

THE COOPER UNION



# FREE EDUCATION COMMITTEE

PROGRESS REPORT | JANUARY 15, 2017



# CONTENTS

<b>Introduction and Summary</b>	<b>3</b>
<b>Background of the FEC</b>	<b>5</b>
<b>Significant Accomplishments in 2016</b>	<b>7</b>
<b>Measuring Financial Health</b>	<b>9</b>
Establishing Financial Metrics	
<b>Initiatives &amp; Analysis Under Review</b>	<b>11</b>
Current FEC Sponsored Financial Analyses—Ongoing	
Cost Analysis of Administrative Staffing	
Analysis of Operating Expenses per Student (FTE)	
Reclassification of Benefit Expenditures	
Presentation of the Budget by Department	
Reducing Space Expenditures	
Dean Meetings	
Union Meetings	
Current FEC Sponsored Debt Analyses—Ongoing	
Refinancing Debt	
Sandwich Lease	
<b>2016 &amp; 2017 Budget Reviews &amp; Financial Projections</b>	<b>13</b>
Assumptions Underlying the Projections	
Highlights of the Projections	
<b>Looking Ahead</b>	<b>17</b>
<b>Appendices</b>	
Composite Financial Index (CFI)	Appendix A
Financial Projections (through 2039)	Appendix B

# INTRODUCTION AND SUMMARY

This interim progress report presents a thoughtful analysis of our financial condition and of the substantial work done to date by the Free Education Committee (FEC), a committee of the Board of Trustees, and others to determine whether we can “return to free” and, if so, how. For over a century, The Cooper Union provided a tuition-free education and then in 2013 this long-standing tradition changed. As you read the report, you will see that we have a significant financial hole to fill. That said, we are confident that if we all work together, we can find a path to free that will restore OUR Cooper Union to its historical mission of providing an academically excellent education in its schools of Art, Architecture, and Engineering, and the Faculty of Humanities and Social Sciences without financial burden for its students. We are also confident that if we all work together we can find a path to free that will defy the current projections.

This report contains the thoughts, beliefs and observations of the FEC and is being submitted to the Board of Trustees for consideration in accordance with the Consent Decree. As the Consent Decree states, the FEC is fully committed to developing and proposing a strategic plan aimed at returning The Cooper Union “to a sustainable, full tuition scholarship model that maintains Cooper Union’s strong reputation for academic quality within its Art, Architecture and Engineering programs at their historical levels of enrollment.” This is our goal not only because this is what is required by the Consent Decree but also because we believe it is required to fulfill the historic mission of the school. The FEC is equally committed to safeguarding Cooper Union’s long-term financial health.

After the FEC’s first year of intensive fact finding, we have determined that, barring other unforeseen circumstances, it is feasible for Cooper Union to return to a full tuition scholarship model without sacrificing academic excellence or enrollment. We also now understand that financial challenges which were decades in the making may not be quickly or easily resolved. Under the current financial projections, it would likely take until 2039 to return to a sustainable full tuition scholarship model that maintains Cooper Union’s strong reputation for academic quality within Art, Architecture and Engineering programs at their historic levels of enrollment. This is far too long, and we will spend the coming year exploring several efforts that we believe can significantly accelerate the return to free. The FEC does not want to wait decades before returning the school to free because we are concerned about the risk of solidifying tuition and the operating infrastructure required to support it. We are also sensitive to concerns that tuition may adversely impact Cooper Union’s academic quality and reputation, and we want to minimize those effects

as best we can. Accordingly, our goal is to propose a viable, fiscally responsible set of initiatives which will accelerate our ability to return to free without sacrificing long-term health for short-term gain.

This January 2017 Progress Report provides an overview and summary of the FEC's work including activities to date, interim recommendations and initiatives under review. In addition, the report sets forth the framework of financial metrics that we will use to evaluate both Cooper Union's financial health and the viability of recommended initiatives. We have provided an explanation of the budget review and projection process as well as the details of recently approved cost-cutting measures. We end the report with a look ahead to the work that we will undertake in 2017 as we draft our final plan. We are not discouraged but we must be realistic.

In the past year the FEC has met 18 times and engaged in extensive fact-finding efforts. As part of the aforementioned fact-finding efforts, we met with each of the school's deans, staff and faculty union representatives, the dean of student affairs and the interim vice president for development. We reviewed the cost of administrative staffing; each school's operating budgets; physical space requirements; health and retirement benefits; and other costs of operating the school. We reviewed "peer" comparison studies; current and projected budgets; and the impact of cost-saving measures.

In addition, during that time, the FEC worked with the administration and Board to immediately identify expenses that could be reduced without jeopardizing academic excellence. Through the collaboration of the administration, the FEC and the Board's Finance Committee, we were able to identify \$8.4 million in budget cuts, of which \$2.2 million were implemented in FY 17, and \$6.2 million will be additionally implemented in FY 17 and over the next two years. (There were also \$0.7 million of budget cuts in FY 16, for a total of \$9.1 million, which is a total 17 percent reduction in operating expenses excluding debt service, capital and auxiliary expenses.) We believe that we cannot cut our way to free, and the Financial Monitor, who will ultimately be opining on the FEC's proposed plan and submitting a report to the Office of the New York Attorney General, concurs. Nor can we focus solely on budget discipline. We must also raise new unrestricted funds and pay down our debt. Our debt load is too high, and Cooper Union must build its endowment.

Accordingly, the FEC will be studying numerous initiatives which address assets and liabilities as well as income and expenses. As detailed below, we have identified (but not fully analyzed) the following: (a) additional revenue generating and expense cutting measures; (b) a major capital campaign and/or other fundraising efforts; (c) refinancing our debt and/or financially reengineering other solutions to improve cash flow; and (d) reviewing the cost-benefit analysis of maintaining hard assets.

Our work in 2017 will focus on further examining these proposals as well as proposing additional initiatives that we will recommend to the administration and the other appropriate Board committees to thoroughly research and analyze. In addition, we will seek to introduce interim steps in order to show progress along the path to restoring full tuition scholarships on a sustainable basis, consistent with the Consent Decree.

Clearly, whatever initiatives the Board ultimately decides to pursue must be consistent with the long-term financial health and strategic goals of the institution. The Board will be engaging in a strategic planning process over the next 6 to 9 months and we look forward to working together to chart a course forward in which the FEC's commitment to restoring full tuition scholarships is closely aligned with the overall mission of the school.

The Cooper Union will shortly be celebrating its 160th anniversary and our responsibility as stewards is to protect and preserve this institution so that Peter Cooper's legacy continues in perpetuity.

## BACKGROUND OF THE FEC

The FEC, a committee of the Board of Trustees, was born out of the Consent Decree. A copy of the [Consent Decree](#) and the [Court's decision](#) approving it and granting [cy pres relief](#) can be obtained on Cooper Union's [website](#).

The Consent Decree states that the Free Education Committee shall (1) examine "whether Cooper Union can return to a sustainable, full tuition scholarship model that maintains Cooper Union's strong reputation for academic quality within its Art, Architecture and Engineering programs at their historical levels of enrollment"; and (2) "develop and propose a strategic plan" aimed at that purpose.

To this end, the FEC is to present to the Board of Trustees its strategic plan on January 15, 2018. The FEC is also presenting interim progress reports on January 15, 2016 and January 15, 2017 detailing its activities and interim recommendations. The FEC must provide the interim progress reports and strategic plan to the Board and to a financial monitor appointed by the NYAG, and the Board shall issue written responses and thereafter vote on any strategic plan that is proposed.<sup>1</sup>

As specified in the Consent Decree, two-thirds of the FEC's membership is composed of a combination of Alumni Trustees<sup>2</sup> and Student Trustees, and an Alumni Trustee chairs the committee. In addition, a faculty representative and staff representative are invited to observe FEC meetings.

<sup>1</sup> Significantly, the Supreme Court of New York granted cy pres relief that modified Cooper Union's Deed of Trust to recognize that as long as Cooper Union continues to charge tuition, it shall make ongoing, good faith efforts to determine whether it is practical to return to a tuition free model that maintains its strong reputation for academic quality within its Art, Architecture, and Engineering programs at their historic levels of enrollment.

<sup>2</sup> Under the Consent Decree, an "Alumni Trustee" is an alumnus/alumna of Cooper Union who has been appointed to the Board pursuant to an agreement entered into by the CUAA and Cooper Union. Alumni who are appointed to the Board through the Board's own nominating process (and not through the CUAA) are referred to as "alumni trustees."

**FEC Members:**

- Robert Tan, Chair AR'81 (Alumni Trustee)
- Adrian Jovanovic BSE'89 (Alumni Trustee)
- Malcolm King EE'87
- Julian Mayfield (Student Trustee)<sup>3</sup>

**FEC Observers:**

- Atina Grossmann (Faculty Representative to the Board of Trustees)
- Amy Westpfahl (Staff Representative to the Board of Trustees)

On January 15, 2016, the FEC reported to the Board that the committee had held its first organizational meeting on January 12, 2016. Although the Consent Decree called for the NYAG to select the Financial Monitor on or before December 1, 2015, this process was delayed because the New York State Supreme Court did not approve the Consent Decree until December 16, 2015. As a result, the FEC's first substantive report was delayed, and the Board and the FEC worked with the NYAG to revise the reporting timetable.

Under the revised timetable, the FEC provided its [status update on July 1, 2016](#) (the July 2016 Report). In summary, the FEC reported that it had conducted substantial research to identify and propose opportunities for greater operational efficiency and cost savings that could be realized without compromising the high quality of Cooper Union's academic programs. As of July 2016 and as the result of this research, the administration had identified \$3 million in sustainable operating expense reductions. Based on the FEC's work, the FEC and the full Board then charged the administration with identifying an additional \$5 to \$7 million in operating expense reductions.

The July 2016 Report also outlined a process for identifying and analyzing additional opportunities during the next phase of its work to reduce expenses and increase revenues. Finally, the FEC articulated the "arc of return"—a declaration of its deep commitment to reestablishing full-tuition scholarships; committing to operational efficiency through reduction of non-essential expenses while preserving the essence of the school's quality, culture, and teaching; demonstrating unified, committed, and effective leadership; and urging all stakeholders to commit to the same.

Following the issuance of the July 2016 Report, there were two significant developments. First, the NYAG appointed Kroll Associates, Inc. as the Financial Monitor.<sup>4</sup> The Financial Monitor is required to, among other duties, attend all full Board meetings, including executive sessions, and all meetings of the Finance and Business Affairs Committee and the FEC. Further, the Financial Monitor is required to provide analysis of the feasibility of the FEC's final plan and its opinion as to

<sup>3</sup> Monica Abdallah served on the FEC as Student Trustee from January-June 2016

<sup>4</sup> The Financial Monitor responsibilities are being fulfilled by Kroll Managing Directors Joseph Spinelli and Richard Faughnan, and Ronald Salluzzo, a partner in Higher Education and Commercial Services at Attain, who has been retained by Kroll to serve on the team.

the practicality of Cooper Union returning to a full tuition scholarship model.<sup>5</sup> The Financial Monitor began attending FEC meetings, as well as other Board committee meetings and full Board meetings, in August 2016. While the delay in appointing the Financial Monitor hampered some of our efforts, we recognized the urgent work required to develop a plan so we began our work in earnest even before the appointment.

Second, the Board selected Laura Sparks as the 13th President of Cooper Union and her term officially started on January 4, 2017. President Sparks has indicated her commitment to Cooper Union's long-term financial health and a sustainable full tuition scholarship model, and we look forward to working with her to achieve this goal.

## SIGNIFICANT ACCOMPLISHMENTS IN 2016

Since January 2016, the FEC has met 18 times with various invited guests and significant achievements of our first year include the following:

- Collaborated with the Board and administration to secure an additional \$6.2 million in ongoing cost savings, resulting in total budget reductions of \$9.1 million since FY 16, or 17 percent of the operating expenses, excluding debt service, capital and auxiliary expenses.
- Secured the Board of Trustees's commitment to the "arc of return."  
(See minutes for the [Special Meeting of the Board of Trustees on August 31, 2016](#) for additional detail.)
- Established the Roles and Responsibilities of the FEC and how it should interface with the Board and the other committees in order to identify, research and analyze proposed initiatives. Briefly stated, the Finance Committee establishes the financial metrics by which financial health is established; the FEC enumerates initiatives which the administration/Board committees will assess; the Board provides continual feedback on which initiatives are consistent with its overall strategic plan; and the FEC submits a strategic plan for the Board's consideration.
- Investigated various measures of financial health for institutes of higher education, assessed Cooper Union's performance with respect to these measures, and worked with the Financial Monitor, the Finance Committee, and the Board to develop a framework for evaluating the financial conditions under which Cooper Union could return to a full tuition scholarship model that is sustainable.

<sup>5</sup> The Financial Monitor is also responsible for evaluating and reporting on the financial management of The Cooper Union, issuing an opinion on the FEC's final report and generally ensuring compliance with the terms of the Consent Decree.



As a result of this work, the FEC acknowledges the school's significant financial weakness and that, under the current operating model (giving effect to the \$9.1 million in annual expense reductions), Cooper Union would, according to the projections, and barring unforeseen expenses, return to a full tuition scholarship model in FY 2039. While the FEC is reassured that there is a possible date by which the school may be able to return to a sustainable full scholarship model consistent with the Consent Decree, the FEC is concerned that waiting until this future date runs the risk of solidifying tuition revenue and the operating infrastructure to support it, making it less likely that Cooper Union would, in fact, return to a full-tuition scholarship model. There is also significant uncertainty in financial planning out this far (e.g., assumptions for wage inflation, health care costs, etc., can vary wildly over the course of the 20+ years from now to 2039). 2039 cannot be considered a reasonable projection, but rather more of a possible outcome.

The FEC feels strongly that Cooper Union must return to a sustainable full tuition scholarship model sooner and with more certainty than the 2039 baseline date.

In addition, in 2016, the FEC requested that the administration investigate and report on the feasibility of the following:

1. Refinancing (or renegotiating) Cooper Union's debt.
2. Financial engineering solutions (for example: a "sandwich lease") that generate cash today from Chrysler Building rents otherwise owed to Cooper Union in the future (as long as they create a net advantage for Cooper Union).
3. Major capital campaign and/or other fundraising efforts.
4. Possible near term steps to show progress along the path to restoring the sustainable full tuition scholarships (perhaps a tuition freeze which we believe could have a significant impact on fundraising that outweighs the revenue lost in addition to demonstrating our commitment, benefiting students and increasing our credibility with potential funding sources).
5. Strategic examination of whether there are other approaches for operating the school, while maintaining its high academic quality.

Analysis of each of these is in process, with new initiatives being reviewed continuously by the FEC. It is important to understand that this list is preliminary and that a number of these initiatives are in the exploratory phase. Accordingly, these initiatives are subject to change as we learn more about each of these potential efforts and the respective risks and benefits. In addition to the above, the FEC has also asked the administration to identify additional opportunities that could help return Cooper Union to a sustainable full-tuition scholarship model.



## MEASURING FINANCIAL HEALTH

In September 2016, the Financial Monitor suggested that we examine Cooper Union's ability to return to a full-tuition scholarship model within a larger framework for evaluating the school's overall financial health and sustainability. The overarching principle is that the FEC's primary goal, a balanced budget without tuition, is an appropriate goal but that it is not enough to ensure that the school is financially sustainable. Put simply, the Financial Monitor confirmed that our ability to return to free cannot be solely based on reducing expenses or generating positive cash flow and that there are other factors which must be considered.

Significant concerns include:

- We have depleted our reserves.
- Our balance sheet is loaded with debt and out of balance.
- We are not providing annually for funding of our deferred maintenance (i.e., not budgeting enough annually for capital expenditures by at least \$1 million).
- We have an unfunded \$40 million liability for post-employment medical benefits.
- We are not fully amortizing the bridge loan which was taken out in 2014. This loan has a \$38 million balloon payment in 2034, which will need to be either amortized (with cash put aside each year to fund the 2034 payment) or refinanced. The MetLife loan will be paid off in 2036, and the Financial Monitor has noted that it would be ideal to have both loans repaid by then.

### ESTABLISHING FINANCIAL METRICS

It will be important to have clear and transparent metrics to measure our financial health and to evaluate the impact on our financial health of the initiatives we are exploring to help return Cooper Union to free tuition. Financial institutions and rating agencies, such as Moody's Investors Service, analyze many different metrics when evaluating a college's financial health. Most of these metrics are focused on the ability of a college to meet its financial obligations, both operating and capital (including debt), in the short and long-term. They are typically analyzed separately and do not result in a single measure of financial health.

To more broadly evaluate and measure The Cooper Union's financial health over a longer-term horizon, the Finance and Business Affairs Committee investigated a framework that is based on the book *Strategic Financial Analysis in Higher Education: Identifying, Measuring & Reporting Financial Risks*, which was first published in 1980 and is now in its 7th edition. The book is authored by KPMG, an accounting and auditing firm, the investment banking firm of Prager, Sealy & Co., and the consulting firm of Attain. Ronald Salluzzo, who is on the Financial Monitor's team, is one of the authors.

The book details a widely used metric within higher education to measure long-term financial health and determine the financial impact of strategic decisions—The Composite Financial Index (CFI). The CFI combines four core financial ratios (taken from both the balance sheet and income statement) into a single metric that offers a concise measure for understanding the overall financial health of the institution. Although four particular core ratios were selected, it is recognized that there are additional ratios that can also serve as important indicators of institutional well-being and should be considered together with the CFI. The CFI scale ranges from -4.0 to +10.0, and based on the draft FY16 audited financial statements, Cooper Union's CFI is -2.12. The Financial Monitor has indicated that a score of +4.0 or better is likely what will be required for Cooper Union to return to a sustainable full tuition scholarship model, absent other circumstances that would indicate otherwise. For example, such circumstances might include lacking achievement of academic mission due to underinvestment or overly aged facilities indicating a need for further investment that would consume substantial resources.

At its December 2016 meeting, the Board, upon recommendation from the Finance and Business Affairs Committee, adopted the CFI as one of the metrics to be used for measuring Cooper Union's long-term financial health and tasked the administration with proposing a set of additional metrics to complement the CFI that also demonstrate the shorter-term financial impacts of proposed initiatives.

The CFI, while helpful in evaluating long-term financial sustainability, must also be analyzed in the context of an institution's overall strategic plan in order to assess the complete organizational health, not just financial health, of an institution. An institution with a very high CFI but with little achievement of mission may still be an institution that is not succeeding. The Board's forthcoming strategic planning process will assist in developing Cooper Union's strategic path forward and measures for evaluating the institution's progress along that path. This will be key in determining whether the initiatives proposed by the FEC are consistent with the school's overarching mission and strategy.

Additional information about the CFI, how it is calculated, and Cooper Union's CFI calculations for FY 15 and FY 16 can be found in Appendix A.

# INITIATIVES & ANALYSIS UNDER REVIEW

Over the past year, the FEC has considered and engaged in the following analysis of various initiatives, cost cutting, and revenue or cash flow accelerating proposals.

## **CURRENT FEC SPONSORED FINANCIAL ANALYSES—ONGOING**

### **Cost Analysis of Administrative Staffing**

With the help of alumni volunteers, a series of benchmarking analyses were conducted to explore potential areas for staffing reductions. These analyses, using the publicly available Integrated Postsecondary Education Data System (IPEDS), compared Cooper Union to other higher education institutions of varying sizes with enrollments ranging from 500 to 2,000 students. The analysis explored full-time equivalent faculty and staff per student. As part of the analysis on administrative staffing, it was noted that a portion of staff members, while not considered instructional, provide direct support that is critical to the quality of The Cooper Union's academic offerings.

Given our distinctive pedagogical approach and the fact that higher education institutions do not necessarily define instructional costs and non-instructional costs in a consistent and unified manner, it was a challenge to effectively benchmark The Cooper Union against other schools. To achieve better comparability, management conducted informal interviews with selected institutions in order to achieve an “apples-to-apples” comparison of data.

Even when adjusting for the cost of doing business, The Cooper Union's core expenditures per student are higher than the expenditures reported by geographical peers as well as those of mission peers (i.e. schools with similar programs of art, architecture and engineering). On a per-student basis, Cooper Union appears to spend less in instruction and more in academic support than our peers, but that could be due to how we classify these expenses as compared to how our peers classify them. Cooper Union's comparatively high (when compared to other institutions) benefit payments may not be included in the IPEDS data being compared. Additional qualitative analysis of these expense categories is warranted, especially as to comparability to other institutions of the types of costs included in them.

### **Analysis of Operating Expenses per Full-time Equivalent (FTE) Student**

The FEC reviewed the comparison of operating expenses per student (FTE), unadjusted and adjusted for the cost of doing business in a particular geographic region. Unadjusted, Cooper Union ranks very high among peers. While adjusted for the cost of doing business in New York City, Cooper Union still ranks high for expenses among peers.

### **Reclassification of Benefit Expenditures**

Historically, the budget presented the cost of benefits for employees in aggregate under administration. For the first time, beginning with the FY 17 budget, employee benefit expenses were correspondingly apportioned to each department, providing for a more accurate reflection of true expenses associated with instructional and non-instructional expenses.

### **Presentation of the Budget by Department**

In addition, management presented the FY 17 budget by department capturing line item expenses for full-time faculty, part-time faculty, full-time administrators, part-time administrators, full-time staff (union members), part-time staff (union members), full-time staff (non-union), and part-time staff (non-union). The expense analysis also looked at these costs on a per-employee basis, which allowed us to highlight unusual variances and investigate their causes.

### **Reducing Space Expenditures**

The FEC has reviewed an analysis of The Cooper Union's leasing of administrative office space at 30 Cooper Square. A few years ago, we reduced use from six floors to four by consolidating office spaces within 30 Cooper Square and moving Student Affairs to the residence hall. Management is exploring reducing use at 30 Cooper Square by at least one more floor, especially in anticipation of leasing rate increases when the lease ends on June 30, 2018. The FEC also intends to do a cost-benefit analysis of its current (or prospective) use of its other hard assets.

### **Dean Meetings**

Over the course of the fall semester, the FEC invited the dean of the school of architecture, acting dean of the school of engineering, dean of the faculty of humanities and social sciences, acting dean of the school of art, and dean of student affairs to attend meetings of the FEC and provide their perspectives on the potential impacts associated with the proposed budget cuts, discussed in greater detail below, that were developed over the summer. These discussions supported the planned cuts.

### **Union Meetings**

The FEC met with the leadership of each of the three unions at The Cooper Union: CUFACT, which represents the full-time faculty; CUOP, which represents the part-time faculty; and U@CU, which represents the staff. These meetings allowed the FEC to better understand the relationships of the unions to the institution and the financial and operational impacts of their collective bargaining agreements.

### **CURRENT FEC SPONSORED DEBT ANALYSES—ONGOING**

#### **Refinancing Debt**

The FEC and Finance and Business Affairs Committees explored potential benefits from refinancing existing debt. The challenges here are that both loans, Met Life and the bridge loan, have make-whole provisions (sometimes called pre-payment penalties) if The Cooper Union chooses to pay them off early. Any refinancing will have to ensure positive short and long-term benefits for the school and will also need to be approved by the Financial Monitor.

#### **Sandwich Lease**

A sandwich lease is a means for The Cooper Union to obtain a large cash payment now from a financial partner in exchange for that financial partner receiving a portion of future Chrysler Building lease payments. Any agreement regarding restructuring of debt and of income will have to ensure positive short and long-term benefits for the school and will also need to be approved by the Financial Monitor.

## **2016 & 2017 BUDGET REVIEWS & FINANCIAL PROJECTIONS**

For those who want to better understand the details of the budgeting process, we offer the following summary and explanation of the work that was done in 2016.

In February 2016, the Board of Trustees and management published financial projections through FY 20, which showed The Cooper Union producing a small budget surplus in FY 19, but returning to a budget deficit in FY 20. While the projections made at that time did not go beyond FY 20, it was estimated that the deficits would continue due to rising costs while revenues remain flat. This analysis and its prediction of future deficits, even with charging tuition, was one of the

reasons that the FEC encouraged the rest of the Board of Trustees to explore more significant budget cuts in a timelier fashion. It was also evident that future projections needed to extend far beyond FY 20 in order to properly understand the future financial challenges facing us.

Appendix B is a new set of financial projections starting with the FY 17 budget as a base and extending through FY 39. The projections are then used to estimate the CFI in each of those future periods, which is done to track our progress towards financial health and sustainability. As noted above, as a general statement for Cooper Union, a CFI score of 4.0 or better is an indication of sustainable financial health, which is accomplished in FY 39 under the assumptions used in the projections.

Financial projections beyond a few years decrease with accuracy as the years are extended. However, it is necessary to project the future in order to see the possibilities and challenges ahead of us. It is also useful to use these projections to assess proposed initiatives to help us return to a sustainable full-tuition scholarship model.

### **ASSUMPTIONS UNDERLYING THE PROJECTIONS**

- The budget is a cash-basis budget reflecting Cooper Union's operations. Endowment contributions and Temporarily Restricted activities are not part of the budget because they are not part of operations, but they are reflected in the audited financial statements.
- For long-term leases or contracts, the contractual revenue and expenses are reflected in the periods in which they will occur.
- Conservative revenue and expense assumptions (i.e., annual percentage increases) are used where contracts or leases do not exist. These assumptions are noted on the document. While the assumptions are believed to be conservative, we will need to continually stress-test them in light of current economic realities. For example, we have assumed a 2.0 percent annual increase in the unrestricted endowment payout. This presumes that the unrestricted endowment value will increase 2.0 percent beyond the amount of annual withdrawals for spending (called the spending rule), which have been set at 5.0 percent in recent years. Thus, we are projecting real annual growth of 7.0 percent, which can come from investment growth and new gifts.
- The additional \$6.2 million of potential budget cuts are included in the years and amounts discussed below.
- An annual surplus or deficit is calculated first without the impact of undergraduate tuition and then with it. This helps us see the possibilities of reducing the future impact of tuition or eliminating it.
- The CFI scores for each future period are calculated based on the methodology shown in Appendix A.

## HIGHLIGHTS OF THE PROJECTIONS

- Except for FY 19, all future periods show deficits without undergraduate tuition until after the Met Life loan is paid off in FY 37.
- Except for FY 18, all future periods show surpluses when including undergraduate tuition.
- The bridge loan is interest only until FY 25 and then it matures in FY 34, but with a remaining balloon payment of \$38 million. The projections assume that it will be refinanced at that time and pro forma interest and principal payments are reflected beyond FY 34. An alternate scenario is to begin self-amortizing the \$38 million balloon payment beginning in FY 18 so that the funds are available in FY 34 to repay the bridge loan in full. This would allow The Cooper Union to be debt-free in FY 37 when the Met Life loan is repaid. The impact on our financial sustainability, as measured by the CFI, would have to be analyzed to determine whether this scenario is appropriate to pursue.
- The CFI score was negative (-2.12) in FY 16 (see Appendix A), is projected to worsen in FY 17 due to this year's significant cash deficit, but then begins improving in small increments over time as cash surpluses restore the Expendable Net Assets (these are available resources, beyond the budget, to pay operating expenses—the institutional equivalent of a personal savings account) that were in an \$87 million deficit in FY 16. Even with the annual surpluses, Expendable Net Assets remain in a deficit through FY 37, which is reflected in the lower CFI scores through that time.
- There is only \$1.5 million budgeted annually for capital expenditures. A recent study noted that we should be spending approximately \$2.5 million annually on capital replacement and repair so as to not fall behind in deferred maintenance. This is not reflected in the projections, but should be considered as part of a plan for financial sustainability.
- The projections do not include any projections or revenue from a major capital campaign that could be mounted.
- The projections do not include any projections from additional cost savings or revenue generation that could result from FEC initiatives that have yet to be evaluated.
- The future surpluses could allow us to take steps towards restoring the full-tuition scholarship, perhaps incrementally increasing the minimum scholarship percentage (currently 50 percent) to higher levels over a planned period. This would likely delay the increase in the CFI, but could be considered.



- The goal of the FEC is to return to full-tuition scholarships on a long-term sustainable basis as soon as practical. The FEC believes that incremental steps of reducing tuition by specific amounts at specific milestones is an appropriate means of incrementally returning to full-tuition scholarships. This approach has the benefit of demonstrating the Board's commitment to restoring free tuition in a tangible and credible manner.

As noted above, the FEC's most impactful initiative to date is its role in recommending that the administration and the Board develop an additional \$6.2 million of potential budget cuts. Without these budget cuts, Cooper Union would not have the future budget surpluses (including undergraduate tuition revenue) now shown in the revised projections.

To be more specific, the Board, at the FEC's urging, requested management to identify significant additional potential cuts and to assess the associated risks to the institution, including those to Cooper Union's academic offerings, as well as to contractual, legal and compliance requirements. In the FEC's July 2016 Report, management was to assess budget cut scenarios of \$5 million and \$7 million. Note that \$0.7 million in expenses were cut when the FY 16 budget was prepared and an additional \$2.2 million in expenses were cut in the original FY 17 budget. The \$6.2 million of cuts discussed below are in addition to those previous cuts. Overall, this represents \$9.1 million of actual and planned cuts, or 17 percent of FY 15 Educational & General Expenses of \$53.5 million. The Educational & General Expenses are those expenses which The Cooper Union has the ability to cut, which excludes debt service, capital and auxiliary expenses.

At the September 2016 Board meeting, management presented potential additional budget expense reductions totaling \$6.2 million, as summarized below:

Salaries	\$2,955,000
Benefits	905,000
Non-personnel	2,320,000
<b>Total</b>	<b>\$6,180,000</b>
Academic (mainly admin within academic, not instructional)	\$1,980,000
Administration	4,200,000
<b>Total</b>	<b>\$6,180,000</b>

The deans and management developed these potential budget cuts with the goal of having the least impact on the academic experience. While 32 percent of the cuts are described above as academic, most of those costs are not direct instructional costs, but rather are administrative

costs within the academic departments. There are no planned reductions in full-time faculty included in the above numbers; however, we have included the potential impact of a faculty retirement incentive program which has been agreed to by the full-time faculty union (CUFCT), administration, and the Board. The salary savings also include the elimination of as many as 20 administrative positions. Savings in benefits are simply the savings associated with personnel reductions and do not represent changes to any benefit plans. Any such changes to benefit plans would have to be negotiated with our three unions, and none are included above.

The Board of Trustees had directed management to implement these budget cuts in a timely and prudent manner, acknowledging that it will take a few years to fully realize these savings. The financial projections in Appendix B include the savings recognized in the following years: FY 17: \$1.58 million; FY 18: \$2.3 million; and FY 19: \$2.3 million. It is possible that some savings may take longer to implement, such as those from the faculty retirement incentive program.

## LOOKING AHEAD

The FEC's efforts in 2016 laid the foundation for the FEC's second year of activity, which will yield a strategic plan for returning to a sustainable full-tuition scholarship model that maintains Cooper Union's strong reputation for academic quality within its Art, Architecture and Engineering programs at their historic levels of enrollment.

In our first year, we were successful in setting the FEC's priorities, analyzing the operating model, seeking the commitment of the full Board of Trustees to the arc of return, establishing a method for measuring long-term financial health, and significantly reducing the expense base, which should by 2019 result in operating surpluses (inclusive of tuition).

In our second year, we will aggressively analyze and potentially pursue a wide variety of additional initiatives that could, in combination, yield a plan back to free. These initiatives could include restructuring of existing debt and income, a variety of fundraising strategies, strategic partnerships, other non-tuition earned revenue streams (e.g., the expansion of profitable professional certification or other continuing education programs). We will evaluate them to prepare the January 2018 plan within the context of ensuring that the proposed initiatives (a) are consistent with Cooper Union's educational and civic mission; (b) advance a full-tuition scholarship model; and (c) are financially sustainable.

The appointment of Laura Sparks as the 13th president of The Cooper Union offers us an important partnership. President Sparks has clearly stated that returning The Cooper Union to tuition-free in a sustainable manner is a priority. The FEC looks forward to working with President Sparks and our fellow Board members in this regard and will serve as the interface committee between the Board and the administration on efforts related to returning to a 100 percent scholarship model.

# APPENDICES

## APPENDIX A

### COMPOSITE FINANCIAL INDEX (CFI)

The Composite Financial Index (CFI) is calculated by blending four different ratios, two of which are balance sheet-based and two of which are income statement-based. The balance sheet ratios make up 70 percent of the CFI and the income statement ratios make up 30 percent. The larger focus on the balance sheet suggests that expendable (i.e., liquid) financial resources are the primary key to sustainability of a higher education institution. (Cooper Union, although viable over its 150 year history, has not historically had a great deal of expendable liquid assets, and the financial challenges the institution experienced over the last four decades suggests that, while viable, the institution wasn't operating in a financially sustainable way.)

The calculations of the CFI based on the FY 15 audited financial statements and FY 16 draft audited financial statements are shown on the following page. The FY 16 CFI is negative (-2.12), which does not fit favorably on the CFI performance scale of -4.0 to +10.0. A score of +3.0 generally represents fiscal health at most institutions, but according to the Financial Monitor, a score of +4.0 or better more appropriately represents the long term financial sustainability that Cooper Union will need to consider returning to a full tuition scholarship model.

Cooper Union's CFI calculations for FY 15 and FY 16 can be found on the next page.

Appendix B contains current financial projections for Cooper Union through 2039 and the corresponding CFI calculation for each year.

RATIO NAME	RATIO COMPUTATION	RATIO VALUE	CONVERSION	FY16				FY 15
				STRENGTH FACTOR	ADJUSTED STRENGTH	WEIGHTING	RATIO SCORE	
		<b>A</b>	<b>B</b>	<b>C=A/B</b>	<b>D</b>	<b>E</b>	<b>F=D*E</b>	
<b>Primary Reserve Ratio</b>								
Expendable net assets	\$(87,310,691)	-108.86%	0.133	-8.18	-4.00	35%	(1.40)	(1.40)
Total expenses	\$80,205,090							
<b>Viability Ratio</b>								
Expendable net assets	\$(87,310,691)	-49.89%	0.417	-1.20	-1.20	35%	(0.42)	(0.29)
Total plant debt	\$175,000,000							
<b>Return on net assets ratio</b>								
Change in net assets	\$6,130,625	0.99%	0.02	0.49	0.49	20%	0.10	(0.12)
Total net assets (Beginning of Year)	\$622,356,315							
<b>Net Operating Revenues</b>								
Operating surplus (deficit)	\$(21,259,411)	-36.07%	0.007	-51.52	-4.00	10%	(0.40)	(0.40)
Total operating revenues	\$58,945,679							
<b>COMPOSITE FINANCIAL INDEX</b>							<b>(2.12)</b>	<b>(2.21)</b>

## CERTAIN CALCULATIONS

## CALCULATION OF EXPENDABLE NET ASSETS

Unrestricted net assets	\$(160,808,357)
Less: Property plant and equipment, net	(161,387,946)
Add: Long-term debt	233,760,000
Less debt in excess of Net PP&E	(72,372,054)
Temporarily restricted net assets	711,420,485
Expendable net assets with Chrysler Building	\$550,612,128
Less: TRNA not in operations	
Chrysler Building	\$(675,000,000)
Time restrictions (Deferred annuities)	(2,940,340)
Expendable net assets without Chrysler Bld	(127,328,212)
Add: OPEB (if not requiring cash short term)	40,017,521
Adjusted expendable net assets	\$(87,310,691)

## CALCULATION OF TOTAL PLANT DEBT

Long term debt	\$233,760,000
Deferred revenue	104,437,444
Total debt	338,197,444
Less: non- project debt	
Bridge Loan	(58,760,000)
Deferred revenue	(104,437,444)
Debt for Viability Ratio	\$175,000,000

**Note: If the calculated Strength Factor is above 10.0 or below (4.0), then those factors are adjusted to 10.0 and (4.0).**

(\$000'S)	FY17 BUDGET	INCREASE ASSUMPTIONS	FY18	FY19	FY20	FY21	FY22	FY23
<b>REVENUE</b>								
<b>REAL ESTATE</b>								
Chrysler Building—Base Rent	\$7,750	Per lease	\$20,125	\$32,500	\$32,500	\$32,500	\$32,500	\$32,500
Chrysler Building—Revenue Sharing	1,049	Per lease	525	—	—	—	—	—
Chrysler Building—Tax Equivalency	20,305	1.0%	20,981	21,191	21,403	21,617	21,833	22,051
26 Astor Place—Tax Equivalency	1,330	1.0%	1,343	1,356	1,370	1,384	1,398	1,412
51 Astor Place—Tax Equivalency	2,292	1.0%	2,315	2,338	2,361	2,385	2,409	2,433
41 Cooper Square—Retail Rent	185	Per lease	190	196	202	208	214	221
Astor Place Holding Corporation	1,304	1.0%	1,317	1,330	1,343	1,356	1,370	1,384
<b>Total Real Estate</b>	<b>\$34,215</b>		<b>\$46,796</b>	<b>\$58,911</b>	<b>\$59,179</b>	<b>\$59,450</b>	<b>\$59,724</b>	<b>\$60,001</b>
<b>GRADUATE TUITION &amp; ALL FEES</b>								
Graduate Tuition, net of scholarships	\$450	3.0%	\$464	\$478	\$492	\$507	\$522	\$538
Matriculated Student Fees	2,035	1.0%	2,055	2,076	2,097	2,118	2,139	2,160
Non-Matriculated Student Fees	1,325	1.0%	1,338	1,351	1,365	1,379	1,393	1,407
<b>Total Graduate Tuition &amp; All Fees</b>	<b>\$3,810</b>		<b>\$3,857</b>	<b>\$3,905</b>	<b>\$3,954</b>	<b>\$4,004</b>	<b>\$4,054</b>	<b>\$4,105</b>
<b>CONTRIBUTIONS</b>								
Annual Fund and Other Unrestricted Gifts	\$3,000	3.0%	\$3,090	\$3,183	\$3,278	\$3,376	\$3,477	\$3,581
<b>AUXILIARIES</b>								
Student Housing	\$2,130	3.0%	\$2,194	\$2,260	\$2,328	\$2,398	\$2,470	\$2,544
<b>OTHER REVENUE</b>								
Building Usage Fees	\$450	0.0%	\$450	\$450	\$450	\$450	\$450	\$450
Other Revenue	\$100	0.0%	\$100	\$100	\$100	\$100	\$100	\$100
<b>ENDOWMENT PAYOUT</b>								
Unrestricted Endowment Payout	\$2,665	2.0%	\$2,718	\$2,772	\$2,827	\$2,884	\$2,942	\$3,001
<b>Total Revenue, Before Undergraduate Tuition</b>	<b>\$46,370</b>		<b>\$59,205</b>	<b>\$71,581</b>	<b>\$72,116</b>	<b>\$72,662</b>	<b>\$73,217</b>	<b>\$73,782</b>
<b>EXPENSES</b>								
<b>SALARIES AND WAGES</b>								
Full-time faculty	\$7,306	2.5%	\$7,489	\$7,676	\$7,868	\$8,065	\$8,267	\$8,474
Part-time faculty	4,005	2.5%	4,105	4,208	4,313	4,421	4,532	4,645
Administration	7,551	2.5%	7,740	7,934	8,132	8,335	8,543	8,757
Staff	9,483	2.5%	9,720	9,963	10,212	10,467	10,729	10,997
Budget cuts	(466)	2.5%	(1,723)	(3,011)	(3,086)	(3,163)	(3,242)	(3,323)
Students	463	0.0%	463	463	463	463	463	463
<b>Total Salaries and Wages</b>	<b>\$28,342</b>		<b>\$27,794</b>	<b>\$27,233</b>	<b>\$27,902</b>	<b>\$28,588</b>	<b>\$29,292</b>	<b>\$30,013</b>

(\$000'S)	FY17 BUDGET	INCREASE ASSUMPTIONS	FY18	FY19	FY20	FY21	FY22	FY23
<b>BENEFITS</b>								
Payroll taxes	\$1,978	2.5%	\$2,027	\$2,078	\$2,130	\$2,183	\$2,238	\$2,294
Medical & prescriptions	4,791	5.0%	5,031	5,283	5,547	5,824	6,115	6,421
Dental & vision	135	5.0%	142	149	156	164	172	181
Retirement (TIAA CREF)	2,000	2.5%	2,050	2,101	2,154	2,208	2,263	2,320
Budget cuts	(194)	2.5%	(554)	(923)	(946)	(970)	(994)	(1,019)
Other	541	2.0%	552	563	574	585	597	609
Administrative fees	640	2.0%	653	666	679	693	707	721
<b>Total Benefits</b>	<b>\$9,891</b>		<b>\$9,901</b>	<b>\$9,917</b>	<b>\$10,294</b>	<b>\$10,687</b>	<b>\$11,098</b>	<b>\$11,527</b>
<b>NON-PERSONNEL</b>								
Utilities	\$2,129	2.0%	\$2,172	\$2,215	\$2,259	\$2,304	\$2,350	\$2,397
Lease & R/E taxes—30 Cooper Sq.	723	2.0%	737	752	767	782	798	814
Lease & R/E taxes—29 3rd Ave	1,302	2.0%	1,328	1,355	1,382	1,410	1,438	1,467
Repairs & maintenance	856	2.0%	873	890	908	926	945	964
Legal, audit & monitor fees	1,305	2.0%	1,331	1,358	1,385	1,413	1,441	1,470
Consultants	1,199	2.0%	1,223	1,247	1,272	1,297	1,323	1,349
Housekeeping	1,187	2.0%	1,211	1,235	1,260	1,285	1,311	1,337
Security	987	2.0%	1,007	1,027	1,048	1,069	1,090	1,112
Materials & supplies	846	2.0%	863	880	898	916	934	953
Insurance	481	2.0%	491	501	511	521	531	542
Receptions & events	590	2.0%	602	614	626	639	652	665
Travel	667	2.0%	680	694	708	722	736	751
Software	504	2.0%	514	524	534	545	556	567
Budget cuts	(918)	2.0%	(1,637)	(2,371)	(2,418)	(2,466)	(2,515)	(2,565)
Other	3,518	2.0%	3,588	3,660	3,733	3,808	3,884	3,962
<b>Total Non-personnel</b>	<b>\$15,376</b>		<b>\$14,983</b>	<b>\$14,581</b>	<b>\$14,873</b>	<b>\$15,171</b>	<b>\$15,474</b>	<b>\$15,785</b>
<b>DEBT SERVICE &amp; CAPITAL</b>								
Interest—Met Life Loan	\$10,273	Per Loan	\$10,273	\$10,225	\$9,926	\$9,574	\$9,200	\$8,804
Principal—Met Life Loan	—	Per Loan	—	3,254	5,842	6,195	6,568	6,964
Interest—Bridge Loan (pro forma after FY 34)	2,292	Per Loan	2,703	2,703	2,703	2,703	2,703	2,703
Principal—Bridge Loan (pro forma after FY 34)	—	Per Loan	—	—	—	—	—	—
Capital	1,500		1,500	1,500	1,500	1,500	1,500	1,500
<b>Total Debt Service &amp; Capital</b>	<b>\$14,065</b>		<b>\$14,476</b>	<b>\$17,682</b>	<b>\$19,971</b>	<b>\$19,972</b>	<b>\$19,971</b>	<b>\$19,971</b>
<b>Total Expenses</b>	<b>\$67,674</b>		<b>\$67,154</b>	<b>\$69,413</b>	<b>\$73,040</b>	<b>\$74,418</b>	<b>\$75,835</b>	<b>\$77,296</b>
<b>Surplus (Deficit) before Undergraduate Tuition</b>	<b>\$(21,304)</b>		<b>\$(7,949)</b>	<b>\$2,168</b>	<b>\$(924)</b>	<b>\$(1,756)</b>	<b>\$(2,618)</b>	<b>\$(3,514)</b>
Undergraduate Tuition, net of scholarships	\$5,764	3.0%	\$7,899	\$8,282	\$8,421	\$8,674	\$8,934	\$9,202
<b>Surplus (Deficit)</b>	<b>\$(15,540)</b>		<b>\$(50)</b>	<b>\$10,450</b>	<b>\$7,497</b>	<b>\$6,918</b>	<b>\$6,316</b>	<b>\$5,688</b>
Composite Financial Index	(2.56)		(2.32)	(0.65)	(0.64)	(0.62)	(0.61)	(0.60)

(\$000'S)	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
<b>REVENUE</b>								
<b>REAL ESTATE</b>								
Chrysler Building—Base Rent	\$32,500	\$32,500	\$32,500	\$32,500	\$36,750	\$41,000	\$41,000	\$41,000
Chrysler Building—Revenue Sharing	-	-	-	-	-	-	-	-
Chrysler Building—Tax Equivalency	22,272	22,495	22,720	22,947	23,176	23,408	23,642	23,878
6 Astor Place—Tax Equivalency	1,426	1,440	1,454	1,469	1,484	1,499	1,514	1,529
51 Astor Place—Tax Equivalency	2,457	2,482	2,507	2,532	2,557	2,583	2,609	2,635
41 Cooper Square—Retail Rent	227	234	241	248	256	263	271	279
Astor Place Holding Corporation	1,398	1,412	1,426	1,440	1,454	1,469	1,484	1,499
<b>Total Real Estate</b>	<b>\$60,280</b>	<b>\$60,563</b>	<b>\$60,848</b>	<b>\$61,136</b>	<b>\$65,677</b>	<b>\$70,222</b>	<b>\$70,520</b>	<b>\$70,820</b>
<b>GRADUATE TUITION &amp; ALL FEES</b>								
Graduate Tuition, net of scholarships	\$554	\$571	\$588	\$606	\$624	\$643	\$662	\$682
Matriculated Student Fees	2,182	2,204	2,226	2,248	2,270	2,293	2,316	2,339
Non-Matriculated Student Fees	1,421	1,435	1,449	1,463	1,478	1,493	1,508	1,523
<b>Total Graduate Tuition &amp; All Fees</b>	<b>\$4,157</b>	<b>\$4,210</b>	<b>\$4,263</b>	<b>\$4,317</b>	<b>\$4,372</b>	<b>\$4,429</b>	<b>\$4,486</b>	<b>\$4,544</b>
<b>CONTRIBUTIONS</b>								
Annual Fund and Other Unrestricted Gifts	\$3,688	\$3,799	\$3,913	\$4,030	\$4,151	\$4,276	\$4,404	\$4,536
<b>AUXILIARIES</b>								
Student Housing	\$2,620	\$2,699	\$2,780	\$2,863	\$2,949	\$3,037	\$3,128	\$3,222
<b>OTHER REVENUE</b>								
Building Usage Fees	\$450	\$450	\$450	\$450	\$450	\$450	\$450	\$450
Other Revenue	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100
<b>ENDOWMENT PAYOUT</b>								
Unrestricted Endowment Payout	\$3,061	\$3,122	\$3,184	\$3,248	\$3,313	\$3,379	\$3,447	\$3,516
<b>Total Revenue, Before Undergraduate Tuition</b>	<b>\$74,356</b>	<b>\$74,943</b>	<b>\$75,538</b>	<b>\$76,144</b>	<b>\$81,012</b>	<b>\$85,893</b>	<b>\$86,535</b>	<b>\$87,188</b>
<b>EXPENSES</b>								
<b>SALARIES AND WAGES</b>								
Full-time faculty	\$8,686	\$8,903	\$9,126	\$9,354	\$9,588	\$9,828	\$10,074	\$10,326
Part-time faculty	4,761	4,880	5,002	5,127	5,255	5,386	5,521	5,659
Administration	8,976	9,200	9,430	9,666	9,908	10,156	10,410	10,670
Staff	11,272	11,554	11,843	12,139	12,442	12,753	13,072	13,399
Budget cuts	(3,406)	(3,491)	(3,578)	(3,667)	(3,759)	(3,853)	(3,949)	(4,048)
Students	463	463	463	463	463	463	463	463
<b>Total Salaries and Wages</b>	<b>\$30,752</b>	<b>\$31,509</b>	<b>\$32,286</b>	<b>\$33,082</b>	<b>\$33,897</b>	<b>\$34,733</b>	<b>\$35,591</b>	<b>\$36,469</b>



(\$000'S)	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
<b>BENEFITS</b>								
Payroll taxes	\$2,351	\$2,410	\$2,470	\$2,532	\$2,595	\$2,660	\$2,727	\$2,795
Medical & prescriptions	6,742	7,079	7,433	7,805	8,195	8,605	9,035	9,487
Dental & vision	190	200	210	221	232	244	256	269
Retirement (TIAA CREF)	2,378	2,437	2,498	2,560	2,624	2,690	2,757	2,826
Budget cuts	(1,044)	(1,070)	(1,097)	(1,124)	(1,152)	(1,181)	(1,211)	(1,241)
Other	621	633	646	659	672	685	699	713
Administrative fees	735	750	765	780	796	812	828	845
<b>Total Benefits</b>	<b>\$11,973</b>	<b>\$12,439</b>	<b>\$12,925</b>	<b>\$13,433</b>	<b>\$13,962</b>	<b>\$14,515</b>	<b>\$15,091</b>	<b>\$15,694</b>
<b>NON-PERSONNEL</b>								
Utilities	\$2,445	\$2,494	\$2,544	\$2,595	\$2,647	\$2,700	\$2,754	\$2,809
Lease & R/E taxes—30 Cooper Sq.	830	847	864	881	899	917	935	954
Lease & R/E taxes—29 3rd Ave	1,496	1,526	1,557	1,588	1,620	1,652	1,685	1,719
Repairs & maintenance	983	1,003	1,023	1,043	1,064	1,085	1,107	1,129
Legal, audit & monitor fees	1,499	1,529	1,560	1,591	1,623	1,655	1,688	1,722
Consultants	1,376	1,404	1,432	1,461	1,490	1,520	1,550	1,581
Housekeeping	1,364	1,391	1,419	1,447	1,476	1,506	1,536	1,567
Security	1,134	1,157	1,180	1,204	1,228	1,253	1,278	1,304
Materials & supplies	972	991	1,011	1,031	1,052	1,073	1,094	1,116
Insurance	553	564	575	587	599	611	623	635
Receptions & events	678	692	706	720	734	749	764	779
Travel	766	781	797	813	829	846	863	880
Software	578	590	602	614	626	639	652	665
Budget cuts	(2,616)	(2,668)	(2,721)	(2,775)	(2,831)	(2,888)	(2,946)	(3,005)
Other	4,041	4,122	4,204	4,288	4,374	4,461	4,550	4,641
<b>Total Non-personnel</b>	<b>\$16,099</b>	<b>\$16,423</b>	<b>\$16,753</b>	<b>\$17,088</b>	<b>\$17,430</b>	<b>\$17,779</b>	<b>\$18,133</b>	<b>\$18,496</b>
<b>DEBT SERVICE &amp; CAPITAL</b>								
Interest—Met Life Loan	\$8,384	\$7,939	\$7,467	\$6,966	\$6,435	\$5,872	\$5,276	\$4,643
Principa—Met Life Loan	7,384	7,829	8,302	8,802	9,333	9,896	10,493	11,125
Interest—Bridge Loan (pro forma after FY 34)	2,703	2,690	2,635	2,575	2,507	2,430	2,343	2,247
Principal—Bridge Loan (pro forma after FY 34)	—	1,159	1,282	1,437	1,626	1,828	2,043	2,271
Capital	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
<b>Total Debt Service &amp; Capital</b>	<b>\$19,971</b>	<b>\$21,117</b>	<b>\$21,186</b>	<b>\$21,280</b>	<b>\$21,401</b>	<b>\$21,526</b>	<b>\$21,655</b>	<b>\$21,786</b>
<b>Total Expenses</b>	<b>\$78,795</b>	<b>\$81,488</b>	<b>\$83,150</b>	<b>\$84,883</b>	<b>\$86,690</b>	<b>\$88,553</b>	<b>\$90,470</b>	<b>\$92,445</b>
<b>Surplus (Deficit) before Undergraduate Tuition</b>	<b>\$(4,439)</b>	<b>\$(6,545)</b>	<b>\$(7,612)</b>	<b>\$(8,739)</b>	<b>\$(5,678)</b>	<b>\$(2,660)</b>	<b>\$(3,935)</b>	<b>\$(5,257)</b>
Undergrauate Tuition, net of scholarships	\$9,478	\$9,762	\$10,055	\$10,357	\$10,668	\$10,988	\$11,318	\$11,658
<b>Surplus (Deficit)</b>	<b>\$5,039</b>	<b>\$3,217</b>	<b>\$2,443</b>	<b>\$1,618</b>	<b>\$4,990</b>	<b>\$8,328</b>	<b>\$7,383</b>	<b>\$6,401</b>
Composite Financial Index	(0.60)	(0.65)	(0.70)	(0.76)	(0.58)	(0.36)	(0.09)	0.13

(\$000'S)	FY32	FY33	FY34	FY35	FY36	FY37	FY38	FY39
<b>REVENUE</b>								
<b>REAL ESTATE</b>								
Chrysler Building—Base Rent	\$41,000	\$41,000	\$41,000	\$41,000	\$41,000	\$41,000	\$48,000	\$55,000
Chrysler Building—Revenue Sharing	-	-	-	-	-	-	-	-
Chrysler Building—Tax Equivalency	24,117	24,358	24,602	24,848	25,096	25,347	25,600	25,856
26 Astor Place—Tax Equivalency	1,544	1,559	1,575	1,591	1,607	1,623	1,639	1,655
51 Astor Place—Tax Equivalency	2,661	2,688	2,715	2,742	2,769	2,797	2,825	2,853
41 Cooper Square—Retail Rent	288	296	305	315	324	334	344	365
Astor Place Holding Corporation	1,514	1,529	1,544	1,559	1,575	1,591	1,607	1,623
<b>Total Real Estate</b>	<b>\$71,124</b>	<b>\$71,430</b>	<b>\$71,741</b>	<b>\$72,055</b>	<b>\$72,371</b>	<b>\$72,692</b>	<b>\$80,015</b>	<b>\$87,352</b>
<b>GRADUATE TUITION &amp; ALL FEES</b>								
Graduate Tuition, net of scholarships	\$702	\$723	\$745	\$767	\$790	\$814	\$838	\$863
Matriculated Student Fees	2,362	2,386	2,410	2,434	2,458	2,483	2,508	2,533
Non-Matriculated Student Fees	1,538	1,553	1,569	1,585	1,601	1,617	1,633	1,649
<b>Total Graduate Tuition &amp; All Fees</b>	<b>\$4,602</b>	<b>\$4,662</b>	<b>\$4,724</b>	<b>\$4,786</b>	<b>\$4,849</b>	<b>\$4,914</b>	<b>\$4,979</b>	<b>\$5,045</b>
<b>CONTRIBUTIONS</b>								
Annual Fund and Other Unrestricted Gifts	\$4,672	\$4,812	\$4,956	\$5,105	\$5,258	\$5,416	\$5,578	\$5,745
<b>AUXILIARIES</b>								
Student Housing	\$3,319	\$3,419	\$3,522	\$3,628	\$3,737	\$3,849	\$3,964	\$4,083
<b>OTHER REVENUE</b>								
Building Usage Fees	\$450	\$450	\$450	\$450	\$450	\$450	\$450	\$450
Other Revenue	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100
Endowment Payout								
Unrestricted Endowment Payout	\$3,586	\$3,658	\$3,731	\$3,806	\$3,882	\$3,960	\$4,039	\$4,120
<b>Total Revenue, Before Undergraduate Tuition</b>	<b>\$87,853</b>	<b>\$88,531</b>	<b>\$89,224</b>	<b>\$89,930</b>	<b>\$90,647</b>	<b>\$91,381</b>	<b>\$99,125</b>	<b>\$106,895</b>
<b>EXPENSES</b>								
<b>SALARIES AND WAGES</b>								
Full-time faculty	\$10,584	\$10,849	\$11,120	\$11,398	\$11,683	\$11,975	\$12,274	\$12,581
Part-time faculty	5,800	5,945	6,094	6,246	6,402	6,562	6,726	6,894
Administration	10,937	11,210	11,490	11,777	12,071	12,373	12,682	12,999
Staff	13,734	14,077	14,429	14,790	15,160	15,539	15,927	16,325
Budget cuts	(4,149)	(4,253)	(4,359)	(4,468)	(4,580)	(4,695)	(4,812)	(4,932)
Students	463	463	463	463	463	463	463	463
<b>Total Salaries and Wages</b>	<b>\$37,369</b>	<b>\$38,291</b>	<b>\$39,237</b>	<b>\$40,206</b>	<b>\$41,199</b>	<b>\$42,217</b>	<b>\$43,260</b>	<b>\$44,330</b>

(\$000'S)	FY32	FY33	FY34	FY35	FY36	FY37	FY38	FY39
<b>BENEFITS</b>								
Payroll taxes	\$2,865	\$2,937	\$3,010	\$3,085	\$3,162	\$3,241	\$3,322	\$3,405
Medical & prescriptions	9,961	10,459	10,982	11,531	12,108	12,713	13,349	14,016
Dental & vision	282	296	311	327	343	360	378	397
Retirement (TIAA CREF)	2,897	2,969	3,043	3,119	3,197	3,277	3,359	3,443
Budget cuts	(1,272)	(1,304)	(1,337)	(1,370)	(1,404)	(1,439)	(1,475)	(1,512)
Other	727	742	757	772	787	803	819	835
Administrative fees	862	879	897	915	933	952	971	990
<b>Total Benefits</b>	<b>\$16,322</b>	<b>\$16,978</b>	<b>\$17,663</b>	<b>\$18,379</b>	<b>\$19,126</b>	<b>\$19,907</b>	<b>\$20,723</b>	<b>\$21,574</b>
<b>NON-PERSONNEL</b>								
Utilities	2,865	\$2,922	\$2,980	\$3,040	\$3,101	\$3,163	\$3,226	\$3,291
Lease & R/E taxes—30 Cooper Sq.	973	992	1,012	1,032	1,053	1,074	1,095	1,117
Lease & R/E taxes—29 3rd Ave	1,753	1,788	1,824	1,860	1,897	1,935	1,974	2,013
Repairs & maintenance	1,152	1,175	1,199	1,223	1,247	1,272	1,297	1,323
Legal, audit & monitor fees	1,756	1,791	1,827	1,864	1,901	1,939	1,978	2,018
Consultants	1,613	1,645	1,678	1,712	1,746	1,781	1,817	1,853
Housekeeping	1,598	1,630	1,663	1,696	1,730	1,765	1,800	1,836
Security	1,330	1,357	1,384	1,412	1,440	1,469	1,498	1,528
Materials & supplies	1,138	1,161	1,184	1,208	1,232	1,257	1,282	1,308
Insurance	648	661	674	687	701	715	729	744
Receptions & events	795	811	827	844	861	878	896	914
Travel	898	916	934	953	972	991	1,011	1,031
Software	678	692	706	720	734	749	764	779
Budget cuts	(3,065)	(3,126)	(3,189)	(3,253)	(3,318)	(3,384)	(3,452)	(3,521)
Other	4,734	4,829	4,926	5,025	5,126	5,229	5,334	5,441
<b>Total Non-personnel</b>	<b>\$18,866</b>	<b>\$19,244</b>	<b>\$19,629</b>	<b>\$20,023</b>	<b>\$20,423</b>	<b>\$20,833</b>	<b>\$21,249</b>	<b>\$21,675</b>
<b>DEBT SERVICE &amp; CAPITAL</b>								
Interest—Met Life Loan	\$3,972	\$3,260	\$2,506	\$1,706	\$858	\$95	\$-	\$-
Principal—Met Life Loan	11,796	12,508	13,262	14,062	14,910	6,475	-	-
Interest—Bridge Loan (pro forma after FY 34)	2,139	2,021	1,890	1,747	1,590	1,418	1,231	1,028
Principal—Bridge Loan (pro forma after FY 34)	2,514	2,773	3,049	3,339	3,649	3,978	4,326	4,696
Capital	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
<b>Total Debt Service &amp; Capital</b>	<b>\$21,921</b>	<b>\$22,062</b>	<b>\$22,207</b>	<b>\$22,354</b>	<b>\$22,507</b>	<b>\$13,466</b>	<b>\$7,057</b>	<b>\$7,224</b>
<b>Total Expenses</b>	<b>\$94,478</b>	<b>\$96,575</b>	<b>\$98,736</b>	<b>\$100,962</b>	<b>\$103,255</b>	<b>\$96,423</b>	<b>\$92,289</b>	<b>\$94,803</b>
<b>Surplus (Deficit) before Undergraduate Tuition</b>	<b>\$(6,625)</b>	<b>\$(8,044)</b>	<b>\$(9,512)</b>	<b>\$(11,032)</b>	<b>\$(12,608)</b>	<b>\$(5,042)</b>	<b>\$6,836</b>	<b>\$12,092</b>
Undergraduate Tuition, net of scholarships	\$12,008	\$12,368	\$12,739	\$13,121	\$13,515	\$13,920	\$14,338	\$14,768
<b>Surplus (Deficit)</b>	<b>\$5,383</b>	<b>\$4,324</b>	<b>\$3,227</b>	<b>\$2,089</b>	<b>\$907</b>	<b>\$8,878</b>	<b>\$21,174</b>	<b>\$26,860</b>
Composite Financial Index	0.31	0.44	0.51	0.44	1.36	1.75	2.77	3.98