STAFF SUMMARY RECOMMENDATION

THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY

Third Amendment to and Reinstatement of Resolution No. 273

May 26, 2016

PRIOR AMOUNT APPROVED:	\$1,093,805,000
NEW PROPOSED AMOUNT:	\$1,300,000,000
PRIOR APPROVAL DATES:	March 17, 2010, as amended on April 25, 2013 and April 24, 2014
FINANCING TEAM:	Please see Attachment 2 to identify possible conflicts of interest
LOCATION:	Stanford, CA, Santa Clara County

PURPOSE OF THE THIRD AMENDMENT AND REINSTATEMENT: The Board of Trustees of the Leland Stanford Junior University ("Stanford") seeks to authorize a Third Amendment to and Reinstatement of Resolution No. 273 (the "Resolution") as follows:

- Reinstate the Resolution to issue bonds through May 31, 2017;
- Increase the prior authorized amount from \$1,093,805,000, to \$1,300,000,000; and
- Amend the authorized project list to include additional projects identified in Exhibit A (attached here to as Attachment 1).

BACKGROUND: In March 2010, the Authority approved the Resolution and amended it in April 2013 for the benefit of Stanford, authorizing the issuance of one or more series of revenue bonds to finance and refinance authorized projects, as identified in Exhibit A of the Resolution, that included the acquisition, construction, expansion, rehabilitation, remodeling, renovation and equipping of certain educational facilities, in an amount not to exceed \$1,016,805,000, with an expiration date of March 17, 2016. In April 2014, the Authority approved a second amendment to the Resolution to increase the prior authorized amount not to exceed \$1,093,805,000, amend the authorized project list to include additional projects, and to authorize a private placement structure.

Under the Resolution, the Authority issued Stanford's Series U-1 bonds in May 2010 in the amount of \$215,375,000; Series U-2 bonds in April 2012 in the amount of \$77,760,000; Series U-3 bonds and Series U-4 bonds in May 2013 in the amount of \$261,410,000 and \$39,215,000, respectively; and Series U-5 bonds and Series U-6 bonds in May 2014 in the amounts of \$124,115,000 and \$278,980,000, respectively.

The Resolution expired on March 17, 2016, and at the time, Stanford anticipated issuing additional bonds to complete their current Capital Plan utilizing funds from existing financings and commercial paper. However, due to current market conditions, Stanford decided it would be financially prudent to seek the issuance of bond financing through CEFA, providing Stanford the opportunity to strengthen and reduce their long term cost of debt.

ENVIRONMENTAL BENEFIT: As part of Stanford's Capital Plan, they adopted an Energy and Climate Plan, known as the "Stanford Energy System Innovations (SESI)" designed to provide the campus with a more efficient central energy facility that would include a heat recovery design, and reduce greenhouse gas emissions and total campus water consumption. This new system was operational in April 2015 and along with Stanford's solar power procurement, is anticipated to reduce campus emissions approximately 68% from 2014 levels and save 15% of campus potable water. The energy and cost efficiencies from the SESI project is projected to save Stanford \$420 million over the next 35 years.

FINANCIAL STATUS: Stanford reports strong operating results over the review period, posting continuous year end surplus from operations of approximately \$313 million in FY 2015, \$214 million in FY 2014, and \$165 million in FY 2013. Stanford attributes the increase to strong sponsored research support, solid investment income, sound health care service revenue, generous donor support, and consistent tuition revenue. Together these sources represent 90% of Stanford's almost \$5.0 billion in unrestricted operating revenues in FY 2015.

Operating expenses for Stanford increased over the review period, from nearly \$4.0 billion in FY 2013 to \$4.6 billion in FY 2015. Salaries and benefits, which comprise 61% of Stanford's total operating expenses, increased from \$2.5 billion to \$2.8 billion over the same period. Stanford attributes the increase to the combination of salary programs designed to maintain the University's competitive position, higher benefit costs, and increases in headcount to support new programs and sponsored research activities. In addition, other operating expenses and depreciation experienced growth over the same review period primarily due to expenses incurred in support of sponsored research activities, new programs and facilities.

Stanford's balance sheet appears to exhibit good liquidity and solid financial strength over the review period reflecting strong donor support, solid investment returns, and positive operating results, with total assets increasing approximately 15%, from \$31.5 billion in FY 2013 to \$36.2 billion in FY 2015, providing Stanford with a solid and growing asset base.

DUE DILIGENCE: Staff has received and reviewed the Eligibility, Legal Review, Religious Due Diligence, and CEQA documentation. All documentation satisfies the Authority's requirements.

<u>RECOMMENDATION</u>: Staff recommends that the Authority approve the Third Amendment to and Reinstatement of Resolution No. 273, subject to all prior provisions and conditions remaining unchanged and in full effect.

Stanford University Statements of Activities (000's) - University Only

	Fiscal Year Ended August 31,					
		2015		<u>2014</u>		2013
Operating Revenues						
Total Student Income	\$	563,586	\$	533,690	\$	511,444
Total Sponsored Research Support		1,386,768		1,266,147		1,233,202
Total Health Care Services		840,961		697,505		623,596
Current Year Gifts in Support of Operations		233,572		211,841		180,071
Total Net Assets Released from Restrictions		158,171		136,693		121,988
Total Investment Income Distributed for Operations		1,276,463		1,166,110		1,004,520
Special Program Fees and Other Income		498,804		493,446		463,450
Total Operating Revenues		4,958,325		4,505,432		4,138,271
Operating Expenses						
Salaries and benefits		2,848,708		2,659,610		2,498,157
Depreciation		334,592		310,958		291,732
Other operating expenses		1,462,398		1,321,272		1,182,960
Total Operating Expenses		4,645,698		4,291,840		3,972,849
Change In Net Assets from Operating Activities		312,627		213,592		165,422
Non-Operating Activities						
Increase in reinvested gains		644,855		1,561,670		899,321
Donor advised funds, net		66,734		29,314		1,930
Current year gifts not included in operations		1,655		17,673		2,902
Equity and fund transfers from Hospitals, net		89,963		69,018		29,002
Capital and other gifts released from restrictions		96,693		167,626		192,676
Pension and other post employment benefit related changes						-
other than net periodic benefit expense		(85,091)		11,952		145,927
Transfer to permanently restricted net assets, net		(49,998)		(41,232)		(37,010)
Transfer to temporarily restricted net assets, net		(26,223)		(41,028)		(19,621)
Swap interest and change in value of swap agreements		(8,587)		(12,072)		17,682
Other		(2,693)		5,765		821
Net Change in Unrestricted Net Assets		1,039,935		1,982,278		1,399,052
Net Change in Temporarily Restricted Net Assets		(100,113)		1,231,409		580,240
Net Change in Permanently Restricted Net Asset		272,517		284,349		238,392
TOTAL NET ASSETS, BEGINNING OF YEAR		29,221,137		25,723,101		23,505,417
TOTAL NET ASSETS, END OF YEAR	\$	30,433,476	\$	29,221,137	\$	25,723,101
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Stanford University Statements of Financial Position (000's) - University Only

		As of August 31				
		<u>2015</u>		2014		2013
ASSETS						
Cash and cash equivalents	\$	708,204	\$	630,214	\$	784,443
Assets limited as to use		160,351		300,566		165,238
Accounts receivable, net		225,440		454,990		358,483
Receivables (payables) from SHC and LPCH, net		89,045		85,909		81,649
Prepaid expenses and other assets		77,303		67,869		62,223
Pledges receivable, net		760,519		711,795		644,811
Student loans receivable, net		81,492		81,441		78,437
Faculty and staff mortgages and other loans receivable,	net	549,724		507,187		453,330
Investment at fair value		28,766,240		27,828,590		24,703,407
Plant facilities, net of accumulated depreciation		4,795,564		4,558,913		4,207,927
Works of Art and Special Collections				-		-
TOTAL ASSETS	\$	36,213,882	\$	35,227,474	\$	31,539,948
LIABILITIES AND NET ASSETS						
Liabilities:						
Accounts payable and accrued expenses	\$	719,979	\$	644,821	\$	653,413
Accrued pension and post retirement benefit cost		685,836		566,236		542,924
Pending trades of securities		14,431		232,893		405,748
Liabilities under security lending agreements		132,425		191,011		84,048
Deferred rental and other income		652,850		616,575		584,067
Income beneficiary share of split interest agreements		435,426		436,166		394,195
Notes and bonds payable		3,085,378		3,264,636		3,098,433
U.S. government refundable loan funds		54,081		53,999		54,019
TOTAL LIABILITIES		5,780,406		6,006,337		5,816,847
NET ASSETS:						
Unrestricted		16,507,624		15,467,689		13,485,411
Temporarily restricted		7,744,051		7,844,164		6,612,755
Permanently restricted		6,181,801		5,909,284		5,624,935
TOTAL NET ASSETS		30,433,476		29,221,137		25,723,101
TOTAL LIABILITIES AND NET ASSETS	\$	36,213,882	\$	35,227,474	\$	31,539,948

ATTACHMENT 1

Projects

100 Gigabyte Border Routers Upgrade 100 Gigabyte Connectivity to Corporation for Education Network Initiatives in California (CENIC) 1047 Campus Drive -Bathroom & Miscellaneous Repairs 1520 Page Mill Road Tenant Improvements 1651 Page Mill Renovation 2370 Watson Court Tenant Improvements 408 Panama Mall Office Building Academic Equipment Access Ramps Accessible Parking Accessible Pathways Accessible Restrooms Add Chilled Water Heat Exchanger to Highland Hall Administrative Systems Infrastructure Alumni Center Distributed Digital Control Upgrade Always Seismic Renovation Americans with Disabilities Act compliance at various buildings (ADA) Anderson Collection at Stanford University (formerly Anderson Gallery Building) Anne T. and Robert M. Bass Biology Research Building and Connective Elements Arguello Domestic Water Main Arguello Way Storm Drain Upgrade Arillaga Family Sport Center Backfill Arrillaga Family Sports Center Addition Backup/Storage Improvements Barnes Living/Learning and Security Upgrades Barriers Removal Bicycle and Pedestrian Paths & Lighting **BioChem Quad Utilities** Biomedical Innovation Building and Tunnel Infrastructure Boiler Feed Water Piping Systems Building Energy Retrofit Program **Building Expansions Building Renovations** C.J. Huang Building Campus Drive 24 inch Chilled Water - Roth/Quarry Campus Drive at Bowdoin Domestic Water Campus Drive at Galvez Domestic Water Campus Energy Management Control System (EMCS) Upgrade Campus Hot Water-Galvez to Arguello Campus Transit Improvements Capital Utilities Program (CUP) Central Energy Facility Eyewash Showers Central Energy Facility Controls Upgrade Central Energy Facility Distributed Control System/Instrument Upgrade Central Energy Facility Site Improvement/Pump house Central Loading Dock and Stauffer III Demolition Chi Theta Chi Row House Renovation

Chilled Water Extensions

Chilled Water Heat Exchangers

Chilled Water Metering

CJ Huang Tenant Improvement Build-out

Clark Center Whole Building Energy Retrofit Program

Client/Server Hardware

Columbae Life Safety and Code Compliance and Miscellaneous Upgrades

Communications & Networking Systems

Conduit-Welch Rd Reinforcement

Copper Cable

Crothers Way 12-Inch Domestic Waterline Replacement

CUP - All Other

CUP - Chilled Water

CUP - Creek/Pump Stations

CUP - Department Firewalls

CUP - Domestic Water

CUP - Fish Ladders

- CUP Hot Water
- CUP IT & CS
- CUP Lake Water
- CUP Other
- CUP Reservoirs
- CUP Sewer
- CUP Steam
- CUP Storm Drains

CUP System Expansion and CUP System Replacement

Current Good Manufacturing Practice (cGMP) Facility

Data Center Power and Cooling Upgrade

David and Joan Traitel Building and Connective Elements

Deferred/Planned Maintenance

Departmental Firewall Refresh

Dolores Knob, Tube & Misc. Scope and Design

Domestic Water Facilities

Domestic Water Inter-Tie Upgrade

Domestic Water Supervisory Control and Data Acquisition

Domestic Water System Bowdoin Pressure Reducing Valve Stations

Domestic Water Transmission

Drainage

Drainage System Upgrades

Dry Land Diving Facility

Durand Knob, Tube & Misc. Scope and Design

Edwards Seismic Retrofit

El Camino Swale Rehab

Electric Motor Replacement

Electric Vehicle Service Equipment Expansion Project

Electrical Smart Meters

Electrical Upgrade Backlog Scope & Design

Electricity Metering Projects

Electronic Communications Hub (ECH)/Enterprise Data Center Cable & Conduit Electronic Communications Hub Improvement & Expansions - East Campus Elevator Upgrade

Elevators

Emergency Generators and Fueling Project Emergency Management & Control Systems (EMCS) Energy Retrofit Program Energy Retrofit Program - Medical School of Business Air Handler Energy Retrofit Program Heating, Ventilation and Air Conditioning Upgrades at Arillaga Center for Sports and Recreation Energy Retrofit Program Heating, Ventilation and Air Conditioning Upgrades at Arillaga Family Sports Center Energy Retrofit Program-Maples Control System Escondido Road Lake Water Escondido South Hot Water Line Escondido South Interiors Reno Escondido Village Barnes Sprinkler, Roof & Miscellaneous Escondido Village Graduate Residences and Parking Garage Escondido Village High-rise Sprinklers Installation Escondido Village Hulme Midrise Renovation Escondido Village Low-Rise Fire Alarm Escondido Village Site Lighting Escondido Village Slab Heat Renovation Escondido Village Slab Replacement Exterior Backlog Scope & Design Exterior Backlog Stern Windows Fiber cables Fire Alarms Forsythe Fiber and Managed Machine Room Switch Freidenrich Center for Translation Research Fremont Road Longitudinal Welded Pipe Upgrade French Knob, Tube & Misc. Scope and Design Furniture Fixture & Equipment (FF&E) & Vehicles Galvez Mall Lake Water Pipe Galvez Street Storm Drain Upgrade Garbage Disposal Code Upgrades and Grease Containment Gender-Neutral Restroom Conversions General Use Permit (GUP) Mitigation Projects Governor's Corner Interim improvement Governor's Corner Renovation Graduate School of Business Bio-Retention Renewal Grove Life Safety and Code Compliance and Miscellaneous Upgrades Heating, Ventilation, and Air Conditioning (HVAC) Highland Hall (formerly, Stanford Graduate School of Business Graduate Residences, formerly Graduate School of Business Housing Expansion) High Voltage Cable Replacement High Voltage (HV) Infrastructure Upgrade and HV Transmission System Improvements High Voltage Replacements High Voltage Supervisory Control and Data Acquisition (SCADA) Upgrades Hoskins Sprinkler, Living/Learning, Security Upgrade Hot Water Pipe Via Ortega, Via Pueblo Information Technology & Communication Systems Information Technology System (ITS) Communications Cable Information Technology System (ITS) Communications Conduit Information Technology System (ITS) Conduit - Conduit to Scientific Research **Computing Facility**

Information Technology System (ITS) Fiber to Scientific Research Computing Facility @ SLAC Information Technology System (ITS) Improvements Information Technology System (ITS) Networking Systems Cable Infrastructure Improvements Infrastructure Upgrade Infrastructure Upgrade Lagunita Interiors Backlog Hammarskjold Interiors Backlog Scope & Design Interiors Backlog Toilet Retrofits Hulme Interiors Backlog Toilet Retrofits Phi Sigma Interiors Backlog Toilet Retrofits Synergy Irrigation System Upgrade ITS Conduit for New Northwest Data Center and Communications Hub ITS Conduit: New Windhover ITS Conduit: New Bass Building ITS Conduit: Porter Drive ITS Copper: AT&T Minimum Point of Entry Copper ITS Copper: New Manzanita Residences ITS Copper: New McMurtry Building ITS Fiber for New Northwest Data Center and Communications Hub ITS Fiber: Beckman - Fairchild ITS Fiber: Forsythe-Polya ITS Fiber: Jenkins - Mirrielee ITS Fiber: Jenkins to Rains ITS Fiber: Maples to Police Compound ITS Fiber: Medical Electronic Communications Hub to Beckman ITS Fiber: New Manzanita Residences ITS Fiber: New McMurtry Building ITS Fiber: Northwest Data Center and Communications Hub to Puichon ITS Fiber: Press Electric Communication Hub Reinforcements ITS Fiber: Quad Electric Communication Hub-Aero/Astro ITS Fiber: Quad Electric Communication Hub-Li Ka Shing Center ITS Fiber: Sunken Diamond ITS Fiber: West Electronic Communications Hub - Pine Hall ITS Fiber: Stadium to Maples ITS Fiber: East Electric Communications Hub-Bonair Electric Communication Hub ITS Fiber: East Electric Communications Hub-Jenkins Electric Communications Hub ITS Fiber: Haas 0.1 to Mayfield ITS Fiber: Medical Electric Communication Hub Reinforcement ITS Fiber: Northwest Data Center Communications Hub Electric Communications Hub to Beckman ITS Fiber: Press Electric Communications Hub-Bldg 02-500 Jen-Hsun Huang Engineering Center Junipero Serra Boulevard Lake Water Lake Lagunita to Campus East Junipero Serra Boulevard Lake Water Replacement Fremont to Lake Lagunita Kairos Knob, Tube & Misc. Scope and Design Knight Management Center Knob, Tube & Misc. Scope and Design Projects Lagunita Bathrooms Upgrade Lagunita Court Refurbishment Lagunita Lakeside Patio Pergola Lake Water Filtration

Lake Water Supervisory Control and Data Acquisition Lasuen Knob & Tube & Misc. Upgrades Scope and Design Li Ka Shing Center for Learning & Knowledge Life Safety and Code Compliance and Miscellaneous Upgrades Life Safety and Code Compliance Backlog Life Safety and Code Compliance Backlog - Haus Mitteleuropa Life Safety and Code Compliance Backlog - Synergy Life Safety and Code Compliance Fire Alarms Life Safety and Code Compliance Fire Alarms - STERN BURBANK Life Safety and Code Compliance - Fire Alarms-STERN DONNER Life Safety and Code Compliance-Fire Alarms-STERN LARKN N Life Safety and Code Compliance-Fire Alarms-STERN LARKN W Life Safety and Code Compliance-Fire Alarms-STERN SERRA Life Safety and Code Compliance-Fire Alarms-STERN TWAIN E Life Safety and Code Compliance-Fire Alarms-STERN TWAIN N Life Safety and Code Compliance-Fire Alarms-STERN ZAPATA Life Safety and Code Compliance - Fire Sprinklers Life Safety and Code Compliance Fire Sprinklers - FRENCH HOUSE Life Safety and Code Compliance Fire Sprinklers - BARNES Life Safety and Code Compliance Fire Sprinklers - Escondido Village Center Life Safety and Code Compliance Fire Sprinklers - HULME Life Safety and Code Compliance Fire Sprinklers - MIRRIELEES Life Safety and Code Compliance Fire Sprinklers - SAE Living/Learning Upgrades Loading Docks Lorry I Lokey Stem Cell Research Building Manzanita Park Refurbishment Manzanita Undergraduate Dormitory (formerly New Manzanita Undergraduate Dormitory) Manzanita, Graduate School of Business Housing, Schwab Hot Water Mars Knob, Tube & Misc. Scope and Design McCullough Energy Efficiency Mechanical, Electrical and Plumbing, Sewer & Exterior Infrastructure Meters & Backflow Preventer Meters and Backflows Miranda Avenue Domestic Water System Reconfiguration Miranda Domestic Water Upgrade Muwekma Life Safety and Code Compliance and Miscellaneous Upgrades Network Taps Network-Backbone Networking Load Balancer System Networking Special Projects New Buildings New Dining & Kitchens and Renovations New Residences at Lagunita Court (formerly Lagunita Court Addition) New Water Well #3 New Wells & Rehabilitations Northwest Data Center and Communications Hub Northwest Data Center and Communications Hub Computer Cabinet Buildout On Campus Photovoltaics Outdoor Lighting LED Retrofit Panama Street Utility Relocation Paul Allen Building Annex Distributed Digital Control Upgrade Paul Allen Building Distributed Digital Control Upgrade

Phi Psi Knob, Tube & Misc. Scope and Design Photovoltaics Power Generation Pump Stations Rains Houses Renovation Recycled Water System Refrigerant Leak Alarm System Renovation /Refresh-Escondido Village South Interiors **Renovations and Seismic Projects** Replacement Boiler Plant Replacement Central Energy Facility Site Camera and Card Reader Addition Research Animal Facility 1 and Research Animal Facility 2 Rehabilitation & Retrofit Residential & Dining Enterprise (R&DE) Deferred Maintenance Backlog projects Residential & Dining Enterprise (R&DE) Major Renovation Plan (formally Capital Project Program (CPP) and Capital Improvement Program (CIP)) Residential Computing Wireless Roads Roble Dining Hall Expansion Roble/Lagunita Outdoor Dining Enhancements **Roof Replacement** Roofs and Maintenance Equipment Backlog Construction Stern Roofs and Maintenance Equipment Backlog Scope & Design Roofs and Maintenance Equipment Backlog-Synergy Roth Knob, Tube & Misc. Scope and Design Row House Kitchen Replacements Row House Knob/Tube & Miscellaneous Upgrade Row House Renovations Row Kitchen Renovations Salvatierra St Domestic Water Replacement San Juan Hill Drainage Improvements San Juan Reservoir Rehabilitation Sanitary Sewer Rehabilitation Science Teaching and Learning Scientific Research Computing Facility - Backbone and Firewall Refresh Scientific Research Computing Facility "Uplift" Racks Refresh Sewer and Domestic Water Line Replacement Sewer Replacement - Galvez Shriram Center for Bioengineering and Chemical Engineering Siebel Golf Practice Remodeling Sigma Nu Knob, Tube & Misc. Scope and Design Site Improvements Slab Heating Replacement Slavianski Dom Life Safety and Code Compliance and Miscellaneous Upgrade Software Systems Special Fast Track Cable Stadium Field House Stanford Ave Storm Drain Replacement Stanford CheM-H and the Stanford Neurosciences Institute (SNI) (formerly Chemical Biology/Neurosciences) Stanford Energy System Innovation & High Voltage Substation Stanford Energy System Innovation Piping & Building Conversion Stanford in Redwood City Stanford Infrastructure Program (SIP) Steam Metering

Stern Hall Window Replacement Stern Larkin Resident Fellow Apartment Expansion/Reconfiguration/Renovation Stern-Twain Resident Fellow Apartment Expansion and Renovation Storm Drain Improvements Storm Drainage Supervisory Control and Data Acquisition (SCADA) System Upgrade Sweet Hall/Galvez Lake Water Upgrade Trails Undergraduate Housing and Dining Underground Utilities Infrastructure Improvements Uninterruptable Power Supply (UPS) University Terrace (previously named California Avenue Homes) Utility Metering, Billing, Reporting and Sustainability Systems Integration Utility Upgrades Site & Safety Improvements Waste Collection System Water Conservation & Recycling Plan Implementation Water Conservation Program Water Mains Water Wells Rehabilitation Well 3R Electrical Upgrade West Campus Detention Facilities Whole Building Energy Retrofit Program (WBERP) Whole Building Energy Retrofit Program (WBERP) - Mechanical Engineering Research Lab (MERL) Whole Building Energy Retrofit Program (WBERP) - Varian William H. Neukom Building (Law School Clinics & Faculty Office Building) Wireless Access Points for Central Energy Facility and Substation Wireless Infrastructure Wiremold Replacement Yang & Yamazaki Environment and Energy Building

ATTACHMENT 2

Financing Team Stanford University

Borrower:	The Board of Trustees of the Leland Stanford Junior University
Agent for Sale:	California State Treasurer
Issuer's Counsel:	Attorney General's Office
Issuer's Financial Advisor:	Public Financial Management, Inc.
Issuer's Financial Analyst:	Macias Gini O'Connell LLP
Bond Counsel:	Orrick, Herrington & Sutcliffe
Underwriters:	Goldman Sachs & Co. Barclays Capital Inc. Bank of America Merrill Lynch
Underwriter's Counsel:	Hawkins Delafield & Wood LLP
Borrower's Counsel:	Ropes and Gray, LLP
Trustee:	The Bank of New York Mellon, N.A.
Trustee Counsel:	The Law Office of Samuel D. Waldman
Rating Agency:	Moody's Investor Services, Standards & Poors, Fitch Ratings
Auditor:	PricewaterhouseCoopers LLP

THIRD AMENDMENT TO AND REINSTATEMENT OF RESOLUTION NO. 273

RESOLUTION OF THE CALIFORNIA EDUCATIONAL FACILITIES AUTHORITY AMENDING THE PROJECTS SET FORTH IN RESOLUTION NO. 273 AUTHORIZING THE ISSUANCE OF REVENUE BONDS TO FINANCE AND/OR REFINANCE EDUCATIONAL FACILITIES FOR THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY

May 26, 2016

WHEREAS, the California Educational Facilities Authority (the "Authority"), a public instrumentality of the State of California, is authorized and empowered by the provisions of the California Educational Facilities Authority Act (the "Act") to issue bonds, notes, debentures, commercial paper notes, or other securities to finance and refinance the acquisition, construction, expansion, rehabilitation, remodeling, renovation and equipping of educational facilities by participating private colleges (as defined in the Act) situated within the State of California;

WHEREAS, The Board of Trustees of the Leland Stanford Junior University (the "Borrower") applied to the Authority for the issuance of its bonds in the aggregate principal amount not to exceed \$1,093,805,000 (the "Bonds"), to be issued from time to time on behalf of the Borrower to provide financial assistance to the Borrower to finance and refinance the acquisition, construction, expansion, rehabilitation, remodeling, renovation and equipping of certain of the Borrower's educational facilities, as more fully described in Exhibit A attached to and incorporated in the Bond Resolution (as defined below) (the "Prior Projects");

WHEREAS, pursuant to Resolution No. 273 adopted on March 17, 2010, as amended by First Amendment to Resolution No. 273 adopted on April 25, 2013 and Second Amendment to Resolution No. 273 adopted on April 24, 2014 (as amended, the "Bond Resolution"), the Authority authorized the issuance of the Bonds for the Prior Projects;

WHEREAS, the Authority has issued such Bonds, designated as its California Educational Facilities Authority Revenue Bonds (Stanford University) Series U-1 in the aggregate principal amount of \$215,375,000, its California Educational Facilities Authority Revenue Bonds (Stanford University) Series U-2 in the aggregate principal amount of \$77,760,000, its California Educational Facilities Authority Revenue Bonds (Stanford University) Series U-2 in the aggregate principal amount of \$121,10,000, its California Educational Facilities Authority Revenue Bonds (Stanford University) Series U-3 in the aggregate principal amount of \$261,410,000, its California Educational Facilities Authority Revenue Bonds (Stanford University) Series U-4 in the aggregate principal amount of \$39,215,000, its California Educational Facilities Authority Revenue Bonds (Stanford University) Series U-5 in the aggregate principal amount of \$124,115,000 and its California Educational Facilities Authority Revenue Bonds (Stanford University) Series U-6 in the aggregate principal amount of \$278,980,000 and expects to issue additional Bonds pursuant to the Bond Resolution;

WHEREAS, the Borrower subsequently applied to the Authority for the issuance of additional Bonds from time to time on behalf of the Borrower to provide financial assistance to the Borrower to finance and refinance the acquisition, construction, expansion, rehabilitation,

remodeling, renovation and equipping of certain additional educational facilities of the Borrower, such additional facilities being more fully described in Exhibit A attached hereto and incorporated herein (the "Projects");

WHEREAS, the Borrower has provided documentation to the Authority demonstrating that all parts of the Projects have complied with Division 13 (commencing with Section 21000) of the Public Resources Code, or are not projects under that division;

WHEREAS, the Bond Resolution required that the Bonds be sold not later than March 17, 2016; and

WHEREAS, the Borrower has requested that the Authority reinstate the Bond Resolution, increase the authorized amount under the Bond Resolution to \$1,300,000,000 and extend the date for issuance of the Bonds to May 25, 2017;

NOW, THEREFORE, BE IT RESOLVED by the California Educational Facilities Authority as follows:

Section 1 The Borrower's application for additional financial assistance filed with the Authority is hereby approved.

<u>Section 2</u> The Bond Resolution is hereby reinstated and is hereby supplemented and amended as follows:

(a) Exhibit A, which describes the Prior Projects, as attached to the Bond Resolution and referred to in the third WHEREAS clause of the Bond Resolution shall be amended by Exhibit A, which describes the Projects, attached hereto and incorporated herein.

(b) The amount of \$1,093,805,000 appearing in Sections 2 and 3 and Exhibit B of the Bond Resolution shall be replaced in its entirety with the amount of \$1,300,000,000.

(c) The date "March 17, 2016" appearing in Section 3 of the Bond Resolution shall be replaced in its entirety by "May 25, 2017."

(d) The reference to "Resolution No. 2013-01, as amended by Amendment to Resolution No. 2013-01" appearing in Section 9 of the Bond Resolution shall be replaced in its entirety with "Resolution No. 2014-03".

(e) <u>A new Section 12 is hereby added to the Bond Resolution as follows:</u>

"Section 12. The aggregate principal amount of California Educational Facilities Authority Revenue Bonds (Stanford University) Series U-7 originally issued shall not exceed the difference between \$550,000,000 and the aggregate principal amount of Commercial Paper Notes outstanding at any one time under Resolution No. 255, as amended." **Section 3** Except as herein amended and supplemented, all of the findings, terms and provisions of the Bond Resolution are hereby ratified, confirmed and approved.

<u>Section 4</u> This amendment shall take effect from and after the date of adoption.

Date of Adoption:

EXHIBIT A

PROJECTS DESCRIPTION

"Projects" means, collectively, all of the projects listed in Exhibit A to the original Bond Resolution, as amended, which are incorporated herein by reference, plus the following additional educational facilities of the Borrower, but only to the extent that the cost thereof has been financed or refinanced from proceeds of the Bonds:

100 Gigabyte Border Routers Upgrade 100 Gigabyte Connectivity to Corporation for Education Network Initiatives in California (CENIC) 1047 Campus Drive -Bathroom & Miscellaneous Repairs 1520 Page Mill Road Tenant Improvements 1651 Page Mill Renovation 2370 Watson Court Tenant Improvements 408 Panama Mall Office Building Academic Equipment Access Ramps Accessible Parking Accessible Pathways Accessible Restrooms Add Chilled Water Heat Exchanger to Highland Hall Administrative Systems Infrastructure Alumni Center Distributed Digital Control Upgrade Always Seismic Renovation Americans with Disabilities Act compliance at various buildings (ADA) Anderson Collection at Stanford University (formerly Anderson Gallery Building) Anne T. and Robert M. Bass Biology Research Building and Connective Elements Arguello Domestic Water Main Arguello Way Storm Drain Upgrade Arillaga Family Sport Center Backfill Arrillaga Family Sports Center Addition Backup/Storage Improvements Barnes Living/Learning and Security Upgrades **Barriers Removal Bicycle and Pedestrian Paths & Lighting BioChem Quad Utilities 3Biomedical Innovation Building and Tunnel Infrastructure Boiler Feed Water Piping Systems Building Energy Retrofit Program Building Expansions Building Renovations** C.J. Huang Building Campus Drive 24 inch Chilled Water - Roth/Quarry Campus Drive at Bowdoin Domestic Water

Campus Drive at Galvez Domestic Water Campus Energy Management Control System (EMCS) Upgrade Campus Hot Water-Galvez to Arguello **Campus Transit Improvements** Capital Utilities Program (CUP) Central Energy Facility Eyewash Showers Central Energy Facility Controls Upgrade Central Energy Facility Distributed Control System/Instrument Upgrade Central Energy Facility Site Improvement/Pumphouse Central Loading Dock and Stauffer III Demolition Chi Theta Chi Row House Renovation **Chilled Water Extensions Chilled Water Heat Exchangers** Chilled Water Metering CJ Huang Tenant Improvement Build-out Clark Center Whole Building Energy Retrofit Program Client/Server Hardware Columbae Life Safety and Code Compliance and Miscellaneous Upgrades **Communications & Networking Systems** Conduit-Welch Rd Reinforcement Copper Cable Crothers Way 12-Inch Domestic Waterline Replacement CUP - All Other CUP - Chilled Water CUP - Creek/Pump Stations CUP - Department Firewalls **CUP** - Domestic Water CUP - Fish Ladders CUP - Hot Water CUP - IT & CS CUP - Lake Water CUP - Other **CUP** - Reservoirs CUP - Sewer CUP - Steam **CUP** - Storm Drains CUP System Expansion and CUP System Replacement Current Good Manufacturing Practice (cGMP) Facility Data Center Pool and Cooling Upgrade David and Joan Traitel Building and Connective Elements Deferred/Planned Maintenance Departmental Firewall Refresh Dolores Knob, Tube & Misc. Scope and Design **Domestic Water Facilities** Domestic Water Inter-Tie Upgrade

Domestic Water Supervisory Control and Data Acquisition

Domestic Water System Bowdoin Pressure Reducing Valve Stations **Domestic Water Transmission** Drainage Drainage System Upgrades **Dry Land Diving Facility** Durand Knob, Tube & Misc. Scope and Design **Edwards Seismic Retrofit** El Camino Swale Rehab **Electric Motor Replacement Electric Vehicle Service Equipment Expansion Project Electrical Smart Meters** Electrical Upgrade Backlog Scope & Design **Electricity Metering Projects** Electronic Communications Hub (ECH)/Enterprise Data Center Cable & Conduit Electronic Communications Hub Improvement & Expansions - East Campus Elevator Upgrade Elevators **Emergency Generators and Fueling Project** Emergency Management & Control Systems (EMCS) Energy Retrofit Program Energy Retrofit Program - Medical School of Business Air Handler Energy Retrofit Program Heating, Ventilation and Air Conditioning Upgrades at Arillaga Center for Sports and Recreation Energy Retrofit Program Heating, Ventilation and Air Conditioning Upgrades at Arillaga Family Sports Center Energy Retrofit Program-Maples Control System Escondido Road Lake Water Escondido South Hot Water Line Escondido South Interiors Reno Escondido Village Barnes Sprinkler, Roof & Miscellaneous Escondido Village Graduate Residences and Parking Garage Escondido Village High-rise Sprinklers Installation Escondido Village Hulme Midrise Renovation Escondido Village Low-Rise Fire Alarm Escondido Village Site Lighting Escondido Village Slab Heat Renovation Escondido Village Slab Replacement Exterior Backlog Scope & Design Exterior Backlog Stern Windows Fiber cables Fire Alarms Forsythe Fiber and Managed Machine Room Switch Freidenrich Center for Translation Research Fremont Road Longitudinal Welded Pipe Upgrade French Knob, Tube & Misc. Scope and Design Furniture Fixture & Equipment (FF&E) & Vehicles

Galvez Mall Lake Water Pipe Galvez Street Storm Drain Upgrade Garbage Disposal Code Upgrades and Grease Containment Gender-Neutral Restroom Conversions General Use Permit (GUP) Mitigation Projects Governor's Corner Interim improvement Governor's Corner Renovation Graduate School of Business Bio-Retention Renewal Grove Life Safety and Code Compliance and Miscellaneous Upgrades Heating, Ventilation, and Air Conditioning (HVAC) Highland Hall (formerly, Stanford Graduate School of Business Graduate Residences, formerly Graduate School of Business Housing Expansion) High Voltage Cable Replacement High Voltage (HV) Infrastructure Upgrade and HV Transmission System Improvements High Voltage Replacements High Voltage Supervisory Control and Data Acquisition (SCADA) Upgrades Hoskins Sprinkler, Living/Learning, Security Upgrade Hot Water Pipe Via Ortega, Via Pueblo Information Technology & Communication Systems Information Technology System (ITS) Communications Cable Information Technology System (ITS) Communications Conduit Information Technology System (ITS) Conduit - Conduit to Scientific Research **Computing Facility** Information Technology System (ITS) Fiber to Scientific Research Computing Facility @ SLAC Information Technology System (ITS) Improvements Information Technology System (ITS) Networking Systems Cable Infrastructure Improvements Infrastructure Upgrade Infrastructure Upgrade Lagunita Interiors Backlog Hammarskjold Interiors Backlog Scope & Design Interiors Backlog Toilet Retrofits Hulme Interiors Backlog Toilet Retrofits Phi Sigma Interiors Backlog Toilet Retrofits Synergy Irrigation System Upgrade ITS Conduit for New Northwest Data Center and Communications Hub ITS Conduit: New Windhover ITS Conduit: New Bass Building **ITS Conduit: Porter Drive** ITS Copper: AT&T Minimum Point Of Entry Copper **ITS Copper: New Manzanita Residences** ITS Copper: New McMurtry Building ITS Fiber for New Northwest Data Center and Communications Hub ITS Fiber: Beckman - Fairchild

ITS Fiber: Forsythe-Polya

ITS Fiber: Jenkins - Mirrielee

ITS Fiber: Jenkins to Rains

ITS Fiber: Maples to Police Compound

ITS Fiber: Medical Electronic Communications Hub to Beckman

ITS Fiber: New Manzanita Residences

ITS Fiber: New McMurtry Building

ITS Fiber: Northwest Data Center and Communications Hub to Puichon

ITS Fiber: Press Electric Communication Hub Reinforcements

ITS Fiber: Quad Electric Communication Hub-Aero/Astro

ITS Fiber: Quad Electric Communication Hub-Li Ka Shing Center

ITS Fiber: Sunken Diamond

ITS Fiber: West Electronic Communications Hub - Pine Hall

ITS Fiber: Stadium to Maples

ITS Fiber: East Electric Communications Hub-Bonair Electric Communication Hub

ITS Fiber: East Electric Communications Hub-Jenkins Electric Communications Hub

ITS Fiber: Haas 0.1 to Mayfield

ITS Fiber: Medical Electric Communication Hub Reinforcement

ITS Fiber: Northwest Data Center Communications Hub Electric Communications Hub to Beckman

ITS Fiber: Press Electric Communications Hub-Bldg 02-500

Jen-Hsun Huang Engineering Center

Junipero Serra Boulevard Lake Water Lake Lagunita to Campus East

Junipero Serra Boulevard Lake Water Replacment Fremont to Lake Lagunita

Kairos Knob, Tube & Misc. Scope and Design

Knight Management Center

Knob, Tube & Misc. Scope and Design Projects

Lagunita Bathrooms Upgrade

Lagunita Court Refurbishment

Lagunita Lakeside Patio Pergola

Lake Water Filtration

Lake Water Supervisory Control and Data Acquisition

Lasuen Knob & Tube & Misc. Upgrades Scope and Design

Li Ka Shing Center for Learning & Knowledge

Life Safety and Code Compliance and Miscellaneous Upgrades

Life Safety and Code Compliance Backlog

Life Safety and Code Compliance Backlog - Haus Mitteleuropa

Life Safety and Code Compliance Backlog - Synergy

Life Safety and Code Compliance Fire Alarms

Life Safety and Code Compliance Fire Alarms - STERN BURBANK

Life Safety and Code Compliance - Fire Alarms-STERN DONNER

Life Safety and Code Compliance-Fire Alarms-STERN LARKN N

Life Safety and Code Compliance-Fire Alarms-STERN LARKN W

Life Safety and Code Compliance-Fire Alarms-STERN SERRA

Life Safety and Code Compliance-Fire Alarms-STERN TWAIN E Life Safety and Code Compliance-Fire Alarms-STERN TWAIN N Life Safety and Code Compliance-Fire Alarms-STERN ZAPATA Life Safety and Code Compliance - Fire Sprinklers Life Safety and Code Compliance Fire Sprinklers - FRENCH HOUSE Life Safety and Code Compliance Fire Sprinklers - BARNES Life Safety and Code Compliance Fire Sprinklers - Escondido Village Center Life Safety and Code Compliance Fire Sprinklers - HULME Life Safety and Code Compliance Fire Sprinklers - MIRRIELEES Life Safety and Code Compliance Fire Sprinklers - SAE Living/Learning Upgrades Loading Docks Lorry I Lokey Stem Cell Research Building Manzanita Park Refurbishment Manzanita Undergraduate Dormitory (formerly New Manzanita Undergraduate Dormitory) Manzanita, Graduate School of Business Housing, Schwab Hot Water Mars Knob, Tube & Misc. Scope and Design McCullough Energy Efficiency Mechanical, Electrical and Plumbing, Sewer & Exterior Infrastructure Meters & Backflow Preventer Meters and Backflows Miranda Avenue Domestic Water System Reconfiguration Miranda Domestic Water Upgrade Muwekma Life Safety and Code Compliance and Miscellaneous Upgrades Network Taps Network-Backbone Networking Load Balancer System **Networking Special Projects** New Buildings New Dining & Kitchens and Renovations New Residences at Lagunita Court (formerly Lagunita Court Addition) New Water Well #3 New Wells & Rehabilitations Northwest Data Center and Communications Hub Northwest Data Center and Communications Hub Computer Cabinet Buildout **On Campus Photovoltaics Outdoor Lighting LED Retrofit** Panama Street Utility Relocation Paul Allen Building Annex Distributed Digital Control Upgrade Paul Allen Building Distributed Digital Control Upgrade Phi Psi Knob, Tube & Misc. Scope and Design **Photovoltaics Power Generation Pump Stations Rains Houses Renovation Recycled Water System**

Refrigerant Leak Alarm System Renovation /Refresh-Escondido Village South Interiors **Renovations and Seismic Projects Replacement Boiler Plant** Replacement Central Energy Facility Site Camera and Card Reader Addition Research Animal Facility 1 and Research Animal Facility 2 Rehabilitation & Retrofit Residential & Dining Enterprise (R&DE) Deferred Maintenance Backlog projects Residential & Dining Enterprise (R&DE) Major Renovation Plan (formally Capital Project Program (CPP) and Capital Improvement Program (CIP)) **Residential Computing Wireless** Roads **Roble Dining Hall Expansion** Roble/Lagunita Outdoor Dining Enhancements **Roof Replacement** Roofs and Maintenance Equipment Backlog Construction Stern Roofs and Maintenance Equipment Backlog Scope & Design Roofs and Maintenance Equipment Backlog- Synergy Roth Knob, Tube & Misc. Scope and Design Row House Kitchen Replacements Row House Knob/Tube & Miscellaneous Upgrade **Row House Renovations Row Kitchen Renovations** Salvatierra St Domestic Water Replacement San Juan Hill Drainage Improvements San Juan Reservoir Rehabilitation Sanitary Sewer Rehabilitation Science Teaching and Learning Scientific Research Computing Facility - Backbone and Firewall Refresh Scientific Research Computing Facility "Uplift" Racks Refresh Sewer and Domestic Water Line Replacement Sewer Replacement - Galvez Shriram Center for Bioengineering and Chemical Engineering Siebel Golf Practice Remodeling Sigma Nu Knob, Tube & Misc. Scope and Design Site Improvements **Slab Heating Replacement** Slavianski Dom Life Safety and Code Compliance and Miscellaneous Upgrade Software Systems Special Fast Track Cable **Stadium Field House** Stanford Ave Storm Drain Replacement Stanford CheM-H and the Stanford Neurosciences Institute (SNI) (formerly Chemical Biology/Neurosciences) Stanford Energy System Innovation & High Voltage Substation Stanford Energy System Innovation Piping & Building Conversion

Stanford in Redwood City Stanford Infrastructure Program (SIP) **Steam Metering** Stern Hall Window Replacement Stern Larkin Resident Fellow Apartment Expansion/Reconfiguration/Renovation Stern-Twain Resident Fellow Apartment Expansion and Renovation Storm Drain Improvements Storm Drainage Supervisory Control and Data Acquisition (SCADA) System Upgrade Sweet Hall/Galvez Lake Water Upgrade Trails Undergraduate Housing and Dining Underground Utilities Infrastructure Improvements Uninterruptable Power Supply (UPS) University Terrace (previously named California Avenue Homes) Utility Metering, Billing, Reporting and Sustainability Systems Integration Utility Upgrades Site & Safety Improvements Waste Collection System Water Conservation & Recycling Plan Implementation Water Conservation Program Water Mains Water Wells Rehabilitation Well 3R Electrical Upgrade West Campus Detention Facilities Whole Building Energy Retrofit Program (WBERP) Whole Building Energy Retrofit Program (WBERP) - Mechanical Engineering Research Lab (MERL) Whole Building Energy Retrofit Program (WBERP) - Varian William H. Neukom Building (Law School Clinics & Faculty Office Building) Wireless Access Points for Central Energy Facility and Substation Wireless Infrastructure Wiremold Replacement Yang & Yamazaki Environment and Energy Building