WORKING GROUP'S CHARGE Co-Chairs: Trustees Michael Borkowsky & Jeff Gural

August 18, 2013

Charge of the Working Group

As stated in the Agreement that established the Working Group:

"The charge of the Working Group is to explore ways in which Cooper Union may revert to providing full-tuition scholarships for all enrolled students while establishing a sustainable financial model and continuing to invest in academic excellence."

Criteria for Models Proposed by the Working Group

- 1. Provide full-tuition scholarships for all enrolled students.
- 2. Establish a sustainable financial model.
- 3. Continue to invest in academic excellence.
- 4. The Board of Trustees would consider reverting to a full-tuition scholarship for all enrolled students if they are persuaded of an alternative model that satisfies the above three criteria.

Sustainable Financial Model

"The definition of a sustainable financial model will be provided by the Trustee Finance Committee." The Trustee Finance Committee has established the following minimum criteria for a sustainable financial model.

Time Horizon

A sustainable financial model for Cooper Union satisfies the following minimum criteria at least through 2038, which is the end of the second step up of the Chrysler rent per our agreement with Tishman-Speyer.¹

Endowment Spending Policy

A sustainable financial model entails adhering to the Endowment Spending Policy, according to which 5% of the prior 20-quarter running average market value of the endowment portfolio (exclusive of the Chrysler Building) shall be used toward the operating budget in any given fiscal year. Earnings and appreciation in excess of 5% shall be reinvested. Additionally, income generated from the Chrysler Building will be counted as operating revenue while appreciation of that property will be non-operating to maintain purchasing power of the endowment.

Deficit

The Annual Deficit is here defined as the excess of all operating expenses over all operating revenues in any given fiscal year. For this calculation, revenues from the financial portfolio of the endowment include only those covered by the Endowment Spending Policy. The Structural Deficit is an estimate of the Annual Deficit, in today's dollars, that if closed consistently (over time), would balance operating expenses with operating revenues to enable a sustainable financial model.ⁱⁱⁱ

Cost Inflation and Compound Annual Growth Rate of Tax Equivalency Payments

The assumptions of cost inflation are as follows: 3% per year for expenses other than debt service and healthcare expenses, and 7.5% per year for healthcare expenses. The compound annual growth rate of the tax equivalency revenues is assumed to be 3% per year.

Competitive Compensation

The ability to continue to recruit and retain the finest faculty and staff requires planning for competitive levels of compensation over the period of the financially sustainable model.

Fund Raising

Assumptions of fund-raising yield will be based a feasibility study to be conducted as soon as we can demonstrate a path to a financially sustainable model that can support a long-term vision of excellence and distinction. At that point we plan to begin the silent phase of our next capital campaign. The campaign itself will be announced (focusing on raising funds for scholarships and academic investments) when appropriate levels of funding are pledged during a silent phase. Based on our preliminary prospect analysis, the financial model assumes a capital campaign of \$130 million over ten years, including the Annual Fund.

The assumption of annual growth in the Annual Fund is 5% per year.

Financial Risks to Manage

Cooper Union must develop the financial strength to manage and mitigate numerous risks, among them the following:

Post-retirement benefits (FAS 106): the unfunded liability of \$29 million must be reduced over time^v
Uncertainty about inflation
Uncertainty about the cost of health care
Uncertainty about Medicare reimbursement for retired employees

Uncertainty about the performance of financial markets

Variability in real estate tax revenues (which fluctuate with the real estate market and tax rates)

Growing deferred maintenance (which must be funded over time lest Cooper Union consume its physical assets)

Lack of adequate reserves (reserves need to grow in proportion to annual operations and debt liabilities)

Investments in Academic Excellence

The ability to support and invigorate academic excellence in the advancement of science and art requires continuous investments in faculty and their work, in opportunities for students, in the supporting infrastructure, and in the ability to communicate to the world the extraordinary work that goes on at Cooper Union.

Notes

ⁱ The rent income from the Chrysler building increases each decade and then remains flat for that decade. In addition, income from tax equivalency payments is forecasted to grow at 3.3% per year over the long term. The blended annual compound growth rate of rent income and tax equivalency payments for the decade following the 2018-19 step-up is 1.6%, which is much lower than expected inflation. The next step-up, in 2028-29, is much smaller, and does not compensate for the resulting deficit of low growth. A budget that is structurally in balance therefore must be defined not annually, but rather over a window of time that encompasses multiple decades. There will be a third step-up beginning in 2038-39; however, defining a sustainable solution only through 2038 is reasonable given the variability of long-term forecasts.

ii This policy is based on an historical national average of 8% applicable for long-term growth of endowment portfolios and 3% inflation, but may be subject to revision as markets change. Withdrawing from the endowment in excess of the policy in order to cover operating expenses depletes the purchasing power of the endowment. Cooper Union has not adhered consistently to its endowment spending policy for the unrestricted pool, because of the persistent structural deficit. In the absence of tuition revenue, some of the excess appreciation during bull markets has been used to cover the deficit. This practice can be traced back at least to President Jack White's Annual Report in 1969-1970, which refers to the adoption of a "total return concept" to supplement the real estate revenues. Consequently, the purchasing power of the unrestricted portfolio has not been maintained, and it has had to be replenished periodically (by the sale of assets and the recent loan) in order to continue operating the institution. Today, even strict adherence to the endowment spending policy entails withdrawing more than 5% of current value; this is because the trailing average of a rapidly declining endowment is larger than the current market value. Furthermore, in the present economy, even the historical average return of 8% may be optimistic. All the more reason why Cooper Union must act now to ramp up to a long-term sustainable model.

iii Because Cooper's principal revenue stream (the Chrysler rent) follows a step function with 10-year intervals, the Annual Deficit can vary considerably from year to year. The Structural Deficit is an estimated composite of the Annual Deficits over the window of time of our forecasting model. The Structural Deficit is quantified as the amount of sustainable, recurring net increases in revenues and/or decreases in expenses needed in the near term for a long-term balance of composite revenues and expenses.

Any remedy to solving the Structural Deficit must meet both cash flow and accrual-based concepts. A solution that balances cash flows without generating net accrued revenue, is not sustainable (e.g., excluding depreciation from the deficit calculation). Conversely, a solution that generates accrued revenues without generating net cash flows will not meet Cooper Union's needs for sustainability.

The Deficit can be defined in several ways. Since at least 1969, Cooper Union has used the Total Return Concept (see endnote ii and the Annual Report, 1969-1970) in order to more flexibly leverage its assets to operate the institution. This is a risky practice, which has prevented Cooper Union's endowment from growing to the levels that it might have.

In the absence of tuition, Cooper Union has relied on revenues from its real estate holdings – most notably the Chrysler Building. These revenues were subject to price fluctuation in the commercial real estate rental market. In a report in 1969-1970, President John White states that these revenues were not keeping up with inflation (which he cites as having been in the 3-4% range), and that the percentage of the budget that was funded by the Chrysler revenues was dropping.

iv It is imperative that a conservative assumption be adopted, even while striving to exceed it, based on the historical record. It is important also to distinguish between the various kinds of gifts. Annual fund gifts are unrestricted cash gifts that go directly to the operating budget. Of the remaining gifts, some are restricted by the donor for specific programs (these gifts may or may not be budget-relieving, depending upon their designated restriction), some are endowment gifts (of which roughly 5% can be spent per year), and some are part of an estate plan. In order to close the structural deficit with fund-raising alone, the required amount would need to be received annually in unrestricted cash gifts. On the basis of past performance, the annual fund and other sources of unrestricted annual giving would need to increase by 300%-500% and be sustained at that level, increasing with inflation. Alternatively, new endowment (over and beyond the fund-raising goals currently included in the model) would need to be raised, such that 5% of that corpus per year would be available for budget-relief and sufficient to eliminate the deficit. These are aspirations but not reasonable assumptions for a sustainable financial model.

^v The post-retirement benefits liability is unfunded.