CALIFORNIA EDUCATIONAL FACILITIES AUTHORITY
BOND FINANCING PROGRAM
EXECUTIVE SUMMARY

Applicant:	Carnegie Institution of Washington ("Institution") 1530 P Street, N.W. Washington, D.C 20005-1910	**Amount Requested:** **Loan Term:** **Date Requested:** **Final Resolution Number:**	$18,500,000 35 Years January 26, 2006 234

Facility Type: Research Institution
Project Sites: The Observatories, 791, 813, 823, 823-1/2 and 823-3/4 Santa Barbara Street, Pasadena, CA 91101; and Las Campanas, Chile

Use of Bond Proceeds: Bond proceeds will be used to current refund the outstanding CEFA Revenue Bonds for Series 1993A, resulting in present value savings of approximately $3.4 million.

Type of Issue: Public offering, variable rates
Credit Enhancement: Liquidity provider, SunTrust Bank
Expected Rating: Without credit enhancement: 'Aaa/VMIG-1' (Moody's) and "AA+/A-1+" (S&P)
Senior Underwriter: Lehman Brothers Inc.
Bond Counsel: Orrick Herrington & Sutcliffe LLP

Financial Overview: Although the Institution's financial statements show fluctuating revenues over the last three years primarily due to market conditions, revenue growth continues to outpace growth in expenditures. The Institution has exhibited a strong balance sheet with good liquidity, substantial financial resources and minimal debt.

Sources of Revenue (FYE 06/30/2005)	**Amount**	**Percent of Total**
Investment income, net	$68,602,358	65.2%
Grant and contracts	30,441,132	28.9%
Net assets released from restriction	4,310,056	4.1%
Contribution and gifts	1,024,221	1.0%
Other income	830,402	0.8%
Net loss on property disposal	(15,971)	0.0%
Total	$105,192,198	100.0%

Sources of Funds:		**Uses of Funds:**	
Par Amount of Bonds	$18,500,000	Current refund CEFA Series 1993A	$18,130,120
Borrower's Funds	30,120	Financing costs	400,000
Total Sources	$18,530,120	Total Uses	$18,530,120

Legal Review: No information was disclosed to question the financial viability or legal integrity of the Applicant.

Recommendation: Staff recommends the Authority approve a resolution in an amount not to exceed $18,500,000 for Carnegie Institution of Washington, subject to the bonds having at least an "A" category rating by a nationally recognized rating agency and meeting the standard bond issuance guidelines for "A" category rated debt.

(YD)

STAFF SUMMARY AND RECOMMENDATION

Carnegie Institution of Washington ("Institution")

January 26, 2006

Final Resolution Number: 234

I. PURPOSE OF FINANCING: Carnegie Institution of Washington is embarking on a plan to restructure its debt and take advantage of the current low interest rates in the bond market. Bond proceeds will be used to refinance the CEFA Series 1993A. The refunding will generate an overall net present value savings of approximately $3.4 million over the life of the bonds.

Current Refund Series 1993A CEFA Bonds $18,130,120

The Authority's outstanding Revenue Bonds Series 1993A were originally issued in the amount of $17,500,000. The bond proceeds financed the Magellan telescope project in Chile and the renovation of the facilities of the Observatories at Pasadena. The fixed interest rate on the existing bonds is 5.60% and has a final maturity in 2023. Replacing these bonds with the proposed new bond issue will result in a net present value savings of approximately $3.4 million and extend the life of the bonds for an additional 17 years.

Issuance Costs 400,000

Total $18,530,120

Financing Structure:

- General Obligation of Carnegie Institution of Washington
- Liquidity provided by SunTrust Bank
- 35 year term, final maturity October 1, 2040
- Negotiated Public Offering
- Variable Rate, weekly initial mode
- Without credit enhancement, expected credit rating for this financing 'Aaa/VMIG-1' (Moody's) and "AA+/A-1+" (S&P)

II. FINANCIAL STATEMENTS AND ANALYSIS:

Carnegie Institution of Washington
Statement of Activities
(Unrestricted)

	For the Year Ended June 30,		
	2005	2004	2003
Revenue and support			
Grant and contracts	$ 30,441,132	$ 22,458,366	$ 24,705,588
Contributions, gifts	1,024,221	1,246,482	18,130,285
Net loss on property disposal	(15,971)	(318,211)	(18,012)
Other income	830,402	3,968,740	1,683,264
Net external revenue	32,279,784	27,355,377	44,501,125
Investment income and net change in market value	68,602,358	80,749,277	32,665,818
Net assets released from restrictions	4,310,056	9,425,691	6,321,584
Total revenues, gains, and other support	105,192,198	117,530,345	83,488,527
Expenses			
Salary, Fringe benefits and payroll taxes	33,915,089	31,503,741	27,940,283
Fellowship grants and awards	3,244,028	2,914,970	2,322,097
Depreciation	7,175,082	7,794,105	6,009,836
Educational and research supplies	9,004,921	7,670,677	7,727,459
Building maintenance and operation	7,296,113	8,526,987	3,410,213
Travel and expenses	1,998,269	1,767,793	1,930,305
Publications	83,691	72,831	80,073
Shop	126,599	123,638	63,573
Telephones	199,123	207,031	197,833
Books and subscriptions	258,211	342,961	310,759
Administrative and general	2,114,146	1,485,438	1,580,700
Facilities construction	14,211,686	8,530,528	1,710,375
Interest	1,859,438	1,771,130	1,364,369
Printing and copying	61,527	77,751	80,780
Shipping and postage	124,083	193,990	188,703
Insurance, taxes, and professional fees	2,173,779	2,832,386	2,210,446
Equipment	5,801,268	3,398,598	5,876,810
Fundraising expenses	615,996	647,977	637,295
Capitalized scientific equipment and facilities	(20,894,649)	(18,896,507)	(9,210,827)
Total expenses	69,368,400	60,966,025	54,431,082
Change in net assets	**35,823,798**	**56,564,320**	**29,057,445**
Net assets, beginning of year	587,677,734	531,113,414	502,055,969
Net assets, end of year	$ 623,501,532	$ 587,677,734	$ 531,113,414

Carnegie Institution of Washington
Statement of Financial Position

	As of June 30,		
	2005	2004	2003
Assets			
Cash and cash equivalents	$ 186,133	$ 518,726	$ 631,216
Accrued investment income	196,512	99,044	98,668
Contribution receivable, net	7,459,804	7,155,007	6,561,772
Accounts receivable and other assets	8,673,414	8,425,062	8,877,030
Bond proceed held by trustee	4,920,242	18,209,191	29,536,629
Investments	641,071,595	590,769,709	532,023,413
Property and equipment, net	159,218,202	144,813,240	133,195,832
Total Assets	$ 821,725,902	$ 769,989,979	$ 710,924,560
Liabilities			
Account payable and accrued expenses	$ 7,173,434	$ 4,115,909	$ 5,083,899
Deferred revenue	34,914,748	34,695,018	35,523,865
Broker payable	204,718	-	-
Bonds payable	64,710,315	64,670,359	64,715,672
Accrued postretirement benefits	15,625,000	13,670,000	11,359,000
Total Liabilities	122,628,215	117,151,286	116,682,436
Net Assets			
Unrestricted	623,501,532	587,677,734	531,113,414
Temporarily Restricted	36,086,697	25,910,003	24,207,950
Permanently Restricted	39,509,458	39,250,956	38,920,760
Total Net Assets	699,097,687	652,838,693	594,242,124
Total Liabilities and Net Assets	$ 821,725,902	$ 769,989,979	$ 710,924,560

Financial Ratios:

	Proforma FYE June, 2005	2005	2004	2003
Debt service coverage (x)	29.4	24.12	34.57	31.09
Debt to Expendable net assets (x)	0.10	0.10	0.11	0.12
Margin (%)		39.03	48.15	34.80
Current Ratio (x)		0.16	0.29	0.39

Financial Discussion:

Although the Institution's financial statements show fluctuating revenues over the last three years primarily due to market conditions, revenue growth continues to outpace growth in expenditures.

The Institution relies on investment income and governmental grants and contracts as its primary source of revenues. In fiscal year 2005, these revenues comprised 94% of total revenues.

In fiscal year 2000, the Institution began a 7-year capital campaign to finance certain projects. In the first year of the campaign, most contributions were collected, explaining the upward surge in that category in that year, followed by a gradual decrease in the following years as the capital accumulated financed the intended projects.

In fiscal year 2005, total revenues equal $105 million, up more than 26% from 2003 while expenses increased 19.7% during the same period. A $12 million decrease in investment revenue in 2005 compared to 2004 was due mainly to unanticipated favorable market conditions that yielded unrealized gains in fiscal year 2004.

Finally, nearly $4.3 million of net assets were released from restrictions in fiscal year 2005 adding more capital to their net assets.

Of note, in the schedule of expenses, the capitalized scientific equipment and facilities category reflects the cost incurred to acquire new equipments and constructing new facilities. One such facility is the Embryonic Building that was completed and opened in August 2005.

The Institution has exhibited a strong balance sheet with good liquidity, substantial financial resources and minimal debt.

During our review period, the total net assets of the Institution increased from $594 million in fiscal year 2003 to $699 million at fiscal year 2005, an increase of 17.7%. The growth is a result of an improved stock market with investments increasing from $532 million in fiscal year 2003 to $641 million in fiscal year 2005. Total assets have increased steadily during the last three fiscal years, from $710.9 million in fiscal year 2003 to $821.7 million in fiscal year 2005. Asset growth during this period was largely from diversifying the endowment into alternative assets to reduce volatility inherent in an undiversified portfolio while generating attractive overall performance.

The 17.7% growth in net assets since fiscal year 2003 is a healthy indicator financially when compared to the small increase of liabilities over the same period of time, which did not exceed 4.7%.

The Institution's current financial strength is sound. In fiscal year 2005, its debt service coverage ratio was 24.1x. With this proposed financing, its proforma debt service coverage ratio will be approximately 29.4x. Leverage remains low with debt to expendable net asset ratio of 0.1x.

III. FELLOWS, INSTITUTION COSTS AND FACULTY STATISTICS:

Each year the Observatories admit two or three recently graduated post-doctoral scholars (from 80 applicants) to begin fellowships of up to three years. These fellows interact with faculty, including attendance at weekly seminars, and are given access to the telescopes in order to pursue their independently chosen course of research. Other scholars, selected as associates, participate in faculty research.

Admissions and Enrollments

Applications for fellowships and associated positions at the Institution in recent years have ranged between 500 and 550. Admissions and enrollments numbered between approximately 50 and 90. The following table summarizes the actual enrollments for the current academic year and the past five academic years for both the observatories and the Institution, as a whole.

Enrollments

Academic Year	Observatories Enrollments	Embryology Enrollments	Total Institution Enrollments
2004-05	8	24	120
2003-04	11	35	123
2002-03	11	34	114
2001-02	14	37	150
2000-01	14	39	133

Stipends, Tuition and Fees

The Institution does not charge tuition or fees, and all fellows and associates receive a stipend for living expenses from the Institution. Stipends are funded by the Institution and by federal and private grants. The exact amount awarded a fellow or associate varies with demand and the nature of his or her studies. Annual stipends for full-time positions for the 2004-05 fiscal year ranged from $26,000 to $50,000. The Institution also provides medical insurance to all fellows and associates who meet certain eligibility requirements.

The following table provides a breakdown of the sources of stipend funding over the last five fiscal years.

Sources of Stipend Funds*
($000)

	Carnegie Endowment Funds				
Fiscal Year Ended June 30	Unrestricted	McClintock Fellowship	Restricted Endowment	Restricted Federal & Private	Total
2004	$ 934	$ 134	$ 253	$ 991	$ 2,312
2003	1,044	90	294	1,473	2,901
2002	947	19	169	984	2,119
2001	1,020	21	111	883	2,035

* The figure above includes stipends, benefits, and related support costs.

Faculty

The Institution's faculty is composed of scientists who pursue their own course of research while training and guiding the Institution's fellows and associates. All faculty members are full-time employees, and there are no tenured positions. Instead, the Institution provides each faculty member with the freedom to pursue his or her chosen research over the course of his or her lifetime. As of June 30, 2005, there were 59 faculty members at the Institution, yielding a 2.1 to 1 ratio of fellows and associates to faculty. Twelve of those faculty members were at the Observatories, and nine at the Department of Embryology.

IV. BACKGROUND:

General:

Carnegie Institution of Washington (the "Institution") is a federally chartered private, nonprofit corporation engaged in basic research and advanced education in astronomy, biology, and the earth sciences. The Institution is currently organized into six departments: (i) The Carnegie Observatories (the "Observatories") headquartered in Pasadena, California, (ii) the Department of Plant Biology, (iii) the Department of Global Ecology both located in Palo Alto, California (at Stanford University), (iv) the Department of Terrestrial Magnetism, (v) the Geophysical Laboratory, both located in Washington, D.C., and (vi) the Department of Embryology in Baltimore, Maryland.

Andrew Carnegie founded the Institution in 1902 to provide scholars with the facilities and freedom to pursue their investigations and to encourage the application of their discoveries for the benefit of humankind. Since the Institution's initial incorporation in the District of Columbia in 1902 and its reincorporation by Act of Congress in 1904, it has provided its scholars with the facilities, equipment, and learning environment needed to make discoveries that have served as critical building blocks of scientific advancement.

The Institution Observatories, headquartered in Pasadena, was founded in 1904. For many years, the telescopes at the Institution's Mount Wilson observatory, and the Mount Palomar telescope (operated in cooperation with Cal Tech) were the world's largest. The Magellan Project, a consortium made up of the Harvard-Smithsonian Center for Astrophysics, the Massachusetts Institute of Technology, the University of Michigan, the University of Arizona and Carnegie Institution, operates the two 6.5-meter telescopes at Las Campanas. These institutions shared in the capital costs of the project and now operate these important new land-based telescopes. These contributions, totaling approximately $32 million, are recognized by the Carnegie Institution as deferred revenue.

Administration:

The Institution is governed by the Board of Trustees (the "Board"), which may include up to 27 members. The Board is responsible for the direction and management of the Institution's affairs and the control and disposal of its property, endowment, and other funds. The Board operates under the Institution's Articles of Incorporation and Bylaws. The Board meets at least once a year. At the annual meeting each May the Board makes the appropriations for the next fiscal year. There are eight Standing Committees of the Board of Trustees. These Committees are concerned with the entire spectrum of the activities of the Institution.

Accreditations:
Although the Institution is not accredited by any association of schools and colleges, the expertise of the faculty and fellows and the quality of facilities and equipment offer unique research and educational opportunities. The Institution's many notable scientists have included two Nobel Prize recipients in the field of genetics, as well as George Ellery Hale and Edwin Hubble in the field of astronomy.

Academic Programs:
The Institution's six departments are composed of:

- The Carnegie Observatories headquartered in Pasadena, California;
- The Departments of Plant Biology and Global Ecology in Stanford, California;
- The Department of Terrestrial Magnetism and the Geophysical Laboratory in Washington, D.C.; and
- The Department of Embryology in Baltimore, Maryland.

The Observatories:
The Las Campanas facility enables the Institution's astronomers to analyze, interpret data acquired in Chile, plan future observations, and propose improvements to the telescopes' instrumentation.

The Observatories also offer opportunities for both undergraduate and graduate students to participate in the research activities of the scientific staff, including the Summer Undergraduate Research Fellowship (SURF) program administered by the California Institute of Technology. In addition, the Institution's scientists participate at the weekly astrophysics conference at the nearby Cal Tech campus and occasionally supervise the dissertation research of Ph.D. students from other institutions.

The facilities in Las Campanas, Chile, are restricted to the usage of the Carnegie Institution of Washington, and are not accessible to the residents of Chile.

Competition:
Although the Institution does not have any direct competition, its observatories have formed a consortium for the Magellan Project located in Las Campanas, Chile. This consortium is made up of Harvard-Smithsonian Center for Astrophysics, the Massachusetts Institute of Technology, the University of Michigan, the University of Arizona and Carnegie Institution of Washington.

V. OUTSTANDING DEBT:

Issue Name:	Original Amount	Amount Outstanding As of 6/30/05	Estimated Amount Outstanding after Proposed Financing
Existing			
CEFA, Series 1993A	$17,500,000	$17,500,000	$ 0
CEFA, Series 1993B	17,500,000	17,500,000	17,500,000
Maryland, 2002	30,000,000	29,700,000	29,700,000
Proposed			
CEFA, Series 2006		N/A	18,500,000
Totals		$64,700,000	$65,700,000

VI. RELIGIOUS AFFILIATION DUE DILIGENCE:

Staff has reviewed the Applicant's responses to the questions contained in the Religious Affiliation portion of the Application. No information was disclosed in the questionnaire or discovered by staff to question the Applicant's compliance with the provisions of the Authority's Act relating to religious affiliation.

VII. LEGAL REVIEW:

Staff has reviewed the Applicant's responses to the questions contained in the Legal Status portion of the Application. No information was disclosed to question the financial viability or legal integrity of this applicant.

VIII. STAFF RECOMMENDATION:

Staff recommends the Authority approve a resolution in an amount not to exceed $18,500,000 for Carnegie Institution of Washington, subject to the bonds having at least an "A" rating by a nationally recognized rating agency and meeting the standard bond issuance guidelines for "A" category rated debt.