner will immediately reduce all product pricing across the board, a potential savings to MIT of between $60-$70K annually. In addition, they will increase the
electronic commerce transaction discount an increase of 20% for a potential savings of up to $10K annually.

**Implementation Considerations:**
MIT’s cylindered gas partner is a significant supplier and service provider in the education, biotech and life sciences sectors throughout greater Boston and New England. Their institutional learning’s and business strategies are synchronous with the robust, exacting research mission of MIT.

SAVINGS SUMMARY: $70K-$80K annually

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**Vendor Consolidation for Clerical Temporary Help**

**Summary Description**
MIT spends approximately $3.3 million on temporary clerical help for 5 skill categories. $2,786,188, or 84% of this spend is in GIB. Two and a half years ago this commodity for these skill categories went out to bid and 2 providers were awarded contracts. We currently have formal agreements with two suppliers and they currently have a 90% market share. Both suppliers offered a 32% mark up rate initially as per their bid. The list price mark up rate in the industry for this commodity varies from 40% to 60%. We have recently renegotiated this rate down 20% to 30%, resulting in a projected savings of $225K over the next eighteen months until the contracts expire. Customers using these vendors will see a 5% reduction as a separate line item on each invoice received.

In addition, these contracts do not contain any temp to perm fees. For FY08 MIT hired 20 temps from Supplier A. Their average placement fee for administrative assistants is $10K -assuming the average salary is $40K and their average fee is 25%. Based on this MIT saved $200K in temp to perm fees. MIT also hired 25 temps from Supplier B. Their average for a $40K position is $12K which is 30%, which was a $288K savings for MIT. The total temp to perm savings was approximately $488K last year.

**Quantify the Idea:**
Continuation of vendor consolidation and reducing choice of vendors is the main idea for this commodity. Based on the work done through the procurement office we feel this strategy is the best total cost of ownership (TCO) based on supplier consolidation.

**Pros**
Renegotiations already earned us an additional 5% potential savings of $225K for 18 months. If we continue to hire temp to perms there are also additional savings of approximately $488K annually.

Ten percent of the clerical business is outside the formal contracts in place which is about $300,000/year at an approximate mark up of 50%. If we could move this market share to
the primary suppliers there would be a 23% savings or $69,000 annually as well as any
temp to perm charges waived.

**Implementation Considerations:**
We need to reach out to the community for those who are purchasing temps outside the
current agreements. This strategy is a perfect example as to how consolidating MIT’s
volume to contracted vendors is in the best interest of the Institute.

SAVINGS SUMMARY: With GIB being 84% of the savings this would be
approximately $600K in savings

**Transition from laser jet printers to multifunctional devices**

**Summary Description:**
Multifunctional machines are devices that can copy, print, fax and copy documents.
According to some industry studies it costs at least 50% more to print a page on a laser jet
printer than printing that same page on a digital multifunctional machine. Some studies
show that a typical charge from a laser printer can cost .06/page and for a multi
functional machine the cost is approximately .02/page, a savings of .04/page.

**Quantify the idea:**
We do not have an estimate of the number of page prints on laser jet printers, but based
on the above data, for every 100,000 prints there would be a savings of $4,000. We do
have an extensive inventory list of copiers and printers on campus. Currently there are
751 copiers and 4222 printers as part of the central inventory system. Unfortunately
because many laser jet printers and faxes are less than $1000 they are not on the
inventory list. Any equipment under $1000 is not tracked or tagged by our property
department.

A small business is developing a series of software tools to track printing/paper and toner
consumption for various universities. It shared the following data with the team: For a
one month period it tracked the page count for 997 active and networked printers. The
tool counted 2,785,612 pages for the month.

As of May 16, based on discussions with IS&T, it added another 1037 printers, to his
tool. Two days of tracking, one week end, one week day, showed an average of 148,938
printed copies/daily. This information projected out for a month would be approximately
4,468,140 printed copies. As of June 15 we can look at the actual counts and adjust
accordingly.

The page counts for these all the printers that he monitored for one month totaled
7,253,752 pages. A one year projection of cost savings of using a multifunction device
instead of a laser printer of .04/sheet would yield a savings of $3,481,800.
These counts are conservative because it shows only network printers not all.

**Implementation Consideration:**
This effort should be combined with an Institute wide plan to reduce the total amount of printing on campus. Reduction in printing needs to happen. All devices should be set to default printing to double sided and we also need to reduce color printing. This is expensive because of the cost of ink cartridges.

IS&T does not support multi function machines on the network as they do for laser printers. In the past network security and hardware service have been issues. In order for the institute to move towards multifunction devices IS&T would be required to oversee their use and maintenance and repair.

Student assistance has been requested to do further market research on studies to further verify cost per copy information for printers and multifunction devices.

Procurement is having two vendors take a look at the copiers, printers, faxes and scanners in the VPF organization and tell us how we could reduce our inventory and reduce costs.

Making an assumption that printing, copying faxing, scanning is done throughout the Institute we have made the assumption that this would have a huge impact on GIB.

SAVINGS SUMMARY: $.04/sheet $3,481,800

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**Office Supplies-Update Core Contract List, Implementation of a minimum order value of $50 and Limited View Catalog**

**Summary Description**
Today we have a multiyear agreement with an office supplies company. MIT spent $2.9M in FY08 of which $1.8 (62%) was spent from GIB. The current core contract list is for 427 items which represents 38% of the business.

**Quantify the Idea:** Update Core Contract list
MIT should update the core contract list to reflect changes in buying trends and to assure top items priced at the best discount structure. The current core list is for 427 items which represents 38% of the spend. A recommendation is to update the core list to the top 239 items in a $70,822 in product savings. This would be achieved by lowering prices on products that were not previously on the core contract list.

GIB savings would be $43,909.

**Implementation Considerations:**
This is an easy cost savings that would have no impact on behavior change. MIT would still have access to the full catalog, pricing would be reduced for items that have been
ordered in the past that are now on the core list and others deleted based on number of times ordered. The recommendation would be to develop a communication plan about contract items and savings and these items offer the best value to MIT.

**Quantify the Idea:** Implementation of a Minimum Order Value of $50
In FY08, MIT placed 29,531 orders and 13,807 were below $50 with an average value of $22.67. Freight costs for MIT’s office supplies company is high for this account. With the ease of use with eCAT, customers can order as frequently as desired and we do not have a minimum order size which involves lots of cartons and deliveries to campus. This idea would be to drive down the number of cartons and number of deliveries to campus. By increasing order size it will reduce cartons and deliveries which would help lower transportation costs.

By implementing this minimal order size, MIT’s office supplies company can also give an additional incentive and offer a point of sale discount for orders over $200 resulting in approximately $32,000 in additional program savings, based on their profitability model.

GIB savings would be $19,840.

**Implementation Considerations:**
This implementation would require a change in the behavior for the community. Working with MIT’s office supply company from a green perspective to will give MIT an incentive on the back end.

**Quantify the Idea:** Limited View Catalog
Instead of allowing the entire catalog to be opened to the community we would offer a limited view of items. There are over 18,000 items in the catalog and last year MIT ordered 10,700 different items with 4800 of these items ordered less than 10 times.

The first step would be to have a limited view of 5000-6000 items and to reduce those items over time. The limited view would include core contract items, private label and “only recycled toner cartridges and 2 types of recycled paper”. This type of a catalog would produce $600K in savings. (Procurement has a file to back up these savings)

GIB would be $372K.

**Implementation Considerations:**
• Marketing and communication about the change.
• Less choice.
• Change behavior to buy only certain items like the private label, recycled toner cartridges and certain copier papers. One recycled paper and one virgin paper instead of the many choices the community has today
• New catalog to replace existing catalog. IS&T support needed

SAVINGS SUMMARY: Total GIB cost savings for 3 ideas is estimated at $435,749
Office Supplies – Rebid Office Supplies

Summary Description:
Currently MIT has a long term master agreement with an office supply company. The business was awarded based on a formal RFP and a new contract commenced in January 2007. The current agreement provided a substantial signing bonus to the institute. On file is a detailed breakdown of savings projected over the 3 years. The savings is based on the signing bonus, new pricing, private label conversion and additional rebates. Our pricing includes all shipping costs, insurance and product is delivered desktop with a 98.48% fill rate for next day delivery.

For calendar year 2007 we saved $306K on contract items, $150K on non core items, and 1/3 of the signing bonus for a total of $606K. For FY 08 the total was $553K.

MIT’s office supply company also has a green program. MIT has been awarded for the last two years as their #1 customer in higher education with the highest sales in green products. For FY08 MIT had overall sales of $2,963,898 and $1,408,915 or 47.54% were recycled products.

Procurement is waiting for a new proposal for it to retain the business. Based on a third party recent audit, it was stated that MIT has a highly competitive pricing structure for our model.

Quantify the Idea:
MIT could go out to bid at the end of our initial term which is 12/31/09, or we could extend the agreement with the two additional one year options that is part of the existing contract with some additional enhancements to ecommerce and pricing incentives. Is this endeavor worthwhile pursuing or should we continue to build on this relationship?

Implementation Considerations:
Is there an opportunity for additional cost savings? With the economy being what it is will vendors be able to give us signing bonuses, provide lower costs and the high level of service that is currently provided? If we rebid this contract there may be an opportunity to save more money, and if we switch vendors we would have to establish a new relationship, coordinate the MIT desk top delivery logistics and activate and a new vendor in the eCAT portal. IS&T resources would be needed to enable a new catalog.

It would probably take 2-3 months to go through this process of developing a formal RFP, evaluating and selecting a vendor, negotiations with finalist, awarding the contract and enabling in the ecommerce portal if we change vendors.

SAVINGS SUMMARY: TBD
Reduction of small dollar purchase orders processed by MIT Procurement

Summary Description: Procurement processes 125,000 purchase orders on a yearly basis. Requisitions are generated from a combination of SAPweb, ECAT³ and paper. Of that amount, 46,000 are less than $5,000 and are non ECAT³ purchases. Given MIT’s policy of not requiring selection of source documentation for orders <$5K very little value is added by Procurement processing most of these requisitions. This idea would provide cost savings, additional revenue and process improvements.

Many of MIT’s peer institutions, both in New England and nationally, have developed policies which discourage the use of manual purchases orders for small dollar procurements. These are usually handled with the use of ecommerce tools, and procurement cards.

Our proposal is to establish and enforce new policies which require the use of the MIT procurement card or ECAT³ for purchases under $5,000 unless there are additional approvals required or a sound business reason for a particular purchase to be placed via a manual purchase order.

Quantify the Idea: The savings would be positioned as “soft savings” due to the elimination and shift of transactional work to value added functions. (i.e.; higher levels of customer service, contract management, strategic sourcing, promotion of current partnerships, contracts, consortium contracts and assisting DLC’s to compete purchases as much as possible).

However once this transition is completed it would be possible to propose the elimination of 2-3 FTEs (between Procurement and Accounts Payable) and result in hard savings of approximately $120K-$180K annually.

Benchmarked with several peer institutions, the estimated cost of processing a purchase order (from requisition though invoice processing) versus the cost of procurement card and ecommerce transactions yield the following results:
Although there is some disparity in the estimates it is clear that creating a manual purchase order is the most expensive method in terms of costs and resources. Except for a few commodity areas that require special processing, restricted and sensitive items, there is no value added to these transactions processed by Procurement.

Procurement needs to educate the community of the benefits of processing orders for existing SciQuest vendors through ECAT³. It is the most efficient way to order, receive items and pay for goods.

However, given MIT’s nature as an academic and research organization we understand that we may be unable to include all vendors in our ecommerce system. There is a need for the MIT Procurement card to be the ordering tool for the vast majority of non ecommerce <$5K purchases. The benefits of growing the Procurement card program include a reduction of manual purchase orders and resultant ability to shift work to value added services. In addition there would be a major reduction in the amount of paper invoices processed by Accounts Payable. Finally there would be an increase of funds received by the Institute by way of an increased rebate from the bank.

**Implementation Considerations:**
A new marketing plan for the Procurement card should be developed to counteract the impression that it is more work for the DLC when using the credit card than the generation of a requisition for purchases. An important aspect of that development would be the establishment of community focus groups to understand why that impression exists and to use the information to adjust the program. Procurement needs to educate the community more in the tools we have in place. Our goal is making their experience better and transparent when they need to procure these lower valued orders.

**SAVINGS SUMMARY:** $120K-$180K Annually
Temporary Staff and Consultants SPI’s

Employee Job Share Bank

Summary Description: A job share bank is a central database used to track available employees and job opportunities that would help the community identify and share staff resources. Employees working less than 100% will be able to find employers with part-time jobs and vice versa. This will be particularly helpful in the next couple of years as employees face reductions in work hours and employers can no longer maintain positions that are full-time. A job share bank could also aide departments requiring additional short-term hours due to non layoff reasons, reducing the need for outside help in some instances. The benefits to the Institute would not only be limited to potential cost savings, but also improved retention of valued employees, expanded professional development opportunities and broadened employee experience.

Quantify the Idea: There will be costs associated with the development of a system. However, the savings are unquantifiable at this time without further work.

Implementation Considerations: A central database system would need to be developed either in-house or a module licensed that would work with our existing systems. Currently the Institutes applicant tracking system does not have this feature configured. All jobs posted are visible beyond the MIT community. A recruiting company offers a module that may work with our current applicant tracking system; however, due to the way MIT is structured this will require custom setup and cost is unknown at this time. The annual license fee for the module would be ~$7K-$10K.

There is a current recommendation to implement a Vendor Management System (VMS) to better manage our existing professional and temp service providers. Modules also exist for these systems that may allow MIT to post job sharing information, which MIT could license. The cost to implement would have to be explored further.

Additional considerations include:

1. Logistical issues around tracking employee hours. For example, an hourly employee must have a home department and the home department would be responsible for coordinating with all other departments to track hours on a weekly basis. Departments sharing employees would have to work out potential overtime issues, along with how performance evaluations would be handled. It's important to get that settled before they embark on this type of arrangement.

2. The EB cost to MIT potentially increases if the appointment level of an employee is 50% or greater (exempt) or if an employee works 17.5 hours (non-exempt) or more.

3. Such tools will not be effective unless they are promoted and supported by top management. It is important that guidance on how best to achieve and support such arrangements be available. We need to find out what is being done at the local level and identify examples of best practices and ideas that can be shared and deployed to other parts of MIT.

SAVINGS SUMMARY: TBD
**In-house Casual Labor**

**Summary Description:** Convert casual labor workforce from outside placement agencies and bring the program in-house

**Quantify the Idea:** Bringing the casual labor workforce in-house would provide the community with the ability to have a pool of MIT trained staff of all levels. Casual labor could be used to fill in for departments with staff on maternity and sick leave as well as during transition periods during turnover.

**Implementation Considerations:** The savings for this are likely cost neutral and may require MIT to hire a full-time staff person to monitor the program. There are considerations for ensuring that the workers do not exceed 1000 hours within a six-month period for benefits purposes.

<table>
<thead>
<tr>
<th>RECOMMENDATION</th>
<th>PROS</th>
<th>CONS</th>
<th>OUTSTANDING</th>
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<tbody>
<tr>
<td>MITemps In-house Casual Labor</td>
<td>1. Create a pool of MIT trained casual workers</td>
<td>1. Hire MIT Staff to monitor program 2. Employees currently employed via MITemps are able to work for long periods of time, if program is brought in-house employees would only be able to work for 6 month periods at a time to keep MIT from incurring benefits related costs</td>
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SAVINGS SUMMARY: TBD
**Implement a Vendor Management System (VMS)**

**Summary Description:** Implement a VMS that provides a single procurement portal for hiring, classifying, payrolling and operationally managing MIT’s contingent workforce, i.e., independent contractors, and those that currently come through professional staffing service vendors and the MIT Temps program. These services are currently arranged and rates negotiated directly between the hiring managers and individual vendors.

The benefits of a VMS currently not being realized include: leveraging MIT’s collective purchasing power; rate standardization, benchmarking and rate analysis for positions and market; on-line access to multiple vendors and a competitive bidding process; consistent evaluation process for independent contractor applicants, improved tracking and visibility of services spend, and consolidated invoicing and payment process. MIT would write a single check to the VMS in contrast to the thousands of invoices now processed weekly.

**Quantify the Idea:** MIT currently spends ~$150M annually on professional consultants, independent contractors, temporary employees and contract services. An analysis of the data indicates that ~$68M - $87M of that spend could be impacted by the implementation of a VMS. Recent presentation by two VMS vendors, indicate in their experience, a potential savings of 10% and 15%. While case studies may support these outcomes, we cannot accurately substantiate the cost savings at MIT. Still, a conservative estimate of potential annual savings could be in the $6M to $8M range (in consultation with key personnel from Procurement). We are also in unanimous agreement that MIT would benefit from the implementation of a VMS in areas beyond cost savings.

**Implementation Considerations:** There are concerns that a VMS would become a gatekeeper between hiring managers and vendors – dictating rates and closing communication channels. MIT would need to carefully manage its’ requirements for a successful VMS implementation, not only during implementation but also on an on-going basis. MIT should require maximum flexibility in determining rates, communicating directly with vendors, and defining the desired statement of work on a project-by-project basis. The realization of savings will not be focused on “squeezing” MIT’s valued consultants but rather through improved processes and negotiations with staffing service vendors. The use of a VMS independent contractor (1099) classification process will significantly mitigate MIT’s co-employment risk by assuring compliance with IRS standards. Vendors enrolled in the VMS will realize value in the services provided, including the potential for greater work opportunities, plus facilitated invoicing, accounts receivable, and IRS and other withholdings. The VMS is a vendor-funded program (3% of billed services) with no cost to MIT. The implementation of a VMS would be done in phases over the next two to three years.

**SAVINGS SUMMARY:** $6M-$8M
Appendix A (Procurement Team Report Member Names)

Rick Locke, Co-Chair
Tony Sharon, Co-Chair

David Autor
Michelle Carmichael
Paul Conroy

Larry Gallagher
Jeanne Hillery
Keone Hon
Patrick Jailet
Michael Kearns
Harry Lee
Diane McLaughlin
Richard Milner
Eileen Ng-Ghavidel
Olga V Parkin
Zina Queen
Teresa Regan
Diane Shea
Susan Silbey
Chris Sims
Rebecca Uchill
Derek Welcome