SMMUSD Financial Oversight Committee Minutes
Date: Wednesday, February 13, 2019
Time: 7:00 pm to 9:00 pm
Location: Testing Room, SMMUSD Admin Offices
1651 16th Street, Santa Monica, CA 90404

I. Call to Order

7:05 pm	Committee Members:	Seth Jacobson Joan Krenik arrived @ 7:11pm Gordon Lee Debbie Mulvaney	Michael Kremer Shawn Landres arrived @ 7:14pm Shelly Slaugh Nahass arrived @ 7:15pm
	Staff:	Melody Canady Kim Nguyen	Gerardo Cruz Pam Kazee
	Board Liaison:	Jon Kean Craig Foster	Laurie Lieberman
	Absent:	Alex Farivar Marc Levis-Fitzgerald	Tom Larmore Payal Maniar
	Public:	None	

II. Approval of FOC Meeting Minutes

7:51 pm A motion was made by Mr. Landres and seconded by Ms. Krenik to approve the December 6, 2018 and January 24, 2019 meeting minutes.

AYES: Seven (7) (Ms. Krenik, Mr. Jacobson, Mr. Kremer, Mr. Landres, Mr. Lee, Ms. Mulvaney, Ms. Slaugh Nahass)
STUDENT ADVISORY VOTE: None (0)
NOES: None (0)
ABSENT: Four (4) (Mr. Farivar, Mr. Larmore, Mr. Levis-Fitzgerald, Ms. Maniar)
ABSTAIN: None (0)

III. Superintendent Update

7:05 pm A. Financial implications of de Baca, et. al. v. Santa Monica-Malibu USD

Ms. Lieberman informed the committee that there was an article published in Santa Monica Daily Press regarding this case. The lawsuit alleges that the District has been charging

unlawful pupil fees. Parents received two (2) letters from Superintendent Drati addressing this issue. There is a hearing scheduled in March. In the meantime, the court has allowed for discovery by the Plaintiffs. The Plaintiff's attorney asked for information contained in the student directory. Parents were allowed to opt out by a certain date if they do not want their information to be provided to and be contacted by Plaintiff's attorney. If the District wins on the motion for summary judgement, the lawsuit goes away. If the District does not win, then the lawsuit will move forward. No financial implications can be determined now.
The SMDP news article may be found at: https://www.smdp.com/smmusd-facing-materials-lawsuit/172232.

IV. Staff Report: Assistant Superintendent, Business and Fiscal Services Melody Canady

7:11 pm A. Educational Revenue Augmentation Fund (ERAF) Update

Ms. Canady provided the committee with multi-year projections/unrestricted fund handout with two (2) scenarios (Scenario A and B). The district has not yet received a response from LACOE regarding the ERAF calculation. Mr. Landres informed the committee that the City of Santa Monica's projection for the next 10 years is at an ~~accelerated~~ **accelerating** loss. Board Liaisons requested that in every budget report, there be a line item added to show how far into basic-aid fund the district is positioned. Furthermore, the committee would like to know the following:

- How far into basic aid is SMMUSD?
- What is the formula used to determine the amount of ERAF that SMMUSD receives?
- Why is there a $0.2M discrepancy between the $8.6M that SMMUSD received and the $8.8M that LACOE unilaterally took back? What calculations were used to determine those amounts?
- When the district fluctuates between state aid and basic aid…
  - How is the monitoring done?
  - Is ERAF pro-rated for part of the school year?
- What happens if taking back the ERAF moves the District from Basic Aid back into Minimum State Aid?

Ms. Canady's and Mr. Cruz' multi-year projections/ unrestricted fund handout may be found at the end of these minutes.

7:50 pm B. Impact of Malibu fires on property tax revenue and basic aid status of the District

There was no update.

V. Discussion/Action Items

7:52 pm A. Change in Board's definition of District Budget sub-committee's tasks

The Board Liaisons provided the committee with the summation of all conversations. The Board Liaisons determined that this task will be revisited and revised at a future date.

7:59 pm B. Establishment of the "Green Fund" as part of the overall Sustainability plan

Mr. Jacobson provided the committee with an overview of the Green Fund concept. The sustainability plan will be presented at the March 7, 2019 Board meeting. The sub-committee's interest is a "Green Fund" that would fund the sustainability program. Any savings from the sustainability fund would accrue into the Green Fund that can only be used for sustainability programs. The committee asked that the program also address some payback to the district of initial capital costs.

A motion was made by Mr. Jacobson and seconded by Ms. Slaugh Nahass to support the idea in concept and to recommend that the Board study the establishment of a Green Fund.

AYES: Seven (7) (Ms. Krenik, Mr. Jacobson, Mr. Kremer, Mr. Landres, Mr. Lee, Ms. Mulvaney, Ms. Slaugh Nahass)
STUDENT ADVISORY VOTE: None (0)
NOES: None (0)
ABSENT: Four (4) (Mr. Farivar, Mr. Larmore, Mr. Levis-Fitzgerald, Ms. Maniar)
ABSTAIN: None (0)

VI. Ad Hoc Subcommittee Update

8:10 pm A. Financial Benefits of Sustainability: *S. Jacobson*

The subcommittee's report was included with the discussion of the establishment of the "Green Fund" as part of the overall Sustainability plan. The subcommittee's revolving green fund summary may be found at the end of these minutes.

8:10 pm B. District Budget: *J. Krenik, A. Farivar, S. Jacobson, M. Levis-Fitzgerald, S. Slaugh-Nahass*

~~The subcommittee's report was included with the discussion of Board's definition of District Budget sub-committee's tasks.~~ **No report.**

8:10 pm C. Special Ed. Local Plan Area (SELPA): *P. Maniar, M. Kremer, S. Landres, D. Mulvaney*

Mr. Kremer reported that the subcommittee is waiting for the FCMAT report. Ms. Kazee informed the committee that the FCMAT draft report is currently being reviewed by Executive Cabinet and will be publicized at the March 7, 2019 Board meeting. The report is a deficit model, a snapshot in time, looking at all the areas that the District need to improve upon. Some recommendations may be helpful related to organizational structure and industry standards.

8:15 pm D. Bond Oversight: *G. Lee, T. Larmore, M. Kremer*

Mr. Lee reported that the subcommittee met a few weeks ago. The committee may be looking at refunding opportunities. The current issuance is still in the account right now. A potential bond issuance may occur in the later part of 2019. The intention is to keep the bond under $30 per $100K in assessed valuation as the Board promised. Ms. Canady informed the committee that the contractor is being hired and the construction manager has been hired for the Discovery building at SAMOHI. As it gets going, the dollars will move fast. The last issuance of $120M was not that long ago.

VII. Receive and File (Limited Discussion)

A. US News and World Report - January 24, 2019 *"After Strike, Los Angeles Teachers Aim at California Tax Reform"* https://www.usnews.com/news/us/articles/2019-01-24/after-strike-los-angeles-teachers-aim-at-california-tax-reform

VIII. Public / Committee Comments

8:20 pm Ms. Mulvaney announced that Mr. Larmore will be resigning at the end of his term and asked the Committee to begin the process of looking for a replacement.

IX. Next Meeting: Tuesday, March 12, 2019 – Malibu City Hall, Zuma Room

X. Adjournment: The meeting adjourned at 8:21 p.m.

MULTI-YEAR PROJECTIONS / UNRESTRICTED GENERAL FUND

SCENARIO A

		A	B	C	D	E	F
		2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
	Description	AUDITED ACTUALS	2ND INTERIM BUDGET	PROJECTED BUDGET	PROJECTED BUDGET	PROJECTED BUDGET	PROJECTED BUDGET
	Revenue:						
1	Property Tax	92,103,935	83,559,341	86,801,579	90,391,658	94,161,241	98,119,303
2	Education Protection Account (EPA)	2,096,214	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
3	LCFF Transfer to Fund Fund 14	(250,000)					
4	LCFF Transfer to Charter School	(36,981)	(38,000)	(38,000)	(38,000)	(38,000)	-
5	Pr. Year LCFF Adjustment	(151,856)					
7	**Minimum State Aid**	8,585,843	8,585,843	8,585,843	8,585,843	8,585,843	8,585,843
8	***Subtotal LCFF Funding***	***102,347,155***	***94,107,184***	***97,349,422***	***100,939,501***	***104,709,084***	***108,705,146***
10	Other Federal	287,547	301,398	13,000	13,000	13,000	13,000
11	Lottery	1,703,938	1,624,179	1,600,000	1,600,000	1,600,000	1,600,000
12	Mandated Reimbursement Block Grant	411,607	416,289	380,000	380,000	380,000	380,000
13	One-time Mandated	1,542,792	1,895,510				
14	Other State Revenue	5,360	5,460	5,000	5,000	5,000	5,000
15	Meas. "R"	11,920,265	12,205,124	12,449,227	12,698,211	12,952,175	13,211,219
16	Meas. Y & GSH/ City of SM	15,750,038	15,248,204	15,400,000	16,400,000	16,400,000	16,400,000
17	Joint Use Agreement	9,034,456	9,366,941	9,554,280	9,745,365	9,940,273	10,139,078
18	SMMEF Donation	2,010,102	2,046,015	2,000,000	2,000,000	2,000,000	2,000,000
19	Lease & Rental	3,184,002	2,450,000	2,450,000	2,450,000	2,450,000	2,450,000
20	All Other Local Income	1,128,985	1,252,089	1,170,000	1,180,000	1,140,000	1,140,000
22	Local General Fund Contribution	(28,450,054)	(28,706,303)	(29,280,429)	(29,866,038)	(30,463,358)	(31,072,626)
23	**TOTAL REVENUE**	**121,207,861**	**112,212,090**	**113,090,499**	**117,545,040**	**121,126,173**	**124,970,817**
24	**Expenditure:**						
25	Certificated Salary	52,420,405	53,748,752	54,554,983	55,373,308	56,203,908	57,046,966
26	Classified	19,278,936	19,170,597	19,458,156	19,750,028	20,046,279	20,346,973
27	Benefits	28,234,818	29,588,474	31,667,397	33,865,930	35,300,142	36,410,768
28	***STRS***	***7,386,695***	***8,545,594***	***9,328,902***	***10,022,569***	***10,172,907***	***10,040,266***
29	***PERS***	***2,663,914***	***3,210,763***	***3,745,890***	***4,298,001***	***4,567,545***	***4,730,671***
30	***SOCIAL SECURITY & MEDICARE***	***2,247,457***	***2,360,783***	***2,279,596***	***2,313,790***	***2,348,497***	***2,383,724***
31	***HEALTH AND WELFARE***	***11,169,874***	***11,478,240***	***12,281,717***	***13,141,437***	***14,061,338***	***15,045,631***
32	***SUI***	***35,456***	***39,592***	***42,007***	***42,562***	***43,125***	***43,697***
33	***WORKERS COMP***	***2,735,943***	***2,922,103***	***2,960,526***	***3,004,933***	***3,050,007***	***3,095,758***
34	***OPEB***	***1,895,112***	***907,803***	***925,164***	***939,042***	***953,127***	***967,424***
35	***CASH IN -LIEU***	***100,367***	***103,596***	***103,596***	***103,596***	***103,596***	***103,596***
36	Supplies/Books	1,852,705	4,107,897	2,000,000	2,000,000	2,000,000	2,000,000
37	Other Operational Costs	9,543,463	11,416,647	9,000,000	9,000,000	9,000,000	9,000,000
38	Capital Outlay	1,243,294	302,222	200,000	500,000	500,000	500,000
39	Transfer to County Specialized Schools	75,124	120,000	120,000	120,000	125,000	125,000
40	Debt Services / SERP Saving	53,388	28,799	(750,000)	(750,000)	(750,000)	(750,000)
41	Indirect	(1,062,380)	(1,073,849)	(1,000,000)	(1,000,000)	(1,000,000)	(1,000,000)
42	GSH Technology Plan/Replacement	-	2,000,000	1,000,000	1,000,000	1,000,000	1,000,000
43	Interfund Transfer Out to Fund 12 CDS	-	-	1,000,000	1,000,000	1,000,000	1,000,000
44	Interfund Transfer Out to Fund 13 FNS	900,000	900,000	900,000	900,000	900,000	900,000
45	Interfund Transfer Out to Fund 14 DefM	700,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000
46	**TOTAL EXPENDITURE**	**113,239,754**	**121,789,539**	**119,650,535**	**123,259,266**	**125,825,329**	**128,079,707**
47	Increase (Decrease) Fund Balance	**7,968,108**	**(9,577,449)**	**(6,560,036)**	**(5,714,227)**	**(4,699,155)**	**(3,108,890)**
48	Beginning Fund Balance	26,917,922	34,886,030	16,447,449	9,887,413	4,173,186	(525,969)
49	Ending Fund Balance	34,886,030	25,308,580	9,887,413	4,173,186	(525,969)	(3,634,859)
50	Reserve - 17-18 ERAF REPAYMENT		(8,861,132)				
51	Ending Fund Balance		16,447,449				
52	Reserve - Revolving cash, Store	162,763	141,783	141,783	141,783	141,783	141,783
53	Reserve - Deficiting Spending in 18-19		-	-	-	-	-
54	Reserve - Deficiting Spending in 19-20		6,560,036		-	-	-
55	Reserve - Deficiting Spending in 20-21		5,714,227	5,714,227		-	-
56	Reserve - Deficiting Spending in 21-22						
57	3% Contingency Reserve	4,857,751	5,017,611	5,105,288	5,050,000	5,100,000	5,100,000
58	Reserve Up to 2-months of Expenses						
59	Unappropriated Balance	**29,865,516**	**(986,208)**	**(1,073,884)**	**(1,018,596)**	**(5,767,752)**	**(8,876,642)**

As of: 2/8/2019
Printed: 2/13/2019
10:22 AM

MULTI-YEAR PROJECTIONS / UNRESTRICTED GENERAL FUND

SCENARIO B

		A	B	C	D	E	F
		2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
	Description	UNAUDITED ACTUALS	2ND INTERIM BUDGET	PROJECTED BUDGET	PROJECTED BUDGET	PROJECTED BUDGET	PROJECTED BUDGET
	Revenue:						
1	Property Tax	92,103,935	83,559,341	86,801,579	90,391,658	94,161,241	98,119,303
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4	LCFF Transfer to Charter School	(36,981)	(38,000)	(38,000)	(38,000)	(38,000)	-
5	Pr. Year LCFF Adjustment	(151,856)	-	-	-	-	-
7	**Minimum State Aid**	8,585,843	8,585,843	8,585,843	8,585,843	8,585,843	8,585,843
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11	Lottery	1,703,938	1,624,179	1,600,000	1,600,000	1,600,000	1,600,000
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29	***PERS***	***2,663,914***	***3,210,763***	***3,745,890***	***4,298,001***	***4,567,545***	***4,730,671***
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35	***CASH IN -LIEU***	***100,367***	***103,596***	***103,596***	***103,596***	***103,596***	***103,596***
36	Supplies/Books	1,852,705	4,107,897	2,000,000	2,000,000	2,000,000	2,000,000
37	Other Operational Costs	9,543,463	11,416,647	9,000,000	9,000,000	9,000,000	9,000,000
38	Capital Outlay	1,243,294	302,222	200,000	500,000	500,000	500,000
39	Transfer to County Specialized Schools	75,124	120,000	120,000	120,000	125,000	125,000
40	Debt Services / SERP Saving	53,388	28,799	(750,000)	(750,000)	(750,000)	(750,000)
41	Malibu Realignment (Cabrillo)	-	-	(600,000)	(600,000)	(600,000)	(600,000)
42	Indirect	(1,062,380)	(1,073,849)	(1,000,000)	(1,000,000)	(1,000,000)	(1,000,000)
43	GSH Technology Plan/Replacement	-	2,000,000	1,000,000	1,000,000	1,000,000	1,000,000
44	Interfund Transfer Out to Fund 12 CDS	-	-	1,000,000	1,000,000	1,000,000	1,000,000
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46	Interfund Transfer Out to Fund 14 DefM	700,000	1,500,000	500,000	500,000	500,000	500,000
47	**TOTAL EXPENDITURE**	**113,239,754**	**121,789,539**	**117,900,535**	**121,509,266**	**124,075,329**	**126,329,707**
48	Increase (Decrease) Fund Balance	**7,968,108**	**(9,577,449)**	**(4,810,036)**	**(3,964,227)**	**(2,949,155)**	**(1,358,890)**
49	Beginning Fund Balance	26,917,922	34,886,030	16,447,449	11,637,413	7,673,186	4,724,031
50	Ending Fund Balance	34,886,030	25,308,580	11,637,413	7,673,186	4,724,031	3,365,141
51	Reserve - 17-18 ERAF REPAYMENT	-	(8,861,132)	-	-	-	-
52	Ending Fund Balance	-	16,447,449	-	-	-	-
53	Reserve - Revolving cash, Store	162,763	141,783	141,783	141,783	141,783	141,783
54	Reserve - Deficiting Spending in 18-19	-	-	-	-	-	-
55	Reserve - Deficiting Spending in 19-20	-	4,810,036	-	-	-	-
56	Reserve - Deficiting Spending in 20-21	-	3,964,227	3,964,227	-	-	-
57	Reserve - Deficiting Spending in 21-22	-	-	-	-	-	-
58	3% Contingency Reserve	4,857,751	4,994,161	4,938,756	5,096,294	5,200,000	5,300,000
59	Reserve Up to 2-months of Expenses	-	2,537,242	2,592,647	2,435,109	-	-
60	Unappropriated Balance	**29,865,516**	**0**	**0**	**0**	**(617,752)**	**(2,076,642)**

As of: 2/8/2019
Printed: 2/13/2019
10:22 AM

Revolving Green Fund Summary

Sustainability Savings Capture Plan at SMMUSD

Prepared for FOC Committee 2/13/19

Summary: The basic principal of a Revolving Green Fund is to establish an accounting procedure that allows an organization to "capture" the savings resulting from sustainability projects and allow those funds to be used under a set of pre-determined guidelines for future sustainability projects and program support.

Example: In the example of the current LED lighting project, the project is estimated to reduce Districtwide electricity usage by 20% or more per year. Assuming we actually see a 20% savings, tracking will show us this; we should have 20% of the electricity budget remaining at the end of the year. These dollars would be **deposited into the Green Revolving Fund and could be used to pay for other efficiency projects, supporting program staff, or covering the marginal cost increases associated with upgrading from conventional equipment to high efficiency equipment.**

Key Benefits of Green Fund Model:

- Allows the District to create a self-sustaining fund for sustainability
- Reduces need to find additional funds for these initiatives
- Sustainability department can grow based on success of sustainability measures (more money saved, more money for staff salaries, more projects, etc.)
- Provides a formal structure for tracking and monitoring the savings resulting from efficiency projects.
- Having savings numbers on hand and being able to prove that savings occurred help justify future projects.

Potential arguments against Green Fund:

- The one potential argument against green funds is that the District won't be able to apply the savings to the general fund.

Example: Using the example of LED lighting again
→**Without** Green Fund (currently) if the budget was $100 and we had a 15% reduction in energy use, the annual budget could shrink to $85.
→**With** Green Fund: With a Green Fund, the energy budget would remain $100, but the $15 of savings would be put into the green fund year after year.

How to implement:

There are many different ways to establish these funds, so the details of how Fiscal wants to approach this type of a fund will require discussion. Information needed:

- All current sustainability measures explored for cost and savings.
- Budget information regarding water, waste, energy, etc.
- Current detailed project list as stated in Districtwide Plan for Sustainability.
- Detailed future project list and projected costs and savings.

Attached: Examples of Green Fund Guidelines and packets are attached from: Harvard, Illinois University and Miami University of Ohio.

Example provided by Cumming from Occidental College:

→ Occidental College decided on a minimum ROI of 12 years and established different thresholds for when you have to track and monitor savings vs. just using a calculated estimate to determine how much money would be deposited into the green fund for each project. Some projects cannot be tracked but still save money and resources. Or sometimes the tracking is very delayed when you have to wait for "end of year" totals.

→ An Administrative fee was added into every project to support the sustainability department. The fees ranged from 1-5% "fee" that would be kept above and beyond the estimated savings to support staff. The fee was based on type of environmental impact and size of project budget.

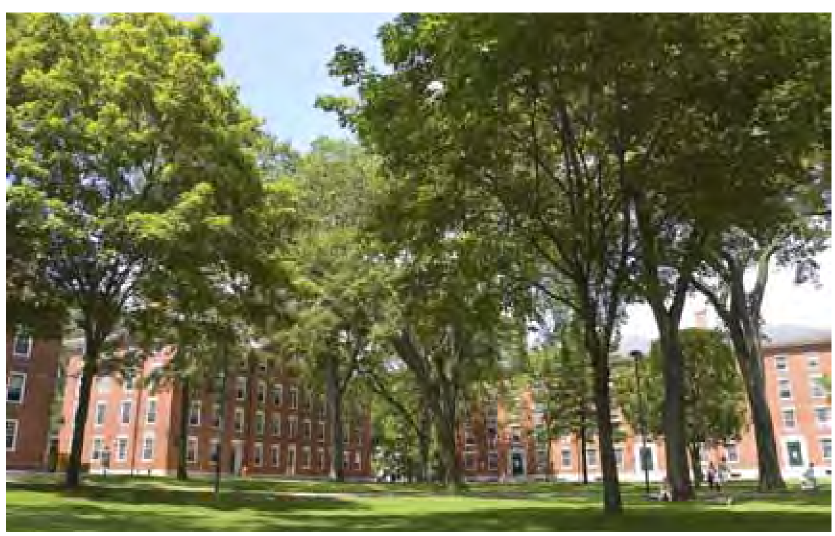
This is a good website for guidelines: Billion Dollar Green Challenge

Please see attached documents.

Harvard University

Green Loan Fund

Robert Foley
Senior Research Fellow
Sustainable Endowments Institute



Summary

Location: Cambridge, Massachusetts

Full-time student enrollment: 19,207

Combined gross square footage of all buildings on campus: 26,500,000

Endowment: $26 billion as of June 30, 2009

Type: Private

This case study was supported by generous contributions from: David Rockefeller Fund, HOK, John Merck Fund, Kresge Foundation, Merck Family Fund, Roy A. Hunt Foundation, U.S. EPA Green Power Partnership and Wallace Global Fund.

The Green Loan Fund at Harvard University has been an active source of capital for energy efficiency and waste reduction projects for almost a decade. This case study examines the revolving fund's history from its inception as a pilot project in the 1990s to its regeneration in the early 2000s to its current operations today. The green revolving fund has been a successful self-replenishing tool for encouraging Harvard's schools and units to invest in projects that generate cost savings and reduce their environmental impacts. Originally funded by the President's Office at $1.5 million, the now $12 million revolving loan fund provides capital to Harvard for high performance campus design, operations, and maintenance projects. The fund's low-interest loans have successfully financed projects which save the university electricity, natural gas, water, waste disposal fees, along with other operating costs.

Challenges faced by the fund's administrators have included promoting the fund across a decentralized campus, soliciting project proposals, and ensuring that projects are successfully implemented and documented. Despite these challenges, the fund has experienced average annual returns of 30 percent, saved the university $4.8 million dollars annually, and reduced Harvard's environmental footprint.

History

Harvard's First Revolving Fund

In 1993, Harvard's first green revolving fund, the Resource Conservation Incentive Program (RCIP), was created with an allocation of $1.5 million from then-President Neil Rudenstine.[1] A report released in 2000 found that "the $1.5 million loan fund yielded an annual average savings of $880,000 with an average annual return [on investment] of 34 percent" after having financed 35 projects.[2]

While the fund initially experienced a surge of interest on campus and funded over 20 projects, in subsequent years it became underutilized and was disbanded in 1998. However, both the RCIP's financial success and its ability to improve environmental performance were noted by members of the Harvard community and it served as the model for the formation of the Green Loan Fund (GLF) in 2001.[3]

While students have played an important role in promoting sustainability at Harvard, the GLF, along its predecessor the RCIP, were primarily initiated as a result of faculty and administrator input.[4] The creation of the Harvard Green Campus Initiative (HGCI) in 2001 marked the introduction of a formal sustainability office to institutionally support green initiatives on campus. The GLF was one of the first green initiatives launched after the HGCI was formed.

Creating the Green Loan Fund

The newly created HGCI was able to make the case that renewed interest in sustainability at Harvard, combined with expanded sustainability staff, would create a demand for campus resources to fund and develop sustainability projects.[5] Further, such resources would be used most effectively if the administrative staff of the HGCI were able to focus on program development and research, rather than on implementing individual projects.

The fund was identified as an ideal model for supporting improvements to Harvard's campus that would reduce energy use and demand ... and above all, pay for themselves..

In 2001, a $3 million revolving loan fund was endowed through the offices of then-President Neil Rudenstine and then-Provost Harvey Fineberg, using the central administrative budget. Their motivation stemmed from recognizing the importance and value of institutionalizing support for energy and resource reductions as well as sustainability goals.[6] The fund was initially interest-free until 2007, when a 3 percent administrative fee was added to defray administrative costs of the GLF and provide initial consulting to ensure project teams follow Harvard's Green Building Standards.[7]

Evolution of the Fund

The fund's eligibility requirements changed in 2003 to include feasibility studies and renewable energy projects, after the value of these projects were recognized on campus. The eligibility requirements were also changed to reflect increased availability of matching funds.[8]
In 2007, the GLF added the Incremental Loan, which funds the cost difference between base code and sustainable design using life-cycle cost analysis. These projects are repaid based on internal rate of return.[9] The fund was enlarged in 2004 to $6 million, and again in 2006 to its current level of $12 million by then-President Larry Summers as a reflection of its consistent success.[10]

In 2008, the Harvard Green Campus Initiative was institutionalized into the Harvard Office for Sustainability (OFS) by President Drew Faust. This change included an expanded mission to oversee University-wide sustainability goals and initiatives, including the GLF. Currently, the fund can commit up to $500,000 for any approved project, although larger projects often find external grants or operating funds to cover the difference. Expected payback periods for improvements on existing infrastructure must be five years or less in order for a project to be approved.[11]

Operations

Harvard Green Loan Fund Overview

Year created: 2001

Size: $12,000,000

Source:
Offices of the President and Provost

Average payback period:
Approximately 3 years

Administrator: Office for Sustainability

Average return on investment: 29.9%

Total savings:
Over $4.8 million annual savings

Managing the Fund

The GLF was initially administered by the HGCI, in which project approval decisions were made by a Green Loan Fund Review Committee composed of facilities staff and administrators. Currently, the review committee resides within the Office for Sustainability and is co-chaired by its director. The committee is made up of stakeholders from across campus, including staff involved with new construction, existing projects, renovations, consulting, energy auditing, and commissioning, as well as financial staff.[12] A majority of Harvard's schools and central administrative departments are represented on the committee.[13]

This committee composition not only allows proposed projects to be scrutinized from multiple diverse viewpoints; it also helps spread knowledge of the fund's existence to many departments across campus. Applicants are encouraged to contact OFS staff before submitting proposals, both to benefit from the range of support services and to align the project direction with the GLF criteria.[14] The ability of designated OFS staff to advocate for the loan fund and solicit proposals, as well as consult and provide feedback on potential projects, is a crucial component of the program's effectiveness.[15]

Approving Project Proposals

After submitting a proposal, the project applicant presents to the committee and answers questions about the proposal; the project can then be modified to address the committee's feedback and concerns. Primary considerations for potential proposals are the projected cost savings and how the applicant intends to quantify and verify the results.

The committee requests that a report be prepared on the project's performance and savings six months after completing construction. Sometimes temporary metering of energy and resource use is used to augment the verification process.[16] Applications are then sent to the Director of Administration and Finance and the Vice President of Campus Services, both within Harvard University Campus Services, for final approval.[17]

Once a loan is approved, a department moves forward with the project and sends invoices to the Office for Sustainability, where it then receives the loan in the form of an internal fund transfer to reimburse the actual cost of the project based on the invoiced amount. The department begins repaying the loan at the start of the fiscal year following project completion and according to a payback schedule determined by the cost of the project and annual cost savings. The loan fund will only reimburse projects that are successfully completed.

Types of Loans

Currently, the GLF provides either full-cost loans with a simple payback period of five years or less, or incremental loans with an internal rate of return of 9 percent or higher. The incremental loans are often used for high-performing new construction projects. Both types of these loans are limited to $500,000. Applicants are also required to apply for utility rebates when they are available. When utility rebates are approved, they are required to be either deducted from the loan amount or used to fund other conservation projects.[18]

There are several other finance payback options available in addition to the five-year full cost and incremental cost loans. Renewable energy projects qualify for GLF loans regardless of the entire project's payback period, but the loan itself must be repaid within five years. Utility sub-metering and engineering services also qualify for GLF loans, and must be repaid within two years. Additionally, projects may be "bundled" as long as the average payback period is five years, allowing very low payback projects to be leveraged for funding those with longer paybacks.[19]

Loan Criteria

An approved project must result in a direct reduction of costs and environmental impact for the university with a simple payback period of five years or less, based on cost savings. Thus, the GLF allows departments to improve their environmental and financial performance without any up-front capital costs. The loan application requires an engineering study or other form of documentation demonstrating the case behind the projected cost and resource savings. While the goal of the GLF is to provide funding for a broad array of projects within a dynamic field, eligible projects often target:

- Greenhouse gas emissions
- Energy use
- Waste disposal

- Water use
- Pollutants
- Maintenance costs
- Procurement practices
- Community education and behavior, and
- Installation of renewable energy technology.[20]

As loans are repaid, the fund is replenished; however, the total fund size only grows through specific additions of capital, such as from the President's office through the Central Administrative budget.[21] While the GLF itself has not sought new seed capital since 2006, the ability of loan applicants to find additional funding through grants, rebates, or even applying their own operating budgets, has enabled the GLF to expand its reach.[22] The GLF has no limit on the number of loans a department may take out and the funding is available on a first-come, first-served basis.[23]

Appendix A: Table of Performance*

ALL FIGURES ARE CUMULATIVE AND ANNUAL (EXCEPT ROI)	RCIP 1993-1998	GLF FALL 2002	GLF SPRING 2003	GLF FALL 2003	GLF SPRING 2004	GLF FALL 2004	GLF FALL 2005	GLF SPRING 2006	GLF SPRING 2007	GLF DECEMBER 2010
Capital Allocated (loaned out, in millions)	$2.6	$1	$1.7	$1.8	$2.3	$3.25	$5	$6.5		Over $16
Average project ROI	34%		30%		34%	40%	35%	33%	35%	29.9%
Cost-savings	$800,000	$300,000	$500,000	$600,000	$750,000				$3.9 million	$4.8 million
Number of Projects			18	18	23	38	38	92	130	185
Pounds CO2e Savings (millions)	8	4	7	9	11.6		51	66.7	60.4	
Gallons Water Savings (millions)		5	5.3	5.3	5.3		8.6	12.7	15.27	
Pounds Solid Waste Savings (thousands)			200	200	200		200	200	200	

**This table highlights several measures of the Green Loan Fund's performance over the years, including the average return on investment of all loans issued so far for almost a decade, as well as some data on the performance of the Resource Conservation Incentive Program. Average annual return on investment figures are based on highly detailed engineering estimates of the projected resource, maintenance, and cost savings resulting from the projects.*

Performance

Since its creation a decade ago, the fund has financed over 200 projects that cumulatively total more than $16 million dollars.

These projects have produced an average annual return on investment of 29.9 percent and currently result in over $4.8 million in cost savings for the university on average each year. The annual return on investment figures are based on highly detailed engineering estimates of the projected resource, maintenance and cost savings resulting from the projects. Additionally, loans have been awarded for a range of project costs: 57 percent of the total number of loans have been up to $49,999, 35 percent between $50,000 and $250,000, and 8 percent above $250,000.[24] For more data on the GLF's aggregate performance, see the table in Appendix A at the end of this report.

Example Project

Harvard Business School Cogeneration

Harvard Business School (HBS) used the Harvard Green Loan Fund to install a 75 kW cogeneration unit, along with infrastructure for the future installation of a second 75kW unit, in the basement of Shad Hall. The cogeneration units were installed to increase Shad Hall's overall energy efficiency and to substantially reduce energy expenses by simultaneously producing heat and electricity. The project had a payback of 4 years and resulted in an estimated reduction of approximately 1,695,527 pounds of CO2. The natural gas fired unit routes exhaust heat-to-heat exchangers that warm water for the entire domestic hot water heating load for showers. The unit feeds electricity into the building's main electric grid, supplementing building power provided from the grid and from photovoltaic panels on the roof.

Shad Hall at Harvard Business School underwent the installation of a cogeneration unit in 2010 that used the waste electrical heat to produce hot water for the building. The cogeneration capabilities represent an annual reduction of approximately 500 tons of greenhouse gas emissions.

Lessons Learned

From 2001 to 2011, the GLF has been a successful funding tool for projects that reduce Harvard's environmental impact while providing cost savings across the university. The loan fund has helped extend the reach of sustainability initiatives across the entire university by funding projects that deliver measurable and positive environmental change on campus.

OFS is currently analyzing and reviewing the current stats of the GLF to explore ways to improve its operations to fit within larger institutional sustainability commitments and goals.[25] The office has also drawn important lessons from its efforts over the years:

- Designated staff must support the fund and advocate for project proposals from the campus community.
- The committee that reviews proposals must be multi-stakeholder and represent many constituencies.
- Projects must be thoroughly reviewed and carefully implemented, especially in the stages of calculating performance and cost savings.[26]

The future of the fund may involve expanding the evaluation criteria to focus on innovation and new technology in addition to longer payback periods to accommodate costlier, higher impact projects.[27] The existence of the 3 percent administrative fee on loans is also being reviewed. These considerations and the need to continue soliciting project proposals, as well as keeping staff engaged in the review process, all point to the need to keep the model relevant and focused on maximizing impact and innovation.

Endnotes

1 “Office for Sustainability: History,” Harvard University, accessed December 2010, http://green.harvard.edu/ofs/history

2 Second Nature: Education for Sustainability Profiles, Harvard University: Harvard Green Campus Initiative. Last modified February 20, 2002, accessed December 2010. http://www.secondnature.org/efs/sdprofiles/harvard.htm

3 Levy, J., and Dilwali, K.M. (2000). “An Evaluation of Harvard’s Resource Conservation Incentive Program: Past Performance and Future Conservations,” No. 199 Environmental Science and Engineering Program¸ Harvard School of Public Health. Retrieved from http://www.greencampus.harvard.edu/gclf/documents/HarvardUniversity--RCIPReviewPaper1199.pdf. Quoted in Serra, Sean. 2008. “Advancing Sustain ability at WPI: The Development of a Comprehensive Program for Investing In, Promoting, and Managing Sustainable Practices at WPI.” An Interactive Qualifying Project submitted to the Faculty of Worcester Polytechnic Institute. Accessed December 2010. http://www.wpi.edu/Pubs/E-project/Available/E-pro ject-072508-162926/unrestricted/SS_IQP.pdf

4 Sharp, Leith. “Green Milestones,” Harvard Green Campus Initiative Newsletter, Spring 2007 Vol.10. Page 3. Accessed December 2010. http://green.harvard.edu/sites/default/files/attachments/ofs/archive/ newsletter2007_10.pdf

5 Gauthier, Nathan. Interview by Ria Knapp, March 2010.

6 Stacy, Jennifer (Business and Finance Coordinator for the Harvard Office for Sustainability). Survey for the Sustainable Endowments Institute. submitted via email January 25, 2011.

7 Ibid.

8 Olson, Dan, “The Green Campus Loan Fund: Responding to Harvard’s Financial Needs,” Harvard Green Campus Initiative Newsletter, Fall 2003 Vol. 4. Page 2. Accessed December 2010. http://green.harvard.edu/sites/default/files/attachments/ofs/archive/newsletter2003_04.pdf

9 Sharp, Leith, Jeffrey Smith, and Michael Crowley. “What 16 LEED Projects have taught the Harvard Green Campus Initiative.” Powerpoint presented at the Greenbuild Conference, Cambridge, MA, 2006. Presentation accessed December 2010,

http://green.harvard.edu/sites/default/files/attachments/ofs/archive/SharpFinalgreenbuild.pdf

10 "Harvard Green Campus Initiative Overview", May 2, 2007. Accessed December 2010, http://green.harvard.edu/sites/default/files/attachments/ofs/archive/HGCIOverview07.pdf

11 Gauthier, Nathan. Interview 2010.

12 Gauthier, Nathan. Interview 2010.

13 Stacy, Jennifer. Survey. submitted via email December 6, 2010.

14 "Green Campus Loan Fund," Harvard University Office for Sustainability, accessed December 2010, http://green.harvard.edu/loan-fund

15 "Building Sustainable Programs," Campus Consortium for Environmental Excellence. Last modified January 2007, accessed December 2010. http://www.epa.gov/region1/assistance/univ/pdfs/bmps/HarvardRevolvingLoanFund1-8-07.pdf

16 Gauthier, Nathan. Interview 2010.

17 Stacy, Jennifer. Survey. submitted via email January 25, 2011.

18 "Loan Fund Criteria and Eligibility Requirements," Harvard University Office for Sustainability, accessed December 2010, http://green.harvard.edu/loan-fund/eligibility

19 "Green Campus Loan Fund: New Projects, New Incentives," Harvard Green Campus Initiative Newsletter, Fall 2004 Vol. 6. Page 9. Accessed December 2010. http://green.harvard.edu/sites/default/files/attachments/ofs/archive/newsletter2004_06.pdf

20 "Loan Fund Criteria and Eligibility Requirements," Harvard University Office for Sustainability, accessed December 2010.

21 Stacy, Jennifer. Survey. submitted via email December 6, 2010.

22 Olson, Dan, Harvard Green Campus Initiative Newsletter, Fall 2003 Vol. 4. Page 2.

23 Stacy, Jennifer. Survey. submitted via email December 6, 2010.

24 Stacy, Jennifer. Survey. submitted via email January 25, 2011.

25 Stacy, Jennifer. Survey. submitted via email December 6, 2010.

26 Gauthier, Nathan. Interview 2010.

27 Ibid.

Miami University Revolving Green Fund (MURGF)

Mission:

The mission of the Miami University Revolving Green Fund (MURGF) is to encourage the growth and development of environmentally sound technologies and practices at Miami University and the greater Oxford community by financing innovative initiatives with sustainable returns. The MURGF will engage students, faculty, staff, and community members for these initiatives; all in coordination with the greater academic mission of the university.

Goals of MURGF:

- To foster sustainable[1] design and environmentally sound technologies and practices at Miami University and in the greater Oxford community.
- To transform Miami into a national leader and an exemplary model for other institutions of higher education, community groups, non-profit organizations, businesses, and governmental bodies.
- To empower students with a voice and opportunities to reshape the Miami community.
- To exceed local, state, and federal environmental regulation standards through funding innovative techniques and best-in-class sustainable practices.
- To facilitate investment in renewable energy, alternative fuels, and energy efficiency.
- To reconnect with alumni and approach external benefactors to solidify the prominence and longevity of the fund.

Management and Procedural Process:

The MURGF Board meets to review proposals on a rolling basis. All proposals will be subject to modification by the board before acceptance. Should a proposal be modified, the affected author(s) will be notified within 72 hours and extended an opportunity for an appeal hearing.

Funding Initiatives:

Initiatives should be financed by the following terms:

- 20% of project cost savings will be retained by the project recipient.
- 80% of project cost savings will be returned to the fund annually until 120% of the initial project cost (adjusted for inflation) has been restored.
- Upon complete restoration, all savings are retained by the project's recipient(s).

Alternative financing strategies may be developed, particularly in the event of matching external funds (grants, gifts) or extraneous financial pressures. Funds will not be used to cover budget shortfalls or faculty or staff salaries unless associated with a MURGF initiative.

When possible, exact measurements should be used to determine finances. In those scenarios where this is impossible or very costly, a calculated estimate should be used in its place. The board will have the final determination on all proposal estimates.

Occasionally, in exceptional circumstances, MURGF may approve a project by consensus that may not produce a financial return, but provides striking sustainability advantages or offsets unusually high energy costs. These proposals will be considered as long as they do not threaten the long-term viability and success of MURGF because other projects are adequately funding MURGF to make up for any loss.

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[1] *Sustainability* as defined by the Brundtland Report to the United Nations: "Meeting the needs of the present generation without compromising the ability of future generations to meet their needs."

All financially affected parties are to sign a written contract before project execution. Terms of a payment plan may be modified during a full committee meeting at the request of the project recipient. Special flexibility should be considered for those projects involving volatile markets or external costs. A majority of the board members must approve the modified terms.
Criteria for Assessment:

Proposals will be evaluated for the following criteria:

- Commitment to environmental sustainability
- Potential to achieve green results
- Measurable outcomes
- Cost effective use of funds
- Terms of payment plan
- Student participation

All proposals must include the following criteria:

- Project Summary
  - Current Conditions
  - Project Description
  - Initiative Goals
  - Expected Results
  - Potential Risks or Uncertainties
  - Contingency Strategy

- Project Budget
  - One Time Expenses
  - On-Going Expenses
  - Available External Grants/Gifts
  - Local, State, or Federal Tax Breaks
  - Expected Returns/Outputs of Project
  - Terms of Payment Plan

- Project Metrics
  - Cost/Resources Saved
  - Persons Impacted by Project
  - Personnel Involved
  - Key Assumptions

- Project Timeline
  - Duration of Project
  - Estimated Project Phases/Benchmarks
  - Target Goals/Milestones

- Project Approval/Review
  - Proper Department Notification
  - Records Kept/Reported
  - Project Upkeep

Submission Information:

Questions and applications for funding under the Miami University Revolving Green Fund should be directed to the Miami University Sustainability Coordinator, David Prytherch at prythedl@muohio.edu (phone 529-9284). Applications will then be forwarded to the MURGF for review and decision.

MIAMI UNIVERSITY REVOLVING GREEN FUND

APPLICATION COVER SHEET

** must be submitted with full proposals**

Project Title

Applicant (name, department, and contact information)

Relevant University Department (and staff/faculty contact, if a student project)

Project Description Abstract (250 words or less)

Total Cost of Project

Projected Cost Savings

Summary of Sustainability Benefits

Revolving Loan Fund (RLF) Agreement

1) The Office of the Chancellor has designated \$1M to establish a Revolving Loan Fund (RLF) that can be used for utility conservation projects at the University of Illinois at Urbana-Champaign. The Student Sustainability Committee has agreed to contribute \$500k to the RLF, and an additional contribution of \$500K will be requested from the Office of the President.
2) Savings from projects will be returned to the fund at fully-loaded utility rates, until the funds invested in that project are repaid. When a project is funded by multiple funding sources, the annual savings to be returned to the RLF will be calculated by the payback associated with the work completed by the funds from the RLF.
    a. For example, Project A costs \$500K and has a \$100K per year payback. The RLF contributes an additional \$400K to increase the scope of work and increase the savings to be \$250K per year. Thus, the total project would cost \$900K with an annual cost savings of \$350K per year. The RLF would be repaid at \$250K per year.
3) Projects will be requested by departments, with information of how each project impacts the selection criteria.
    a. In FY12, the potential projects will be solicited from F&S. These will include, at a minimum, Lighting Retrofits and Steam Savings projects.
    b. Starting in FY13, the potential projects will be solicited from any campus department, including F&S, the Auxiliaries, and other campus departments.
4) Project selection will be handled through the AFMFA Board, which will now be referred to as the AFMFA/Conservation Board. The Board will be modified to include the Student Sustainability Committee (SSC) chair as a student member.
    a. In FY12, the SSC chair will be added as a fifth student member.
    b. Starting in FY13, the four student members will be the Student Body President, the Student Trustee, the Chair of the Student Sustainability Committee and one at-large member.
    c. The non-student representatives will be from F&S, the Provost, Research and Student Affairs. This is unchanged.
5) Criteria for allocation of monies from the fund (through a Strata-based process[1]) will be:

    01. Payback Period
    Project has a short payback period.
    02. Reduction of Coal
    Does this project reduce the use of coal for campus power generation?
    03. Fund Size Impact
    Projects that increase the fund size through grants or additional allocations.
    04. Visibility
    How visible is the project to users of the facility / space?
    05. Project Coordination
    Projects that leverage multiple funding sources to achieve a greater impact or reduce administrative workload.

1. Strata is a computer program used by the AFMFA committee to select projects for funding. First committee members provide weights for selection criteria that are averaged together. Then Committee members score individual projects based on how well they meet a given selection criterion. These weighted scores are then averaged and used to select projects.

6) The RLF will grow through the following methods.
    a. The Chancellor, President, or SSC can elect to increase the fund through a direct allocation. The Office of the Chancellor has agreed that future contributions to the funds from the SSC will be matched by Campus.
    b. When a selected project is eligible for grant funding (for example through DCEO or ICECF) and F&S handles the grant application and accounting, the grant dollars will contribute to the growth of the Loan Fund.
        i. For example, Project A for Dept X costs $900K and has a 3-yr payback period. It is funded by the Revolving Loan Fund CFOP. Dept X gets a grant for $300K. The grant funds offset the loan fund CFOP charges, but Dept X is still responsible for repaying $300K for 3 years. The result is an increase to the Loan Fund of $300K. (This is a positive selection criterion.)
    c. When a selected project is eligible for grant funding and the Department handles the grant application and accounting, the grant dollars MAY contribute to the growth of the Loan Fund, as determined on a case-by-case basis. (The decision will impact the selection criterion about growth of the fund.)

Student Sustainability Committee:

Suhail Barot, 11-12 Committee Chair

Date Approved: 11/16/2011

Kathryn Kinley, 11-12 Committee Treasurer

Date Approved: 11/16/11

McKenzie Beverage, Program Advisor

Date Approved: 11/16/11

Facilities and Services:

John H. Dempsey

John Dempsey, Executive Director

Date Approved: 11/15/11

Office of Sustainability:

P. K. Khanna

Pradeep Khanna, Acting Director

Date Approved: 11/17/11

Office of the Chancellor

Michael Andrechak, Associate Chancellor

Date Approved: 11/22/11