Annual Report of the Financial Monitor

The Cooper Union for the Advancement of Science and Art

February 15, 2019

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I. Introduction

The Amended Consent Decree ("the Consent Decree") issued by the Supreme Court of the State of New York in December 2015 settling the legal action over the charging of tuition at The Cooper Union for the Advancement of Science and Art ("Cooper Union") provided for the selection of a Financial Monitor to evaluate and report on the financial management of Cooper Union and its compliance with the Consent Decree. Among the duties assigned to the Financial Monitor in the Consent Decree is the preparation and issuance of an Annual Report (a) summarizing the financial condition of Cooper Union; (b) reporting on measures proposed by the Cooper Union Board of Trustees ("the Board") and its committees relating to the Consent Decree, and opining on whether those actions were made in good faith and in the best interest of Cooper Union; (c) identifying any non-budgeted expenditures by Cooper Union exceeding $100,000 and any non-budgeted contractual obligations of Cooper Union exceeding $125,000 during the preceding twelve-month period; and (d) analyzing the Free Education Committee ("FEC") Progress Report, the feasibility of its strategic plan, and the practicality of Cooper Union's returning to a 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.

In July 2016, the Attorney General's Office of the State of New York selected Kroll Associates, Inc. ("Kroll") to serve as the Financial Monitor of Cooper Union. This is Kroll's third Annual Report as Financial Monitor. In this report, we address each of the issues outlined above as required by the Consent Decree. Our analysis is informed by our having attended, since our appointment as financial monitor, every meeting of the Board (including executive sessions), and meetings of the FEC, the Audit Committee, the Finance and Business Affairs Committee, the Governance Committee, the Investment Committee, the Academic and Student Affairs Committee, and the Alumni Affairs and Development Committee. In addition, we have reviewed extensive financial information including Cooper Union's audited financial statements, its Board approved budget, approved budget resolutions and amendments, and accounting system records. Finally, we have reviewed Board resolutions and amendments to the Cooper Union bylaws.

As explained in more detail below, Cooper Union has made significant progress this past year in implementing the thoughtful and responsible plan it adopted last year to improve Cooper Union's financial condition and put it on the path to a return to a full-tuition scholarship model within the foreseeable future.

II. The Current Financial Condition of Cooper Union

Our assessment of Cooper Union's current financial condition is based on our review of Cooper Union's final draft audited financial statements as of and for the year ending June 30, 2018, as well as budget data provided by Cooper Union for 2019 and our assessment of Cooper Union's progress against the previously-approved FEC plan to return the institution to a full-tuition scholarship model.

The report of the FEC entitled, *Recommended Plan to Return to Full Tuition Scholarships* ("the FEC Report"), approved with revisions by the Board on March 18, 2018 (hereinafter, "the Board's Plan"), soberly discussed the nature and extent of Cooper Union's financial challenges and calculated the amount needed to enable Cooper Union to return to a full-tuition scholarship model at $250 million. This is clearly a substantial sum for Cooper Union to raise from its various revenue and support activities. Nonetheless, we concurred with the methodology the FEC used to calculate this amount and concluded that the plan developed by the FEC and approved by the Board to achieve Cooper Union's goal, though aggressive, was responsible.

A. Operating Results

A summary of Cooper Union's operating deficits for the past several years follows. The amounts in the table below and the table in the next section are taken from Cooper Union's annual audited financial statements. We note that the audited financial statements are prepared on the basis of generally accepted accounting principles ("GAAP"), which differ from the internal budget process used by Cooper Union through June 30, 2018, which was the cash basis.[1] The first schedule is presented as an indication of the size and persistence of the deficits Cooper Union has incurred. We note that substantial deficits occurred in years prior to 2009 as well. There was a significant improvement in the size of the deficit in 2018, and this progress is expected to continue in coming years, as described in the Board's Plan.

[1] The cash-based budget excludes depreciation and amortization expenses, but includes capital acquisitions. In future years, as debt is being amortized, the principal payments on debt are included in the cash-based budgets. Other items that are excluded from the budget are temporarily restricted net asset gifts and their related expenses, and all other non-cash amortization and accretion items among other smaller items. As we recommended in our last report, for fiscal year 2019, Cooper Union moved to a budgeting process that reflects non-cash charges and is on an "all funds" basis.

(Amounts in millions)

Fiscal Year	Operating Deficit	Margin	Net Tuition	Deficit excluding tuition
2018 (draft)	($4.2)	(5.7%)	$12.3	($16.5)
2017	($21.9)	(36.2%)	$10.6	($32.5)
2016	($21.3)	(36.1%)	$8.2	($29.5)
2015	($24.5)	(45.9%)	$5.8	($30.3)
2014	($19.8)	(36.6%)	$3.0	($22.8)
2013	($14.6)	(27.2%)	$3.4	($18.0)
2012	($17.9)	(34.5%)	$3.1	($21.0)
2011	($23.6)	(51.5%)	$3.0	($26.6)
2010	($21.4)	(47.2%)	$3.0	($24.4)
2009	($11.9)	(25.1%)	$3.0	($14.9)
Cumulative	($181.1)			($236.5)

We have repeated this information from our prior reports to re-iterate that, although much operational progress has been accomplished during 2018, the persistent deficit levels suggest that the challenge of restoring financial health continues.

We continue to believe a positive margin of approximately 2% per year represents a sustainable operating performance. That margin, however, would be appropriate *after* restoring resources to a level appropriate for Cooper Union. Therefore, positive margins substantially higher than 2%, and at the levels suggested in the Board's Plan, are necessary if Cooper Union is to achieve normal standards of financial viability and health and return to a full tuition scholarship model.

When comparing the financial results of 2018 to 2017, there are several substantial events that have occurred. The improvement in operating results of $17.7 million results from both continuing or structural events, and some events that may or may not be repeatable. The most notable of these items include:

- **Increase in investment return utilized for operations** of $12.3 million ($50.0 million in 2018 and $37.7 million in 2017). This is principally the result of a reset in rents on the Chrysler land lease. This is a structural event, and in fact, there are contractual increases throughout the term of the lease, which expires in 2147. The contractual rents received under the Chrysler Building lease increased from $7.8 million in 2017 to $20.1 million in 2018, and will increase to $32.5 million in 2019 through 2027, with additional increases thereafter. This contractual change in 2018 results in an improvement in the operating results of over $12 million from 2017, with the further increase in 2019 contributing to generating positive cash results of operations.

- **Decrease in total expenses** of $4.2 million ($78.3 million in 2018 and $82.5 million in 2017). The largest change was a $2 million reduction in health-related benefits due to lower claims. Cooper Union self-insures most health benefits, with a stop-loss policy to cap the total loss on a claim. The payment of a claim passes directly through to the statement of activities. Some of the other reductions that are part of the Board's Plan scheduled to reduce expenses over several years are structural and are part of the implementation of the institution's expense-reduction program. These reductions would appear to be partially offset, however, by other changes in expenses. The planned initiatives are detailed in the Board's Plan. The deliberations of the various committees of the Board and the Board's Plan acknowledge the need for incremental investment in curriculum renewal, and increases in capital spending. (The spending itself will not impact operations, but the incremental depreciation will. We would note that depreciation in 2018 decreased by $300,000, further indicating a reduced reinvestment in capital). We would reiterate our comment from our prior reports that we do not believe this operating issue can be solved solely through reductions in expenses.

- **All other changes** result in a net improvement of $1.2 million. This would be a normal range of change for all other revenue activities. We note, however, that a key element of the Board's Plan is substantially enhanced philanthropy, which in total is meeting the targets in the Board's Plan, but only about 30% of the total philanthropy is included in the computation of operating results because some of the funds raised are for longer term or specific purposes.

A review of the 2019 cash operating budget projection suggests a planned cash operating surplus of $13 million with net tuition and fees of $13.3[2] million and expenditures of $72.8 million.[3]

Based on the Board's Plan forecast (included as Appendix A in the FEC Report), Cooper Union anticipates generating "Cash Available for Other Key Financial Priorities" of $13.7 million in 2020 with comparable operating surpluses in future years and a plan for using the cash generated to restore prior uses of funds and invest in initiatives identified in the Board's Plan. We discuss the need for restoring resources under the Balance Sheet Structural Issues section below.

We recommended that the internal budget basis for measuring operations be reconciled to the GAAP-based audited financial statements to ensure that the differences are accounted for and their impact understood. This is an important bridge between annual operations and the audited

[2] The $13.3 million of net tuition and fees in 2019 is comprised of $8.4 million of undergraduate net tuition, $0.7 million of graduate net tuition and $4.2 million of student fees.

[3] As noted above, Cooper Union principally used a cash-based budget for fiscal year 2018, which has presented expenditures, rather than total expenses and excludes certain temporarily restricted net assets from both revenue and expenses.

statements, which is the basis for computing the measure of the institution's financial health, the Composite Financial Index. We understand that the reconciliation is scheduled to be part of the activities of the finance function (and has been adopted for fiscal year 2019). The need to reconcile these two financial documents is exacerbated due to the size of the differences. Revenue in the draft audited statements in 2018 is $74.1 million, while revenues in Cooper Union's internal budget variance reports are $66.3 million. Expenses in the draft audited statements total $78.3 million, while the expenses in the internal budget variance reports are $66.0 million. This results in an operating deficit in the draft financial statements of $4.2 million, but an operating surplus in the plan of $0.3 million. We have reviewed the differences and understand the components. The size of the differences is significant, which supports our recommendation (which Cooper Union has adopted) of moving to an "all funds" budgeting approach, which would reduce these differences. We would note that when expenses are excluded that are funded from "off budget" items, that the risk becomes the dissipation of the revenue source (often a specific gift) with the costs then becoming funded from general funds of the organization.

B. Balance Sheet Structural Issues

In our prior annual reports, we have discussed the need for Cooper Union to strengthen its overall financial condition. The need for this remediation is justified by the data contained in the Balance Sheet and the structural issues that data highlights. These issues will require attention even after Cooper Union addresses its operating deficits and the costs of its operations no longer exceed its revenues. The generation of operating surpluses (under either a GAAP or a cash basis) necessarily requires replenishment of resources that were consumed when Cooper Union financed past operating losses through consumption of available net assets, incremental debt, front loading of revenue from certain leased properties and the creation of unfunded obligations for post-retirement benefits. Once these various items are funded, the operating surpluses anticipated to be generated will be available to support a return to a full-tuition scholarship model. The items referenced above include the following, and have been discussed in our prior reports, but are of enough significance to warrant repeating in this report:

- A bridge loan for $58.8 million Cooper Union secured in June 2014, which has been used to cover operating losses. Cooper Union will pay interest only on this loan until 2025. The loan will not be fully repaid at maturity requiring a refinancing of the remaining balance of $39 million or a significant cash payment. The Board's Plan considers creating a "debt retirement reserve" to ensure availability of resources at the contractual maturity of this loan. Since Cooper Union has met the financial targets contained in the Board's Plan, these resources have been funded thus far.

- Deferred revenue of $103.7 million on the balance sheet representing agreements to lease certain properties for ninety-nine years to a third party. The deferred revenue represents the unamortized balances of these leases that Cooper Union entered into in 2004 and 2008.

These leases previously provided cash to cover persistent operating losses. In the audited financial statements, the accretion of the deferred revenue will add to revenues each year, but will provide no cash or other resources to the institution. This deferred revenue does not impact the cash-based financial model and the change in the deferred revenue amounted to $608,000 from 2017 to 2018. The Board's Plan appropriately considers the impact of the deferred revenue in the computations of financial health.

- There is $31.8 million in postretirement benefit costs accrued which will consume cash in future periods, likely at increasing amounts as covered personnel retire.[4] This obligation consumed about $900,000 of cash in both 2018 and 2017. The Board's Plan considers this obligation, including a factor for growth of the obligation over time. If discount rates increase or stay steady with the current environment, this may represent a cushion in the plan for the amounts that will be required to liquidate this obligation. The plan projects providing liquid assets to support this liability in the projection period.

- From 2016 to 2018, the combined purchases of plant assets totaled $4.4 million while depreciation and amortization totaled $25.1 million, suggesting an under-investment in plant assets, which will likely need to be addressed in future periods. The Board's Plan includes funding of capital assets above current levels by amounts increasing to $1 million above current levels per year by 2022. While this amount may not fully fund the amounts necessary to maintain a current plant, there is also a plan for programmatic investments starting in 2019 and growing to $3 million per year by 2025. We believe a portion of these programmatic investments will need to be used for capital in the related program areas. In order to understand better the relative position of capital at Cooper Union, we have recommended adding two ratios to the financial metrics currently in use: a Physical Asset Reinvestment Ratio (which compares investment in plant to depreciation expense) and an Age of Facilities Ratio (which compares accumulated depreciation to depreciation expense). These ratios would help inform the Board on the status of the physical plant and possibly indicate the need for adjustments to the Board's Plan in future years.

- Net plant assets are $147.6 million in 2018 ($154.2 million in 2017) while related debt is $175.0 million. The depreciation of assets at a rate faster than the liquidation of debt, without a renewals and replacements reserve, further supports the conclusion that Cooper Union is under-investing in capital. Cooper Union is currently paying interest only on this loan and there is a prepayment penalty recently estimated at over $42.4 million.

Cooper Union's operating cash and equivalents as of June 30, 2018 totaled $31.1 million. The persistent operating deficits have consumed most of the cash generated from the activities that produced cash to fund the deficits, such as loans and prepayment of rental income, resulting in a

[4] This liability declined from $40 million in 2016 principally due to the discount rate on the obligation increasing from 3.25% to 4.10%. The liability balance can be expected to fluctuate based on changes in actuarial assumptions.

substantial "borrowing from the future." This borrowing, as well as the need for plant and programmatic investments totaling $250 million by the FEC's estimate, will necessarily have to be funded from future operating positive margins, which necessarily will rely heavily on new revenue sources and growth in non-operating resources such as endowment and similar funds.

The FEC Report addressed these issues and the Board appropriately considered them in the design of the Board's Plan.

C. Implications of Current Financial Condition on Future Activities

The Board's Plan, when approved, was acknowledged as aggressive but achievable. The activities of the current year appear focused on a structured, disciplined approach pursued in the context of long-term financial improvements. The focus of the Board and the FEC in 2018 emphasized the creation of a sustainable financial environment. After achieving a sustainable level of financial health, the focus can shift to creating an environment for a fiscally thriving institution, followed by a focus on moving to a tuition-free environment.

The Board's Plan appropriately projects a way forward to eliminate operating deficits and to produce and grow financial resources to an appropriate level. The largest initiatives that move Cooper Union from large deficits to operating surpluses are the contractual changes in the lease agreement on the Chrysler Building, enhanced philanthropy and the continuation of the current tuition plan, which moves to full-tuition scholarships over time by providing annual increments in scholarship levels. The largest incremental initiative, not currently under contractual or legal obligation, that moves Cooper Union to large enough surpluses to allow the return to a full-tuition scholarship model is heavily dependent on incremental philanthropy, particularly current-use philanthropy.

III. Measures Proposed by the Board of Trustees and its Committees

The Cooper Union Board adopted a number of resolutions to the Cooper Union bylaws to comply with the various provisions of the Consent Decree. We believe that the Board acted appropriately, in good faith and in the best interests of Cooper Union.

The Consent Decree states that the Cooper Union Board was required to amend the Cooper Union bylaws or approve resolutions making the changes recommended in the Consent Decree "at the earliest of the next quarterly Board of Trustee meeting following the entry of this Consent Decree or at the next quarterly Board of Trustees meeting following the election(s) of Alumni Trustee, Faculty Representatives or a Staff Representative, or sixty (60) days." The Board complied with this requirement by adopting resolutions making the necessary changes to the Cooper Union bylaws on November 11, 2015.

The Consent Decree states "that no Trustee who was a member of the Board of Trustees on October 6, 2006 shall be reappointed to the Board, and all who served on the Board as of October 6, 2006, shall have their terms expire as of December 7, 2016, and that no person shall be named Trustee Emeritus while this Consent Decree is in effect." The Board complied with this requirement by passing a resolution stating that no Trustee Emeriti will be named during the duration of the Consent Decree. No Trustee Emeriti currently serve on the Cooper Union Board. Furthermore, the two trustees who had served on the Board since October 6, 2006, were not reappointed to and currently do not serve on the Board.

The Consent Decree states that "at all times one (1) of the Alumni Trustees shall serve as either the Chair or Vice Chair of the Board of Trustees and have the responsibilities of Chair and/or Vice Chair of the Board of Trustees." The Board complied with this requirement by adopting Section 3.01 of the amended bylaws. Moreover, Stephen Gerard and Eric Hirschhorn, both alumnus of Cooper Union, serve on the Board as Vice Chairs. Mr. Gerard is also an Alumni Trustee.

The Consent Decree states that the Board should always include "two (2) Student Trustees, who shall be current students at Cooper Union, shall each serve two-year terms that are staggered, shall have voting power afforded to other Trustees on the Board, . . . shall be considered as members of the Board in determining whether a quorum is present, and shall be entitled to attend executive sessions of the Board" except for those meetings in which matters of academic governance, employment and personnel matters, or other conflict of interests issues are discussed. The Board complied with this requirement by adopting Section 1.03.2 of the amended bylaws. Two students with staggered terms currently sit on the Board as Student Trustees.

The Consent Decree states that "at all times, the Board of Trustees shall have alumni representation pursuant to an agreement entered into by the CUAA and Cooper Union and approved by the

Attorney General for the State of New York." The Board complied with this requirement by adopting Section 3.01 of the amended bylaws. There are currently six Alumni Trustees serving on the Board.

The Consent Decree states that the Board must meet the requirements for confirming the nominations of Alumni Trustees outlined in the Cooper Union Alumni Association protocol attached to the Consent Decree as Exhibit A. The protocol states that the total number of Alumni Trustees sitting on the Board should equal one-third the total number of individuals sitting on the Board at the December meeting of the Board (rounded to the nearest whole number). This requirement is reflected in section 1.03.1 of the amended bylaws. The Board complied with this requirement. Further, the Board has interpreted the Protocol to mean that there will be two Alumni Trustee seating periods in December and June. A determination of the number of Alumni Trustees required to satisfy the one-third ratio will be determined prior to the Annual December meeting (based on the number of trustees expected to be appointed at that meeting) with the understanding that the Alumni Trustee(s) will be seated only if the total number of trustees expected to be appointed are, in fact, appointed. Further, the calculation of the one-third ratio will include any newly elected Alumni Trustee(s). At the end of the December 2018 Board meeting there were twenty Trustees and six of the trustees sitting on the Board were Alumni Trustees, thereby satisfying the one-third requirement.[5]

The Consent Decree states that four full-time faculty members, one each from Cooper Union's four divisions, elected by the full-time faculty; one part-time faculty member elected by the part-time faculty; and one staff member elected by the staff shall serve as Faculty Representatives. The Board complied with this requirement by adopting Section 1.14 of the amended bylaws.

The Consent Decree states that the six Faculty Representatives shall serve one four-year term, shall be observers and advisers without voting power, shall not be counted towards a quorum, and shall "not be entitled to attend executive sessions." The Faculty Representatives shall "be entitled to observe all other sessions of the Board" except in which a conflict of interest may arise, shall be entitled "to receive any information or documents not designated as privileged, private, or confidential during an executive session, and may provide advice or information when solicited by the Board." The Board complied with this requirement by adopting Section 1.14 of the amended bylaws.

The Consent Decree states that "the Board shall make good faith efforts to recruit candidates who are experts, by training or profession, in the areas of higher-education, accounting, finance, law, non-profit governance, communications, management, or management-labor relations, or who

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[5] The protocol also has a provision for electing additional Alumni Trustees if the Board increases the number of Trustees during the year in a way that would leave the representation of Alumni Trustees below one-third of the Board for two consecutive Board meetings.

have substantial fundraising-development experience or potential." The Board complied with this requirement. Two of the recently-elected trustees, Cristina Ross and Dwight McBride, both qualify by their experience in architecture and higher-education, respectively, for a position on the Board.

The Consent Decree states that the respondents agreed to create a Free Education Committee "at the earliest of the next quarterly board meeting or sixty days following the entry of this Consent Decree." The Board complied with this requirement when it created the FEC by resolution on November 11, 2015. Current members of the committee include two Alumni trustees, one Trustee, and one Student trustee. The FEC Report was approved by the Board of Trustees on March 18, 2018 and is available on the committee's website.

The Consent Decree states that respondents were required to form a Governance Committee, "which shall assume the duties of the present Committee on Trustees." In addition to those duties formerly assumed by the Committee on Trustees, the Governance Committee is also responsible for "ensuring that the Board (a) observes best practices of non-profit governance; (b) has a robust conflict of interest policy; (c) is provided with annual training on non-profit governance and the duties and responsibilities of trustees; (d) develops a governance structure for the schools within Cooper Union; and (e) understands the fiduciary duties and responsibilities of trustees." Currently sitting on the Governance Committee are three Alumni Trustees and one Student Trustee, as stipulated in the Consent Decree.

The Board has taken steps to comply with the Consent Decree's requirements concerning the Governance Committee. By resolution, the Board renamed the Committee on Trustees the Governance Committee. The resolution also expanded the Governance Committee's responsibilities and codified them in section 2.02.4 of the amended bylaws to mirror the requirements of the Consent Decree, as reflected above. The Board requires trustees to execute conflict of interest forms on an annual basis, which are reviewed by the chair of the Audit Committee. The Board also requires trustees to attend an instructional session with outside legal counsel (who has extensive experience with non-profit institutions) to better understand their fiduciary and legal obligations as trustees. Under the Consent Decree, this training must be annual. In 2017 the Board took the additional step of adopting a formal Code of Conduct to guide the behavior of trustees and committee members, which is available to the public through the Cooper Union Board of Trustee website. Further, in June 2018, the Board brought in a facilitator to lead a session on board governance and the roles and responsibilities of a trustee.

The Consent Decree states that the Board shall make meeting minutes promptly available on Cooper Union's website. The Board complied with this requirement. Board meeting minutes are available on Cooper Union's website.[6] The latest minutes published on the Cooper Union website are from the September 26, 2018 meeting.

The Consent Decree states that the Board shall make "annual statements that outline fiscal year dollar-value and percentage-change performance of the non-real-estate investments in Cooper Union's endowment . . . along with disclosures of all fees paid directly by Cooper Union during the quarter and fiscal year to any investment advisers or fund managers, and the identity of the chief adviser or fund manager responsible for handling each investment." The Board generally reports on the performance of the non-real estate endowment at its quarterly meetings. In 2018, the Board reported updates on the non-real estate endowment, which were included in the meeting minutes and posted on the Cooper Union website following its March and June meetings. We have been advised that the December 2018 Board meeting minutes include a full 2018 fiscal year performance analysis which will be approved by the Board at its March 2019 meeting and posted on the Cooper Union website shortly thereafter.

The Consent Decree states the Board must disclose fees to investment advisors. As such, the Board has posted the fee information required on the website without disclosing the specific name of the investment advisor or fund manager, which are in most cases protected by Non-Disclosure Agreements.

The Consent Decree states that the Board shall "cause the information now provided on its website to be revised or deleted in response to notice from the Attorney General, prior to entry of this Consent Decree, identifying items that are alleged to be inaccurate and need to be clarified or revised." The respondents complied with this requirement in 2015 by updating the Cooper Union website.

[6] *See* https://cooper.edu/about/trustees/minutes-board-trustees-meetings

IV. Identification of Non-Budgeted Expenditures and Obligations

Kroll's identification of non-budgeted expenditures by Cooper Union exceeding $100,000 and non-budgeted contractual obligations exceeding $125,000 was based upon our review of Cooper Union's financial information for the fiscal year ended June 30, 2018. The financial information included the Board approved budget, approved budget resolutions and amendments, accounting system records, and applicable supporting documentation. Cooper Union's budgeted expenditures consist solely of unrestricted-fund cash operating expenditures. These operating expenditures exclude restricted and temporarily restricted funds, including research grants and non-credit program expenditures, as well as scholarship expenditures and other non-cash expenses, such as depreciation. Cooper Union intends, however, to begin budgeting for both unrestricted and restricted expenditures as of fiscal year 2019. The total budget for unrestricted operating expenditures for the fiscal year ended June 30, 2018 was $68,637,000, a .89% decrease from the $69,252,000 total of fiscal year 2017 and a 4.32% decrease from the $71,739,323 total of fiscal year 2016.

As in the two previous fiscal years, the most substantial components of the expenditure budget were debt servicing costs, faculty salaries and facilities maintenance. To identify the non-budgeted expenditures exceeding $100,000, Cooper Union and Kroll analyzed more than 1,250 departmental operating expenditure sub-accounts and any corresponding cumulative budgeted sub-account expense deficits. As detailed below, within 8 sub-account groupings, there were 14 individual instances of sub-account deficits in excess of $100,000, totaling $3,054,117. There were, however, savings and other budget surpluses in other sub-accounts that resulted in a total actual expenditure surplus of $2,630,255 for the fiscal year ended June 30, 2018.

The Cooper Union for the Advancement of Science and Art
Budgeted vs. Actual Expenditure Deficit Summary
Fiscal Year Ended June 30, 2018

	Department - Subaccount				
Ref#	**Description**	**Number**	**Budget**	**Actual**	**(Deficit)**
1	Budget Items: Faculty stipend	11-10-999999-5001020	$ 535,681	$ 1,081,189	$ (545,508)
2	Employee benefits : Prescrip plan union staff	11-00-502119-5101040	186,000	536,305	(350,305)
3	Employee benefits : FICA	11-00-502119-5100510	1,900,000	2,025,600	(125,600)
4	Employee benefits : STD administration	11-00-502119-5104545	3,600	106,697	(103,097)
5	Engineering school : Staff full time	11-15-202010-5003010	227,754	771,202	(543,448)
6	Engineering school : Faculty full time	11-10-202010-5001010	-	124,223	(124,223)
7	Engineering school : Allocated fringe benefit	11-00-202010-5105010	240,545	358,581	(118,036)
8	Engineering school : Allocated Payroll Taxes	11-00-202010-5105011	73,556	180,565	(107,009)
9	Buildings & grounds : Contracted svc other	11-45-502010-5200310	50,000	327,031	(277,031)
10	Buildings & grounds : Contracted svc cleaning	11-45-502010-5200320	400,000	591,542	(191,542)
11	Capital Projects : Architect & design	11-45-502199-5251010	-	250,469	(250,469)
12	Typography Conference : Administration	14-20-301015-5002010	-	109,243	(109,243)
13	Student housing : Contracted svc other	11-40-401020-5200310	50,000	155,132	(105,132)
14	29 3rd ave : 29 3rd Ave gross rev rent	41-50-601060-5204230	39,650	143,123	(103,473)
	Total		**$ 3,706,786**	**$ 6,760,903**	**$ (3,054,117)**

Cooper Union's explanation and justifications for the identified budget deficits are categorized and discussed below.

1. Budget Items: Faculty stipend – Budget Deficit ($545,508)

   Faculty stipend, administration and severance pay were originally budgeted on a cash basis, rather than an accrual basis, which requires accounting for multiple years of severance. The early retirement plan expenses were reclassified to the institutional general department where the budget was provided for the entire institution.

2. Employee benefits: Prescription plan union staff – Budget Deficit ($350,305)

   Because Cooper Union has a self-funded health plan, claims experience directly impacts year-to-year results and actual-to-budget results. This variance is simply the result of an unusually high prescription-claims-year among the institution's union employees. The varying nature of self-insurance also leads to positive budget variances; for example, union employees' medical claims (Account 11-00-5021195101010) were significantly down and offset this negative variance in prescription claims. Overall, benefits had a budget surplus of more than $1 million.

3. Employee benefits: FICA – Budget Deficit ($125,600)

   The budget for payroll taxes was understated, but as noted above, employee benefits, which include payroll taxes, pension and fringe benefits, had a budget surplus of more than $1 million.

4. Employee benefits: STD administration – Budget Deficit ($103,097)

   The Met Life group insurance costs were all budgeted in account 11-00-502119-5103010 (Employee benefits: TPA group life), but actual expenses were coded to this STD Administration account. The $110,576 positive budget variance in 11-00-502119-5103010 offsets this negative variance.

5. Engineering school: Staff full time – Budget Deficit ($543,448)

   Similar to faculty full-time below, full-time staff salaries were budgeted in the various departments of the Engineering School. Certain actual salary expenses, however, were charged directly to the Engineering School cost center, which created the budget variance. In total, there was a budget surplus for actual Engineering School full-time staff salaries.

6. Engineering school: Faculty full time – Budget Deficit ($124,223)

   Similar to staff full-time above, full-time faculty salaries were budgeted in the various departments of the Engineering School. Certain actual salary expenses, however, were charged directly to the Engineering School cost center, which created the budget variance. In total, there was a budget surplus for Engineering School full-time faculty salaries.

7. Engineering school: Allocated fringe benefit – Budget Deficit ($118,036)

   The budget for payroll taxes was understated, but as noted above, employee benefits, which include payroll taxes, pension and fringe benefits, had a budget surplus of more than $1 million.

8. Engineering school: Allocated Payroll Taxes – Budget Deficit ($107,009)

   The budget for payroll taxes was understated, but as noted above, employee benefits, which include payroll taxes, pension and fringe benefits, had a budget surplus of more than $1 million.

9. Buildings & grounds: Contracted svc other – Budget Deficit ($277,031)

   The costs of the cleaning services at 41 Cooper Square were budgeted in 11-45-502050-5200320, but coded to 11-45-502010-5200320, the “Building & Grounds” cost center. Therefore, as detailed below, there are offsetting variances in these two accounts. Furthermore, one of the cleaning service vendors also provided maintenance services to the institution, which were coded to the “Contracted svc other” expense account, while the budgeted amount was coded to the “Contracted svc cleaning” account.

Ref#	Department - Subaccount Description	Number	Budget	Actual	(Deficit) / Surplus
1	41 Cooper Sq : Contracted svc cleaning	11-45-502050-5200320	$ 335,000	$ -	$ 335,000
2	21 Stuyvesant : Contracted svc cleaning	11-45-502030-5200320	39,500	16,830	22,670
3	Foundation building : Contracted svc cleaning	11-45-502040-5200320	70,000	51,094	18,906
4	30 cooper square : Contracted svc cleaning	11-45-502020-5200320	111,600	106,800	4,800
5	Buildings & grounds : Contracted svc cleaning	11-45-502010-5200320	400,000	591,542	(191,542)
6	21 Stuyvesant : Contracted svc other	11-45-502030-5200310	5,000	4,396	604
7	30 cooper square : Contracted svc other	11-45-502020-5200310	5,000	8,983	(3,983)
8	Buildings & grounds : Contracted svc other	11-45-502010-5200310	50,000	327,031	(277,031)
	Total		**$ 1,016,100**	**$ 1,106,676**	**$ (90,576)**

10. Buildings & grounds: Contracted svc cleaning – Budget Deficit ($191,542)

See Note 9. Buildings & grounds: Contracted svc other, above.

11. Capital Projects: Architect & design – Budget Deficit ($250,469)

This budget variance results from Cooper Union budgeting for capital expenditures primarily at an institutional level, instead of at a departmental level. Cooper Union also budgets in general categories (*e.g.*, "construction costs"), instead of specific categories such as "Architect & design." The table below shows that there was an overall budget surplus for total capital expenditures.

Ref#	Department - Subaccount Description	Number	Budget	Actual	(Deficit) / Surplus
1	General : Capital expense contra	11-00-000000-5206006	$ -	$ (3,203)	$ 3,203
2	General : Equip furniture & fixtures	11-00-000000-5206006	-	3,203	(3,203)
3	Capital Projects : Construction costs	11-00-502199-5251040	-	750	(750)
4	Art school : Capital equipment >1000	11-10-102010-5250010	10,000	6,051	3,949
5	Architecture school : Capital equipment >1000	11-10-152010-5250010	-	21,078	(21,078)
6	Mechanical enginering : Capital equipment >1000	11-10-202050-5250010	-	500	(500)
7	Lubalin center : Capital equipment >1000	11-15-102040-5250010	1,000	-	1,000
8	Information technology : Capital equipment >1000	11-15-502105-5250010	182,907	182,907	-
9	Continuing education : Capital equipment >1000	11-20-301010-5250010	-	1,128	(1,128)
10	Dean of students : Capital equipment >1000	11-30-401010-5250010	-	2,500	(2,500)
11	Admissions : Capital equipment >1000	11-30-451010-5250010	1,500	-	1,500
12	Financial Services : Capital equipment >1000	11-30-451020-5250010	1,500	-	1,500
13	Registrar : Capital equipment >1000	11-30-451030-5250010	2,000	-	2,000
14	Buildings & grounds : Capital equipment >1000	11-45-502010-5250010	-	85,345	(85,345)
15	Foundation building : Construction costs	11-45-502040-5251040	20,000	-	20,000
16	Capital Projects : Architect & design	11-45-502199-5251010	-	250,469	(250,469)
17	Capital Projects : Construction costs	11-45-502199-5251040	1,392,093	503,167	888,926
18	Presidents office : Capital equipment >1000	11-50-501010-5250010	3,000	-	3,000
19	General expense : Equip furniture & fixtures	11-50-502115-5251050	355	-	355
20	Datatel : Capitalized software >1000	11-50-502121-5250020	-	8,450	(8,450)
21	CV starr research foundation: Capital equipment >1000	51-25-202011-5250010	500	-	500
	Total		**$ 1,614,855**	**$ 1,062,345**	**$ 552,510**

12. Typography Conference: Administration – Budget Deficit ($109,243)

During late 2017, there were personnel transitions and allocation adjustments within the Art School and the Typography program. Although staffing expenditures were originally budgeted for in a staff supplemental account, select expenditures were charged to Typography Conference: Administration. The positive variance in the staff supplemental account offsets this administration variance, as does the positive variance in the Art School staff pay account.

13. Student housing: Contracted svc other – Budget Deficit ($105,132)

This account variance was primarily due to $85,630 of summer refurbishing/cleaning work done in the residence hall and coded to this account rather than to a "cleaning" expense account. The budget variance is offset by the surplus in account 11-40401020-5200320, Contracted Service Cleaning, as indicated below.

	Department - Subaccount				
Ref#	**Description**	**Number**	**Budget**	**Actual**	**(Deficit) / Surplus**
1	Student housing : Contracted svc cleaning	11-40-401020-5200320	$ 309,000	$ 227,750	$ 81,250
2	Student housing : Contracted svc other	11-40-401020-5200310	50,000	155,132	(105,132)
	Total		**$ 359,000**	**$ 382,882**	**$ (23,882)**

14. 29 3rd Ave: 29 3rd Ave gross rev rent – Budget Deficit ($103,473)

The 29 3rd Ave property is leased by Cooper Union and then sublet to various retail stores. A percentage of the additional rent received over the base year amount is then paid to the landlord. The budget did not fully consider the rent increases and the new tenant of a previously vacant store when calculating the amount to be paid to the landlord.

It is important to acknowledge a variety of operational adjustments that have been made within the unrestricted operating expenditures budget throughout both this and the prior fiscal year. These adjustments have successfully reduced operating costs and provided greater transparency. For example, fringe benefit allocations are now being coded directly to the three primary components: benefits, pensions and payroll taxes, rather than solely to fringe benefits. A multi-year cost savings plan was developed and implemented to reduce non-payroll related expenditures, as well as staff salaries and related benefits.

Regarding the identification of non-restricted individual contractual obligations of Cooper Union exceeding $125,000, there were four such obligations entered into during the 2018 fiscal year. Kroll reviewed available supporting documentation and verified the terms and nature of the services to be performed and payment stipulations concerning these obligations with the four vendors listed below. In the fiscal year ended June 30, 2018, there were no payments to Smith Engineering PLLC, but as detailed below, the total amount paid to the three remaining vendors was $863,559.

The Cooper Union for the Advancement of Science and Art
Contractual Obligations greater than $125,000 Summary
Fiscal Year Ended June 30, 2018

Ref#	Name	Description	Amount
1	Altus Partners, Inc.	Insurance and Risk Management	$ 404,727
2	4 Star Contracting, Inc.	Exterior Façade Repairs	267,748
3	Century Elevator Maintenance Co.	Construction Services	191,084
4	Smith Engineering PLLC	Environmental Consulting	-
	Total		**$ 863,559**

V. The Free Education Committee Report

The FEC Report included a detailed description of the FEC's Plan to return Cooper Union to a full-tuition scholarship model. We have reviewed the plan and its attendant risks and have commented on them in our prior year's report. We review below Cooper Union's implementation of what is now the Board's Plan over the past year.

A. The Board's Plan

The Board's Plan, if met, would allow Cooper Union to reinstitute full-tuition scholarships by fiscal year 2029. Cooper Union has moved from plan design to plan implementation and the FEC's function has shifted to monitoring progress against that plan. The FEC has directed attention toward follow up on various matters in the plan, such as examining the feasibility of moving matters from the "bullpen," or initiatives considered part of the overall plan, but not yet implemented. In its first year after approval of the plan, the FEC has accomplished several critical milestones, including:

- Re-examining and correcting matters from the Board's Plan.
- Confirming the level of financial challenges Cooper Union faces.
- Designing changes in operations to meet the required level of financial sustainability to support full-tuition scholarships.
- Creating a path from the current level of scholarship support to full-tuition scholarships over the next 10 years.
- Establishing "guardrails" that require that the Plan's financial targets be met before scholarship levels are increased.

In the current year, the FEC has focused substantial efforts on monitoring the plan and discussing the feasibility of moving matters from the "bullpen" to active consideration and engagement. Much of the monitoring activity has focused on the quarterly review process and at the end of each fiscal year, an annual review. A key to these reviews is and will be assessment of the financial position of the institution against the established guardrails. The guardrails require reassessment of the overall plan if any of the initiatives fall short of the cumulative goals by more than 5%.

The status of Cooper Union's performance against the guardrails is forecast for 2019 as follows:

- Cumulative cash surplus of $6.9 million over planned levels;
- Cumulative cash and investment balance of $29.7 million over planned levels;
- Cumulative operating expenses are forecast at $2.5 million under planned levels; and
- Current use contributions are forecast at $800,000 over plan.

B. Summary of Risks to Achieving the Plan

The risks to achieving the Board's Plan are unchanged from our prior year's report, and have been repeated because of their significance to achieving the plan. These risks can be categorized as external and beyond Cooper Union's direct control, and internal and capable of being actively managed.

1. External Risks

The FEC Report identifies several external risks, including: (1) the economy and potential economic downturns, (2) the impact of inflation on expense control, (3) uncertainty in investment markets, and (4) Federal and State tax and student aid policy. Each of these forces beyond the control of Cooper Union could have a substantial impact on Cooper Union's financial condition and might adversely affect the institution's timetable for a return to full-tuition scholarships. We believe, however, that the plan's guardrails, if faithfully invoked and enforced, should provide adequate coverage for these issues, should they occur. We would note that the volatility of the investment markets has recently caused declines in values through December 31, 2018 that eroded a portion of the surplus that is noted as of September 30, 2018. However, we understand that after the decline there remained a surplus on the guardrail, and the investment performance in January 2019 restored those losses that occurred at the conclusion of 2018.

While not an evident risk, there is recent media coverage indicating that the current lessee of the land associated with the Chrysler Building intends to sell its rights to an unrelated third party. This will require Cooper Union to establish a working relationship with the new lessee. Under the current agreement with the lessee, Cooper Union has no input or involvement with this transaction.

2. Internally Managed Risks

The plan also acknowledges various internal risks including the risk that a future Board or administration may decide that the Board's Plan is no longer a priority. We believe the FEC appropriately observes that this risk is mitigated in the early years by the presence of the Financial Monitor, and even after the Monitor has left the scene, by the Consent Decree itself, which has imposed an ongoing requirement that "At any time tuition is being charged . . . Cooper Union is required to make ongoing, good faith efforts to determine whether it is practical to return to a free-tuition model . . . ." Furthermore, the Consent Decree requires that "[i]f it is practical to return to such a free-tuition model, Cooper Union must expeditiously develop and implement a plan to do so [and] maintain that model as long as it is practical."

We believe the most significant internal risk to the plan is the long-term expectations for philanthropy. The level of philanthropy in the first years of the plan have exceeded the philanthropy targeted, but there are substantial increases in the levels of philanthropy required by the plan. While the targets established for the early years of the plan would appear achievable within the context of existing resource allocations, the longer-term annual use funds that need to be raised to meet the plan's targets will require a substantial change in the methods of raising funds and the sources of those funds.

There are other risks that must be managed, including certain contractual or legal rights that, if altered, would place substantial pressure on the financial health of Cooper Union. Many of these issues are addressed in the FEC Report, the most notable being the continuation of the tax equivalency payments in the amounts forecasted, and the continuation of the contractual payments pursuant to the Chrysler Building lease. Revenue from real estate sources (including modest amounts from other properties) totaled $45.2 million in the 2018 audited financial statements ($33.1 million in 2017). This represents 61% of unrestricted revenues in 2018 (55% in 2017). As noted above, this increase of $12.1 million is the single largest reason for the improvement in operating results for 2018 and the Board's Plan is dependent on the continuation of these payments as well as the substantial increases planned in future years. We would note that this revenue stream comprises an increased component of unrestricted revenues and the reliance on the lease payments and tax equivalency payments will be significant throughout the term of the plan.

C. Governance

The Board made important improvements in its overall governance in 2017 that have continued into 2018. Notably these include the Board's:

- Adopting a Code of Conduct for members of the Board and its committees to provide guidance to trustees and committee members on their fiduciary duties and obligations, and on the standards of conduct each is expected to observe;

- Updating and approving committee charters to ensure higher levels of committee coordination to ensure they are working effectively together;

- Focusing the FEC on its responsibility to monitor progress against the plan and examine the initiatives aimed at returning Cooper Union to a sustainable, full-tuition scholarship model;

- Assigning each initiative to the appropriate committee to evaluate and provide feedback to the Board and the FEC; and

- Approving a strategic plan that both complies with the initiatives of the Board's Plan and defines the strategic imperatives for Cooper Union.

* * *

The Cooper Union Board and administration agreed in the Consent Decree that Cooper Union "should expeditiously attempt to balance its budget," and that all parties should "work together to try to expeditiously return Cooper Union to a sustainable, full-tuition scholarship model within the foreseeable future that maintains Cooper Union's strong reputation for academic quality within its Art, Architecture and Engineering programs at their historical levels of enrollment." Under the strong leadership of President Laura Sparks and Board Chair Rachel Warren, Cooper Union has made significant progress this past year in implementing the thoughtful and responsible plan it adopted last year to improve Cooper Union's financial condition and put it on the path to a return to a full-tuition scholarship model within the foreseeable future. For the Board to continue to make progress in returning to a full-tuition scholarship model, it will be essential that the Board and the Cooper Union community continue to thoughtfully address issues, to faithfully pursue the current plan and to agree on adjustments to the plan when conditions require it.

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