New Issue Book-Entry Only Not Bank Qualified Moody's Rating: Aaa S&P Global Rating: AA+ (See "OTHER BOND INFORMATION—Ratings")

In the opinion of Pacifica Law Group LLP, Seattle, Washington, Bond Counsel, under existing law and subject to certain qualifications described herein, interest on the Bonds is excludable from gross income for federal income tax purposes. In addition, interest on the Bonds is not an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals. See "TAX MATTERS" herein.



# UNIVERSITY OF WASHINGTON \$100,000,000

General Revenue Bonds, 2019A (Term Rate Bonds)

Dated: Date of delivery N

Maturity Date and Mandatory Purchase Date: as shown on inside cover

The University of Washington (the "University") is issuing its General Revenue Bonds, 2019A (the "Bonds") to pay costs of University projects, or to refinance commercial paper issued originally to finance costs of University projects, and to pay the costs of issuance. U.S. Bank National Association (the "Paying Agent") is serving as Paying Agent for the Bonds pursuant to a Paying Agent Agreement between the Paying Agent and the University dated as of February 1, 2019. The Bonds are issuable only as fully registered obligations and, when issued, will be registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York ("DTC"). DTC will act as securities depository for the Bonds. Purchases of beneficial interests in the Bonds will be made in book-entry form, in denominations of \$5,000 each and integral multiples thereof. Purchasers will not receive certificates representing their interests in the Bonds, except as described herein. So long as DTC or its nominee is the registered owner of the Bonds, payments of principal of and interest on the Bonds will be made directly to DTC or to such nominee. Disbursements of such payments to DTC's Direct Participants are the responsibility of DTC, and disbursements of such payments to the Beneficial Owners are the responsibility of the Direct Participants and the Indirect Participants, as more fully described in Appendix D.

The Bonds are to be issued initially as Term Rate Bonds bearing interest at the initial Term Rate for the initial Term Rate Period as set forth on the inside cover. Interest on the Bonds during the Initial Term Rate Period is payable on May 1, 2019, and thereafter on each November 1 and May 1, and on the Scheduled Mandatory Purchase Date. If not previously redeemed at the option of the University or converted to a new Term Rate Period or to another Mode, the Bonds are subject to tender for mandatory purchase on the Scheduled Mandatory Purchase Date set forth on the inside cover as described herein. If not purchased on the Scheduled Mandatory Purchase Date, the Bonds are subject to the Delayed Remarketing Rate. This Official Statement describes the Bonds only during the initial Term Rate Period.

No Liquidity Facility secures payment of the purchase price of Bonds that are tendered or deemed tendered for purchase and not remarketed. The Bonds are subject to optional redemption prior to maturity as described in this Official Statement.

The Bonds are special fund obligations of the University, payable solely from General Revenues, as defined herein. General Revenues include all non-appropriated income, revenues and receipts of the University if and to the extent such funds are not restricted in their use by law, regulation or contract. The University has no taxing power. The Bonds are not an obligation, either general, special or moral, of the State of Washington (the "State"). The University reserves the right to include in General Revenues other sources of revenue or income upon compliance with certain conditions, and to exclude items from General Revenues in the future. The University has previously issued bonds and commercial paper notes payable from General Revenues and has entered into lease and other financing arrangements payable from General Revenues. The University may issue additional bonds or enter into leases or other contractual obligations payable from General Revenues.

This cover page contains certain information for quick reference only. It is not a summary of this issue. Investors must read the entire Official Statement to obtain information essential to the making of an informed investment decision.

The Bonds are offered when, as and if issued, subject to receipt of the approving legal opinion of Pacifica Law Group LLP. Certain matters will be passed upon for the Underwriters by their counsel, Foster Pepper PLLC. It is expected that delivery of the Bonds will be made by *Fast Automated Securities Transfer* through DTC in New York, New York, on or about February 7, 2019.

# **CITIGROUP**

BACKSTROM MCCARLEY BERRY & CO., LLC

# UNIVERSITY OF WASHINGTON

# GENERAL REVENUE BONDS, 2019A (TERM RATE BONDS)

#### \$100,000,000

Price: 108.132%
Yield to Mandatory Purchase Date: 1.93%
Term Rate: 5.00%
Delayed Remarketing Rate: 8.00%

First Interest Payment Date: May 1, 2019
Maturity Date: May 1, 2048
Mandatory Purchase Date: May 1, 2022

First Par Call Date: November 1, 2021

CUSIP<sup>+</sup> No.: 91523NTA4

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# UNIVERSITY OF WASHINGTON

# 4311 11th Avenue Northeast Seattle, Washington 98105-4608

Telephone: (206) 221-6752 Website: http://finance.uw.edu/treasury/(1)

### **BOARD OF REGENTS**

Regent	Title	Term Expiration
Constance Rice	Chair	September 30, 2019
Joel Benoliel	Vice Chair	September 30, 2021
William S. Ayer	Member	September 30, 2022
Joanne R. Harrell	Member	September 30, 2021
Jeremy Jaech	Member	September 30, 2024
Libby G. MacPhee <sup>(2)</sup>	Member	September 30, 2024
Rogelio Riojas	Member	September 30, 2019
Blaine Tamaki	Member	September 30, 2022
David Zeeck <sup>(2)</sup>	Member	September 30, 2023
Kaitlyn Zhou <sup>(2)(3)</sup>	Member	June 30, 2019
Tyler Lange	Secretary of the	Board of Regents
Shelley Tennant	Assistant Secreta	ary of the Board of Regents
ADMI	NISTRATIVE OFFICE	RS
Ana Mari Cauce	President	
Mark Dichards	Drovest and Eve	nutiva Vica President

Ana Mari Cauce	President
Mark Richards	Provost and Executive Vice President
Brian McCartan	Vice President for Finance
Paul G. Ramsey	Executive Vice President for Medical Affairs

### BOND COUNSEL

Pacifica Law Group LLP Seattle, Washington

### FINANCIAL ADVISOR

Piper Jaffray & Co. Seattle, Washington

#### **PAYING AGENT**

U.S. Bank National Association Seattle, Washington

The University's website and other websites referenced herein are not part of this Official Statement, and investors should not rely on information presented on the University's or other websites in determining whether to purchase the Bonds. This inactive textual reference to the University's website and other website references herein are not hyperlinks and do not incorporate the University's or other websites by reference.

<sup>(2)</sup> Pending State Senate confirmation.

<sup>&</sup>lt;sup>(3)</sup> Student Regent (serves a one-year term).

No dealer, broker, salesperson or any other person has been authorized to give any information or to make any representation, other than the information and representations contained in this Official Statement, in connection with the sale of the Bonds and, if given or made, such information or representation must not be relied upon as having been authorized by the University. This Official Statement does not constitute an offer to sell or a solicitation or sale of the Bonds.

The Underwriters have provided the following sentence for inclusion in this Official Statement. The Underwriters have reviewed the information in this Official Statement in accordance with, and as part of, their responsibilities to investors under the federal securities laws as applied to the facts and circumstances of this transaction, but the Underwriters do not guarantee the accuracy or completeness of such information.

Certain statements contained in this Official Statement do not reflect historical facts but are forecasts and "forward-looking statements." No assurance can be given that the future results discussed herein will be achieved, and actual results may differ materially from the forecasts described herein. In this respect, words such as "estimate," "project," "anticipate," "expect," "intend," "forecast," "plan," "believe" and similar expressions are intended to identify forward-looking statements. All projections, forecasts, assumptions and other forward-looking statements are expressly qualified in their entirety by the cautionary statements set forth in this Official Statement.

CUSIP numbers are included in this Official Statement for convenience of the holders and potential holders of the Bonds. The CUSIP numbers were provided by CUSIP Global Services. No assurance can be given that the CUSIP numbers for the Bonds will remain the same after the date of issuance and delivery of the Bonds. Neither the University nor the Underwriters take any responsibility for the accuracy of such CUSIP numbers.

This Official Statement is not to be construed as a contract or agreement between the University and purchasers or owners of any of the Bonds.

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#### OFFICIAL STATEMENT

#### UNIVERSITY OF WASHINGTON

#### \$100,000,000

General Revenue Bonds, 2019A (Term Rate Bonds)

#### INTRODUCTORY STATEMENT

This Official Statement, including the inside cover, table of contents and appendices, provides information regarding the University of Washington (the "University") and its General Revenue Bonds, 2019A (the "Bonds"). U.S. Bank National Association (the "Paying Agent") is serving as Paying Agent for the Bonds pursuant to a Paying Agent Agreement between the Paying Agent and the University dated as of February 1, 2019.

The University is issuing the Bonds (a) to pay costs of University projects, or to refinance commercial paper issued originally to finance costs of University projects; and (b) to pay costs of issuance. See "SOURCES AND USES OF BOND PROCEEDS."

The University is issuing the Bonds pursuant to chapter 28B.142 of the Revised Code of Washington ("RCW"). The issuance of the Bonds is authorized pursuant to a resolution of the Board of Regents of the University adopted on July 12, 2018 (the "Resolution") and the Paying Agent Agreement. See Appendix A.

Brief descriptions of the Bonds, the University, the Paying Agent, the Resolution, the Paying Agent Agreement and certain statutes and agreements are included in this Official Statement. Such descriptions do not purport to be comprehensive or definitive. All references to the statutes, agreements, or other instruments described herein are qualified in their entirety by reference to each such document, statute, or other instrument. The information in this Official Statement is subject to change without notice, and neither the delivery of this Official Statement nor any sale of the Bonds shall under any circumstances create any implication that there has been no change in the affairs of the University since the date of this Official Statement. Capitalized terms used in this Official Statement but not defined herein have the meanings set forth in the Resolution, a copy of which is included in Appendix A, or the Paying Agent Agreement, a substantially final form of which is included in Appendix A.

### THE BONDS

### General

The Bonds will be dated their date of delivery and will bear interest at the rate set forth on the inside cover of this Official Statement. The Bonds will mature on May 1, 2048, subject to mandatory purchase and prior redemption or Conversion as described below.

The Bonds will be issued as fully registered bonds in denominations of \$5,000 each or any integral multiple of \$5,000 (each, an "Authorized Denomination"). The Bonds will be registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York ("DTC"), pursuant to DTC's book-entry only system (the "Book-Entry Only System"). Purchases of beneficial interests in the Bonds will be made in book-entry form only. If at any time the Book-Entry Only System is discontinued for the Bonds, the Bonds will be exchangeable for other fully registered certificated Bonds in Authorized Denominations. See Appendices A and D.

For so long as DTC or its nominee is the Registered Owner of the Bonds, interest and principal shall be paid and delivery shall be made as described in the operational arrangements referred to in the Letter of Representations and pursuant to DTC's standard procedures. See Appendices A and D.

The interest due on any Bond on any Interest Payment Date shall be paid to the Registered Owner of such Bond as shown on the Bond Register as of the 15th day (whether or not a Business Day) of the month next preceding each Interest Payment Date (the "Record Date"). If the Bonds are no longer held in book-entry only form, the interest on the Bonds shall be payable by check, provided that any Registered Owner of \$1,000,000 or more in aggregate

principal amount of the Bonds, upon written request given to the Paying Agent at least five business days prior to the Record Date designating an account in a domestic bank, may be paid by wire transfer of immediately available funds. If the Bonds are no longer held in book-entry only form, all payments of principal shall be made solely upon presentation of the Bond to the Paying Agent.

### **Paying Agent**

The University has appointed U.S. Bank National Association as initial Paying Agent for the Bonds (and "Trustee" under the Resolution). The Paying Agent will authenticate the Bonds and act as the paying agent, tender agent, and registrar for the purpose of paying the principal of and interest on the Bonds, recording the purchase and registration, exchange or transfer, and payment of Bonds and performing the other respective obligations of the Paying Agent and Trustee under the Resolution.

#### **Term Rate Bonds**

Interest at the Term Rate. The Bonds are to be issued as Term Rate Bonds, bearing interest at the Term Rate, as set forth on the inside cover. If not purchased on the Mandatory Purchase Date, the Bonds are subject to the Delayed Remarketing Rate described under the heading "Delayed Remarketing Period" below.

Interest on the Bonds shall accrue on the basis of a 360-day year composed of twelve 30-day months and shall be payable on each Interest Payment Date. "Interest Payment Date" means (a)(i) May 1, 2019 and thereafter each May 1 and November 1; (ii) each Purchase Date; and (iii) each date on which all or a portion of the Bonds are redeemed, and (b) without duplication, the first Business Day succeeding the last day of each Interest Rate Period. The "Initial Term Rate Period" commences on the Initial Issue Date and ends on the Scheduled Mandatory Purchase Date set forth on the inside front cover, unless such Bonds are earlier converted or redeemed. In the event that a Bond becomes a Delayed Remarketing Bond, the Initial Term Rate Period shall include any immediately succeeding Delayed Remarketing Period.

Upon Conversion and remarketing the Bonds may accrue interest in the same or a different Interest Rate Mode. Under the Resolution, the other permitted Interest Rate Modes are the Daily Mode, Weekly Mode, Commercial Paper Mode, Index Floating Mode, and Fixed Mode.

Mandatory Purchase on Mandatory Purchase Date. The Bonds are subject to mandatory tender for purchase at the Purchase Price on the following Purchase Dates (without duplication): (i) the Scheduled Mandatory Purchase Date set forth on the inside front cover; (ii) on each proposed Conversion Date for which notice of mandatory tender has been given to the Registered Owners; (iii) on each proposed redemption date on or after the Par Call Date for which notice of mandatory tender has been given to the Registered Owners; and (iv) at any time during a Delayed Remarketing Period, upon notice given by the Remarketing Agent to the Paying Agent of a successful remarketing and the availability of funds sufficient to pay the Purchase Price for all such Bonds (in Authorized Denominations), without regard to any notice requirements.

In connection with any mandatory tender for purchase of Bonds, the Paying Agent shall give notice to the Registered Owners of the affected Bonds (at their addresses as they appear on the Bond Register as of the date of such notice) not less than 20 days prior to the Purchase Date. Bonds tendered for purchase shall be purchased on the Purchase Date specified in the applicable notice by payment of the Purchase Price made by the Paying Agent, payable in immediately available funds to the Registered Owner (and not to any Participant), by 3:00 p.m., New York time, on the Purchase Date, or as soon as practicable thereafter upon the receipt by the Paying Agent of the Purchase Price in the Bond Purchase Fund.

Delayed Remarketing Period; Delayed Remarketing Rate. If the entire Purchase Price for any Bonds cannot be paid on the applicable Purchase Date, then the Bonds will not be purchased and will become Delayed Remarketing Bonds. A Delayed Remarketing Period will commence on the Purchase Date with respect to the Bonds for which funds were insufficient to pay the entire Purchase Price. During a Delayed Remarketing Period, the Delayed Remarketing Bonds will bear interest at the Delayed Remarketing Rate set forth on the inside front cover; interest shall continue to be due and payable on each Interest Payment Date and also shall be payable on the last day of the Delayed Remarketing Period for the Delayed Remarketing Bonds; the Remarketing Agent will continue to be

obligated to remarket the Bonds; the Delayed Remarketing Bonds will continue to be subject to optional redemption by the University as described under the heading "—Optional Redemption" below; the University may Elect to effect a Conversion of the Delayed Remarketing Bonds; and, if and when the Delayed Remarketing Bonds are successfully remarketed, the Registered Owners of the Delayed Remarketing Bonds will be obligated to tender their Bonds for purchase.

No Credit Facility or Liquidity Facility secures payment of the Purchase Price of any Bonds and a failure of the University to pay the Purchase Price is not a default. Any Bonds that are not purchased when tendered are subject to the Delayed Remarketing Rate.

Conversion of Interest Rate Mode. The Bonds may be converted to a new Mode, upon notice provided by the Paying Agent not less than 20 days prior to the proposed Conversion Date. See Section 6 of the Paying Agent Agreement at "APPENDIX A – COPY OF THE RESOLUTION AND SUBSTANTIALLY FINAL FORM OF PAYING AGENT AGREEMENT."

Conditions to Conversion. No Conversion shall take effect unless each of the following conditions, to the extent applicable, has been satisfied:

- If the notice of the University's Election to convert indicates that a Credit Facility will be in effect during the subsequent Interest Rate Period, such Credit Facility must be in effect on the Conversion Date;
- The University must obtain a Favorable Opinion of Bond Counsel with respect to such Conversion dated as of the Conversion Date; and
- Except with respect to Delayed Remarketing Bonds and Unremarketed Bonds, the Paying Agent
  must have sufficient funds on hand from remarketing or refunding proceeds, proceeds of a draw
  on the Credit Facility or other funds made available by the University, to pay the Purchase Price of
  the Bonds on the Conversion Date.

Rescission of Election to Convert. The University may rescind any Election to effect a Conversion by delivering to the Paying Agent on or prior to 10:00 a.m., New York time, on the second Business Day preceding a proposed Conversion Date, a notice to the effect that the University has determined to rescind its Election to effect such Conversion. See the Paying Agent Agreement at "APPENDIX A – COPY OF THE RESOLUTION AND SUBSTANTIALLY FINAL FORM OF PAYING AGENT AGREEMENT."

#### **Optional Redemption**

The Bonds are subject to redemption at the option of the University, as a whole or in part on any date on or after November 1, 2021 (each a "Par Call Date"), at a Redemption Price equal to 100 percent of the principal amount thereof, plus interest accrued to the Redemption Date. During any Delayed Remarketing Period, the Par Call Date for any Delayed Remarketing Bond shall mean any Business Day.

Selection of Bonds for Redemption. If the University elects to redeem fewer than all of the Bonds for optional redemption, the University shall select the amount to be redeemed. In no event shall any Bond be Outstanding in a principal amount that is not an Authorized Denomination. If less than all the Outstanding Bonds are to be redeemed, the Bonds to be redeemed shall be selected in accordance with the then effective operational arrangements of DTC referred to in the Letter of Representations or if the Bonds are no longer in book-entry only form, the Bonds shall be selected randomly by the Paying Agent.

**Notice of Redemption.** For so long as the book entry-only system is in effect, notice of redemption shall be provided in accordance with the operational arrangements of DTC referred to in the Letter of Representations, and no additional published or other notice shall be provided by the University. Notice of redemption may be conditional. Notice of redemption shall be given by the University to the Paying Agent, who shall give notice to DTC at least 20 days prior to the proposed date of redemption.

Conditional Redemption. Any notice for redemption may be conditional, in which case the conditions shall be set forth in the notice.

Effect of Redemption. If an unconditional notice of redemption has been given or if a conditional notice of redemption has been given and the conditions set forth in the notice have been satisfied, then on the Redemption Date the Bonds or portions thereof so called for redemption shall become payable at the Redemption Price specified in such notice; and from and after the Redemption Date, interest thereon or on portions thereof so called for redemption shall cease to accrue, and such Bonds or portions thereof shall cease to be Outstanding and to be entitled to any benefit, protection or security under the Resolution. Thereafter the Owners of such Bonds or portions thereof shall have no rights in respect thereof except to receive payment of the Redemption Price upon delivery of such Bonds to the Paying Agent.

Any notice mailed as described above will be conclusively presumed to have been given, whether or not actually received by any owner of a Bond. The failure to mail notice with respect to any Bond will not affect the validity of the proceedings for the redemption of any other Bond with respect to which notice was so mailed.

#### Special Considerations Relating to a Future Remarketing of the Bonds

The following factors should be considered with respect to the ability of the University to remarket the Bonds on the Scheduled Mandatory Purchase Date (or on a Conversion Date occurring on or after the respective Par Call Date or during the Delayed Remarketing Period).

A Remarketing Agent will be Selected and Paid by the University. After the initial issuance and sale of the Bonds, there will be no Remarketing Agent in place. Upon an Election to effect a Conversion of the Bonds, the University may be required to retain a Remarketing Agent, the selection of which will be within the University's sole discretion, consistent with the Paying Agent Agreement. The Remarketing Agent's responsibilities will include remarketing the Bonds, as further described in this Official Statement. The Remarketing Agent will be appointed by the University prior to the Mandatory Purchase Date and paid by the University for its services. As a result, the interests of the Remarketing Agent may differ from those of the owners of the Bonds.

The Remarketing Agent May Purchase the Bonds for Its Own Account. The Remarketing Agent will be permitted, but is not obligated, to purchase tendered Bonds for its own account and, in its sole discretion, may acquire such tendered Bonds in order to achieve a successful remarketing of the Bonds. The Remarketing Agent, however, will not be obligated to purchase the Bonds and may cease doing so at any time without notice. The Remarketing Agent may also make a market in the Bonds by routinely purchasing and selling the Bonds other than in connection with a tender and remarketing. Such purchases and sales may be at or below par. The Remarketing Agent, however, will not be required to make a market in the Bonds. The Remarketing Agent may also sell any Bonds it has purchased to one or more affiliated investment vehicles for collective ownership or enter into derivative arrangements with affiliates or others in order to reduce its exposure with respect to the Bonds. The purchase of the Bonds by the Remarketing Agent may create the appearance that there is greater third-party demand for the Bonds in the market than is actually the case.

The Bonds May be Offered at Different Prices on Any Date. The Remarketing Agent may or may not be able to remarket the Bonds on a Scheduled Mandatory Purchase Date at par, and the Remarketing Agent may sell the Bonds at varying prices to different investors on such date or any other date. The Remarketing Agent is not obligated to advise purchasers in a remarketing in which it does not have third-party buyers for all of the Bonds at the Purchase Price. In the event a Remarketing Agent owns any Bonds for its own account, it may, in its sole discretion in a secondary market transaction outside the tender process, offer such Bonds on any date, including any Scheduled Mandatory Purchase Date, at a discount to the stated principal amount to some investors.

The Ability to Sell the Bonds May Be Limited. During the Term Rate Period, the owners of the Bonds do not have the right to optionally tender their Bonds for purchase through a tender process. Investors who purchase the Bonds, whether through the initial sale or otherwise, should not assume that they will be able to sell their Bonds other than through the mandatory tender process set forth in the Paying Agent Agreement. While the Bonds are in the Term Rate Mode, in the event that a remarketing is unsuccessful, the owners may be required to retain their Bonds throughout any Delayed Remarketing Period, subject to the Delayed Remarketing Rate.

The Remarketing Agent May Be Removed, Resign, or Cease Remarketing. The Remarketing Agent will be appointed by the University prior to the Scheduled Mandatory Purchase Date. The Remarketing Agent may be removed or have the ability to resign or cease its remarketing efforts, subject to the terms of the Paying Agent Agreement, without a successor being named under certain circumstances. Any Remarketing Agreement will be negotiated between the University and the Remarketing Agent, each acting in its sole discretion subject to the minimum qualifications of a Remarketing Agent set forth in the Paying Agent Agreement.

### Purchase of Bonds by the University

The University may acquire Bonds by the purchase of Bonds offered to the University at any time at such purchase price as the University deems appropriate, or by gift at any time, on terms as the University deems appropriate. The Resolution does not require that Bonds so acquired be cancelled.

#### **Defeasance**

Any Bonds shall be deemed to have been paid and not be Outstanding under the Resolution and shall cease to be entitled to any benefit or security of the Resolution except the right to receive the money and the proceeds and income from Government Obligations set aside and pledged in the manner hereafter described, if (a) in the event that any or all of the Bonds are to be optionally redeemed, the University shall have given to the Paying Agent irrevocable instructions to give such notice of redemption of such Bonds as may be required by the provisions of the Resolution; and (b) there shall have been made an Irrevocable Deposit, in trust, with the Paying Agent or another corporate fiduciary of money in an amount that shall be sufficient, and/or noncallable Government Obligations that are direct obligations of the United States or obligations unconditionally guaranteed by the United States maturing at such time or times and bearing such interest to be earned thereon, without considering any earnings on the reinvestment thereof, as will provide a series of payments that shall be sufficient, together with any money initially deposited, to provide for the payment of the principal of and the interest on the defeased Bonds when due in accordance with their terms, or upon the earlier prepayment thereof in accordance with a refunding plan.

#### SOURCES AND USES OF BOND PROCEEDS

# **Use of Proceeds**

The proceeds from the sale of the Bonds are to be applied (a) to pay costs of University projects, or to refinance commercial paper issued originally to finance costs of University projects, including the construction of housing and food services facilities and a life sciences building; and (b) to pay all or a portion of the costs of issuance.

#### Sources and Uses of Funds

The proceeds of the Bonds, together with other funds, are expected to be applied, as follows (amounts in table have been rounded to the nearest dollar):

Sources of Funds	
Par Amount of the Bonds	\$ 100,000,000
Original Issue Premium	8,132,000
Total Sources of Funds <sup>(1)</sup>	\$ 108,132,000
<b>Uses of Funds</b>	
Project Fund Deposit <sup>(2)</sup>	\$ 107,587,357
Issuance Costs <sup>(3)</sup>	544,643
Total Uses of Funds <sup>(1)</sup>	\$ 108,132,000

<sup>(1)</sup> Totals may not foot due to rounding.

#### SECURITY FOR THE BONDS

#### **Special Fund Obligations**

The Bonds are special fund obligations of the University, payable solely from General Revenues and the money and investments that are deposited into the special fund designated as the General Revenue Bond Redemption Fund, 2019 (the "Bond Fund"). The Bonds are not an obligation, either general, special or moral, of the State, nor a general or moral obligation of the University. The Registered Owners of the Bonds shall have no right to require the State, nor has the State any obligation or legal authorization, to levy any taxes or appropriate or expend any of its funds for the payment of the principal of or the interest or any premium on the Bonds. The University has no taxing power.

The University is obligated to pay debt service on the Bonds from General Revenues; however, the obligations of the University are not secured by a statutory lien on or security interest in General Revenues. The University's commitment to apply General Revenues to pay debt service on the Bonds is a legally enforceable covenant.

There is no coverage covenant, debt service reserve requirement or additional bonds test in the Resolution.

#### **General Revenues**

"General Revenue" or "General Revenues" means all non-appropriated income, revenues and receipts of the University if and to the extent such funds are not restricted in their use by law, regulation, or contract. For example, the following items are restricted and, therefore, excluded from General Revenues:

- (a) Appropriations to the University by the State from the State's General Fund;
- (b) Each fund the purpose of which has been restricted in writing by the terms of the gift or grant under which such fund has been donated, or by the donor thereof;

<sup>(2)</sup> A portion of the amount deposited to the Project Fund is to be used to pay \$100 million of the University's outstanding General Revenue Notes (Commercial Paper).

<sup>(3)</sup> Issuance costs include Underwriters' discount, legal fees, Financial Advisor fees, rating agency fees, and other costs incurred in connection with the issuance of the Bonds.

- (c) Fees imposed upon students as a condition of enrollment at the University, including but not limited to services and activities fees, building fees ("Building Fees") and technology fees; and
- (d) Revenues and receipts attributable to the Metropolitan Tract Revenue (which consists of revenues from 11 acres owned by the University in downtown Seattle, known as the "Metro Tract").

As noted under subsection (b) above, grants or other funds that are restricted by contract or donor terms are excluded from General Revenues. See "UNIVERSITY OF WASHINGTON—General Revenues." Unrestricted fund balances, to the extent that they were accumulated from money that was received as General Revenues, are included in and available to pay obligations secured by General Revenues. Any interest subsidy received from the federal government with respect to General Revenue bonds is included and available to pay obligations secured by General Revenues.

#### **Additions to General Revenues**

The University reserves the right to include in General Revenues, at its sole option, other sources of revenue or income currently excluded in the definition of General Revenues. Such additions shall occur on the date and as provided in a certificate executed by the controller of the University (the "Controller") (or the successor to the functions of the Controller). The Controller shall, in the case of additions of items or auxiliaries to General Revenues, certify that for the preceding two Fiscal Years for which audited financial statements are available, the item or auxiliary maintained a "coverage ratio" defined in the Resolution of at least 125 percent. In the event an auxiliary or item is added to General Revenues, the obligations of that auxiliary or item may remain outstanding and have a prior claim on auxiliary Net Revenue.

#### **Deletions from General Revenues**

The University reserves the right to remove, at its sole option, in the future, without limitation, any revenues from General Revenues. The removal of General Revenues shall be evidenced by a certificate executed by the Controller identifying the items to be deleted. The University is not required to meet any coverage or other test prior to removing revenues from General Revenues. To date, the University has not removed any revenues.

### **Building Fee Revenue Bonds**

A portion of the University's outstanding General Revenue bonds are "Building Fee Revenue Bonds" that are payable from Building Fees and trust land revenues in addition to General Revenues and money and investments in the Bond Fund. The State Legislature (the "Legislature") has previously authorized and may in the future authorize the University to issue a bond or bonds to be paid from Building Fees and trust land revenues deposited into the University of Washington bond retirement account defined in and in accordance with RCW 28B.20.700 through 28B.20.740 (the "Building Fee Revenue Bond Statute"). The Building Fee Revenue Bond Statute permits the University to issue bonds payable from and secured by a pledge of any or all of the Building Fees and trust land revenues deposited in the University of Washington bond retirement fund ("Building Fee Revenue Bonds").

Under the Resolution, the Board of Regents has covenanted to establish, maintain and collect Building Fees in such amounts that will provide money sufficient to pay the principal of and interest on all bonds (outstanding Building Fee Revenue Bonds and any additional building fee revenue bonds hereafter issued) payable out of the University of Washington bond retirement fund, to set aside and maintain reserves, if any, required to secure the payment of such principal and interest, and to maintain coverage, if any, which may be required over such principal and interest.

Building Fee Revenue Bonds are not general or special obligations of the State, but are limited obligation bonds of the University payable only from Building Fees, money and investments in the University of Washington bond retirement fund, General Revenues and money and investments in the Bond Fund. The Bonds are not Building Fee Revenue Bonds.

### **Additional Bonds**

The University may incur additional obligations, including bonds, Payment Agreements (such as interest rate swaps) and lease or other contractual obligations, that are payable from General Revenues, in addition to the University's

outstanding General Revenue Notes (Commercial Paper) (the "Commercial Paper Notes"), the outstanding General Revenue bonds, the Bonds and other lease and contractual obligations. There are no limitations, either statutory or contractual, that would prevent the University from incurring such additional obligations.

#### **Payment Agreements**

To the extent permitted by State law, the University may enter into Payment Agreements payable from General Revenues subject to the satisfaction of certain conditions precedent. Payment Agreements, as defined in chapter 39.96 RCW, include interest rate swaps entered into in connection with the issuance of bonds.

The University currently has no Payment Agreements in place.

# No Acceleration Upon Default

If the University were to default on the payment of principal of or interest on the Bonds, payment of the principal of and accrued interest on the Bonds would not be subject to acceleration. The University is liable for principal and interest payments only as they become due. In the event of multiple defaults on the payment of principal of or interest on the Bonds, the Bondholders would be required to bring a separate action for each such payment not made. Any such action to compel payment or for money damages would be subject to the limitations on legal claims and remedies against public bodies under State law.

### **Debt Payment Record**

The University has never defaulted on the payment of principal of or interest on any of its bonds or other debt.

#### **Future Debt**

The University currently expects to borrow approximately \$100 million per year each year for the next four years. In addition, the University expects to continue to make draws on a \$30 million non-revolving line of credit to finance short-term University assets (the "Line of Credit"). Additional projects may be funded on an interim basis with proceeds of Commercial Paper Notes or on a long-term basis with proceeds of bonds, in each case if approved by the Board of Regents.

#### UNIVERSITY DEBT AND ESTIMATED DEBT SERVICE

#### **General Revenue Obligations**

The University's General Revenue obligations take three forms:

- (1) General Revenue Bonds and Commercial Paper Notes.
  - (i) General Revenue Bonds. From time to time, the University issues and has outstanding General Revenue bonds, such as the Bonds, to finance University purposes in accordance with law.
  - (ii) Commercial Paper Notes. The University is authorized to issue Commercial Paper Notes from time to time in an aggregate principal amount not to exceed \$250 million, for University purposes, pursuant to a resolution of the Board of Regents adopted on July 16, 2009. The University issues Commercial Paper Notes generally to provide interim financing for University projects, including a portion of the projects to be financed by the Bonds and other projects to be financed by future General Revenue bonds. The University provides self-liquidity for the payment of its Commercial Paper Notes, which are not currently secured by a bank credit or liquidity facility.
- (2) Leases and other contractual obligations payable from General Revenues.
  - (i) Leases supporting Lease Revenue Bonds. The University has entered into a number of financing and other leases in connection with lease revenue bonds, which are payable from General Revenues. University lease payments are applied to pay debt service on lease revenue bonds.

Lease revenue bonds have financed the University's multi-phase South Lake Union biomedical research facilities and other clinic, research and administrative facilities.

- (ii) Other Contractual Obligations. The University has entered into other contracts payable from all or a component of General Revenues and, in some cases, other revenues. Reimbursed State General Obligation Bonds ("Reimbursed Bonds") refers to bonds authorized by the Legislature and issued as State general obligation bonds to provide proceeds to the University. These bonds are payable from all or a component of General Revenues and, in some cases, other revenues. The University also enters into equipment leases and leases in connection with State-issued certificates of participation ("Certificates of Participation") from time to time to finance equipment and other property.
- (3) *Line of Credit*. The University has entered into the Line of Credit under a Master Financing Agreement with JPMorgan Chase Bank, N.A. The Line of Credit currently allows for draws (for a maximum term of 10 years) in an aggregate amount not to exceed \$30 million through June 30, 2020.

The Bonds, the outstanding General Revenue bonds, the Commercial Paper Notes, leases and other contractual obligations, and the Line of Credit are equally and ratably payable from General Revenues without preference, priority or distinction because of date of issue or otherwise.

### **University Debt**

The following table summarizes outstanding debt obligations by type.

### **Table 2: Outstanding Obligations**

(as of February 2, 2019) (dollars in thousands)

	Total
Obligations Payable from General Revenues	
General Revenue Bonds <sup>(1)</sup>	\$1,819,095
Leases (supporting lease revenue bonds)	342,970
Reimbursed Bonds and Certificates of Participation	90,564
Commercial Paper Notes <sup>(2)</sup>	100,000
Equipment (Capital) Leases	8,348
Other <sup>(3)</sup>	7,178
Subtotal <sup>(3)</sup>	\$2,368,155
Other Obligations <sup>(4)</sup>	
Northwest Hospital & Medical Center <sup>(4)</sup>	\$7,065
Total Obligations	\$2,375,220

<sup>(1)</sup> Excludes the Bonds.

Source: The University.

<sup>&</sup>lt;sup>(2)</sup> The \$100 million of outstanding Commercial Paper Notes is expected to be paid from proceeds of the Bonds.

<sup>(3)</sup> Includes amounts drawn on the Line of Credit.

<sup>(4)</sup> Northwest Hospital & Medical Center (now UW Medicine/Northwest dba Northwest Hospital & Medical Center, or "Northwest"). See "UW MEDICINE."

Additional detail on the Commercial Paper Notes is shown in the following table:

# **Table 3: Unused Commercial Paper Authorization**

(as of February 2, 2019) (dollars in thousands)

	Total
Maximum Amount Authorized	\$250,000
Less: Amount outstanding <sup>(1)</sup>	(100,000)
Unused commercial paper authorization	\$150,000

<sup>(1)</sup> The University expects to pay the \$100 million of outstanding Commercial Paper Notes from proceeds of the Bonds.

Source: The University.

#### **Estimated General Revenue Debt Service Schedule**

The following table provides the debt service requirements for the Bonds and the outstanding General Revenue bonds. The table also provides debt service requirements for lease and other contractual obligations payable from General Revenues. The table excludes debt service on Commercial Paper Notes.

Table 4: University of Washington General Revenue Bonds Debt Service Schedule

					Leases and	
	Outstanding	The B	onds <sup>(5)</sup>	Total General	Other Obligations Paid	Total General
Fiscal Year	General Revenue		-	Revenue	from General	Revenue Debt
Ending 6/30	Bonds <sup>(1)(2)</sup>	Principal	Interest	Bonds <sup>(2)(4)</sup>	Revenues <sup>(2)(3)</sup>	Service <sup>(2)(4)</sup>
2020	\$ 131,855,614	Timeipai	\$ 5,000,000	\$ 136,855,614	\$ 54,665,034	\$ 191,520,648
2020	132,762,628	-	5,000,000	137,762,628	53,720,710	191,483,338
2021	132,779,511	-	5,000,000	137,779,511	50,809,557	188,589,068
2022	129,221,289	-	4,500,000	133,721,289	48,739,615	182,460,904
2023	129,221,289	-	4,500,000	133,693,060	43,683,895	177,376,955
2024	129,048,031	-	4,500,000	133,548,031	39,581,281	177,370,933
2023		-				
	128,877,148	-	4,500,000	133,377,148	34,154,892	167,532,040
2027	129,153,268	-	4,500,000	133,653,268	33,519,416	167,172,684
2028	124,247,986	-	4,500,000	128,747,986	29,531,917	158,279,903
2029	123,935,842	-	4,500,000	128,435,842	24,856,262	153,292,104
2030	121,100,259	-	4,500,000	125,600,259	23,128,424	148,728,683
2031	117,030,052	-	4,500,000	121,530,052	22,635,629	144,165,681
2032	115,554,742	-	4,500,000	120,054,742	22,559,583	142,614,325
2033	108,596,417	-	4,500,000	113,096,417	21,821,447	134,917,864
2034	104,576,765	-	4,500,000	109,076,765	19,792,538	128,869,303
2035	104,534,982	-	4,500,000	109,034,982	17,889,239	126,924,221
2036	140,639,730	-	4,500,000	145,139,730	17,789,062	162,928,792
2037	99,738,137	-	4,500,000	104,238,137	17,692,319	121,930,456
2038	100,284,631	-	4,500,000	104,784,631	17,582,584	122,367,215
2039	99,338,963	-	4,500,000	103,838,963	11,513,919	115,352,882
2040	115,730,433	-	4,500,000	120,230,433	11,398,385	131,628,818
2041	103,253,598	-	4,500,000	107,753,598	11,280,581	119,034,179
2042	103,377,259	-	4,500,000	107,877,259	11,152,404	119,029,663
2043	103,503,262	-	4,500,000	108,003,262	11,018,566	119,021,828
2044	101,186,737	-	4,500,000	105,686,737	5,170,600	110,857,337
2045	26,999,755	-	4,500,000	31,499,755	5,170,600	36,670,355
2046	25,189,844	-	4,500,000	29,689,844	5,168,800	34,858,644
2047	17,609,313	-	4,500,000	22,109,313	5,170,000	27,279,313
2048	6,882,750	\$ 100,000,000	4,500,000	111,382,750	5,168,800	116,551,550
Total <sup>(4)</sup>	\$3,006,202,006	\$100,000,000	\$132,000,000(5)	\$3,238,202,006	\$676,366,056	\$3,914,568,065

<sup>(1)</sup> Includes all General Revenue bonds, including those that are also Building Fee Revenue Bonds.

Source: The University.

<sup>&</sup>lt;sup>(2)</sup> Build America Bond subsidies are not reflected in this table. See "CERTAIN INVESTMENT CONSIDERATIONS—Uncertainties of Federal Legislation" for a discussion of continued sequestration of a portion of these subsidy payments.

<sup>(3)</sup> Includes leases and other contractual obligations payable from General Revenues, including lease obligations with respect to lease revenue bonds, a Northwest note, line of credit obligations, and Reimbursed Bonds and Certificates of Participation.

<sup>(4)</sup> Totals may not foot due to rounding.

Utilizes 5.00% stated coupon rate through mandatory redemption date and then assumes a rate of 4.50% through final maturity.

### **GENERAL REVENUES**

#### **Overview of General Revenues**

As described under the heading "SECURITY FOR THE BONDS—General Revenues," General Revenues include all non-appropriated income, revenues, and receipts of the University if and to the extent such funds are not restricted in their use by law, regulation, or contract.

The following table shows General Revenues and General Revenue balances of the University for Fiscal Years 2014 through 2018. The table shows the calculation of General Revenues in two ways: first as gross University revenues minus exclusions from General Revenues; and second as the specific components that comprise General Revenues. "Total Revenue" presented in the first calculation is adjusted to include certain net non-operating revenue, interest on capital asset related debt and other revenues. See "UNIVERSITY REVENUE AND EXPENSES—University Total Revenue By Source."

The definition of "General Revenues" in the Resolution provides that unrestricted fund balances, to the extent that they were accumulated from money that was received as General Revenues, also are includable and available to pay obligations secured by General Revenues. To illustrate unrestricted fund balances that may be available to pay General Revenue obligations, the following table shows general net position and also shows general net position adjusted to remove certain non-cash items (to show the figure excluding the effect of Governmental Accounting Standards Board ("GASB") Statement No. 68, Accounting and Financial Reporting for Pensions ("GASB 68"), which was implemented in Fiscal Year 2015, and GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits other than Pensions ("GASB 75"), which was implemented in Fiscal Year 2018).

**Table 5: General Revenues** (fiscal years, dollars in thousands)

General Revenue (Exclusions from Total Revenue)	2014	2015	2016	2017	2018(1)
Total Revenue <sup>(2)</sup>	\$4,953,409	\$4,982,564	\$5,024,269	\$6,106,922	\$6,425,908
Less:					
State operating appropriations	(262,146)	(255,156)	(302,097)	(341,971)	(362,267)
Grant and contract direct costs	(1,080,088)	(1,082,452)	(1,093,865)	(1,147,694)	(1,196,554)
Gifts <sup>(3)</sup>	(117,071)	(115,636)	(115,000)	(166,491)	(166,721)
Revenues of component units <sup>(4)</sup>	(161,247)	(211,174)	(276,946)	(636,200)	(705,687)
Student activities fees and U-Pass fees	(43,539)	(44,080)	(43,134)	(44,816)	(44,907)
Student technology fees, Building Fees, student					
loan funds	(71,576)	(76,297)	(79,066)	(72,008)	(74,728)
Trust and endowment income, net unrealized gains					
on noninvested funds investments, Metro Tract					
net operating income, component unit					
investment income, and other restricted					
investment income	(440,903)	(187,599)	19,050	(416,327)	(368,191)
State capital appropriations	(7,693)	(20,812)	(39,221)	(64,166)	(26,399)
Capital grants, gifts and other	(26,156)	(21,986)	(21,645)	(52,897)	(142,573)
Other nonoperating revenues/expenses	(42,816)	(9,042)	(13,133)	(12,963)	(4,749)
Gifts to permanent endowments	(55,541)	(67,359)	(88,267)	(85,449)	(95,890)
<b>Total General Revenues</b>	\$2,644,633	\$2,890,971	\$2,970,945	\$3,065,940	\$3,237,242
General Revenue (By Component)					
Student tuition and fees (less student activities fees, U-					
Pass fees, technology fees, Building Fees and loan					
funds)	\$733,815	\$804,391	\$837,677	\$836,837	\$882,236
Grant and contract indirect costs	242,773	246,677	248,276	257,706	263,865
Invested funds distributions and net invested funds					
unrealized gains and losses	39,742	39,805	63,927	27,056	36,221
Sales and services of educational departments	212,592	223,494	224,747	217,421	242,886
Patient services <sup>(5)</sup>	1,066,181	1,196,561	1,210,271	1,319,393	1,331,023
Auxiliary systems	266,748	308,883	337,726	355,734	383,503
Other operating revenues	82,782	71,160	48,321	51,793	97,508
<b>Total General Revenues</b>	\$2,644,633	\$2,890,971	\$2,970,945	\$3,065,940	\$3,237,242
General Net Position					
General net position (per audit)	\$1,614,991	\$754,822	\$568,824	\$315,982	(\$1,343,629)
Plus: Impact of 2015 GASB No. 68 Pensions <sup>(6)</sup>	-	803,277 <sup>(7)</sup>	$769,615^{(7)}$	761,658 <sup>(7)</sup>	706,142
Plus: Impact of 2018 GASB No. 75 OPEB <sup>(8)</sup>	-	-	-	-	1,763,597
Adjusted General Net Position	\$1,614,991	\$1,558,099(7)	\$1,338,439(7)	\$1,077,640 <sup>(7)</sup>	\$1,126,110

<sup>(1)</sup> See accompanying notes to Audited Financials: Reconciliation of Total University Revenue to General Revenue, June 30, 2018 (in Appendix B).

<sup>(2)</sup> Total Revenue excludes revenues from Northwest (2014–2016). Northwest revenues are included in total revenues in Fiscal Years 2017 and 2018 because, effective Fiscal Year 2017, Northwest was presented as a blended component unit of the University, rather than in its previous form as a discretely presented component unit.

<sup>(3)</sup> Gift figures represent amounts realized in applicable Fiscal Year.

<sup>(4)</sup> Revenues of component units include UW Physicians and UW Neighborhood Clinics and, in Fiscal Years 2017 and 2018, Northwest revenues. See "UW MEDICINE—Components of UW Medicine."

<sup>(5)</sup> Excludes revenue from Northwest, UW Physicians and UW Neighborhood Clinics. UW Medical Center and Airlift Northwest revenues are included in patient services revenues within General Revenues for the University as of the date of this Official Statement. See "UW MEDICINE—Components of UW Medicine--Northwest Hospital & Medical Center" for a discussion of the planned integration of UW Medical Center and Northwest

into one hospital with two campuses, as of January 2020. If the integration occurs, Northwest revenues would no longer be reported separately but would be a part of UW Medical Center's revenues included in General Revenues.

- (6) The impact of GASB 68 accounting in the year of implementation, and the cumulative impact on subsequent years, is shown as an adjustment to General Net Position to illustrate the effects of this non-cash change in accounting.
- (7) Unaudited.
- (8) The impact of GASB 75 accounting in the year of implementation is shown as an adjustment to General Net Position to illustrate the effects of this non-cash change in accounting.

Source: The University's General Revenue Supplement to Audited Financial Statements

Financial support is received by the University from a variety of sources, including grants and contracts, patient services, tuition and fees, State funding, gifts, auxiliary enterprises, investment income and sales and services. As shown in the table entitled "GENERAL REVENUES," several of these sources are unrestricted and are included in General Revenues: auxiliary systems and patient services, student tuition and fees (less student activities fees, U-Pass fees, technology fees, Building Fees and student loan funds), grants and contracts indirect costs, sales and services of educational departments of the University, other operating revenue, and invested funds' distribution and net invested funds' unrealized gains and losses.

### **General Revenue Components**

The following chart shows the General Revenue components for Fiscal Year 2018.

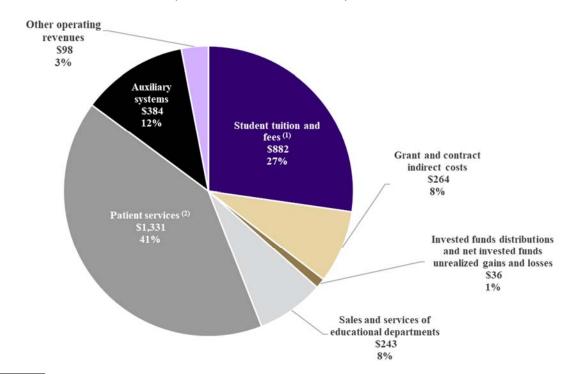


Figure 1: General Revenue Components, Fiscal Year 2018 (dollars in millions, total \$3,237)

Source: Chart is derived from data included in the General Revenue Supplement to Audited Financial Statements of the University (Fiscal Year Ended June 30, 2018).

The following describes the largest components of General Revenues, which include auxiliary systems and patient services, student tuition and fees, and grant and contract indirect costs.

Opes not include student activities fees, technology fees, building fees, and loan funds.

<sup>(2)</sup> Excludes revenue from Northwest, UW Physicians and UW Neighborhood Clinics.

#### **Patient Services**

Patient services are the largest component of General Revenues, representing 41 percent of General Revenues in Fiscal Year 2018. Some revenues of the integrated health system operated under the name "UW Medicine," described under the heading "UW MEDICINE," are patient services revenues included in General Revenues and some are not. In addition, some UW Medicine entities generate other revenues included in General Revenues, such as student tuition and fees and grant and contract indirect costs. See "—Student Tuition and Fees" and "—Grant and Contract Indirect Costs."

The following table lists the UW Medicine entities, notes which entities' revenues are included in General Revenues and whether the entities' revenues are reflected in the University financial statements. The table also identifies the entities that are part of the UW Medicine Clinical Enterprise—UW Division (the "Clinical Enterprise"), which includes University divisions, departments and blended component units that generate patient services revenues.

**Table 6: UW Medicine Entities** 

Entity	Included in General Revenues?	Included in Clinical Enterprise?	Included in University financial statements?
UW Medical Center	Yes	Yes	Yes
UW School of Medicine	Yes	No	Yes
Shared Services <sup>(1)</sup>	$Yes^{(2)}$	Yes	Yes
Airlift Northwest	Yes	Yes	Yes
Northwest Hospital	Not currently <sup>(3)</sup>	Yes	Currently a blended component unit <sup>(3)</sup>
UW Neighborhood Clinics <sup>(4)</sup>	No	Yes	Blended component unit
UW Physicians <sup>(5)</sup>	No	Yes	Blended component unit
Valley Medical Center	No	No	Discrete component unit
Harborview Medical Center	No	No	No

<sup>(1)</sup> Includes UW Medicine Information Technology Services, UW Medicine Shared Services (shared costs such as accounting, patient financial services, supply chain, finance, etc.) and Consolidated Laundry.

Source: The University.

### **Student Tuition and Fees**

Student tuition and fees are the second largest component of General Revenues, representing 27 percent of General Revenues in Fiscal Year 2018. Student tuition is established by the Board of Regents within the tuition-setting authority delegated by the Legislature. Under current State law, the University retains authority to set tuition for graduate students and non-resident undergraduate students, but the Legislature limits increases in tuition for resident undergraduate students.

Future increases in resident undergraduate tuition are limited to annual increases of no more than the average annual percentage growth rate in the median hourly wage for Washington for the previous 14 years. Accordingly, resident undergraduate tuition increases were limited to approximately 2.2 percent in each of the 2017–2018 and 2018–2019 academic years. The University raised resident undergraduate tuition by the full 2.2 percent in each year. See also "INITIATIVES—Initiative 960."

The University has authority to waive or reduce tuition and fees. Student tuition and fees revenue figures included in this Official Statement exclude amounts waived. Tuition waivers are used to assist low-income students, recruit outstanding students and recruit and support graduate teaching and research assistants. Tuition can be waived by the

Represents revenues from external parties (i.e., Harborview Medical Center ("Harborview") and Valley Medical Center ("Valley") and other parties for shared services).

Northwest revenues will become part of UW Medical Center revenues commencing January 1, 2020 if the integration of Northwest proceeds as currently planned. See "UW MEDICINE."

<sup>(4)</sup> UW Physicians Network dba UW Neighborhood Clinics.

<sup>(5)</sup> The Association of University Physicians dba UW Physicians.

University for students meeting certain eligibility requirements consistent with these objectives and with authorizations in State law.

# **Auxiliary Systems**

Auxiliary systems revenues are the third largest component of General Revenues, representing 12 percent of General Revenues in Fiscal Year 2018. Auxiliary systems include housing and food services, other auxiliary enterprises, and sports programs.

#### **Grants and Contract Indirect Costs**

Indirect costs from grants and contracts are the fourth largest component of General Revenues, representing eight percent of General Revenues in Fiscal Year 2018. Grants and contracts fund a wide variety of research and training programs at the University. In 2016 the University negotiated an increase to the indirect cost/facilities and administrative cost ("F&A") rate. Through Fiscal Year 2020 the most common research activities will continue to see phased-in F&A increases of 1.0 percent to 2.5 percent over the F&A rates effective in Fiscal Year 2016.

The University's expectations with regard to future grant and contract revenues (and therefore future grant and contract indirect cost revenues included in General Revenues) are informed by its awards. See "UNIVERSITY RECENT DEVELOPMENTS." Awards are received by the University over one or more fiscal years and, when expenditures are made reimbursable, are presented as grant and contract revenues in the University's financial statements. For more information regarding grant and contract revenues for Fiscal Years 2018 and 2017, see "APPENDIX B—AUDITED FINANCIAL STATEMENTS AND REQUIRED SUPPLEMENTAL INFORMATION OF THE UNIVERSITY (FISCAL YEAR ENDED JUNE 30, 2018)."

#### UNIVERSITY OVERVIEW

Founded in 1861, the University is a research university with campuses located in Seattle, Tacoma and Bothell. The University is the largest of six State-funded four-year institutions of higher education in the State. In fall quarter of academic year 2017–2018, approximately 104,000 people studied and worked in approximately 25.7 million square feet of University-owned facilities. Of these people, approximately 56 percent were students and 44 percent were staff and faculty. With approximately 46,000 full-time and part-time employees at census, the University is one of the largest employers in King County and the State.

The University provides baccalaureate, masters, doctoral and professional degree programs through 16 colleges and schools including arts and sciences, built environments, business, dentistry, education, educational outreach, engineering, environment, information, law, medicine, nursing, pharmacy, public affairs, public health, and social work. The University offers 613 degree options across 312 programs. In the 2017–2018 academic year, the University awarded 17,064 degrees, including 11,179 bachelor degrees, 4,514 master's degrees, 820 doctoral degrees and 551 professional degrees.

#### Governance

The University is governed by a 10-member Board of Regents, which includes one student of the University. Regents are appointed by the Governor of the State with the consent of the State Senate, and, except for the student member, hold their offices for six-year terms or until their successors are appointed and qualified, whichever is later. The student member of the Board of Regents serves a one-year term from July 1 to June 30 of the following year, or until his or her successor is appointed and qualified, whichever is later.

The Board of Regents consists of the following individuals:

Dr. Constance Rice, Chair (Senior Executive Fellow, Semi-retired, Casey Family Programs).

Joel Benoliel, Vice Chair (Retired Senior Vice President and Chief Legal Officer, Costco Wholesale Corporation).

William S. Ayer, Member (Retired Chairman and Former Chief Executive Officer, Alaska Air Group).

Jeremy Jaech, Member (Managing Partner, Harmony Meadows LLC).

Joanne R. Harrell, Member (Senior Director, U.S. Citizenship and Public Affairs, Microsoft Corporation).

*Libby G. MacPhee, Member*<sup>(1)</sup> (Community Volunteer).

Rogelio Riojas, Member (President and Chief Executive Officer, Sea Mar Community Health Centers).

Blaine Tamaki, Member (Attorney, Tamaki Law).

David Zeeck, Member<sup>(1)</sup> (President and Publisher, The News Tribune, The Olympian, and The Bellingham Herald).

Kaitlyn Zhou, Student Member<sup>(1)</sup> (University master's student at the Allen School of Computer Science and Engineering).

The University's Administrative Officers include the following individuals:

Dr. Ana Mari Cauce, President. Dr. Cauce is the 33rd president of the University, where she has been a member of the faculty since 1986. She is a noted scholar on risk and resilience among adolescents and has received numerous awards for her research as well as the University's Distinguished Teaching Award. Before becoming President in 2015, she served as chair of the Departments of American Ethnic Studies and Psychology, as Dean of the College of Arts and Sciences and as Provost, the University's chief academic officer. In 2008, she played a key role in establishing the Husky Promise, a program that has helped more than 40,000 low-income students attend the University. Since becoming president, Dr. Cauce has put a spotlight on the University's work in Population Health across the University, launched the University's Race & Equity Initiative and been a champion for ensuring the University and public higher education across the country remain accessible and affordable for all students. Raised in Miami after emigrating with her family from Cuba, Dr. Cauce earned degrees in English and psychology from the University of Miami and a Ph.D. in psychology, with a concentration in child clinical and community psychology, from Yale University. She has received honorary degrees from the University of Miami and Tsinghua University.

Dr. Mark Richards, Provost and Executive Vice President for Academic Affairs. Dr. Richards joined the University as Provost and Executive Vice President for Academic Affairs on July 1, 2018. A geophysicist, Dr. Richards also holds a faculty appointment in the College of the Environment's Department of Earth and Space Sciences. As Provost, he is the University's chief academic and budget officer. Dr. Richards came to the University from the University of California, Berkeley, where he was a professor of Earth and Planetary Science. While at Berkeley, he served as dean of mathematical and physical sciences, and simultaneously as executive dean of the College of Letters and Science. For his work on racial, ethnic, and gender diversity in the STEM fields, Dr. Richards received Berkeley's two highest awards for promoting equity and inclusion. After receiving his bachelor's degree in engineering from the University of Texas at Austin, Dr. Richards earned his master's in applied physics and a Ph.D. in geophysics from Caltech, followed by a postdoc at the Australian National University. He served on the faculties of the University of Oregon and, in 1993, at the University.

Brian McCartan, Vice President for Finance, University of Washington. Brian McCartan is Vice President for Finance, overseeing the central finance functions of the University, including Controller, Treasury, and Enterprise Business Services divisions. In addition, Mr. McCartan leads the Finance Transformation Program to replace the University's legacy financial systems. Prior to joining the University, he served as Chief Financial Officer at Sound Transit, the regional transit authority for the central Puget Sound region, for 11 years. At Sound Transit, he managed the finance, risk management, information technology, and enterprise asset management functions. Prior to Sound Transit, Mr. McCartan served as debt manager at the City of Seattle, financing the capital programs for the City and its utilities, and as an international economist at the U.S. Treasury in Washington, D.C., helping administer U.S. international monetary operations. Mr. McCartan graduated from the University with a bachelor's degree in philosophy and political science. He has a master's degree in international relations from Yale University.

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<sup>(1)</sup> Pending State Senate confirmation.

Dr. Paul G. Ramsey, CEO, UW Medicine, Executive Vice President for Medical Affairs and Dean of the School of Medicine, University of Washington. Dr. Ramsey has served as the senior executive leader of UW Medicine since 1997. He came to the University in 1978, following completion of his residency training in Internal Medicine at Massachusetts General Hospital. He served as acting chair and then chair of the Department of Medicine from 1990 to 1997, when he was appointed to his current administrative leadership position. Dr. Ramsey was the first holder of the Robert G. Petersdorf Endowed Chair in Medicine in 1995. He has received the Distinguished Teacher Award from the UW School of Medicine's graduating class three times (in 1984, 1986 and 1987) and the Margaret Anderson Award, which recognizes exceptional support of medical students, from the School of Medicine graduating class of 1989. Dr. Ramsey's research has focused on the development of methods to assess physicians' clinical competence. He has been the Principal Investigator on multiple research grants related to assessment of physicians' clinical skills, and served as a Henry J Kaiser Family Foundation Faculty Scholar in General Internal Medicine for five years. Dr. Ramsey received the John P. Hubbard award from the National Board of Medical Examiners in 1999 in recognition of his research contributions in the field of evaluation. He has served on many national committees, including serving as an elected member of the Association of American Physicians and the National Academy of Medicine (previously known as the Institute of Medicine), and is a member of multiple organizations. Dr. Ramsey graduated from Harvard College with honors in Biochemistry and received his M.D. from Harvard Medical School.

#### Accreditation

The University has been continuously accredited by the Northwest Commission on Colleges and Universities ("NWCCU"), its regional higher education authority, since 1918, and is a member of the Association of American Universities. NWCCU adheres to a seven-year accreditation cycle. The NWCCU reaccredited the University in its last evaluation, held October 2013, and accepted the University's mid-cycle report in the spring of 2017.

### ADMISSIONS, STUDENT ENROLLMENT AND FACULTY

The following tables show the number of applicants to the University's undergraduate, graduate and professional schools, certain qualifications of these applicants, the number of applicants accepted into each school, the tuition and student fees for each school, and the number of students enrolled in autumn quarter of the calendar years 2014–2018. The autumn quarter of the calendar year corresponds with a different fiscal year (e.g. autumn 2013 is enrollment for Fiscal Year 2014, autumn 2014 is enrollment for Fiscal Year 2015 and so on). In autumn quarter 2018, 76 percent of undergraduate students were located at the Seattle campus, 13 percent at Bothell, and 11 percent at Tacoma, based on headcount. For both the 2016–2017 and 2017–2018 academic years, approximately 66 percent and 65 percent of undergraduate, graduate and professional FTEs were in-State residents. The Bothell and Tacoma campuses consist primarily of undergraduate students.

Table 7: Applications, Students and Enrollments(1)

Undergraduate **Autumn Quarter** 2014 2015 2016 2017 2018 Freshmen 35,382 41,257 48,471 50,007 50,965 Applied Accepted 20,510 23,183 23,776 25,017 26,490 Percent Accepted to Applied 49% 58% 56% 50% 52% 7,341 Enrolled 7,943 7,802 8,158 8,571 Percent Enrolled to Accepted 36% 34% 33% 33% 32% 2014 2015 2016 2017 2018 **Transfers** 9,619 9,480 9,819 9,718 9.123 **Applied** Accepted 4,826 4,747 5,164 4,974 5.041 Percent Accepted to Applied 51% 48% 54% 51% 55% Enrolled 3.308 3,123 3,207 3,218 3,264 Percent Enrolled to Accepted 69% 66% 62% 65% 65% 2016 2017 Undergraduate FTE<sup>(2)</sup> 2014 2015 2018 Bothell 4,101 4,402 4,804 5,026 5,060 Seattle 29,359 29,888 29,873 30,295 31,004 3,565 3,685 3,996 4,204 4,291 Tacoma 37,025 37,975 38,673 39,525 40,355 Total All Campuses 2014 2015 2016 2017 2018 Undergraduate Headcount Bothell 4,406 4,698 5.113 5,370 5,411 Seattle 31,099 31,525 31,418 31,843 32,594 3,826 3,940 4,301 4,457 4,573 Tacoma 39,331 40,163 40,832 41,670 42,578 Total All Campuses 2014 2015 2016 2017 2018 Additional Enrollment Statistics 31% 32% 27% 29% 34% Percent of All Students From Outside State Percent Retention (Freshmen to Sophomore) 92% 92% 92% 92% 92% Mean GPA 3.69 3.70 3.70 3.71 3.73 Median GPA 3.76 3.78 3.79 3.80 3.81 Percent of Class Reporting GPA Data 100% 100% 100% 100% 100% Mean Combined SAT Scores 1200 1210 1200 1263 1293 Median Combined SAT Scores 1210 1230 1220 1290 1320 Percent of Class Reporting SAT Data 84% 81% 78% 76% 76%

Source: The University.

<sup>(1)</sup> Unless otherwise noted, all figures include Seattle, Tacoma, and Bothell campuses.

Full-time equivalent ("FTE") defined as an undergraduate carrying 12 credit hours or a graduate student carrying 10 credit hours. FTE exceeds headcount enrollment when students take more credit hours than the credit hour threshold equating to one FTE.

Table 7: Applications, Students and Enrollments<sup>(1)</sup> (Continued)

# Autumn Quarter

		Autumn Quarter				
Graduate	2014	2015	2016	2017	2018	
Applied	29,851	32,248	32,562	34,150	34,421	
Accepted	9,106	9,693	9,703	10,700	11,153	
Percent Accepted to Applied	31%	30%	30%	31%	32%	
Enrolled	4,389	4,717	4,693	4,605	4,656	
Percent Enrolled to Accepted	48%	49%	48%	43%	42%	
Graduate FTE	13,751	14,154	14,401	14,652	15,170	
Graduate Headcount	13,333	13,595	13,896	14,059	14,498	
Professional <sup>(2)</sup>	2014	2015	2016	2017	2018	
Applied	10,511	12,388	12,791	12,218	12,859	
Accepted	1,269	1,291	1,226	1,335	1,371	
Percent Accepted to Applied	12%	10%	10%	11%	11%	
Enrolled	556	570	595	604	616	
Percent Enrolled to Accepted	44%	44%	49%	45%	45%	
Total Professional FTE	4,081	3,834	3,900	3,978	3,980	
Total Professional Headcount	2,006	2,009	2,081	2,126	2,176	

<sup>(1)</sup> Unless otherwise noted, all figures include Seattle, Tacoma, and Bothell campuses.

Source: The University.

**Table 8: Extension Course and Conference Registrations** 

2014	2015	2016	2017	2018
 75,412	76,245	78,426	82,949	79,503

Source: The University.

Table 9: Tuition and Fees<sup>(1)</sup>

(Full Academic Year)

	Autumn Quarter					
	2014	2015	2016	2017	2018	
Undergraduate Resident	\$ 12,394	\$ 11,839(2)	\$ 10,752(2)	\$ 10,974	\$11,207	
Undergraduate Non-Resident	33,513	34,143	34,791	35,538	36,558	
Graduate Resident	16,683	16,278	16,653	16,272	16,590	
Graduate Non-Resident	28,926	28,326	28,896	28,320	28,881	
Professional School Resident(3)	26,496-39,654	28,362-43,494	29,577-46,875	30,297-48,255	31,482-48,270	
Professional School Non-Resident(3)	45,024-60,555	44,124-66,483	44,112-71,703	44,979-73,827	47,190-73,842	

<sup>(1)</sup> Includes Seattle, Tacoma, and Bothell campuses.

<sup>(2)</sup> Includes the Medical, Pharmacy, Dentistry and Law schools.

<sup>(2)</sup> The University reduced resident undergraduate tuition as part of an agreement with the Legislature that resulted in increased State appropriations. See "UNIVERSITY REVENUE AND EXPENSES—Fiscal Year 2018 Results and Recent Developments."

<sup>(3)</sup> Includes the Medical, Pharmacy, Dentistry and Law schools and the Master of Business Administration program; figures shown represent the range from lowest to highest among these professional schools. Source: The University.

Table 10: University FTEs<sup>(1)</sup>

**Autumn Quarter** 

	2014	2015	2016	2017	2018
Undergraduate	37,025	37,975	38,673	39,525	40,355
Graduate	13,751	14,154	14,401	14,652	15,170
Professional <sup>(2)</sup>	4,081	3,834	3,900	3,978	3,980
Total University FTE	54,857	55,963	56,974	58,155	59,505

<sup>(1)</sup> Includes Seattle, Tacoma, and Bothell campuses.

Source: The University.

Table 11: University Headcount<sup>(1)</sup>

		Αι	ıtumn Quarte	r	
	2014	2015	2016	2017	2018
Undergraduate	39,331	40,163	40,832	41,670	42,578
Graduate	13,333	13,595	13,896	14,059	14,498
Professional <sup>(2)</sup>	2,006	2,009	2,081	2,126	2,176
Total University Headcount	54,670	55,767	56,809	57,855	59,252

<sup>(1)</sup> Includes Seattle, Tacoma, and Bothell campuses.

Source: The University.

The following tables show selected faculty and student housing and dining data for autumn quarter for the past five years.

**Table 12: Faculty Data**<sup>(1)</sup>

	2014	2015	2016	2017	2018
Number of Faculty	4,561	4,703	4,707	4,380	4,369
Tenure Rate (%)	37%	36%	36%	33%	35%

<sup>(1)</sup> For 2014–2016 faculty data reflects core faculty comprised of professorial, instructional, and research categories. Starting in 2017 faculty data reflects full-time faculty across Seattle, Bothell, Tacoma campuses. In all years, headcount associated with temporary faculty categories is excluded.

Source: The University.

Table 13: Student Housing and Dining Data<sup>(1)</sup>

	2014	2015	2016	2017	2018
Room and Board <sup>(2)</sup>	\$10,055	\$10,576	\$11,036	\$11,251	\$11,925
Autumn Opening Occupancy <sup>(3)</sup>	6,607	7,010	7,024	7,294	8,365
Occupancy <sup>(4)</sup>	114%	112%	113%	118%	109%

<sup>(1)</sup> Figures include residence hall units and exclude single student and family housing apartments.

Source: The University.

<sup>(2)</sup> Includes the Medical, Pharmacy, Dentistry and Law schools.

<sup>(2)</sup> Includes the Medical, Pharmacy, Dentistry and Law schools.

Room and board pricing is for the full academic year. The room portion of annual room and board pricing is the weighted average of all residence hall double rooms in inventory, and the dining portion is for a representative meal plan.

<sup>(3)</sup> Autumn opening occupancy is used to calculate capacity.

Effective October 31, 2014, numbers restated to reflect as-built capacity and 10<sup>th</sup> day occupancy. Occupancy that exceeds 100 percent is the result of housing three students in a room designed for two.

### UNIVERSITY REVENUE AND EXPENSES

The following section provides more general information regarding University revenues and expenses. University revenues may be restricted in whole or in part and, to the extent restricted, are excluded from General Revenues. Appropriated revenue also is excluded from General Revenues. Restricted, appropriated and other revenues that are excluded from General Revenues are, however, important components of the University's overall financial position.

### **University Revenues**

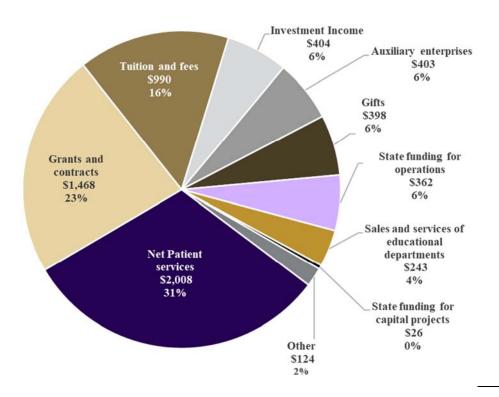
*University Total Revenue by Source.* The University's revenues increased by 5.3 percent in Fiscal Year 2018, totaling \$6.4 billion. The following table and chart show total University revenues by type of revenue source (including Northwest revenues in 2016–2018).

**Table 14: University Total Revenue** (fiscal years, dollars in millions)

	2014	2015	2016	2017	2018
Net Patient services	\$1,207	\$1,362	\$1,788	\$1,869	\$2,008
Grants and contracts	1,327	1,334	1,347	1,422	1,468
Tuition and fees	839	914	949	942	990
Investment income	481	227	44	442	404
Auxiliary enterprises	261	319	349	374	403
Gifts	191	200	221	289	398
State funding for operations	262	255	302	342	362
Sales and services of educational departments	213	223	223	217	243
State funding for capital projects	8	21	39	64	26
Other	164	136	138	144	124
Total revenue – all sources	\$4,953	\$4,991	\$5,400	\$6,105	\$6,426

Source: Management's Discussion and Analysis, Audited Financial Statements of the University.

Figure 2: University Total Revenue By Source, Fiscal Year 2018 (dollars in millions, total \$6,426)



Source: Chart is derived from data included in the Management's Discussion and Analysis, Audited Financial Statements of the University (Fiscal Year Ended June 30, 2018).

### **University Expenses**

*Operating Expenses.* The University's operating expenses increased 3.4 percent in Fiscal Year 2018, due primarily to increased salary and benefit costs. The following table and chart show University operating expenses by functional expenditure (including Northwest expenses in 2016–2018).

**Table 15: University Operating Expenses** 

(fiscal years, dollars in millions)

	2014	2015	2016	2017	2018
Medical-related	\$1,042	\$1,193(1)	\$1,580	\$1,658	\$1,712
Educational and general instruction	1,037	1,114	1,172	1,204	1,268
Research	766	730	751	768	785
Academic support	297	337	398	507	512
Auxiliary enterprises (other than medical)	286	$302^{(1)}$	422	495	495
Depreciation/amortization	308	311	342	363	384
Institutional support	224	$223^{(1)}$	267	240	251
Operation and maintenance of plant	201	241	239	206	201
Scholarships and fellowships	138	147	156	137	149
Student services	43	43	47	49	53
Public service	42	35	39	39	49
Total operating expenses	\$4,384	\$4,676	\$5,413	\$5,666	\$5,859

<sup>(1)</sup> Restated in 2016.

Source: Management's Discussion and Analysis, Audited Financial Statements of the University.

Auxiliary enterprises \$495 Medical-related Depreciation/amortization Scholarships and fellowships \$384 \$149 3% Operation and maintenance of plant \$201 Institutional support \$251 Educational and general Academic instruction support Student services \$1,268 \$512 Research \$53 22% \$785 1% 13% Public service \$49 1%

Figure 3: University Operating Expenses by Use, Fiscal Year 2018 (dollars in millions, total \$5,859)

Source: Chart is derived from data included in the Audited Financial Statements of the University (Fiscal Year Ended June 30, 2018).

#### **INVESTMENTS**

#### Governance

The Board of Regents is vested by statute with the responsibility of managing the University's assets, including its investments. Depending on whether investments are restricted or unrestricted, investments may be available for payment of General Revenue obligations. Unrestricted fund balances, to the extent that they were accumulated from money that was received as General Revenues, are included in and available to pay obligations secured by General Revenues.

The Board of Regents establishes investment policy and has delegated authority to carry out the day-to-day activities of the investment portfolios to the University of Washington Investment Management Company ("UWINCO"), an internal investment management company, which is led by the Chief Investment Officer of the University. Investment performance is reviewed quarterly by the University of Washington Investment Management Company Board ("UWINCO Board"), which is the advisory board to the Board of Regents and UWINCO. Balances and returns on these funds have varied, sometimes significantly, from period to period. See Note 6 in "APPENDIX B - AUDITED FINANCIAL STATEMENTS OF THE UNIVERSITY AND REQUIRED SUPPLEMENTAL INFORMATION OF THE UNIVERSITY (FISCAL YEAR ENDED JUNE 30, 2018)" and "UNIVERSITY RECENT DEVELOPMENTS—Investment Income."

#### **Invested Funds and Consolidated Endowment Fund**

The University invests both Invested Funds ("IF") and the Consolidated Endowment Fund ("CEF"). The IF reflects the total value of the University's operating fund investments. The CEF is the investment pool consisting of the University's endowments (a permanent fund established through private gifts to support the program(s) specified by the donor).

#### **IF Pools**

The IF currently consists of four pools: Short-term Pool, Intermediate-term Pool, Long-term Pool and Capital Assets Pool ("CAP"). Although the pool names were updated by the Board of Regents in May 2017, the investment strategies of the individual pools remain the same. The Short- and Intermediate-term Pools are invested primarily in high quality, fixed-income securities to meet the day-to-day obligations of the University. The Long-term Pool holds CEF units that are intended to enhance the overall portfolio return. In May 2014, the Board of Regents approved the CAP, which allows funds to be used to make internal loans to pay for approved University capital projects. The size of the CAP is targeted at 10 percent of the IF, and the maximum size is limited by policy to 15 percent of the IF.

University policy stipulated the following minimum and maximum percentages that the IF may be invested in these pools as of June 30, 2018. The percentages that were invested in these funds for the periods ended June 30, 2017 and June 30, 2018 are shown below. Over the next 12 months, fund transfers are planned to bring the Short-term Pool and the Intermediate-term Pool allocations within the policy range with an amendment to policy planned for 2019.

**Table 16: Invested Funds** 

		Percent as of	Percent as of
	Policy Percent	June 30, 2017	June 30, 2018
Short-term Pool	10%-40%	52%	51%
Intermediate-term Pool	25%-60%	17%	19%
Long-term Pool	15%-45%	25%	25%
Capital Assets Pool	0%-15%	6%	5%

Source: University of Washington Investment Management Company.

#### **CEF Distributions**

Under the Board of Regents-approved spending policy for the CEF, distributions to endowed programs are made in an amount equal to four percent of the twenty-quarter rolling average of the CEF's market valuation. The spending policy calls for an additional administrative fee of one percent to support fundraising and stewardship activities (0.8 percent) and investment management (0.2 percent). Similar to program distributions, the administrative fee is based on the CEF's twenty-quarter rolling average market value.

#### **UW MEDICINE**

The University operates an integrated health system under the name "UW Medicine," consisting of University-divisions, departments, component units, Harborview, partially-owned organizations, and key affiliates and partners as shown in the following figure.

**UW Medicine** UW Medicine Clinical Key Affiliates and Other Medicine Partially Owned Enterprise Organizations Organizations **Partners** UW Medical Center(1) UW School of Medicine(1) lical Group (wi attle Children's Harborview Medical Airlift Northwest(1) Center Northwest Hospital & Medical Center Valley Medical Center **UW Physicians UW Neighborhood Clinics** RCCH-UW Medicine althcare Holdings, LLC

**Figure 4: UW Medicine Entities** 

The following provides an overview of the entities operated as the integrated health system known as UW Medicine (other than shared services), including the entities with revenues included in General Revenues (together with shared services) and the Clinical Enterprise. The Clinical Enterprise includes University divisions, departments and blended component units that generate patient services revenues. See "Table 6: UW Medicine Entities" under the heading "GENERAL REVENUES—Patient Services Revenues."

#### **UW Medicine Entities with Revenues Included General Revenues**

UW Medical Center, Airlift Northwest and the UW School of Medicine are, together with shared services, the UW Medicine entities with revenues, included in General Revenues.

*UW Medical Center*. UW Medical Center is a 529-licensed-bed hospital that is a division of the University. UW Medical Center provides highly specialized inpatient and outpatient healthcare to patients throughout the Pacific Northwest and also serves as a major clinical, teaching and research site for students and faculty of the University. In 2013, UW Medical Center began phase two of the Montlake Tower project to construct new inpatient floors including the addition of intensive care, medical/surgical beds and operating rooms, all of which opened early in 2016. Phase two was fully completed in 2018. The revenues, expenses, assets and liabilities of UW Medical Center are included in the University's financial statements.

<sup>(1)</sup> Revenues Included in General Revenues.

<sup>(2)</sup> Includes Capital Medical Center, Island Hospital & Clinics, MultiCare Connected Care, Overlake Hospital Medical Center, Eastside Health Network, PeaceHealth, Seattle Cancer Care Alliance, Seattle Children's and Skagit Regional Health.
Source: The University.

Airlift Northwest. Airlift Northwest is a medical transport service that works with first responders throughout Washington, Alaska, Montana and Idaho to transport critically ill and injured patients to local hospitals, regional trauma centers or specialty care facilities. The revenues, expenses, assets and liabilities of Airlift Northwest are included in the University's financial statements.

UW School of Medicine. The UW School of Medicine was founded in 1946 and is recognized for training primary care physicians and advancing medical knowledge through scientific research. UW School of Medicine was second in the nation in research funding received from the National Institutes of Health based on federal Fiscal Year 2017 awards. Physician faculty members of the UW School of Medicine staff UW Medical Center, Harborview, Northwest, and UW Neighborhood Clinics, as well as the Puget Sound Veterans Affairs Health Care System, Seattle Cancer Care Alliance ("SCCA") and Seattle Children's Hospital. The revenues, expenses, assets and liabilities of the UW School of Medicine are included in the University's financial statements.

### **UW Medicine Entities within the Clinical Enterprise**

Together with UW Medical Center, Airlift Northwest and shared services, the following University departments, divisions and blended component units constitute the Clinical Enterprise components of UW Medicine.

Northwest Hospital & Medical Center. Northwest is a 281-licensed-bed hospital in North Seattle, which affiliated with UW Medicine in 2010. Northwest is a not-for-profit community hospital offering comprehensive medical, surgical and therapeutic services. The University is the sole corporate member of Northwest. Under GASB 80, primary governments that are the sole corporate member of component units organized as not-for-profit corporations are required to blend the balances, activities, and cash flows of the component unit with those of the primary government. Effective Fiscal Year 2017, Northwest is presented as a blended component unit of the University, rather than in its previous form as a discretely presented component unit.

The University is in the process of integrating UW Medical Center and Northwest into one hospital with two campuses (under one license). Upon completion of the proposed integration, Northwest is to be operated as a second campus of UW Medical Center and the two-campus hospital is to be financially, clinically and administratively integrated. On February 8, 2018, the Board of Regents approved the dissolution and integration of Northwest. The integration currently is expected to take effect no later than January 1, 2020. It is anticipated that, in connection with the integration, the Northwest corporate entity will be dissolved, at which point all Northwest assets and liabilities would transfer to the University to be reported as part of the University (instead of as a blended component unit). Following integration, Northwest revenues would cease to be revenue or income separately reported as an exclusion from General Revenues. If integration and dissolution do not proceed, and Northwest revenue remains a separate item, Northwest revenue would not be included in General Revenues unless and until it can be added by certificate of the Controller. See "SECURITY FOR THE BONDS—Additions to General Revenues" and Table 18: UW Medical Center, Northwest, Clinical Enterprise and UW Medicine Financial Information for information regarding Northwest's financial results and Table 17 for patient activity statistics, each showing historical performance of the hospitals.

*UW Physicians*. UW Physicians is the physician practice group for more than 2,200 physicians and other healthcare professionals associated with UW Medicine. UW Physicians provides primary and specialty care totaling more than one million patient visits each year. UW Physicians is a not-for-profit corporation whose members consist of clinically active faculty of the UW School of Medicine. Pursuant to an agreement between the University and UW Physicians, UW Physicians is responsible for providing medical services to patients at hospitals owned or managed by the University and other sites of practice approved by the Dean of the UW School of Medicine. UW Physicians is presented as a blended component unit of the University in the University's financial statements.

**UW Neighborhood Clinics**. UW Neighborhood Clinics is a network of clinics with 14 locations throughout the greater Puget Sound area. The clinics offer a spectrum of primary care services, select specialty care and urgent care services as well as ancillary services, including on-site laboratory, X-ray facilities and nutrition services. UW Neighborhood Clinics is a not-for-profit corporation organized for the benefit of the UW School of Medicine, its faculty practice plan, UW Physicians, and all of its affiliated medical centers. UW Neighborhood Clinics is presented as a blended component unit of the University in the University's financial statements.

#### **Other UW Medicine Entities**

Harborview and Valley also are part of the UW Medicine umbrella organization that coordinates the provision of patient services.

Harborview Medical Center. Harborview is a Level 1 adult and pediatric trauma and burn center with 413 licensed beds that offers specialty care in nearly every area of medicine. Harborview's primary mission is to provide and teach exemplary patient care and to provide health care for those patients King County is obligated to serve. Harborview is owned by King County. The University has operated and managed Harborview since 1967. The University and King County entered into a 10-year hospital services agreement (with two renewable 10-year agreement terms) in February 2016, under which the University is reimbursed by Harborview for services provided and expenses incurred, all subject to the terms of the agreement. Harborview's financial results are not included in the University's financial statements.

Valley Medical Center. Valley is a 321-licensed-bed hospital in Southeast King County, and is a full-service acute care public hospital. Valley is owned and operated by Public Hospital District No. 1 of King County (the "District"). The District is a public agency as defined by RCW 39.34.020(1) and a municipal corporation. In addition to the hospital, the District operates a network of more than two dozen primary care, urgent care and specialty clinics throughout Southeast King County. The District entered into a strategic alliance with UW Medicine in 2011. Valley continues to be included as a discretely presented component unit of the University following implementation of GASB Statement No. 80, Blending Requirements for Certain Component Units effective as of Fiscal Year 2017 ("GASB 80").

#### **Patient Activity Statistics**

The following table shows patient activity statistics for UW Medical Center and Northwest as well as for UW Medicine, the umbrella organization coordinating patient services among these two hospitals and the other UW Medicine hospitals (Harborview and Valley) and other entities. As shown in "Table 6: UW Medicine Entities" under the heading "GENERAL REVENUES—Patient Services Revenues," the revenues of UW Medical Center, Airlift Northwest and shared services are included in General Revenues and the revenues of Northwest are expected to be included commencing January 1, 2020, if the proposed integration proceeds as currently planned.

Table 17: UW Medical Center, Northwest, Clinical Enterprise and UW Medicine Patient Activity Statistics

(fiscal years)

	2014	2015	2016	2017	2018
UW Medical Center (include	ed in General Revenu	ies and a compone	ent of the Clinical	Enterprise)	
Admissions	18,033	18,092	18,362	18,964	19,350
Outpatient Visits	291,375	302,038	320,037	341,014	353,718
Emergency Visits	25,338	26,465	26,555	27,730	28,279
Northwest (a component of t	he Clinical Enterpris	se)			
Admissions	9,211	9,934	10,060	9,945	9,935
Outpatient Visits	193,387	195,031	197,132	174,257	169,370
Emergency Visits	34,276	36,159	35,068	34,150	33,651
Clinical Enterprise <sup>(1)</sup> (includ	les UW Medical Ceni	ter and Northwest	and other Clinica	l Enterprise entiti	es)
Clinical Enterprise <sup>(1)</sup> (include Admissions	les UW Medical Cent N/A	ter and Northwest N/A	and other Clinica 28,422	l Enterprise entiti 28,909	es) 29,285
* '					*
Admissions	N/A	N/A	28,422	28,909	29,285
Admissions Outpatient Visits	N/A N/A N/A	N/A N/A N/A	28,422 817,968 61,623	28,909 853,445	29,285 895,501
Admissions Outpatient Visits Emergency Visits	N/A N/A N/A	N/A N/A N/A	28,422 817,968 61,623	28,909 853,445	29,285 895,501
Admissions Outpatient Visits Emergency Visits  UW Medicine <sup>(1)</sup> (includes Cl	N/A N/A N/A	N/A N/A N/A well as Harborviev	28,422 817,968 61,623 w and Valley)	28,909 853,445 61,880	29,285 895,501 61,930

<sup>(1)</sup> See "Table 6: UW Medicine Entities."

Source: The University.

#### **UW Medicine Joint Ventures**

As shown in Figure 4, UW Medicine includes organizations owned, in part, by the University.

Seattle Cancer Care Alliance. SCCA is a joint venture of UW Medicine, Seattle Children's Hospital and Fred Hutchinson Cancer Research Center. SCCA integrates the cancer research, teaching and clinical cancer programs of all three institutions to provide cancer care. Each member of SCCA has a one-third interest. The University accounts for its share of the joint venture under the equity method of accounting.

Children's University Medical Group. Children's University Medical Group ("CUMG") is a joint venture of UW Medicine and Seattle Children's Hospital established to assist the organizations in carrying out their pediatric patient care, charitable, educational and scientific missions. CUMG employs UW School of Medicine faculty physicians, and it bills and collects for their services as an agent of UW School of Medicine. The University records revenue from CUMG based on an income distribution plan effective December 31, 2008.

**RCCH-UW Medicine Healthcare Holdings, LLC.** RCCH-UW Medicine Holdings, LLC is a joint venture of UW Medicine and RCCH Healthcare Partners ("RCCH"), which created a public-private partnership to own and operate community hospitals in Washington, Alaska, and Idaho. The partnership will take the form of a limited liability

company that will own and operate community hospitals or other healthcare entities. RCCH will operate and manage these facilities and UW Medicine will provide clinical expertise.

### **Strategic Collaborations**

As shown in Figure 4, UW Medicine also includes key affiliations and non-University owned partners.

In addition to its sole membership in Northwest, its strategic alliance with Valley, its management agreement with Harborview, and its partial ownership of the organizations described above, UW Medicine has entered into a number of affiliations, alliances and collaborations with third-party entities as part of its mission to improve the health of the public, including the following. These relationships are intended to address and further UW Medicine's goals as described in "APPENDIX B-AUDITED FINANCIAL STATEMENTS AND REQUIRED SUPPLEMENTAL INFORMATION OF THE UNIVERSITY (FISCAL YEAR ENDED JUNE 30, 2018)" and below.

In July 2017, UW Medicine and MultiCare Health System ("MultiCare") announced the formation of a new alliance to expand access to high-quality healthcare and allow the two organizations to engage in joint activities to further the mission of each organization. Through this clinically integrated network ("CIN"), UW Medicine and MultiCare are working to provide cost-effective and clinically integrated healthcare in communities throughout the Puget Sound region while supporting the education of the next generation of clinicians and advancing research. The parties' joint activities are guided by four core principles: the provision of high-quality, patient-centered care; a commitment to teaching and research; ensuring strong financial stewardship to deliver value to the payers of healthcare services; and a focus on improving the health of populations served by the alliance. In June 2018, the Board of Regents approved formation of the CIN legal entity and, subsequent to fiscal year end, the CIN was incorporated within the State.

In July 2018, the Board of Regents granted approval to proceed with the UW Medicine Clinical Transformation project, which is being called "Destination One." This multi-year project is intended to allow UW Medicine to improve patient engagement, to enhance physician and practitioner experience and to achieve business and operating efficiencies through development of foundational systems and improved staffing workflows. Patient engagement is to be enhanced through development of a single online patient portal for activities between the patient and UW Medicine. UW Medicine seeks to achieve business and operating efficiencies through simplification and standardization across operations and information technology, to improve revenue cycles and optimize resource utilization. Total project costs are estimated at \$180 million, of which \$129 million is expected to be financed by the University. The remaining portion is expected to be funded with equity contributions from Harborview, UW Medical Center, Northwest, and the Seattle Cancer Care Alliance. The project began in November 2018 with initial implementation expected by April 2020.

In November 2018, the Board of Regents granted approval to proceed with the Northwest Childbirth Center. The project will renovate approximately 23,000 square feet of existing space in three adjoining wings (including one that is not part of the current Childbirth Center) plus approximately 1,600 square feet of new space to house a new C-section suite. The project cost is approximately \$25 million and will be financed by the University.

#### UNIVERSITY RECENT DEVELOPMENTS

# Patient Services Operating Results

The two hospitals with revenues that are included in or currently planned to be included in General Revenues – UW Medical Center and Northwest – had negative margins in Fiscal Year 2018 as shown on Table 18. UW Medical Center's negative margin was primarily due to an additional \$15.3 million benefit expense recognized as a result of the implementation of GASB 75 in Fiscal Year 2018. In addition, Fiscal Year 2018 results reflected lower than anticipated commercial reimbursements and higher salary, wage and benefit expenses and supply costs, offset partially by an increase in patient volumes. Margins were unfavorable at Northwest for a variety of reasons, including a significant shift in payer mix, which resulted in unfavorable reimbursement, and lower than anticipated patient volumes.

On November 9, 2017, the Board of Regents approved UW Medicine's Financial Improvement and Transformation plan ("Project FIT"), a three-year plan designed to improve financial stability and position UW Medicine for the future. Specifically the plan is intended to improve margins over the three-year period so that, by Fiscal Year 2020, balance sheet and cash levels would strengthen. As part of Project FIT, financial improvement is planned through revenue generation and cost savings with continued infrastructure investment. Key factors are planned related to clinical service growth, labor mix and productivity improvements. In general, UW Medicine's strategies are intended to improve financial performance through the reduction of costs and streamlining the provision of clinical care, as well as mitigating recent negative reimbursement trends being experienced within the market. Challenges include a continued focus on patient volumes shifting from inpatient to outpatient settings due to technological advancements and demand for care that is more convenient, affordable and accessible as well as the industry-wide migration to value-based payment models as government and private payers shift risk to providers.

Fiscal Year 2018 represents the first year of Project FIT. Overall, while UW Medicine on a combined basis (excluding UW School of Medicine) met Project FIT targets for Fiscal Year 2018 with a total margin of (0.2) percent overall, components of UW Medicine did not.

The Clinical Enterprise total margin of (2.0) percent for Fiscal Year 2018 improved from Fiscal Year 2017's total margin of (3.4) percent, but the Clinical Enterprise did not meet its planned total margin target of (0.4) percent. More specifically some components of the Clinical Enterprise did not meet planned total margin targets. UW Medical Center fell short of the Project FIT planned total margin target (with total margin of (1.3) percent compared to a breakeven target), not taking into account the impact of GASB 75. Northwest's total margin in Fiscal Year 2018 of (5.6) percent fell short of the (2.9) percent target. Other UW Medicine entities experienced more positive results, including Valley and the UW School of Medicine.

Patient services revenues included in General Revenues were \$1.33 billion in Fiscal Year 2018. See "Table 5: General Revenues" and "Table 6: UW Medicine Entities." The following table shows financial information for UW Medical Center and Northwest, the two hospitals with revenues that are included in or currently planned to be included in General Revenues, as well as for the Clinical Enterprise and the overall UW Medicine organization.

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### Table 18: UW Medical Center, Northwest, Clinical Enterprise, and UW Medicine Financial Information

(fiscal years, dollars in thousands)

	2014	2015	2016	2017	<b>2018</b> <sup>(3)</sup>		
UW Medical Center (included in Ge	neral Revenues ar	nd a component o	of the Clinical En	terprise) <sup>(1)</sup>			
Total Operating Revenue	\$967,651	\$1,083,584	\$1,135,626	\$1,182,856	\$1,260,010		
Operating Margin	2.2%	4.9%	(0.2%)	$(4.0\%)^{(2)}$	(1.7%)		
Net Income	14,096	26,745	(27,679)	(44,323)	(16,645)		
Northwest (a component of the Clin	ical Enterprise) <sup>(1)</sup>						
Total Operating Revenue	\$324,342	\$357,054	\$372,751	\$358,700	\$370,770		
Operating Margin	(3.0%)	(5.0%)	(6.0%)	(9.9%)	(7.7%)		
Net Income	(4,755)	(5,283)	(4,511)	(26,314)	(21,010)		
Clinical Enterprise (includes UW M	edical Center and	Northwest and o	ther Clinical Ent	erprise entities) <sup>(4)</sup>			
Total Operating Revenue	N/A	N/A	\$1,898,148	\$1,968,019	\$2,082,793		
Operating Margin	N/A	N/A	(2.9%)	(4.2%)	(3.0%)		
Net Income	N/A	N/A	(31,144)	(67,505)	(41,976)		
UW Medicine Combined <sup>(4)(5)</sup> (includes Clinical Enterprise as well as Harborview and Valley, excludes eliminations)							
Total Operating Revenue	2,830,459	3,157,955	3,561,102	3,752,120	3,954,585		
Operating Margin	(0.5%)	2.4%	(1.1%)	$(2.7\%)^{(2)}$	(1.3%)		
Net Income	(10,161)	80,597	(4,807)	(84,502)	(8,692)		

<sup>(1)</sup> Of these two hospitals, only UW Medical Center revenues are currently included in General Revenues for the University as of the date of this Official Statement. See "UW MEDICINE" for a discussion of a proposal to combine UW Medical Center and Northwest into one hospital with two campuses, commencing in January 2020. If the proposal is approved, Northwest revenues would no longer be reported separately but would be a part of UW Medical Center's revenues included in General Revenues.

Source: The University.

*Grant Awards*. Grant and contract revenues accounted for 22.8 percent of University revenue in Fiscal Year 2018. In Fiscal Year 2017 the University received a 10-year, \$279 million grant from the Bill and Melinda Gates Foundation. This large award increased overall grant funding in Fiscal Year 2017 by 19 percent and increased non-federal funding by 60 percent. In Fiscal Year 2018 federal and non-federal grant and contract awards were \$1.35 billion, which represented a 17 percent decrease from the University high of Fiscal Year 2017 (and a 47 percent decrease in non-federal funding).

Federal grants and contract funding increased slightly in Fiscal Year 2018. There was a seven percent decrease in funding from the National Institutes of Health, but that decrease was more than offset by increases from the National Science Foundation (up five percent) and the Department of Defense (up 50 percent).

The University's expectations with regard to future grant and contract revenues (and therefore future grant and contract indirect cost revenues) are informed by its awards. The following award information shows the University's grant and contract awards for Fiscal Years 2014 through 2018.

<sup>\$32</sup> million of primary care funding for Neighborhood Clinics was reclassified from non-operating to operating expense. Prior to the reclassification, for example, UW Medical Center operating margin would have been (1.35) percent.

<sup>(3) 2018</sup> expenses include OPEB expense resulting from GASB 75 implementation of \$15.3 million for UW Medical Center (\$20.0 million for the Clinical Enterprise and UW Medicine).

<sup>(4)</sup> See "Table 6: UW Medicine Entities."

<sup>(5)</sup> Unaudited.

#### **Table 19: Grant and Contract Awards**

(fiscal years, dollars in millions)

By Source	2014	2015	2016	2017	2018
Federal Grants and Contracts	\$ 1,084	\$ 1,040	\$ 992	\$ 1,034	\$ 1,035
Non-Federal Grants and Contracts	302	269	373	595(1)	316
$Total^{(2)}$	\$ 1,386	\$ 1,309	\$ 1,365	\$ 1,629	\$ 1,351
School/College <sup>(3)</sup>	2014	2015	2016	2017	2018
Medicine <sup>(4)</sup>	\$ 738	\$ 659	\$ 715	\$ 1,004(1)	\$ 632
Environment	109	88	116	119	134
Engineering	114	113	104	97	125
Arts and Sciences	97	115	99	93	121
Public Health	81	107	97	106	98
Other	247	227	234	210	241
Total <sup>(2)</sup>	\$ 1,386	\$ 1,309	\$ 1,365	\$ 1,629	\$ 1,351

<sup>(1)</sup> Includes a \$279 million 10-year grant from the Bill and Melinda Gates Foundation.

Source: The University.

State Appropriations and Tuition. State appropriations and tuition accounted for 21.4 percent of University revenue in Fiscal Year 2018. As described under the heading "GENERAL REVENUES—Student Tuition and Fees," following a period during which tuition revenue grew as State appropriations to the University declined, the State began to reverse that trend through increased appropriations between Fiscal Year 2014 and Fiscal Year 2018.

State appropriations accounted for approximately 6.0 percent of the University's total revenue in Fiscal Year 2018. The State appropriates funds for certain University operating expenses and for a portion of the University's capital budget. These appropriations are subject to the Legislature's biennial budget process. The table below shows University expenditures of State operating and capital appropriations to the University in Fiscal Years 2014 through 2018.

**Table 20: Expenditures of State Appropriations to the University By Type** (fiscal years, dollars in millions)

	2014	2015	2016	2017	2018
Operating Appropriations	\$262.1	\$255.2	\$302.1	\$342.0	\$362.3
Capital Appropriations <sup>(1)</sup>	7.7	20.8	39.2	64.2	$26.4^{(2)}$
Total Appropriations	\$269.8	\$276.0	\$341.3	\$406.2	\$388.7

<sup>(1)</sup> Reflects expenditures made on capital projects; varies depending on project schedules.

Source: The University.

The 2017 Legislature passed a final compromise operating budget for the 2017–2019 biennium shortly before a potential State government shutdown at the beginning of July 2017. Despite facing constitutionally required increases to K-12 funding (*McCleary v. Washington*), the final State biennial budget included targeted investments in public higher education including medical education and STEM enrollments. In addition, the Legislature authorized salary increases for State employees and provided partial funding for those increases based on the assumption that tuition rates for students other than resident undergraduates would grow to cover compensation

<sup>(2)</sup> Totals subject to change per negotiations with sponsors after fiscal year end. Total does not include external financial aid grants to undergraduates.

<sup>(3)</sup> Purpose is determined by the unit that provides award administration and is subject to change due to reorganization. In 2018, Health Sciences schools were consolidated into "Other."

<sup>(4)</sup> Refers to the School of Medicine.

Some projects that were slated to receive funding for the beginning of Fiscal Year 2018 were delayed by several months, resulting in lower expenditures.

increases for faculty and staff. The 2018 Legislature passed a supplemental operating budget amending the 2017–2019 biennial budget, which added additional targeted funding for computer science enrollments and temporarily shifted some of the cost of salary increases from student tuition revenue to State funding for the biennium.

After failing to pass a biennial State capital budget during the 2017 legislative session, the Legislature approved a compromise 2017–2019 biennial capital budget when it reconvened in 2018. Therefore, some projects that were slated to receive funding for the beginning of Fiscal Year 2018 were delayed by several months.

Gifts. Gifts accounted for 6.2 percent of University revenue in Fiscal Year 2018. Philanthropic support increased substantially in Fiscal Year 2018 to an all-time University record. In Fiscal Year 2018, the University received \$715 million in total private support from 149,000 donors, up from the trailing five-year average of \$481 million. Of the \$715 million received in Fiscal Year 2018, approximately \$453 million was private gifts and approximately \$262 million was private grants. The University formally announced its Be Boundless Campaign, with a goal of at least \$5 billion, on October 21, 2016. Although the goal was reached in October 2018, the campaign will extend until June 30, 2020.

Beginning with audited financial statements for Fiscal Year 2018, new GASB standards apply to irrevocable split-interest agreements, a specific type of giving arrangement used by donors to provide resources to two or more beneficiaries. See Note 1 to "APPENDIX B—AUDITED FINANCIAL STATEMENTS AND REQUIRED SUPPLEMENTAL INFORMATION OF THE UNIVERSITY (FISCAL YEAR ENDED JUNE 30, 2018)."

*Investment Income*. Investment income was \$404 million in Fiscal Year 2018, down from \$442 million in Fiscal Year 2017. The primary contributors (approximately 90 percent) of University investment income are returns on the CEF and IF. Lower endowment returns shown in Table 22 drove the year-over-year decline in investment income. The decline in the annual CEF return is consistent with the performance of global equity markets, which experienced greater volatility in the second half of Fiscal Year 2018. As of June 30, 2018, the CEF was valued at \$3.4 billion and the IF (or operating fund investments) at \$1.8 billion, for total investment-related assets of \$5.2 billion. The IF excludes \$634 million in CEF units owned by the IF and \$137 million in the CAP.

IF year-end market values and returns for the last five fiscal years are shown below. See "APPENDIX B—AUDITED FINANCIAL STATEMENTS AND REQUIRED SUPPLEMENTAL INFORMATION OF THE UNIVERSITY (FISCAL YEAR ENDED JUNE 30, 2018)," which includes notes to the financial statements detailing the investment of the IF.

## Table 21: Invested Funds Market Values & Returns<sup>(1)</sup> (fiscal years, dollars in millions)

	2014	2015	2016	2017	2018
Total Market Value	\$1,606	\$1,526	\$1,492	\$1,659	\$1,788
Annualized One-Year Return	1.6%	0.9%	2.4%	0.1%	0.9%

<sup>(1)</sup> Represents the Short and Intermediate-term Pools, excludes the Long-term Pool and the CAP. *Source: University of Washington Investment Management Company.* 

CEF year-end market values and returns for the last five fiscal years are shown below. See "APPENDIX B—AUDITED FINANCIAL STATEMENTS AND REQUIRED SUPPLEMENTAL INFORMATION OF THE UNIVERSITY (FISCAL YEAR ENDED JUNE 30, 2018)," which includes notes to the financial statements detailing the investment of the CEF.

#### Table 22: Consolidated Endowment Fund Market Values & Returns<sup>(1)</sup>

(fiscal years, dollars in millions)

	2014	2015	2016	2017	2018
Total Market Value	\$2,833	\$3,076	\$2,968	\$3,144	\$3,407
Annualized One-Year Return	15.8%	6.8%	(1.6)%	13.6%	9.6%

<sup>(1)</sup> Includes the Long-term Pool.

Source: University of Washington Investment Management Company.

Table 23 shows investments in the IF and the University demand deposit account by liquidity (daily and weekly). Liquidity can vary up to \$150 million per quarter due to the timing of tuition, gifts, capital expenditures, and other University activities.

**Table 23: University Liquidity** 

(unaudited, dollars in thousands, as of September 30, 2018)

Daily Liquidity <sup>(1)</sup>	Amount
Money Market Funds <sup>(2)</sup>	\$ 61,953
Weekly Liquidity <sup>(3)</sup>	
U.S. Treasuries and Agencies	1,081,435
Fixed Income	345,345
Total Weekly Liquidity	\$ 1,426,780
Total Daily & Weekly Liquidity	\$ 1,488,733
Other University Liquidity	
Supplemental Retirement Fund <sup>(4)</sup>	262,548
Total University Liquidity <sup>(5)</sup>	\$ 1,751,281

<sup>(1)</sup> Investments that can be liquidated on a same-day basis, if sale executed prior to 10:00 a.m., Pacific time.

Source: University of Washington Investment Management Company.

#### LABOR, RISK MANAGEMENT AND RETIREMENT INFORMATION

#### **Labor Relations**

The University employs approximately 46,000 full-time and part-time employees, of whom approximately 18,600 are unionized. Pursuant to chapter 41.80 RCW, the University has negotiated collective bargaining agreements to cover the 2019–2021 biennium with the following unions:

- Inlandboatmen's Union of the Pacific (mariners)
- Service Employees International Union ("SEIU") Local 925 (clerical and healthcare employees)
- UW Police Management group (police sergeants and lieutenants who are also represented by the Washington Federation of State Employees)
- Teamsters Local Union No. 117 (police officers)

The University will begin bargaining with SEIU Local 1199NW (registered nurse, healthcare specialist, imaging tech, social worker, anesthesia and respiratory tech employees primarily at Harborview Medical Center, and at

<sup>(2)</sup> Includes Bank of America balance of \$32 million.

<sup>(3)</sup> Investments that can be liquidated within two to seven days.

<sup>(4)</sup> Liquidity is restricted for use of the Supplemental Retirement Fund.

<sup>(5)</sup> Excludes \$647 million in the Long-term Pool and \$136 million in the CAP, as of September 30, 2018.

Airlift Northwest) and the Washington State Nurses Association (registered nurses at the UW Medical Center) in February 2019. The University has concluded bargaining with SEIU Local 1199 as to research and Hall Health nurses. The University and the Washington Federation of State Employees master group (service, library, public safety, skilled trade employees) did not successfully conclude bargaining by the October 1, 2018 deadline. According to RCW 41.80, the University will not be eligible to receive State funding for this group and no across-the-board increases will be paid to this group of close to 2,700 workers.

With respect to agreements covered by chapter 41.56 RCW, the University is currently negotiating a successor agreement with the American Federation of Teachers Local 6486 (representing approximately 34 English language extension lecturers within UW Continuum College). The University reached an agreement with the graphic communications bargaining unit, also represented by the Teamsters Local 117 in late October 2017. In October 2016, the University reached agreement with the UW Housestaff Association (representing approximately 1,300 medical residents and fellows at the University) on a contract spanning November 1, 2016, to June 30, 2019. In the spring of 2018, the University concluded negotiations with the United Auto Workers Local 4121, representing approximately 4,600 academic student employees. This agreement will expire on April 30, 2021. The United Auto Workers also represents approximately 1,200 to 1,300 post-doctoral fellows. Negotiations for a first collective bargaining agreement are currently ongoing. On December 8, 2017, the Screen Actors Guild–American Federation of Television and Radio Artists filed a petition with PERC to represent approximately 50 employees at KUOW-FM, and bargaining for a first collective bargaining agreement is well underway.

In anticipation of the revisions to State law as a result of Initiative 1433 that will become effective on January 1, 2019, the University will begin impact bargaining with all interested unions regarding contract changes to sick time-off provisions and related issues.

#### Risk Management

The University is exposed to risk of loss related to tort liability, injuries to employees and loss of property. The University purchases insurance protection for workers' compensation as well as marine, aviation and certain other risks. The University also purchases insurance protection for loss of property at self-sustaining units and bond-financed buildings and where otherwise required by contract; otherwise, the risk of property loss is retained, unfunded. For medical professional, general, employment practices, automobile liability and information security and privacy protection, the University maintains a program of self-insurance reserves and excess insurance coverage. The self-insurance reserves represent the estimated ultimate cost of settling claims resulting from events that have occurred on or before the statements of net position date. The reserves include the undiscounted amounts that will be required for future payments of claims that have been reported and claims related to events that have occurred but have not yet been reported.

The self-insurance reserves are estimated through an actuarial calculation and included in long-term liabilities. See "APPENDIX B—AUDITED FINANCIAL STATEMENTS AND REQUIRED SUPPLEMENTAL INFORMATION OF THE UNIVERSITY (FISCAL YEAR ENDED JUNE 30, 2018)." Changes in the self-insurance reserves for the years ended June 30, 2014 through 2018 are noted below:

**Table 24: University Self-Insurance Reserves** (fiscal years, dollars in thousands)

	2014	2015	2016	2017	2018
Reserve at Beginning of Fiscal Year	\$79,708	\$67,450	\$82,201	\$79,153	\$78,484
Incurred Claims and Changes in	13,917	29,495	24,778	15,026	42,033
Estimates					
Claim Payments	(26,175)	(14,744)	(27,826)	(15,695)	(8,307)
Reserve at End of Fiscal Year	\$67,450	\$82,201	\$79,153	\$78,484	\$112,210(1)

<sup>(1)</sup> Increased self-insurance reserve in Fiscal Year 2018 to reflect settlements. *Source: The University.* 

#### **Pension Plans**

The University offers four contributory pension plans: the Washington State Public Employees Retirement System ("PERS") plan, the Washington State Teachers' Retirement System ("TRS") plan, the Law Enforcement Officers' and Fire Fighters' Retirement System ("LEOFF") plan and the University of Washington Retirement Plan ("UWRP"). PERS, TRS, and LEOFF are cost-sharing multiple-employer defined benefit pension plans administered by the Washington State Department of Retirement Systems ("DRS"). The UWRP, a single-employer defined-contribution plan, is administered by the University. The University's noncontributory pension plan, the University of Washington Supplemental Retirement Plan, is a single-employer defined-benefit plan, but is closed to employees who were not active participants on February 28, 2011.

PERS, TRS and LEOFF Plan Descriptions. The University contributes to PERS, TRS and LEOFF. PERS Plan 1 and TRS Plan 1 provide retirement and disability benefits, along with minimum benefit increases beginning at age 66 to eligible nonacademic plan members hired prior to October 1, 1977. PERS and TRS Plans 2 and 3 provide retirement and disability benefits and a cost-of-living allowance to eligible nonacademic plan members hired on or after October 1, 1977. In addition, PERS Plan 3 and TRS Plan 3 have a defined-contribution component, which is fully funded by employee contributions. LEOFF Plan 2 provides retirement, disability and death benefits. Members are vested after completing five years of eligible service. The authority to establish and amend benefit provisions resides with the Legislature subject to restrictions on impairing contractual obligations to employees.

Harborview, a related party of the University, is owned by King County and is not included in the University's reporting entity for GASB financial reporting purposes. However, all of Harborview's employees are University employees. Therefore, under GASB 68, the University includes the pension-related amounts pertaining to employees working at Harborview in the amounts recorded in the University's Financial Report. Harborview will continue to account for pension-related expenses using the current "funding" approach, and does not record any of the associated GASB 68 liabilities.

Significant reporting and actuarial assumptions related to the DRS plans in which the University participates are as follows:

• Fiduciary Net Position – The pension plans' fiduciary net positions have been determined on the same basis as they are reported by the pension plans. DRS financial statements have been prepared in conformity with generally accepted accounting principles ("GAAP"). The retirement plans are accounted for in pension trust funds using the flow of economic resources measurement focus and the accrual basis of accounting. Member contributions are recognized as revenues in the period in which the contributions are earned. Employer contributions are recognized when due and the employer has made a formal commitment to provide the contributions. Benefits and refunds are recognized when due, and payable in accordance with the terms of each plan.

Chapter 43.33 RCW authorizes the Washington State Investment Board (the "WSIB") to have investment management responsibility for the pension funds. Investments are reported at fair value, and unrealized gains and losses are included as investment income in the Statement of Changes in Fiduciary Net Position presented in the DRS Comprehensive Annual Financial Report. Purchases and sales of investments are recorded on a trade-date basis.

DRS publishes an annual report for retirement plans, which is available at: http://www.drs.wa.gov/administration/annual-report/ (which is not incorporated into this Official Statement by this reference).

- Actuarial Assumptions The total pension liability for each DRS plan was determined by an actuarial valuation, conducted by the Washington State Office of the State Actuary (the "OSA") as of June 30, 2016, with the results rolled forward to the measurement date of June 30, 2017 (the measurement period for the University's Fiscal Year 2018). The following actuarial assumptions have been applied to all prior periods included in the measurement:
  - 3.0 percent total economic inflation, 3.75 percent salary inflation

- Salary increase expected to grow due to promotions and longevity in addition to salary inflation assumption
- 7.50 percent investment rate of return

Mortality rates were based on the RP-2000 Combined Healthy Table and Combined Disabled Table published by the Society of Actuaries' Retirement Plans Experience Committee ("RPEC"). As recommended by the RPEC, the OSA applied offsets to the base table and recognized future improvements in mortality by projecting the mortality rates using 100 percent Scale BB. Mortality rates are applied on a generational basis, meaning members are assumed to receive additional mortality improvements in each future year, throughout their lifetime.

The actuarial assumptions used in the June 30, 2016 valuation were based on the results of OSA's 2007–2012 Experience Study. Additional assumptions for subsequent events and law changes are current as of the 2016 actuarial valuation report.

The long-term expected rate of return on pension plan investments was determined by the WSIB using a building block method in which a best estimate of expected future rates of return (expected returns, net of pension plan investment expense, but including inflation) are developed for each major asset class. Those expected returns make up one component of WSIB's Capital Market Assumptions ("CMAs"). WSIB uses the CMAs and their target asset allocation to simulate future investment returns over various time horizons.

The long-term expected rate of return of 7.50 percent approximately equals the median of the simulated investment returns over a 50-year time horizon, adjusted to remove or damper any short-term changes that are not expected over the entire 50-year measurement period.

• Discount Rate – The discount rate used to measure the total pension liabilities was 7.50 percent. The projection of cash flows used to determine the discount rate assumed that contributions from plan members will be made at contractually required rates, and that contributions from employers will be made at statutorily required rates, actuarially determined (including the component of PERS 2/3 and TRS 2/3 employer rates pertaining to the unfunded actuarial accrued liabilities for PERS 1 and TRS 1, respectively). Based on those assumptions, the fiduciary net position for each pension plan in which the University participates was projected to be sufficient to make all projected future benefit payments of the current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Using the WSIB long-term expected rate of return, a 7.50 percent future investment rate of return on pension plan investments was assumed for the test. The expected return on plan assets is the estimated long-term rate of return that will be earned on the investments used to fund the pension obligation. Contributions from plan members and employers were assumed to continue to be made at contractually required rates (including the component of PERS 2/3 and TRS 2/3 employer rates pertaining to the unfunded actuarial accrued liabilities for PERS 1 and TRS 1, respectively, as provided for in Chapter 41.45 RCW).

*Employer Contribution Rates*. Employer contribution rates are developed in accordance with Chapter 41.45 RCW by the OSA, and include a DRS administrative expense component that is currently set at 0.18 percent of covered payroll. To calculate employer and employee contribution rates necessary to pre-fund the plans' benefits, OSA uses actuarial cost and asset valuation methods selected by the Legislature as well as economic and demographic assumptions.

The University's proportionate share of the net pension liability/asset of each DRS plan in which the University participates is shown in the table below.

**Table 25: University's Proportionate Share** 

(as of June 30)

	PERS 1	<b>PERS 2/3</b>	TRS 1	TRS 2/3	LEOFF 2
<b>2018 Rate</b>	8.44%	10.48%	0.20%	0.19%	0.22%
<b>2017 Rate</b>	8.46	10.36	0.16	0.15	0.25

Source: The University.

The University's proportionate share of pension expense is shown in the table below.

Table 26: University's Proportionate Share of Pension Expense

(as of June 30, dollars in thousands)

	PERS 1	<b>PERS 2/3</b>	TRS 1	TRS 2/3	LEOFF 2
2018 Amount	\$23,229	\$55,060	\$1,747	\$927	(\$144) <sup>(1)</sup>
2017 Amount	31,179	75,104	1,315	799	169

<sup>(1)</sup> Negative value indicates overfunding.

Source: The University.

Table 27: Contribution Rates and Funded Status By Plan

(as of June 30, dollars in thousands)

2018	PERS 1	<b>PERS 2/3</b>	TRS 1	TRS 2/3	LEOFF 2
Required University Contributions	\$1,582	\$134,239	\$48	\$2,036	\$400
Covered Employee Payroll	1,074,943	1,062,415	13,986	13,664	4,487
University Contributions as a	0.2%	12.6%	0.3%	14.9%	8.9%
Percent of Payroll (Contribution					
Rates)					
Plan Fiduciary Net Position Percent	61.2%	91.0%	65.6%	93.1%	113.4%
of Total Net Pension Liability					
(funded status)					
2017	PERS 1	<b>PERS 2/3</b>	TRS 1	TRS 2/3	LEOFF 2
Required University Contributions	\$1,788	\$114,852	\$39	\$1,401	\$348
Required University Contributions Covered Employee Payroll	\$1,788 1,043,335	\$114,852 1,027,338	\$39 10,967	\$1,401 10,669	\$348 4,061
			•		*
Covered Employee Payroll	1,043,335	1,027,338	10,967	10,669	4,061
Covered Employee Payroll University Contributions as a	1,043,335	1,027,338	10,967	10,669	4,061
Covered Employee Payroll University Contributions as a Percent of Payroll (Contribution	1,043,335	1,027,338	10,967	10,669	4,061
Covered Employee Payroll University Contributions as a Percent of Payroll (Contribution Rates)	1,043,335 0.2%	1,027,338 11.2%	10,967 0.4%	10,669 13.1%	4,061 8.6%
Covered Employee Payroll University Contributions as a Percent of Payroll (Contribution Rates) Plan Fiduciary Net Position Percent	1,043,335 0.2%	1,027,338 11.2%	10,967 0.4%	10,669 13.1%	4,061 8.6%

Source: The University.

*University Aggregated Balances*. The University's aggregated balances of net pension liabilities and net pension assets as of June 30, 2018 and 2017 are presented in the following table:

Table 28: University's Share of Net Pension Liabilities/Assets

(as of June 30, dollars in thousands)

	PERS 1	<b>PERS 2/3</b>	TRS 1	TRS 2/3	LEOFF 2
2018 Net Pension (Liability)/Asset	(\$400,426)	(\$364,073)	(\$6,076)	(\$1,796)	\$2,995
2017 Net Pension (Liability)/Asset	(454,341)	(521,777)	(5,463)	(2,077)	1,430

Source: The University.

**Retirement Plan (403(b)) and Supplemental Retirement Plan (401(a)).** Faculty, librarians and professional staff are eligible to participate in the UWRP, a 403(b) defined-contribution plan, and the UW Supplemental Retirement Plan (UWSRP), a 401(a) defined-benefit retirement plan that is closed to new participants and operates in tandem with the 403(b) plan. Both plans are administered by the University.

Under GASB Statement No. 73, the University includes the pension-related amounts for the UWSRP plan pertaining to employees working at Harborview in the amounts recorded in the University's Financial Report (see Appendix B). Harborview will continue to account for pension-related expenses using the current "funding" approach, and does not record any of the associated GASB 73 liabilities.

- *UWRP Description*. Contributions to the UWRP are invested by participants in annuity contracts or mutual fund accounts offered by one or more fund sponsors. Employees have at all times a 100 percent vested interest in their accumulations. Benefits from the plan are available upon separation or retirement at the member's option. RCW 28B.10.400 *et seq.* assigns the authority to the Board of Regents to establish and amend benefit provisions.
- *UWRP Funding Policy*. Employee contribution rates are 5 percent, 7.5 percent or 10 percent of salary, based on age. The University matches the contributions of employees. Within parameters established by the Legislature, contribution requirements may be established or amended by the Board of Regents. Employer contributions for the years ended June 30, 2018 and 2017 were \$122,840,000 and \$112,420,000, respectively.
- UW Supplemental Retirement Plan Description. This plan provides for a supplemental payment component, which guarantees a minimum retirement benefit based upon a one-time calculation at each eligible participant's retirement date. The University makes direct payments to qualifying retirees when the retirement benefits provided by the UWRP plan do not meet the benefit goals. The Supplemental Retirement Plan was closed to new participants on February 28, 2011.
- *UW Supplemental Retirement Plan Funding*. The University received an actuarial valuation of the supplemental payment component of the UWRP with a valuation date of June 30, 2016. Update procedures performed by the Office of the State Actuary were used to roll forward the total pension liability to the measurement date of June 30, 2018.

The University has set aside assets of \$261,087,000 and \$230,782,000 as of June 30, 2018 and 2017, respectively, for this liability. These funds do not meet the GASB technical definition of "Plan Assets" because they have not been segregated and restricted in a trust or equivalent arrangement. The total pension liability, therefore, does not reflect a credit for these amounts.

Table 29: Changes in Total Pension Liability UWSRP

(fiscal year, dollars in thousands)

	2018
Beginning Total Pension Liability	\$438,753
Service Cost	14,788
Interest	16,127
Differences Between Expected and Actual Experience	(33,952)
Changes in Assumptions	(17,105)
Benefits Payments	(6,130)
Ending Total Pension Liability	\$412,481
UWSRP Covered Employee Payroll	759,688
Total Pension Liability as a Percentage of Covered Employee Payroll	54.30%

Source: The University.

Table 30: Significant Assumptions Used to Measure the Total Pension Liability

(dollars in thousands)

Inflation: 2.75% Salary changes: 4.25%

RP-2000 Combined Healthy Table, with generational mortality

Source of mortality assumptions: improvements using 100 percent Scale BB

Date of experience study: April 2016
Discount rate: 3.87%

Source of discount rate: Bond Buyer's 20-bond index as of 6/30/18

TPL measurement at discount rate: \$412,481

TPL discount rate increased 1

percent: \$361,760

TPL discount rate decreased 1

percent: \$473,624

Source: The University.

Material assumption changes during the measurement period include updating the GASB Statement No. 73 discount rate from 3.58 percent to 3.87 percent (decreased the total pension liability) and actual returns for CREF investments, which are used in determining a member's "assumed income," were materially higher during the measurement period at 12.32 percent versus the assumed return of 6.25 percent (decreased the total pension liability).

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#### Other Post-Employment Benefits ("OPEB")

OPEB are benefits provided to retired employees (and their spouses) beyond those provided by their pension plans. These programs for employees of the State are administered by the Washington State Health Care Authority ("HCA"). The OPEB relationship between the Public Employees' Benefits Board employers and their employees and retirees is not formalized in a contract or plan document. Rather, the benefits are provided in accordance with a substantive plan. A substantive plan is one in which the plan terms are understood by the employers and plan members. This understanding is based on communications between the employers and plan members and the historical pattern of practice with regard to the sharing of benefit costs. The understanding by the employer and plan members is that there is no contractual obligation to continue the substantive plan as an employee benefits plan on an ongoing basis. Nevertheless the actuarial assumptions used in the valuations assume that this substantive plan will be carried forward into the future.

Accounting requirements dictate the use of assumptions to best estimate the impact that OPEB obligations will have on the University. The professional judgments used by the OSA in determining the assumptions used to value the State OPEB liability are important, and can significantly impact the resulting actuarial estimates.

Table 31: Significant Assumptions Used to Measure the Total OPEB Liability (TOL)

(dollars in thousands)

3.00% Inflation:

Trend rate assumptions vary slightly by medical plan. Initial rate is

Healthcare Cost Trend Rate: 7.00%. Reaching an ultimate rate of approximately 5.00% in 2080

3.75%, including service-based salary increases Salary Increase

RP-2000 combined healthy table and combined disabled table, with future improvements in mortality projected using 100 percent scale

BB and updated based on results of the 2007–2012 experience study

Assumptions:

2007–2012 experience study report

Discount Rate:

Bond buyer general obligation 20-bond municipal bond index as of

Source of Discount Rate: 6/30/17 (measurement date)

Post-Retirement Participation

Date of Experience Study:

65% Percentage:

Fiscal Year 2018 TOL

Source of Mortality

Measurement at Discount

Rate: \$1,565,213

Source: The University.

The TOL for the State was determined by an actuarial valuation using data as of January 1, 2017. The University's proportionate share of the statewide TOL reported as June 30, 2018 was calculated as of the valuation date, and projected to the measurement date of June 30, 2017.

The University's proportionate share percentage was 26.9 percent and 27.0 percent as of June 30, 2018 and 2017, respectively.

The OPEB plan is funded on a pay-as-you-go basis. Accordingly, contributions from employers to the HCA occur only when benefits become due (after retirement). No qualified trust fund has been established dedicated to these benefits and there are no associated assets. As a result, the University reports a proportionate share of the State's total OPEB liability. The OPEB liability and expense will be updated annually by the Office of State Actuary and will be reflected in the University's financial statements.

**Table 32: Changes in Total OPEB Liability (TOL)** 

(fiscal year, dollars in thousands)

	2018
Beginning Total OPEB Liability	\$1,685,909
Service Cost	106,112
Interest	49,703
Changes in Assumptions	(242,454)
Benefits Payments	(25,330)
Changes in Proportionate Share	(8,727)
Ending Total OPEB Liability	\$1,565,213
OPEB Covered Employee Payroll	2,529,127
Total OPEB Liability as a Percentage of Covered Employee Payroll	61.89%

Source: The University.

Material assumption changes during the measurement period include updating the discount rate as of each measurement date. The discount rate used for the beginning TOL was 2.85 percent and the discount rate used for the ending TOL was 3.58 percent, resulting in a reduction of the TOL. According to a report of the OSA, the State's total OPEB expense for Fiscal Year ending June 30, 2018 was \$479,684,617. The University's proportionate share of OPEB expense is shown in Table 33 (in dollars in thousands).

Table 33: University's Proportionate Share of OPEB Expense

(fiscal year, dollars in thousands)

	2018
Total OPEB Expense	\$127,921

Source: The University.

#### CERTAIN INVESTMENT CONSIDERATIONS

The purchase of the Bonds involves investment risk. Prospective purchasers of the Bonds should carefully consider all of the information set forth in this Official Statement, including its appendices, evaluate the investment considerations and merits of an investment in the Bonds and confer with their own tax and financial advisors when considering a purchase of the Bonds.

The Bonds are payable from General Revenues, which include auxiliary systems and patient services, student tuition and certain fees, grant and contract indirect costs, sales and services of educational departments of the University, other operating revenue, and IF distribution and net IF unrealized gains and losses. The University's ability to derive General Revenues from these sources sufficient to pay debt service on the Bonds depends on many factors, some of which are not subject to the control of the University. The following section discusses some of the factors affecting General Revenues; it cannot, however, describe all of the factors that could affect General Revenues.

#### **Uncertainties in the Higher Education Sector**

The U.S. higher education sector has faced uncertainties in an environment of low revenue growth from tuition (generally the main university and college revenue stream), changing enrollment trends, high student debt burdens, reduced state appropriations, federal funding constraints, and competition for sponsored research. For the largest universities, growth in patient care revenue, investment income, and grants and contracts are important factors in terms of revenue outlook. The higher education sector has experienced increased operating expenses (outpacing constrained revenue growth) as well as significant demand for capital investment in housing, dining, and student amenities, and the need to address deferred maintenance, including on aging facilities. The higher education sector will require spending on programmatic and capital investments including technology as the sector has experienced changing technology and delivery models, including a growth in online educational options. Proposals to reduce or eliminate the tuition and student debt levels confronting low- and middle-income families may have implications for the higher education sector.

#### Patient Services Revenue; Uncertainties of the Health Care Sector

Patient services revenue is the largest component of General Revenues. The University generates patient services revenues through the operation of hospitals as well as neighborhood and other clinics; only a portion of these revenues is included in General Revenues. See "Table 6: UW Medicine Entities."

The ability of the University to generate patient services revenue, including patient services revenues included in General Revenues, depends, in part, upon the financial health of the health care sector. The health care sector continues to experience rapid change, including as a result of the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010 (collectively, the "Affordable Care Act"). Legislative efforts to significantly modify or repeal and potentially replace the Affordable Care Act, and litigation seeking to invalidate the Affordable Care Act, have created additional uncertainty; changes to the Affordable Care Act could significantly impact UW Medicine. As the health care industry experiences change, continued reimbursement pressure from commercial and governmental payers as well as inflationary expenses increases have resulted in diminishing margins.

Other challenges inherent to the healthcare sector include potential funding cuts for Medicare and Medicaid, lower patient volumes, replacement or continued implementation and payer reimbursement pressure. UW Medicine hospitals have agreements with federal and State agencies and commercial insurers that provide for payments at amounts less than gross charges. The payer mix is a key factor in the overall financial operating performance of the various UW Medicine components providing patient services.

The Affordable Care Act and its implementation have faced legal and legislative challenges, including repeated repeal efforts and litigation, since its enactment. UW Medicine management cannot determine the impact any major decision, modification or repeal of the Affordable Care Act, or any replacement health care reform legislation, might have on patient services revenue that contributes to General Revenues, though such impacts could be material. Public and nonprofit health care providers often treat large numbers of indigent patients who are unable to pay in full for their medical care. As part of H.R. 1, Congress has eliminated the Affordable Care Act's individual mandate to maintain health insurance coverage. Each of these changes may increase the number of individuals without health insurance, resulting in higher health insurance premiums, increased levels of indigent care and other potential consequences which UW Medicine management cannot predict. State law codified at RCW 70.170.060 prohibits hospitals from denying access to emergency care based on inability to pay or maintaining admissions policies that result in significant reductions in charity care.

Among other provisions (some of which are described herein), the Affordable Care Act created "health insurance exchanges" (such as the Exchange) in which health insurance can be purchased by certain groups and segments of the population, expanded the availability of subsidies and tax credits for premium payments by some consumers and employers and required that certain terms and conditions be included by commercial insurers in contracts with providers. In addition, the Affordable Care Act imposed many obligations on states related to health insurance. The exchanges are still relatively new, participation in them is changing, there is ongoing litigation regarding the subsidies, and the Trump administration has taken and proposed recent actions related to the health insurance marketplaces (including proposing to eliminate subsidies). UW Medicine management cannot predict the effects of the exchanges upon the financial condition of any third-party payer that offers health insurance or the rates paid by third-party payers to providers and, thus, upon patient services revenues and the operations, results of operations and financial condition of the various UW Medicine components providing patient services.

The health care sector has undergone and may continue to undergo significant legislative and regulatory change, including as described above. To date these changes and other factors have led to mergers, acquisitions, consolidations, bankruptcies and closures. The University has entered into a number of recent affiliations, strategic alliances and collaborative relationships, and expects to enter into future arrangements. The University has experienced and expects a continued period of transition as it works to align affiliated and third-party entities' services and performance with broader UW Medicine objectives. UW Medicine (and more specifically the UW Medicine hospitals with revenues included in General Revenues) may continue to experience challenges in this effort, including in implementing Project FIT. See "UNIVERSITY RECENT DEVELOPMENTS."

#### **Tuition and Student Fee Revenues**

Tuition and student fees are the second largest component of General Revenues. See "GENERAL REVENUES—Student Tuition and Fees." Certain significant components of General Revenues, most significantly student tuition, are considered fees subject to Initiative 960, an initiative that requires legislative approval for any fee increase or new fees. See "—State Initiatives and Referenda—Initiative 960." In addition to tuition, the University charges its students a variety of other fees that may be subject to Initiative 960 but that are not included in General Revenues.

A portion of student tuition revenue is used to support student financial aid. In the future, federal, state, institutional and private funders may not appropriate or approve funding for grant, scholarship, loan and other financial aid programs at the same levels and under the same terms as they have in the past, which may affect the amount of financial aid available to students.

Changes in U.S. immigration policies could affect enrollment among international students.

#### **Uncertainties of State Legislation and Initiatives**

Every year, the Legislature considers budget decisions and legislation that affect the University. These include appropriations to public higher education institutions and State financial aid programs; appropriations of student Building Fee Revenue or State bonds for the benefit of the University; and legislation regarding public employees, benefits, tuition, academic standards, public procurement and contracting and many other matters. In recent years, the Legislature has faced significant budgetary pressure as a result of court-mandated increases in K-12 education spending (*McCleary v. Washington*), as well as mental health, affordable housing, homelessness, and other issues. While many of those budget pressures remain, the State's obligation to K-12 education has largely been resolved through a combination of investments in the 2017 and 2018 sessions. Continued investments in K-12 will be needed to keep pace with needs.

As described under the heading "—State Initiatives and Referenda," State initiative measures have been approved from time to time that have directly affected the University or its revenues, including Initiatives 601 and 960. Various State initiative measures have been and may be filed, and approved, from time to time that have a fiscal impact on the University and/or the State, and if affecting the State, may indirectly impact State spending on higher education, including appropriations to the University.

#### **Uncertainties of Federal Legislation**

Research funding from federal sources continues to be a large part of the University's total research revenues. Medicaid and Medicare payments contribute to patient services revenue. Medicare and Medicaid payments represented approximately 40.3 percent of total net patient services revenue in Fiscal Year 2018 (for UW Medical Center and Northwest). The University may be adversely impacted by federal legislative and executive or regulatory actions, including cuts to federal spending, changes to financial aid programs, H.R. 1, and actions affecting international student enrollment. Federal funding, including federal research funding and healthcare reimbursement funding, is subject to federal legislative action, including through the federal budget process and sequestration. Budgetary acts, including the sequestration provisions of the Budget Control Act of 2011 and Statutory Pay-As-You-Go Act of 2010 (together "Sequestration"), could continue to affect the availability of federal funds. Payments made by the federal government in connection with interest payments on taxable bonds eligible for federal interest subsidies between October 1, 2018 and September 30, 2019, were reduced through Sequestration by 6.2 percent, resulting in a reduction in subsidy payments related to certain University bonds. Sequestration of such interest

payments has been extended by Congress and is scheduled to remain in effect through federal fiscal year 2027. State and local reductions in funding could also affect University revenues. A shift from federal to non-federal research funding could reduce the relative amount of funding for indirect costs.

H.R. 1's changes to estate taxes and deductions (including eliminating the 80 percent deductibility of certain athletic tickets and seat licenses) may negatively affect philanthropy and have negatively affected the number of ticket and seat license sales.

#### Laws and Regulation

The University is subject to federal, State, and local laws and regulations, and grant requirements. Failure by the University to comply with, or violations of, statutory, regulatory or grant requirements could result in the loss of federal or State grant funds and other consequences. These statutory and regulatory requirements are subject to change and could become more stringent and costly for the University.

As further described under the heading "—Patient Services Revenues; Uncertainties of the Health Care Sector," the healthcare industry is subject to numerous laws and regulations of federal, State, and local governments, including the Affordable Care Act. These laws and regulations include, but are not limited to, matters such as licensure, accreditation, governmental healthcare program participation requirements, reimbursement for patient services, privacy of health records and Medicare and Medicaid fraud and abuse. Government agencies are actively conducting investigations concerning possible violations of fraud and abuse statutes and regulations by healthcare providers. Violations of these laws and regulations could result in expulsion from government healthcare programs, the imposition of significant fines and penalties and significant repayments for patient services previously billed. Recent regulatory, legislative and accounting activity is expected to impact all entities in UW Medicine during Fiscal Year 2019 and beyond.

#### **Accounting Rules**

The University is subject to accounting rules and standards promulgated by GASB. These rules have changed and may continue to change, requiring the University at such time to value and state its accounts differently. For example, the implementation of GASB 68 and GASB 75 has affected the University's general net position (see the table entitled "GENERAL REVENUES" for information regarding the effect of GASB 68 and GASB 75).

#### **Limitations on Remedies**

Any remedies available to the Registered Owners of the Bonds upon the occurrence of an event of default under the Resolution are in many respects dependent upon judicial actions which are in turn often subject to discretion and delay and could be both expensive and time-consuming to obtain. If the University fails to pay principal of or interest on the Bonds, there can be no assurance that available remedies will be adequate to fully protect the interests of the Registered Owners of the Bonds.

In addition to the limitations on remedies contained in the Resolution, the rights and obligations under the Bonds and the Resolution may be limited by and are subject to bankruptcy, insolvency, reorganization, fraudulent conveyance, moratorium and other laws relating to or affecting creditors' rights, to the application of equitable principles and to the exercise of judicial discretion in appropriate cases. The opinion to be delivered by Pacifica Law Group LLP, as Bond Counsel, concurrently with the issuance of the Bonds, will be subject to limitations regarding bankruptcy, insolvency and other laws relating to or affecting creditors' rights. A complete copy of the proposed form of opinion of Bond Counsel is set forth in APPENDIX C—"FORM OF BOND COUNSEL OPINION."

Under State law, "taxing districts" are authorized to voluntarily file a petition for bankruptcy under the federal bankruptcy code. The State is not authorized to file a petition for bankruptcy. Although the University is a political subdivision in some contexts, it is not considered a taxing district under State property, excise or other tax statutes and does not have taxing power. Accordingly, it is not clear that the University has authority under State law to voluntarily file a petition for bankruptcy. State law does not provide for involuntary bankruptcy against the State or its political subdivisions.

The Board of Regents is authorized under State law to obligate all or a component of the fees and revenues of the University for the payment of bonds, notes or evidences of indebtedness, and the University has pledged General Revenues to the payment of principal of and interest on the Bonds. State law does not provide for an express statutory lien on or security interest in General Revenues. No mortgage or deed of trust has been granted to secure the payment of the Bonds.

Under the terms of the Resolution, payments of debt service on Bonds are required to be made only as they become due and the occurrence of a default does not grant a right to accelerate payment of the Bonds. In the event of multiple defaults in payment of principal of or interest on the Bonds, the Bond owners could be required to bring a separate action for each such payment not made. Remedies for defaults are limited to such actions which may be taken at law or in equity.

#### Seismic and Other Considerations

The University's Seattle, Tacoma and Bothell campuses are located above or near a number of geological faults capable of generating significant earthquakes. The Puget Sound region, including portions of the University campus, is characterized by geotechnical conditions that could result in areas of liquefaction and landslide in an earthquake. In anticipation of such potential disasters, the University designs and constructs its facilities to the seismic codes in effect at the time the projects are designed. Although the University has implemented disaster preparedness plans, there can be no assurance that these or any additional measures will be adequate in the event a natural disaster occurs, nor that costs of preparedness measures will be as currently anticipated. Rising sea levels and changing regional rainfall patterns, such as an increase in winter rainstorm frequency or intensity, are potential impacts of climate change for the University. The University can give no assurance regarding the effect of an earthquake, a tsunami from seismic activity in the State or in other areas, a volcano, mudslide or other natural disaster, climate change or acts of terrorism, or that the University's self-insurance reserves or proceeds of insurance carried by the University, if any, would be sufficient, if available, to rebuild and reopen University facilities or that University facilities or surrounding facilities and infrastructure could or would be rebuilt and reopened in a timely manner following a major earthquake or other disaster. See "OTHER UNIVERSITY INFORMATION—Risk Management" for a description of the University's insurance, including self-insurance.

#### Continuing Compliance with Tax Covenants; Changes of Law

The University's tax certificate will contain various covenants and agreements on the part of the University that are intended to establish and maintain the tax-exempt status of interest on the Bonds. A failure by the University to comply with such covenants and agreements, including any remediation obligations, could, directly or indirectly, adversely affect the tax-exempt status of interest on the Bonds. Any loss of tax exemption could cause all of the interest received by the Owners of the Bonds to be taxable. All or a portion of interest on the Bonds also could become subject to federal income tax as a result of changes of law. Current and future legislative proposals, if enacted into law, clarification of the Internal Revenue Code of 1986, as amended (the "Tax Code") or court decisions may cause interest on the Bonds to be subject, directly or indirectly, to federal income taxation or otherwise prevent beneficial owners from realizing the full current benefit of the tax status of such interest.

#### State Initiatives and Referenda

Under the Washington State Constitution, the voters of the State have the ability to initiate legislation and to modify existing laws through the powers of initiative and referendum. An initiative measure is submitted to the voters (if an initiative to the people) or to the Legislature (if an initiative to the Legislature) if certified by the Secretary of State. An initiative or referendum approved by a majority of voters may not be amended or repealed by the Legislature within a period of two years following enactment, except by a vote of two-thirds of all the members elected to each

chamber of the Legislature. After two years, the law is subject to amendment or repeal by the Legislature in the same manner as other laws.

*Initiative 601*. Initiative 601, approved by State voters in 1993, limited State expenditures and revenues. Under Initiative 601, the State was generally prohibited from increasing expenditures from the State's general fund and related funds during any fiscal year by more than the fiscal growth factor, which equaled the average growth in State personal income for the prior ten fiscal years. Initiative 601 also limited State revenue increases.

Finally, Initiative 601 provided that no fee could increase in any fiscal year by a percentage greater than the fiscal growth factor without prior legislative approval. The term "fee" was not defined in the initiative, so the University interpreted informal guidance from the State Attorney General's Office to identify specific types of University fees as either covered by or exempt from Initiative 601. Under this guidance, mandatory fees related to the regular State-funded instructional program or other degree-granting education programs were considered subject to Initiative 601. Other University fees were considered proprietary and not subject to the Initiative 601 limitation.

Initiative 960. Initiative 960, approved by State voters in November 2007, amended Initiative 601 to require legislative approval of all fee increases without regard to a fiscal growth factor. Initiative 960 also requires legislative approval of any new fee. Initiative 960 did not amend or define the term "fee" used in Initiative 601. On January 31, 2008, the Office of Financial Management ("OFM") distributed an informal memorandum (the "OFM Memo") to State agencies. Under the reasoning of the OFM Memo (and the University policy interpreting Initiative 601), certain components of General Revenues, most significantly student tuition, are considered fees subject to Initiative 960 and therefore cannot be increased without legislative approval. Other fees include summer quarter tuition, fee-based and self-sustaining degree and certificate programs, services and activity fees, student technology fees, course and lab fees and other administrative fees. Fees collected through proprietary transactions are also included in General Revenues, but would not be considered fees subject to Initiative 960 under the reasoning of the OFM Memo.

In the event that Initiative 960 were applied to limit the University's ability to increase fees that contribute to General Revenues, the University would, if necessary, seek to obtain legislative approval for fee increases or would pursue alternative revenue sources, program cuts or reallocations.

#### Cybersecurity

The University, like many other large public and private entities, relies on a complex technology environment to conduct its operations and support the community it serves. The University has invested in cybersecurity protections in recent years that include efforts of the Office of the Chief Information Security Officer ("CISO") to safeguard personal and institutional data by monitoring, analyzing, and forecasting threats to information assets, advising on risk management and on contracts related to data security, providing in-person and online education, consulting on incident management, and developing and managing University policies related to information security. Notwithstanding these and other cybersecurity measures, a cybersecurity breach could damage University systems and cause material disruption to operations and services. The cost to remedy such damage or protect against future attacks could be substantial. Security breaches could expose the University to litigation and other legal risks, which could cause the University to incur costs related to claims. See "LABOR, RISK MANAGEMENT AND RETIREMENT INFORMATION—Risk Management."

#### LEGAL INFORMATION

#### No Litigation Concerning the Bonds

There is no litigation pending or, to the actual knowledge of the University, threatened questioning the validity of the Bonds or the power and authority of the University to issue the Bonds or seeking to enjoin the issuance of the Bonds.

#### **Other Litigation**

The University is a party to lawsuits arising out of its normal course of business, but the University does not believe any of such litigation will have a material adverse impact upon the financial position of the University. Some of these claims are covered by insurance.

#### **Approval of Counsel**

Legal matters incident to the authorization, issuance and sale of Bonds by the University are subject to the approving legal opinion of Pacifica Law Group LLP, Seattle, Washington ("Bond Counsel"). The form of opinion of Bond Counsel is attached hereto as Appendix C. Pacifica Law Group LLP is also serving as Disclosure Counsel to the University in connection with the issuance of the Bonds.

Certain legal matters will be passed on for the Underwriters by Foster Pepper PLLC, Seattle, Washington, Counsel to the Underwriters. Any opinion of such firm will be addressed solely to the Underwriters, will be limited in scope, and cannot be relied upon by investors.

#### TAX MATTERS

#### General

In the opinion of Bond Counsel, under existing law and subject to certain qualifications described below, interest on the Bonds is excludable from gross income for federal income tax purposes under Section 103 of the Tax Code, and is not an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals. The proposed form of opinion of Bond Counsel with respect to the Bonds to be delivered on the date of issuance of the Bonds is set forth in Appendix C.

The Tax Code contains a number of requirements that apply to the Bonds, and the University has made certain representations and has covenanted to comply with each such requirement. Bond Counsel's opinion assumes the accuracy of the representations made by the University and is subject to the condition that the University comply with the above-referenced covenants. If the University fails to comply with such covenants or if the University's representations are inaccurate or incomplete, interest on the Bonds could be included in gross income for federal income tax purposes retroactively to the date of issuance of the Bonds.

Except as expressly stated herein, Bond Counsel expresses no opinion regarding any tax consequences related to the ownership, sale or disposition of the Bonds, or the amount, accrual or receipt of interest on, the Bonds. Owners of the Bonds should consult their tax advisors regarding the applicability of any collateral tax consequences of owning the Bonds.

The interest rate mode and certain requirements and procedures contained in or referred to in the Resolution, the Paying Agent Agreement and other documents may be changed and certain actions may be taken or omitted under the circumstances and subject to the terms and conditions set forth in such documents. We express no opinion herein as to the effect on the exclusion from gross income for federal tax income purposes of interest on any Bond if any such change occurs or action is taken or omitted upon the advice or approval of counsel other than Pacifica Law Group LLP.

#### **Post Issuance Matters**

The opinion of Bond Counsel is based on current legal authority, covers certain matters not directly addressed by such authorities, and represents Bond Counsel's judgment as to the proper treatment of the Bonds for federal income tax purposes. It is not binding on the Internal Revenue Service ("IRS") or the courts. Furthermore, Bond Counsel cannot give and has not given any opinion or assurance about the future activities of the University, or about the effect of future changes in the Tax Code, the applicable regulations, the interpretation thereof or the enforcement thereof by the IRS. Bond Counsel's engagement with respect to the Bonds ends with the issuance of the Bonds, and, unless separately engaged, Bond Counsel is not obligated to defend the University or the Owners regarding the tax-exempt status of the Bonds in the event of an audit examination by the IRS. Under current procedures, parties other than the University and its appointed counsel, including the Owners, would have little, if any, right to participate in

the audit examination process. Moreover, because achieving judicial review in connection with an audit examination of Bonds is difficult, obtaining an independent review of IRS positions with which the University legitimately disagrees may not be practicable. Any action of the IRS, including but not limited to selection of the Bonds for audit, or the course or result of such audit, or an audit of bonds presenting similar tax issues may affect the market price for, or the marketability of, the Bonds, and may cause the University or the Owners to incur significant expense.

Current and future legislative proposals, if enacted into law, clarification of the Tax Code or court decisions may cause interest on the Bonds to be subject, directly or indirectly, to federal income taxation, or otherwise prevent beneficial owners from realizing the full current benefit of the tax status of such interest. The introduction or enactment of any such legislative proposals, clarification of the Tax Code or court decisions may also affect the market price for, or marketability of, the Bonds. Prospective purchasers of the Bonds should consult their own tax advisors regarding any pending or proposed legislation, regulations or litigation, as to which Bond Counsel expresses no opinion.

#### **Not Bank Qualified**

The University has not designated the Bonds as "qualified tax-exempt obligations" within the meaning of Section 265(b)(3)(B) of the Tax Code.

#### CONTINUING DISCLOSURE UNDERTAKING

Undertaking. The University is covenanting for the benefit of the holders and beneficial owners of the Bonds to provide certain financial information and operating data (the "Annual Disclosure Report") by not later than seven months following the end of the University's fiscal year (which currently would be January 31, 2020, for the report for Fiscal Year 2019), and to provide notices of the occurrence of certain enumerated events. The Annual Disclosure Report and notices of material events are to be filed with the Municipal Securities Rulemaking Board. The nature of the information to be contained in the Annual Disclosure Report and in notices of material events is set forth in "APPENDIX E—FORM OF CONTINUING DISCLOSURE CERTIFICATE." These covenants are made by the University to assist the Underwriters of the Bonds in complying with Securities and Exchange Commission Rule 15c2-12(b)(5).

*Prior Compliance with Continuing Disclosure Undertakings*. In reviewing its continuing disclosure filings on EMMA, the University determined that, while it had timely filed its annual financial and operating information in the form of its Bondholders Report in connection with its General Revenue bonds, the Bondholders Report was not linked to the CUSIP numbers for all bonds issued by or on behalf of the University. On July 16, 2014, the University re-filed its Bondholders Reports for the years ended June 30, 2010, through June 30, 2013, to link these reports to the CUSIP numbers for outstanding bond issues.

With respect to notices of material or listed events, the University provided notice of certain insurer ratings downgrades, but has determined that notices had not been filed for every ratings event. On July 16, 2014, the University filed a supplemental notice of insurer rating changes for outstanding insured bond issues.

On October 12, 2016, the University filed a supplement updating and correcting figures included in the 2015 Bondholders Report.

#### **PAYING AGENT**

The University has appointed U.S. Bank National Association, a national banking association organized under the laws of the United States, to serve as Paying Agent. The Paying Agent is to carry out those duties assignable to it under the Resolution and Paying Agent Agreement. Except for the contents of this section, the Paying Agent has not reviewed or participated in the preparation of this Official Statement and assumes no responsibility for the contents, accuracy, fairness or completeness of the information set forth in this Official Statement or for the recitals contained in the Resolution or Paying Agent Agreement, or for the validity, sufficiency, or legal effect of any of such documents.

Furthermore, the Paying Agent has no oversight responsibility, and is not accountable, for the use or application by the University of any of the Bonds authenticated or delivered pursuant to the Resolution and Paying Agent Agreement or for the use or application of the proceeds of such Bonds by the University. The Paying Agent has not evaluated the risks, benefits, or propriety of any investment in the Bonds and makes no representation, and has reached no conclusions, regarding the value or condition of any assets or revenues pledged or assigned as security for the Bonds, or the investment quality of the Bonds, about all of which the Paying Agent expresses no opinion and expressly disclaims the expertise to evaluate.

Additional information about the Paying Agent may be found at its website at http://www.usbank.com/corporatetrust. Neither the information on such website, nor any links from that website, is a part of this Official Statement, nor should any such information be relied upon to make investment decisions regarding the Bonds.

#### OTHER BOND INFORMATION

#### **Ratings**

Ratings of "Aaa" and "AA+" have been assigned to the Bonds by Moody's Investors Service and S&P Global Ratings, respectively. Such ratings reflect only the views of the rating organizations, and an explanation of the significance of the ratings may be obtained from the rating agencies. There is no assurance that the ratings will continue for any given period of time or that they will not be revised downward or withdrawn entirely by the rating agencies if, in the judgment of the agencies, circumstances so warrant. Any such downward revision or withdrawal of any of the ratings could have an adverse effect on the market price of the Bonds.

#### **Financial Advisor**

The University has retained Piper Jaffray & Co., as financial advisor (the "Financial Advisor") in connection with the preparation of the University's plan of financing and with respect to the authorization and issuance of the Bonds. The Financial Advisor is not obligated to undertake, and has not undertaken, to make any independent verification or to assume responsibility for the accuracy, completeness or fairness of the information contained in this Official Statement. While under contract to the University, the Financial Advisor may not participate in the underwriting of any University debt.

#### **Potential Conflicts**

Some or all of the fees of the Financial Advisor, Bond Counsel and Disclosure Counsel are contingent upon the sale of the Bonds. Pacifica Law Group LLP is serving as Bond Counsel and Disclosure Counsel to the University with respect to the Bonds. From time to time, Bond Counsel and Disclosure Counsel and Underwriters' Counsel serve as counsel to other parties involved with the Bonds with respect to transactions other than the issuance of the Bonds.

#### Underwriting

The Bonds are to be purchased from the University at an aggregate purchase price of \$107,934,356.52 (the principal amount of the Bonds of \$100,000,000, plus original issue premium of \$8,132,000, less Underwriters' discount of \$197,643.48), subject to the terms of a bond purchase contract (the "Purchase Contract") between the University and Citigroup Global Markets Inc. and Backstrom McCarley Berry & Co., LLC (the "Underwriters"). The Purchase Contract provides that the Underwriters will purchase all of the Bonds if any are purchased and that the obligation of the Underwriters to accept and pay for the Bonds is subject to certain terms and conditions set forth therein, including the approval by counsel of certain legal matters.

The initial public offering prices or yields set forth on the inside cover pages may be changed from time to time by the Underwriters without prior notice. The Underwriters may offer and sell the Bonds to certain dealers, unit investment trusts or money market funds at prices lower than the public offering prices stated on the inside cover page.

The Underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment

management, principal investment, hedging, financing and brokerage activities. Certain of the Underwriters and their respective affiliates have, from time to time, performed, and may in the future perform, various investment banking services for University, for which they received or will receive customary fees and expenses.

In the ordinary course of their various business activities, the Underwriters and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (which may include bank loans and/or credit default swaps) for their own account and for the accounts of their customers and may at any time hold long and short positions in such securities and instruments. Such investment and securities activities may involve securities and instruments of the University.

Citigroup Global Markets Inc., an underwriter of the Bonds, has entered into a retail distribution agreement with Fidelity Capital Markets, a division of National Financial Services LLC (together with its affiliates, "Fidelity"). Under this distribution agreement, Citigroup Global Markets Inc. may distribute municipal securities to retail investors at the original issue price through Fidelity. As part of this arrangement, Citigroup Global Markets Inc. will compensate Fidelity for its selling efforts.

#### **Independent Auditor**

The selected financial statements of the University for the Fiscal Year ended June 30, 2018 and included as Appendix B to this Official Statement have been audited by KPMG LLP ("KPMG"). KPMG has not been engaged to perform and has not performed, since the date of its report included therein, any procedures on the financial statements addressed in that report. KPMG also has not performed any procedures relating to this Official Statement.

#### **Official Statement**

All forecasts, estimates and other statements in this Official Statement involving matters of opinion, whether or not expressly so stated, are intended as such and not as representations of fact. This Official Statement is not intended to be construed as a contract or agreement between the University and the purchasers or holders of any of the Bonds.

At the time of the delivery of the Bonds, one or more officials of the University will furnish a certificate stating that, to the best of his or her knowledge and belief at the time of the sale or delivery of the Bonds, this Official Statement and information furnished by the University supplemental thereto did not and do not contain any untrue statements of material fact or omit to state a material fact necessary in order to make the statements made, in light of the circumstances under which they were made, not misleading in any material respect.

The University has authorized the execution and delivery of this Official Statement.

UNIVERSITY OF WASHINGTON

/s/ Brian McCartan

Vice President for Finance

#### APPENDIX A

#### COPY OF THE RESOLUTION AND SUBSTANTIALLY FINAL FORM OF PAYING AGENT AGREEMENT



# BOARD OF REGENTS UNIVERSITY OF WASHINGTON RESOLUTION DATED JULY 12, 2018

Authorizing the issuance and sale of

UNIVERSITY OF WASHINGTON GENERAL REVENUE OBLIGATIONS 2018/2019

#### **UNIVERSITY OF WASHINGTON**

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<sup>\*</sup> This Table of Contents and the cover page are not a part of this resolution; they are included for convenience of the reader only.

#### **BOARD OF REGENTS**

#### UNIVERSITY OF WASHINGTON

#### RESOLUTION

A RESOLUTION of the Board of Regents of the University of Washington providing for the authorization, sale, issuance and delivery of University of Washington General Revenue obligations in the aggregate principal amount not to exceed \$102,000,000 for University purposes including financing or refinancing the acquisition of and improvements to capital facilities serving the University; providing in addition for the authorization, sale, issuance and delivery of University of Washington General Revenue refunding obligations for the purpose of refunding certain outstanding obligations; providing for the date, form, terms, maturities and redemption of the obligations; providing for the payment of and establishing the security for such obligations; providing for the redemption of the outstanding obligations to be refunded; delegating authority to an authorized representative of the University to make certain determinations and appointments with respect to the obligations of this issue from time to time; and authorizing the execution of documents in connection with the issuance and sale of such obligations and application of the proceeds thereof.

WHEREAS, the Legislature, pursuant to the Bond Act (as hereinafter defined) has authorized the Board of Regents to sell and issue revenue bonds for any University purpose; and

WHEREAS, the University has determined to issue one or more series of general revenue obligations in the aggregate principal amount not to exceed \$102,000,000 (the "2018/2019 New Money Bonds") for the purpose of financing or refinancing certain facilities serving the University as described herein; and

WHEREAS, it is in the University's best interests to proceed with the financing or refinancing of facilities serving the University, including the Life Sciences building and Housing and Food Services Phase 4A and other University projects; and

WHEREAS, obligations described on Exhibit A attached hereto have previously been issued by or on behalf of the University for University purposes, and also are subject to optional redemption prior to their respective maturities (the "Refunding Candidates"); and

WHEREAS, the University has been advised that debt service savings may be obtained by refunding some or all of the Refunding Candidates through the issuance of one or more series of

general revenue refunding obligations (the "2018/2019 Refunding Bonds"), and through the issuance of commercial paper notes to provide interim financing; and

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF REGENTS OF THE UNIVERSITY OF WASHINGTON, as follows:

#### Section 1. <u>Definitions</u>.

The terms defined in this Section 1 shall, for all purposes of this resolution (including the recitals) and of any resolution supplemental hereto, have the following meanings:

**Acquired Obligations** means the Government Obligations acquired by the University under the terms of this resolution and an Escrow Agreement to effect the defeasance and refunding of one or more of the Refunding Candidates.

**Additional Bonds** means one or more series or subseries of additional obligations of the University payable from General Revenues.

#### Authorized Denominations means:

- (a) with respect to 2018/2019 Bonds in the Fixed Mode or Term Mode, \$5,000 and any integral multiple thereof within a series or subseries and maturity, and
- (b) with respect to 2018/2019 Bonds in the Daily Mode, the Weekly Mode, the Index Floating Mode, or the Commercial Paper Mode, \$100,000 and any integral multiple of \$5,000 in excess thereof within a series or subseries and maturity or as otherwise set forth in the applicable Remarketing Agreement, Loan Agreement or Trust Agreement.

Authorized Representative of the University means the President of the University or the designee(s) of the President or his or her designee for the purposes of one or more duties of the Authorized Representative under this resolution.

**Bank Bonds** has the meaning set forth in the applicable Reimbursement Agreement or Loan Agreement.

**Beneficial Owner** means any person that has or shares the power, directly or indirectly, to make investment decisions concerning ownership of any 2018/2019 Bonds (including persons holding 2018/2019 Bonds through nominees, depositories or other intermediary).

**Board** means the Board of Regents of the University, which exists and functions pursuant to chapter 28B.20 RCW, as amended from time to time.

**Bond Act** means, together, chapter 28B.140 RCW and chapter 28B.142 RCW, in each case as amended from time to time.

-2- F-6.1/207-18 7/12/18 Page 4 of 41 **Bond Counsel** means an attorney or firm of attorneys whose opinion is accepted in the national tax-exempt capital markets as to the issuance and validity of municipal securities and as to the interest paid thereon being exempt from federal income taxation, which attorney or firm of attorneys has been approved by, selected by or retained by the University from time to time.

**Bond Fund** means the special fund designated as the General Revenue Bond Redemption Fund, 2018/2019.

**Bond Purchase Contract** means the Bond Purchase Contract(s) between the University and the underwriter(s) for Underwritten 2018/2019 Bonds or a certificate of award executed by the University pertaining to the initial sale and purchase of Underwritten 2018/2019 Bonds.

**Bond Register** means the registration books maintained by the Registrar containing the names and addresses of the Registered Owners of the Bonds.

**Bonds** mean the University of Washington General Revenue Bonds, 2009 Taxable (Build America Bonds – Direct Payment), General Revenue Bonds, 2009B Taxable (Build America Bonds – Direct Payment), General Revenue Bonds, 2010A, General Revenue Bonds, 2010B Taxable (Build America Bonds – Direct Payment), General Revenue and Refunding Bonds, 2011A, General Revenue and Refunding Bonds, 2012A, General Revenue and Refunding Bonds, 2012B (Taxable), General Revenue Bonds, 2012C, the General Revenue Bonds, 2013, the General Revenue and Refunding Bonds, 2015A (Taxable), General Revenue Refunding Bonds, 2015B, General Revenue and Refunding Bonds, 2015C, General Revenue and Refunding Bonds, 2015D (Taxable), General Revenue and Refunding Bonds, 2016A, General Revenue Refunding Bonds, 2016B (Taxable), General Revenue Bonds, 2018, the 2018/2019 Bonds, and any Additional Bonds.

**Building Fee Revenue Bond Act** means RCW 28B.20.700-.740, as amended by Chapter 499 Wash. Laws 2009, and as further amended from time to time.

**Building Fees** means building fees defined in RCW 28B.15.025, as amended from time to time, and imposed for the purposes set forth in RCW 28B.15.210, as amended from time to time.

Business Day means a day (a) on which banks in Seattle, Washington or New York, New York, the Securities Depository, the Credit Facility Issuer, the Liquidity Facility, or the Remarketing Agent are not authorized to remain open or required to remain closed and (b) on which the New York Stock Exchange is not closed.

*Call Date* means the date(s) on which the Refunding Candidates may be called for redemption under the terms of the proceedings pursuant to which they were issued.

CAP means the Capital Assets Pool (CAP) as defined in the Debt Policy.

**Closing Date** means each date on which a series of 2018/2019 Bonds are issued and delivered in return for payment of the full purchase price therefor.

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**Code** means the Internal Revenue Code of 1986 as in effect on the date of issuance of the 2018/2019 Bonds or (except as otherwise referenced herein) as it may be amended to apply to obligations issued on the date of issuance of the 2018/2019 Bonds, together with applicable proposed, temporary and final regulations promulgated, and applicable official public guidance published, under the Code.

*Commercial Paper Mode* means the Mode during which the 2018/2019 Bonds bear interest at a Commercial Paper Rate or Rates.

*Commercial Paper Rate* means the interest rate (per annum) on any 2018/2019 Bond in the Commercial Paper Mode determined pursuant to the applicable Remarketing Agreement, Loan Agreement or Trust Agreement for such 2018/2019 Bonds.

*Commission* means the Securities and Exchange Commission.

**Continuing Disclosure Certificate** means the certificate of the University, if required under the Rule, undertaking to provide ongoing disclosure to assist the underwriter(s) for 2018/2019 Bonds in complying with the Rule.

*Credit Facility* means a policy of municipal bond insurance, a letter of credit, line of credit, guarantee or other financial instrument or any combination of the foregoing, which obligates a third party to make payment or provide funds for the payment of financial obligations, if any, of the University with respect to any 2018/2019 Bonds, including but not limited to payment of the scheduled principal of and interest on 2018/2019 Bonds. There may be more than one Credit Facility for a series or subseries of 2018/2019 Bonds.

*Credit Facility Issuer* means the issuer of any Credit Facility.

*Current Mode* means, with respect to any series or subseries of the 2018/2019 Bonds, the Mode then in effect.

**Daily Mode** means the Mode during which a series or subseries of the 2018/2019 Bonds bear interest at the Daily Rate.

**Daily Rate** means the per annum interest rate for a series or subseries of the 2018/2019 Bonds in the Daily Mode determined pursuant to the Remarketing Agreement, Loan Agreement or Trust Agreement for such 2018/2019 Bonds.

**Debt Policy** means the University of Washington Debt Management Policy Statement of Objectives and Policies, approved by the Board.

**Derivative Payment Date** means any date specified in a Payment Agreement on which a University Payment is due and payable under the Payment Agreement.

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**Direct Purchaser** means any bank or other financial institution selected to purchase (or to accept delivery of) one or more Direct Purchase 2018/2019 Bonds, including to evidence the University's obligations under a Loan Agreement, pursuant to Section 23 of this Resolution.

*Direct Purchase 2018/2019 Bonds* means any 2018/2019 Bonds or 2018/2019 Bond sold to a Direct Purchaser pursuant to Section 23 of this Resolution.

**DTC** means The Depository Trust Company, New York, New York as depository for the 2018/2019 Bonds, or any successor or substitute depository for the 2018/2019 Bonds.

**Escrow Agent** means any escrow agent selected by the Authorized Representative of the University in accordance with this resolution.

**Escrow Agreement** means one or more Escrow Deposit Agreements to be dated as of the applicable Closing Date.

Fair Market Value means the price at which a willing buyer would purchase an investment from a willing seller in a bona fide, arm's-length transaction, except for specified investments as described in Treasury Regulation §1.148-5(d)(6), including United States Treasury obligations, certificates of deposit, guaranteed investment contracts, and investments for yield restricted defeasance escrows. Fair Market Value is generally determined on the date on which a contract to purchase or sell an investment becomes binding, and, to the extent required by the applicable regulations under the Code, the term "investment" will include a hedge.

**Federal Tax Certificate** means certificate of that name executed by the Authorized Representative of the University at the time of issuance and delivery of 2018/2019 Tax-Exempt Bonds.

*Fiscal Agent* means, for Underwritten 2018/2019 Bonds, the fiscal agent of the State of Washington and, for Direct Purchase 2018/2019 Bonds, the fiscal agent of the State of Washington or the Treasurer of the Board, as set forth in the Loan Agreement.

Fiscal Year means the University's duly adopted fiscal year, currently ending June 30.

**Fitch** means Fitch Ratings, Inc., organized and existing under the laws of the State of Delaware, its successors and their assigns, and, if such organization shall be dissolved or liquidated or shall no longer perform the functions of a securities rating agency, **Fitch** shall be deemed to refer to any other nationally recognized securities rating agency (other than S&P or Moody's) designated by the Authorized Representative of the University.

*Fixed Mode* means the Mode in which a series or subseries of the 2018/2019 Bonds bear interest at a Fixed Rate or Fixed Rates.

*Fixed Rate* means a per annum interest rate or rates borne by a series or subseries of the 2018/2019 Bonds to the maturity thereof or other date determined pursuant to Section 23 and the

-5- F-6.1/207-18 7/12/18 Page 7 of 41 Bond Purchase Contract, Remarketing Agreement, Loan Agreement or Trust Agreement for such 2018/2019 Bonds.

*General Revenues* means all nonappropriated income, revenues, and receipts of the University if and to the extent such funds are not restricted in their use by law, regulation, or contract. For example, the following items are restricted and, therefore, <u>excluded</u>:

- (a) Appropriations to the University by the State from the State's General Fund;
- (b) Each fund the purpose of which has been restricted in writing by the terms of the gift or grant under which such fund has been donated, or by the donor thereof;
- (c) Fees imposed upon students as a condition of enrollment at the University, including but not limited to services and activities fees, building fees, and technology fees; and
  - (d) Revenues and receipts attributable to the Metro Tract Revenue.

Unrestricted fund balances, to the extent that they were accumulated from money that was received as *General Revenues*, also would be includable and available to pay obligations secured by *General Revenues*. Upon the removal of any income, revenues, or receipts from General Revenues pursuant to Section 15(d), this definition of General Revenues shall be deemed to be amended accordingly without further action by the University.

Government Obligations means government obligations as are authorized to be used for refunding purposes by chapter 39.53 RCW, as amended or restated from time to time; or as otherwise set forth in the Bond Purchase Contract, Loan Agreement, Trust Agreement or Remarketing Agreement, as applicable.

*Index Floating Mode* means the Mode during which a series or subseries of the 2018/2019 Bonds bear interest at the Index Floating Rate.

*Index Floating Rate* means the index-based floating rate for a series or subseries of the 2018/2019 Bonds in the Index Floating Mode determined pursuant to the Remarketing Agreement, Loan Agreement or Trust Agreement for such 2018/2019 Bonds.

*Interest Payment Date* means the dates selected by the Authorized Representative of the University and set forth in the Bond Purchase Contract, Loan Agreement, Trust Agreement or Remarketing Agreement, as applicable.

*Interest Rate* means a Fixed Rate, Daily Rate, Weekly Rate, Commercial Paper Rate, Index Floating Rate or Term Rate, as the context requires.

*Irrevocable Deposit* means the irrevocable deposit of money or Government Obligations in order to provide for the payment of all or a portion of the principal of, premium, if any, and interest on any 2018/2019 Bonds in accordance with, and meeting all the requirements of, Section 21.

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**Issuance Costs** means, without intending thereby to limit or restrict any proper definition of such costs under any applicable laws and GAAP, the following:

- (a) costs reasonably incurred incident to preparing, offering, selling, issuing and delivering the 2018/2019 Bonds, including, without limitation, the fees and expenses of Bond Counsel, special counsel (if any) and financial advisor to the University, bond printing, CUSIP bureau fees, rating agency fees, underwriter or Direct Purchaser fees or discount, escrow agent fees and recording and filing fees;
- (b) the fees and expenses payable to the Registrar incident to the Registrar's acceptance of its duties under this resolution; and
  - (c) fees or premiums due to any Credit Facility Issuer.

*Legislature* means the Legislature of the State.

**Letter of Representations** means the blanket issuer letter of representation, signed by the Authorized Representative of the University and accepted by DTC pertaining to the payment of Bonds and the "book-entry" system for evidencing the beneficial ownership of Bonds.

Liquidity Facility means a line of credit, standby purchase agreement or other financial instrument or any combination of the foregoing, if any, which obligates a third party to make payment or to provide funds for the payment of the Purchase Price of 2018/2019 Bonds (or portion thereof). There may be more than one Liquidity Facility for a series or subseries of 2018/2019 Bonds, and the University may provide self-liquidity for a series or subseries of 2018/2019 Bonds, all as set forth in the applicable Remarketing Agreement, Loan Agreement or Trust Agreement.

*Liquidity Facility Issuer* means the issuer of any Liquidity Facility.

**Loan Agreement** means one or more loan or purchase agreements, if any, between the University and a Direct Purchaser under which the Direct Purchaser will make a loan to the University evidenced by a Direct Purchase 2018/2019 Bond, or under which the Direct Purchaser will purchase the Direct Purchase 2018/2019 Bond.

*Maturity Date* means the maturity date or dates for Bonds set forth in the Bond Purchase Contract, Trust Agreement, Loan Agreement or Remarketing Agreement, as applicable.

*Maximum Rate* means the maximum rate for 2018/2019 Bonds set forth in the applicable Bond Purchase Contract, Trust Agreement, Loan Agreement or Remarketing Agreement.

*Mode* means the Daily Mode, Weekly Mode, Commercial Paper Mode, Index Floating Mode, Term Mode, or the Fixed Mode, as the context may require.

*Metro Tract* means the "university tract" as defined in RCW 28B.20.381 to include the tract of land in the city of Seattle, consisting of approximately ten acres, originally known as the

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"old university grounds," as amended to the date of this resolution, and more recently referred to as the "metropolitan tract," together with all buildings, improvements, facilities, and appurtenances thereon.

*Metro Tract Revenue* means all revenues of the University derived from operating, managing, and leasing the Metro Tract.

*Moody's* means Moody's Investors Service, Inc., a corporation duly organized and existing under and by virtue of the laws of the State of Delaware, and its successors and assigns, except that if such corporation shall be dissolved or liquidated or shall no longer perform the functions of a securities rating agency, then the term *Moody's* shall be deemed to refer to any other nationally recognized securities rating agency (other than Fitch or S&P) selected by the Authorized Representative of the University.

*MSRB* means the Municipal Securities Rulemaking Board or any successor to its functions. Until otherwise designated by the MSRB or the Commission, any information or notices submitted to the MSRB in compliance with the Rule are to be submitted through the MSRB's Electronic Municipal Market Access system ("EMMA"), currently located at www.emma.msrb.org.

*Net Revenue* means, with respect to any item or auxiliary revenues proposed to be added to General Revenues, revenues of such item or auxiliary less operating expenses. If the item or auxiliary revenues have previously been pledged to pay debt service on outstanding obligations of the University, the terms revenues and operating expenses shall be determined in accordance with the resolution(s) authorizing the outstanding indebtedness.

*Notice Parties* means, with respect to each series of the 2018/2019 Bonds, the University, the University's financial advisor, the Registrar, any Remarketing Agent, and any Liquidity Facility Issuer or Credit Facility Issuer, and with respect to each series of the Direct Purchase 2018/2019 Bonds, the Direct Purchaser.

*Opinion of Bond Counsel* means an opinion in writing of Bond Counsel.

*Outstanding* means, as of any particular time, all Bonds issued theretofore except:

- (a) Bonds theretofore canceled by the Registrar after purchase by the University;
- (b) Bonds for which an Irrevocable Deposit has been made, but only to the extent that the principal of and interest on such Bonds are payable from such Irrevocable Deposit; provided, that the Bonds to be paid or redeemed with such Irrevocable Deposit shall be deemed to be Outstanding for the purpose of transfers and exchanges or replacement of mutilated, lost, stolen or destroyed Bonds under the proceedings authorizing their issuance;
- (c) temporary, mutilated, lost, stolen or destroyed Bonds for which new Bonds have been issued pursuant to the resolution authorizing their issuance; and

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F-6.1/207-18 7/12/18 Page 10 of 41 (d) Bonds exchanged for new Bonds pursuant to the resolution authorizing their issuance.

Notwithstanding the foregoing, 2018/2019 Bonds that are Bank Bonds shall remain Outstanding until the applicable Credit Facility Issuer or Liquidity Facility Issuer or Direct Purchaser is paid all amounts due on such 2018/2019 Bonds.

**Participant** means (a) any person for which, from time to time, DTC effects book-entry transfers and pledges of securities pursuant to the book-entry system or (b) any securities broker or dealer, bank, trust company or other person that clears through or maintains a custodial relationship with a person referred to in (a).

**Payment Agreement** means a written contract or agreement between or on behalf of the University and a Reciprocal Payor, which provides that the University's obligations thereunder will be conditioned on the absence of: (a) a failure by the Reciprocal Payor to make any payment required thereunder when due and payable, and (b) a default thereunder with respect to the financial status of the Reciprocal Payor; and

- (a) under which the University is obligated to pay, on one or more scheduled and specified Derivative Payment Dates, the University Payments in exchange for the Reciprocal Payor's obligation to pay or to cause to be paid to the University, on the same scheduled and specified Derivative Payment Dates, the Reciprocal Payments; *i.e.*, the contract must provide for net payments;
- (b) for which the University's obligations to make all or any portion of University Payments are payable from General Revenues;
  - (c) under which Reciprocal Payments are to be made directly into the Bond Fund;
- (d) for which the University Payments are either specified to be one or more fixed amounts or are determined according to a formula set forth in the Payment Agreement; and
- (e) for which the Reciprocal Payments are either specified to be one or more fixed amounts or are determined according to a formula set forth in the Payment Agreement.

**Permitted Investment** means any legally permissible investment for University funds, but only to the extent that the same are acquired at Fair Market Value.

**Person** means an individual, a corporation, a partnership, limited liability company, an association, a joint stock company, a trust, an unincorporated organization, a governmental body or a political subdivision, a municipal corporation, a public corporation or any other group or organization of individuals.

**Projects** means projects approved by the Board or pursuant to the Debt Policy including without limitation Housing and Food Services Phase 4A and the Life Sciences building.

\_9\_ F-6.1/207-18 7/12/18 Page 11 of 41 **Purchase Date** means the dates selected by the Authorized Representative of the University and set forth in the Trust Agreement, Loan Agreement or Remarketing Agreement, as applicable.

**Purchase Price** has the meaning set forth in the Trust Agreement, Loan Agreement or Remarketing Agreement, as applicable.

*Rating Agency* means Fitch, Moody's or S&P.

**Rating Category** means the generic rating categories of a Rating Agency, without regard to any refinement or gradation of such rating category by a numerical modifier or otherwise.

**RCW** means the Revised Code of Washington, as now in existence or hereafter amended, or any successor codification of the laws of the State.

**Reciprocal Payment** means any payment to be made to, or for the benefit of, the University under the Payment Agreement by the Reciprocal Payor.

**Reciprocal Payor** means any bank or corporation, partnership or other entity that is a party to the Payment Agreement and that is obligated to make one or more Reciprocal Payments thereunder.

**Record Date** means (except as otherwise set forth in the applicable Trust Agreement, Loan Agreement or Remarketing Agreement):

- (a) with respect to 2018/2019 Bonds in the Fixed Mode or Term Mode, the 15th day (whether or not a Business Day) of the month next preceding each Interest Payment Date; and
- (b) with respect to all other Modes, the Business Day immediately prior to the applicable Interest Payment Date.

**Redemption Date** means the date fixed for redemption of 2018/2019 Bonds subject to redemption in any notice of redemption given in accordance with the terms hereof or the terms of an applicable Trust Agreement, Remarketing Agreement, Loan Agreement or Bond Purchase Contract.

**Redemption Price** means amounts to be paid to redeem the 2018/2019 Bonds on the Redemption Date as set forth in the applicable Bond Purchase Contract, Trust Agreement, Loan Agreement, Remarketing Agreement, or Section 12(a) as applicable.

**Refunded Bonds** means the Refunding Candidates designated by the Authorized Representative of the University pursuant to Section 23 of this resolution.

**Refunding Candidates** means the bonds issued by or on behalf of the University and the obligations issued by or on behalf of Northwest Hospital & Medical Center currently outstanding as shown on Exhibit A.

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**Registered Owner** means the person named as the registered owner of a 2018/2019 Bond on the Bond Register. For so long as the 2018/2019 Bonds are held by a Securities Depository or its nominee, such Securities Depository shall be deemed to be the Registered Owner.

**Registrar** means the Fiscal Agent, whose duties include registering and authenticating the 2018/2019 Bonds, maintaining the Bond Register, registering the transfer of the 2018/2019 Bonds, paying interest on and principal of the 2018/2019 Bonds, and drawing on any Credit Facility securing 2018/2019 Bonds for such purpose, and drawing any amounts under any Credit Facility or Liquidity Facility for the purpose of paying the Purchase Price of any 2018/2019 Bonds payable pursuant to such Credit Facility or Liquidity Facility.

**Reimbursement Agreement** means a Reimbursement Agreement relating to the 2018/2019 Bonds between the University and any Credit Facility Issuer or Liquidity Facility Issuer, and any and all modifications, alterations, and amendments and supplements thereto.

**Remarketing Agent** means one or more remarketing agents selected from time to time by the Authorized Representative of the University to serve as remarketing agent for 2018/2019 Bonds pursuant to a Remarketing Agreement.

**Remarketing Agreement** means a Remarketing Agreement relating to 2018/2019 Bonds between the University and any Remarketing Agent, or any similar agreement, as it may be amended or supplemented from time to time in accordance with its terms.

**Rule** means the Commission's Rule 15c2-12 under the Securities and Exchange Act of 1934, as amended from time to time.

**Securities Depository** means any clearing agency registered under Section 17A of the Securities Exchange Act of 1934, as amended.

**Serial Bonds** means those 2018/2019 Bonds designated as serial bonds in the Bond Purchase Contract.

*State* means the state of Washington.

**S&P** means Standard & Poor's Ratings Services, a Division of The McGraw-Hill Companies, and its successors and assigns, except that if such corporation shall be dissolved or liquidated or shall no longer perform the functions of a securities rating agency, then the term S&P shall be deemed to refer to any other nationally recognized securities rating agency (other than Moody's or Fitch) selected by the Authorized Representative of the University.

*Term Bonds* means 2018/2019 Bonds, if any, designated as term bonds in the applicable Bond Purchase Contract or Loan Agreement.

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*Term Rate* means the per annum interest rate for a series or subseries of 2018/2019 Bonds in the Term Rate Mode determined pursuant to the Remarketing Agreement, Loan Agreement or Trust Agreement for such 2018/2019 Bonds.

*Term Rate Mode* means the Mode during which a series or subseries of 2018/2019 Bonds bear interest at the Term Rate.

**Trust Agreement** means a Trust Agreement entered into between the University and a Trustee with respect to 2018/2019 Bonds, setting forth the terms of such 2018/2019 Bonds.

*Trustee* means a bond trustee selected by the Authorized Representative of the University to act on behalf of owners of 2018/2019 Bonds pursuant to a Trust Agreement.

2018/2019 Bonds means the 2018/2019 New Money Bonds and the 2018/2019 Refunding Bonds.

**2018/2019** New Money Bonds means the University of Washington General Revenue Bonds, Series [2018/2019][\_\_] [Taxable] issued in one or more series or subseries in the aggregate principal amount not to exceed \$102,000,000 to finance (or refinance commercial paper issued to finance) costs of the Projects pursuant to this resolution.

**2018/2019 Refunding Bonds** means the University of Washington General Revenue Refunding Bonds, Series [2018/2019][\_\_] [Taxable] issued in one or more series or subseries to redeem and/or defease or otherwise implement the refinancing of one or more of the Refunding Candidates.

2018/2019 Taxable Bonds means any 2018/2019 Bonds determined to be issued on a taxable basis pursuant to Section 23.

**2018/2019 Tax-Exempt Bonds** means any 2018/2019 Bonds determined to be issued on a tax-exempt basis pursuant to Section 23.

*Underwritten 2018/2019 Bonds* means 2018/2019 Bonds, if any, sold pursuant to a Bond Purchase Contract pursuant to Section 23 of this Resolution.

*University* means the University of Washington, a higher educational institution of the State, the main campus of which is located at Seattle, Washington.

*University of Washington building account* means the fund of that name into which certain Building Fees are to be deposited pursuant to RCW 28B.15.210, as amended from time to time.

*University of Washington bond retirement fund* means the special fund of that name created by chapter 254, Laws of 1957.

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**University Payment** means any payment required to be made by or on behalf of the University under a Payment Agreement and which is determined according to a formula set forth in the Payment Agreement.

*Weekly Mode* means the Mode during which a series or subseries of the 2018/2019 Bonds bear interest at the Weekly Rate.

*Weekly Rate* means the per annum interest rate for a series or subseries of the 2018/2019 Bonds in the Weekly Mode determined pursuant to the Remarketing Agreement, Loan Agreement or Trust Agreement for such 2018/2019 Bonds.

## <u>Interpretation</u>. In this resolution, unless the context otherwise requires:

- (a) The terms "hereby," "hereof," "hereto," "herein, "hereunder" and any similar terms, as used in this resolution, refer to this resolution as a whole and not to any particular article, section, subdivision or clause hereof, and the term "hereafter" shall mean after, and the term "heretofore" shall mean before, the date of this resolution;
- (b) Words of any gender shall mean and include correlative words of any other gender and words importing the singular number shall mean and include the plural number and vice versa;
- (c) Words importing persons shall include firms, associations, partnerships (including limited partnerships), trusts, corporations, limited liability companies and other legal entities, including public bodies, as well as natural persons;
- (d) Any headings preceding the text of the several articles and sections of this resolution, and any table of contents or marginal notes appended to copies hereof, shall be solely for convenience of reference and shall not constitute a part of this resolution, nor shall they affect its meaning, construction or effect;
- (e) All references herein to "articles," "sections" and other subdivisions or clauses are to the corresponding articles, sections, subdivisions or clauses hereof; and
- (f) Whenever any consent or direction is required to be given by the University, such consent or direction shall be deemed given when given by the Authorized Representative of the University or his or her designee, respectively, and all references herein to the Authorized Representative of the University shall be deemed to include references to his or her designee, as the case may be.

#### Section 2. Findings.

The Board hereby finds as follows:

(a) It is in the best interests of the University to finance (or refinance commercial paper issued to finance or refinance) all or a portion of the costs of the Projects, through the issuance of

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2018/2019 New Money Bonds in one or more series or subseries, upon the terms and conditions set forth for the 2018/2019 New Money Bonds in this resolution.

- (b) It is in the best interests of the University to consider the redemption or defeasance of one or more of the Refunding Candidates, or any portion thereof, to achieve debt service savings upon the terms and conditions set forth in this resolution.
- (c) It is necessary and in the best interest of the University to issue the 2018/2019 Bonds payable from General Revenues.

## Section 3. Authorization and Purpose of 2018/2019 Bonds.

- (a) 2018/2019 New Money Bonds. The 2018/2019 New Money Bonds shall be in an aggregate principal amount not to exceed \$102,000,000, and shall be issued in one or more series or subseries to pay (or pay commercial paper notes issued to finance or refinance) costs of the Projects and to pay Issuance Costs for the 2018/2019 New Money Bonds. The 2018/2019 New Money Bonds shall be issued under terms determined pursuant to Section 23, as further set forth in the Bond Purchase Contract, Remarketing Agreement, Loan Agreement and/or Trust Agreement for such 2018/2019 New Money Bonds; shall be numbered in the manner determined by the Registrar; and shall be issued in fully registered form in Authorized Denominations.
- (b) 2018/2019 Refunding Bonds. The 2018/2019 Refunding Bonds, if any, shall be issued in one or more series or subseries to redeem and/or defease or otherwise implement the refinancing of one or more of the Refunding Candidates designated pursuant to Section 23 and to pay Issuance Costs for the 2018/2019 Refunding Bonds. The 2018/2019 Refunding Bonds shall be issued under terms determined pursuant to Section 23, as further set forth in the Bond Purchase Contract, Remarketing Agreement, Loan Agreement and/or Trust Agreement for such 2018/2019 Refunding Bonds; shall be numbered in the manner determined by the Registrar; and shall be issued in fully registered form in Authorized Denominations.

## Section 4. Description of 2018/2019 Bonds.

(a) General Terms. The 2018/2019 Bonds shall be dated as of their date of original issuance and shall mature on the Maturity Dates, as determined pursuant to Section 23, as further set forth in the applicable Bond Purchase Contract, Remarketing Agreement, Loan Agreement or Trust Agreement for such series of 2018/2019 Bonds. The 2018/2019 Bonds shall bear interest determined within Modes selected by the Authorized Representative of the University from time to time. All 2018/2019 Bonds shall be issued in the form of fully registered 2018/2019 Bonds in Authorized Denominations and, unless the Registrar shall otherwise direct, shall be numbered R-1 and upwards.

The University may designate one or more series or subseries of the 2018/2019 Bonds from time to time. 2018/2019 New Money Bonds shall be named University of Washington General Revenue Bonds, Series [2018/2019], with an additional designation of "Taxable" for any series of 2018/2019 Taxable Bonds. 2018/2019 Refunding Bonds shall be named University of Washington General Revenue Refunding Bonds, Series [2018/2019], with an additional designation of

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"Taxable" for any series of 2018/2019 Taxable Bonds. 2018/2019 Bonds issued in one series composed of both New Money Bonds and Refunding Bonds shall be named University of Washington General Revenue and Refunding Bonds, Series [2018/2019], with an additional designation of "Taxable" for any series of 2018/2019 Taxable Bonds. At the written direction of the Authorized Representative of the University, the Registrar shall designate a particular principal amount of 2018/2019 Bonds (in Authorized Denominations) as a series or subseries. A series of 2018/2019 Bonds shall be identified by the year of issue (either 2018 or 2019) and sequential letters (e.g. Series 2018A, Series 2018B, Series 2019A, Series 2019B). A subseries of 2018/2019 Bonds shall be further identified by sequential numbers (e.g., Series 2018A-1, Series 2018A-2, Series 2018B-1, Series 2018B-2). Upon such designation, such 2018/2019 Bonds shall be a series or subseries, as applicable, for this purposes of this resolution, unless and until consolidated or changed to another series or subseries designation by written direction of the Authorized Representative of the University. All 2018/2019 Bonds of a series shall be in the same Mode, but any two series need not be in the same Mode.

- (b) *Terms*. Principal of and interest and any premium on the 2018/2019 Bonds shall be payable in lawful money of the United States of America.
- (c) *Modes*. The terms applicable to 2018/2019 Bonds in the Daily Mode, the Weekly Mode, the Term Mode, the Commercial Paper Mode, the Index Floating Mode or the Fixed Mode, and provisions for conversions between and within such Modes, shall be as provided in the applicable Bond Purchase Contract, Remarketing Agreement, Loan Agreement or Trust Agreement, as applicable.
- (d) Determinations Conclusive. If the 2018/2019 Bonds of a series or subseries are in the Daily Mode, the Weekly Mode, the Term Mode, the Commercial Paper Mode, the Index Floating Mode or the Fixed Mode, the Interest Rates determined as provided in the Remarketing Agreement, Loan Agreement, Trust Agreement or Bond Purchase Contract, as applicable, shall be conclusive.
- (e) *Maximum Rate*. No 2018/2019 Bond, other than a Bank Bond, shall bear interest at an Interest Rate higher than the Maximum Rate.

#### Section 5. Execution.

The 2018/2019 Bonds shall be executed on behalf of the University by the manual or facsimile signatures of the Chair and the Secretary or Treasurer of the Board, and the official seal of the University shall be reproduced thereon. The validity of any 2018/2019 Bond so executed shall not be affected by the fact that one or more of the officers whose signatures appear on such 2018/2019 Bond have ceased to hold office at the time of issuance or authentication or at any time thereafter.

#### Section 6. Authentication.

No 2018/2019 Bonds shall be valid for any purpose hereunder until the certificate of authentication printed thereon is duly executed by the manual signature of an authorized signatory

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of the Registrar. Such authentication shall be proof that the Registered Owner is entitled to the benefit of the trusts hereby created.

## Section 7. Registration, Transfer and Exchange.

(a) Registrar. The 2018/2019 Bonds shall be issued only in registered form as to both principal and interest. The University hereby appoints the Fiscal Agent as the Registrar for the 2018/2019 Bonds. So long as any 2018/2019 Bonds remain Outstanding, the Registrar shall make all necessary provisions to permit the exchange or registration of transfer of 2018/2019 Bonds. The Registrar may be removed at any time at the option of the Authorized Representative of the University and a successor Registrar appointed by the Authorized Representative of the University. Any successor Registrar must be the Treasurer of the Board or a commercial bank with trust powers or a trust company. No resignation or removal of the Registrar shall be effective until a successor shall have been appointed and until the successor Registrar shall have accepted the duties of the Registrar hereunder. The Registrar is authorized, on behalf of the University, to authenticate and deliver 2018/2019 Bonds transferred or exchanged in accordance with the provisions of such 2018/2019 Bonds and this resolution and to carry out all of the Registrar's powers and duties under this resolution. The Registrar shall be responsible for its representations contained in the Certificate of Authentication on the 2018/2019 Bonds.

The Registrar shall keep, or cause to be kept, sufficient books for the registration and transfer of the 2018/2019 Bonds which shall at all times be open to inspection by the University (the "Bond Register").

- (b) Letter of Representations/Book-Entry System. To induce DTC to accept the 2018/2019 Bonds as eligible for deposit at DTC, the University has executed and delivered the Letter of Representations. Except as otherwise set forth in the Loan Agreement, the 2018/2019 Bonds initially issued shall be held in fully immobilized form by DTC acting as depository pursuant to the terms and conditions set forth in the Letter of Representations.
- (c) University and Registrar Not Responsible for DTC. Neither the University nor the Registrar will have any responsibility or obligation to DTC Participants or the persons for whom they act as nominees with respect to the 2018/2019 Bonds in respect of the accuracy of any records maintained by DTC or any DTC Participant, the payment by DTC or any DTC Participant of any amount in respect of the principal or redemption price of or interest on the 2018/2019 Bonds, any notice which is permitted or required to be given to Registered Owners under this resolution (except such notices as shall be required to be given by the University to the Registrar or to DTC), the selection by DTC or any DTC Participant of any person to receive payment in the event of a partial redemption of the 2018/2019 Bonds or any consent given or other action taken by DTC as the Registered Owner.
- (d) DTC as Registered Owner. Except as otherwise set forth in the Loan Agreement, payment of any such 2018/2019 Bond shall be made only as described in this section, but the transfer of such ownership may be registered as herein provided. All such payments made as described in this section shall be valid and shall satisfy and discharge the liability of the University upon such 2018/2019 Bond to the extent of the amount or amounts so paid. Except as provided in

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Section 27, the University and the Registrar shall be entitled to treat the Securities Depository (as Registered Owner) as the absolute owner of all 2018/2019 Bonds for all purposes of this resolution and any applicable laws, notwithstanding any notice to the contrary received by the Registrar or the University. Neither the University nor the Registrar will have any responsibility or obligation under this resolution or the 2018/2019 Bonds, legal or otherwise, to any other party including DTC or its successor (or substitute Securities Depository or its successor), except to the Registered Owners.

## (e) Use of DTC/Book-Entry System.

- otherwise set forth in the Loan Agreement, the 2018/2019 Bonds shall be registered initially in the name of "CEDE & Co.," as nominee of DTC, (or such other name as may be requested by an authorized representative of DTC) with one 2018/2019 Bond maturing on each maturity date of a series or subseries bearing interest at a particular rate in a denomination corresponding to the total principal therein designated to mature on such date and bearing interest as such rate. Registered ownership of such immobilized 2018/2019 Bonds, or any portions thereof, may not thereafter be transferred except (A) to any successor of DTC or its nominee, *provided that* any such successor shall be qualified under any applicable laws to provide the service proposed to be provided by it; (B) to any substitute Securities Depository appointed by the Authorized Representative of the University pursuant to subsection (2) below or such substitute Securities Depository's successor; or (C) to any person as provided in paragraph (4) below.
- (2) Substitute Depository. Upon the resignation of DTC or its successor (or any substitute Securities Depository or its successor) from its functions as Securities Depository or a determination by the Authorized Representative of the University that it is no longer in the best interest of Beneficial Owners to continue the system of book entry transfers through DTC or its successor (or any substitute Securities Depository or its successor), the Authorized Representative of the University may hereafter appoint a substitute Securities Depository. Any such substitute Securities Depository shall be qualified under any applicable laws to provide the services proposed to be provided by it.
- (3) Issuance of New 2018/2019 Bonds to Successor/Substitute Depository. In the case of any transfer pursuant to clause (A) or (B) of paragraph (e)(1) above, the Registrar shall, upon receipt of all outstanding 2018/2019 Bonds of a series or subseries, together with a written request on behalf of the Authorized Representative of the University, issue a single new 2018/2019 Bond for each maturity of such series or subseries of 2018/2019 Bonds then Outstanding and bearing interest at a particular rate, registered in the name of such successor or such substitute Securities Depository, or their nominees, as the case may be, all as specified in such written request of the Authorized Representative of the University.
- (4) Termination of Book-Entry System. In the event that (A) DTC or its successor (or substitute Securities Depository or its successor) resigns from its functions as Securities Depository, and no substitute Securities Depository can be obtained, or (B) the Authorized Representative of the University determines that it is in the best interest of the Beneficial Owners of the 2018/2019 Bonds that they be able to obtain 2018/2019 Bond certificates,

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the ownership of 2018/2019 Bonds may then be transferred to any person or entity as herein provided, and the 2018/2019 Bonds shall no longer be held in fully immobilized form. The Authorized Representative of the University shall deliver a written request to the Registrar, together with a supply of definitive 2018/2019 Bonds, to issue 2018/2019 Bonds as herein provided in any Authorized Denomination. Upon receipt of all then Outstanding 2018/2019 Bonds by the Registrar together with a written request on behalf of the Authorized Representative of the University to the Registrar, new 2018/2019 Bonds shall be issued in such Authorized Denominations and registered in the names of such persons as are requested in such written request.

(f) Transfer or Exchange of Registered Ownership; Change in Denominations. If the 2018/2019 Bonds are no longer held in immobilized, book-entry form, or if so provided in the Loan Agreement, the transfer of ownership of any 2018/2019 Bond may be registered and such 2018/2019 Bonds may be exchanged, but no transfer of any 2018/2019 Bond shall be valid unless it is surrendered to the Registrar with the assignment form appearing on such 2018/2019 Bond duly executed by the Registered Owner or such Registered Owner's duly authorized agent in a manner satisfactory to the Registrar. Upon such surrender, the Registrar shall cancel the surrendered 2018/2019 Bond and shall authenticate and deliver, without charge to the Registered Owner or transferee therefor, a new 2018/2019 Bond (or 2018/2019 Bonds at the option of the new Registered Owner) of the same series, date, designation, if any, maturity date and interest rate and for the same aggregate principal amount in any Authorized Denomination, naming as Registered Owner the person or persons listed as the assignee on the assignment form appearing on the surrendered 2018/2019 Bond, in exchange for such surrendered and canceled 2018/2019 Bond. Any 2018/2019 Bond may be surrendered to the Registrar and exchanged, without charge, for an equal aggregate principal amount of 2018/2019 Bonds of the same series or subseries, date, maturity date and interest rate, in any Authorized Denomination. The Registrar shall not be obligated to transfer or exchange any 2018/2019 Bond during the five-day period prior to the selection of 2018/2019 Bonds for redemption or the maturity date or following any mailing of notice of redemption. No charge shall be imposed upon Registered Owners in connection with any transfer or exchange, except for taxes or governmental charges related thereto.

#### Section 8. Mutilated, Destroyed, Lost or Stolen 2018/2019 Bonds.

If any 2018/2019 Bond is lost, stolen or destroyed, the University may execute and the Registrar may authenticate and deliver a new 2018/2019 Bond or 2018/2019 Bonds of like series or subseries, date and tenor to the Registered Owner thereof, all in accordance with law. However, no substitution or payment shall be made unless and until the applicant shall furnish (a) evidence satisfactory to said Registrar and Authorized Representative of the University of the destruction or loss of the original 2018/2019 Bond and of the ownership thereof, and (b) such additional security, indemnity or evidence as may be required by the Authorized Representative of the University. No substitute 2018/2019 Bond shall be furnished unless the applicant shall reimburse the University and the Registrar for their respective expenses in the furnishing thereof. Any such substitute 2018/2019 Bond so furnished shall be equally and proportionately entitled to the security of this resolution with all other 2018/2019 Bonds issued hereunder.

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- Section 9. Payments of Principal, Redemption Price and Interest; Persons Entitled Thereto.
- (a) Payments of Principal, Interest, Purchase and Redemption Prices. The principal or Redemption Price of each 2018/2019 Bond shall be payable upon surrender or delivery of such 2018/2019 Bond to the Registrar or as otherwise provided in the Loan Agreement. For so long as DTC is the Registered Owner, interest and principal shall be paid and delivery shall be made as described in the operational arrangements referred to in the Letter of Representations and pursuant to DTC's standard procedures.
- (b) Accrual of Interest. Subject to the further provisions of this section, each 2018/2019 Bond shall accrue interest and be payable as to interest as follows:
- (1) On each Interest Payment Date, the Registered Owner of each 2018/2019 Bond as of the Record Date shall be paid the amount of unpaid interest that accrues to the Interest Payment Date.
- (2) The interest due on any 2018/2019 Bond on any Interest Payment Date shall be paid to the Registered Owner of such 2018/2019 Bond as shown on the Bond Register as of the Record Date. Except as otherwise provided in the applicable Bond Purchase Contract, Trust Agreement, Loan Agreement or Remarketing Agreement, the amount of interest so payable on any Interest Payment Date shall be computed (A) on the basis of a 365- or 366-day year for the number of days actually elapsed based on the calendar year for 2018/2019 Bonds in the Daily Mode, Commercial Paper Mode, Index Floating Mode or Weekly Mode, and (B) on the basis of a 360-day year of twelve 30-day months during a Term Mode or a Fixed Mode.
- Securities Depository, and except as otherwise set forth in the Loan Agreement, during the Term Mode or Fixed Mode, the interest, principal or Redemption Price of the 2018/2019 Bonds shall be payable by check, provided that any Registered Owner of \$1,000,000 or more in aggregate principal amount of the 2018/2019 Bonds, upon written request given to the Registrar at least five Business Days prior to the Interest Payment Date, Maturity Date or Redemption Date designating an account in a domestic bank, may be paid by wire transfer of immediately available funds. If the 2018/2019 Bonds of a series or subseries are no longer held by a Securities Depository, and except as otherwise set forth in the Loan Agreement, all payments of interest, principal or the Redemption Price on the 2018/2019 Bonds during the Commercial Paper Mode, Daily Mode, Index Floating Mode or Weekly Mode shall be paid to the Registered Owners entitled thereto on the Interest Payment Date in immediately available funds by wire transfer to a bank within the United States or deposited to a designated account if such account is maintained with the Registered Owner on or prior to the applicable Record Date.

Any account specified pursuant to paragraph (3) hereof shall remain in effect until revoked or revised by the Registered Owner, the Credit Facility Issuer or Liquidity Facility Issuer by an instrument in writing delivered to the Registrar.

## Section 10. Acts of Registered Owners; Evidence of Ownership.

Any action to be taken by Registered Owners may be evidenced by one or more concurrent written instruments of similar tenor signed or executed by such Registered Owners in person or by an agent appointed in writing. Any action by the Registered Owner of any 2018/2019 Bond shall bind all future Registered Owners of the same 2018/2019 Bond or of any 2018/2019 Bond issued upon the exchange or registration of transfer thereof in respect of anything done or suffered by the University or the Registrar in pursuance thereof.

Except as provided in any Reimbursement Agreement or Credit Facility, the Registrar and the University may treat the Registered Owner of a 2018/2019 Bond as the absolute owner thereof for all purposes, whether or not such 2018/2019 Bond shall be overdue, and the Registrar and the University shall not be affected by any knowledge or notice to the contrary; and payment of the principal of and premium, if any, and interest on such 2018/2019 Bond shall be made only to such Registered Owner, which payments shall satisfy and discharge the liability of the University with respect to such 2018/2019 Bond to the extent of the sum or sums so paid.

#### Section 11. Form of 2018/2019 Bonds.

The 2018/2019 Bonds shall each be in substantially the following form, with appropriate or necessary insertions, depending upon the omissions and variations as permitted or required hereby. If the 2018/2019 Bonds are not held in fully-immobilized form, the form of 2018/2019 Bonds will be changed to reflect the changes required in connection with the preparation of certificated 2018/2019 Bonds. The form of the 2018/2019 Bonds shall further be changed as necessary to reflect whether the 2018/2019 Bonds are 2018/2019 New Money Bonds or 2018/2019 Refunding Bonds, whether the 2018/2019 Bonds are 2018/2019 Tax-Exempt Bonds or 2018/2019 Taxable Bonds, whether the 2018/2019 Bonds are Underwritten 2018/2019 Bonds or Direct Purchase 2018/2019 Bonds, any series or subseries designation for the 2018/2019 Bonds and the Current Mode of the 2018/2019 Bonds.

No. R		\$
	UNITED STATES OF AMERICA	

[DTC LANGUAGE]

[STATEMENT OF INSURANCE, IF ANY]

UNIVERSITY OF WASHINGTON
GENERAL REVENUE [REFUNDING] BOND, 2018/2019[\_\_\_\_] [Taxable]

[INTEREST RATE] MATURITY DATE: ISSUE DATE CUSIP

REGISTERED OWNER: CEDE & CO.

#### PRINCIPAL AMOUNT:

This bond is issued pursuant to a resolution of the Board of Regents of the University (the "Bond Resolution") to [finance or refinance costs of the Projects][refund certain outstanding bonds], and to pay costs of issuance.

This bond is payable solely from General Revenues of the University, and the University does hereby pledge and bind itself to set aside from such General Revenues, and to pay into the General Revenue Bond Redemption Fund, 2018/2019 (the "Bond Fund") the various amounts required by the Bond Resolution to be paid into and maintained in such Fund, all within the times provided by the Bond Resolution. Interest on this bond shall accrue at [the Fixed Rate set forth above] [Daily Rates, Weekly Rates, Commercial Paper Rates, Index Floating Rates, Term Rates or Fixed Rates], payable on Interest Payment Dates, all as provided in or authorized under the Bond Resolution.

The bonds of this issue are subject to redemption prior to their scheduled maturity under the terms of the bond purchase contract for such bonds.

[The bonds of this issue are not private activity bonds and are <u>not</u> "qualified tax exempt obligations" eligible for investment by financial institutions within the meaning of Section 265(b) of the Internal Revenue Code of 1986, as amended.]

Except as otherwise provided in the Bond Resolution, this bond shall not be entitled to any right or benefit under the Bond Resolution, or be valid or become obligatory for any purpose, until this bond shall have been authenticated by execution by the Registrar of the certificate of authentication inscribed hereon.

It is hereby certified, recited and represented that the issuance of this bond and the 2018/2019 Bonds of this issue is duly authorized by law; that all acts, conditions and things required to exist and necessary to be done or performed precedent to and in the issuance of this bond and the 2018/2019 Bonds of this issue to render the same lawful, valid and binding have been

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properly done and performed and have happened in regular and due time, form and manner as required by law; that all acts, conditions and things necessary to be done or performed by the University or to have happened precedent to and in the execution and delivery of the Bond Resolution have been done and performed and have happened in regular and due form as required by law; that due provision has been made for the payment of the principal of and premium, if any, and interest on this bond and the 2018/2019 Bonds of this issue and that the issuance of this bond and the 2018/2019 Bonds of this issue does not contravene or violate any constitutional or statutory limitation.

IN WITNESS WHEREOF, the University of Washington has caused this bond to be executed with the manual or facsimile signatures of the Chair and to be attested to by the [Secretary of the Board of Regents][Treasurer of the Board] and caused a facsimile of the official seal of the University to be reproduced hereon.

	UNIVERSITY OF WASHINGTON
(SEAL)	By Chair, Board of Regents
By  [Secretary, Board of Regents]  [Treasurer of the Board]	
The Certificate of Authentication for t following form and shall appear on each 2018/	the 2018/2019 Bonds shall be in substantially the 2019 Bond:
AUTHENTICAT	TION CERTIFICATE
	Washington General Revenue [Refunding] [and [and [additional bloom]] [additional bloom]] Washington General Revenue [Refunding] [and [additional bloom]]
	REGISTRAR
	ByAuthorized Signatory
Date of Authentication:	
Section 12. Redemption.	
(a) Optional Redemption. 2018/20	19 Bonds in a Term Mode, Index Floating Mode or

Fixed Mode shall be subject to redemption at the option of the University, in whole or in part, in Authorized Denominations on such dates and at such prices as determined by the University for such 2018/2019 Bonds as set forth in the respective Bond Purchase Contract, Trust Agreement,

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F-6.1/207-18 7/12/18 Page 24 of 41 Loan Agreement and/or Remarketing Agreement, as applicable. 2018/2019 Bonds in the Commercial Paper Mode are not subject to optional redemption prior to their respective Purchase Dates. Commercial Paper Bonds shall be subject to redemption at the option of the University, in whole or in part in principal amounts that permit all remaining Outstanding Bonds of the same series or subseries to continue in Authorized Denominations, on their respective Purchase Dates at a redemption price equal to the principal amount thereof. 2018/2019 Bonds in the Daily Mode or the Weekly Mode shall be subject to redemption at the option of the University, in whole or in part, in principal amounts which permit all remaining Outstanding Bonds of the same series or subseries to continue in Authorized Denominations, on any date at a redemption price equal to the principal amount thereof. Bank Bonds shall be subject to redemption as set forth in the applicable Reimbursement Agreement or Loan Agreement.

- (b) Mandatory Redemption. If the 2018/2019 Bonds of a series or subseries are issued in the Fixed Mode, any Term Bonds of such series or subseries shall be subject to mandatory redemption prior to their maturity by the Registrar in part, in the years and in the amounts set forth in the applicable Bond Purchase Contract (subject to reductions arising from the University's acquisition and surrender or the optional redemption of 2018/2019 Bonds, all as described in the next paragraph) or Loan Agreement at a redemption price equal to 100% of the principal amount thereof, plus accrued interest to the Redemption Date. If the 2018/2019 Bonds of a series or subseries are issued in a Daily Mode, Weekly Mode, Index Floating Mode or Commercial Paper Mode and converted to the Fixed Mode or Term Mode, the 2018/2019 Bonds of that series or subseries (other than Bank Bonds) may be converted in whole or in part to Serial Bonds and/or Term Bonds upon delivery of a Favorable Opinion of Bond Counsel prior to the commencement of the Term Mode or Fixed Mode for such 2018/2019 Bonds and if so converted to Term Bonds shall be subject to mandatory sinking fund redemption as determined by the University pursuant to the Remarketing Agreement, Loan Agreement or Trust Agreement, as applicable.
- (c) Selection of 2018/2019 Bonds for Redemption. Whenever the University elects to redeem fewer than all of the 2018/2019 Bonds of a series or subseries, the University shall select the maturity or maturities within such series or subseries to be redeemed. Whenever fewer than all the Outstanding 2018/2019 Bonds of a series or subseries and maturity are to be redeemed, the 2018/2019 Bonds to be redeemed shall be selected in accordance with the operational arrangements of DTC referred to in the Letter of Representations (or, in the event the 2018/2019 Bonds of a series or subseries are not in book-entry only form, randomly by the Registrar). In no event shall any Bond be Outstanding in a principal amount that is not an Authorized Denomination.
- (d) Notice of Redemption. For so long as the book entry-system is in effect with respect to a series or subseries of 2018/2019 Bonds, notice of redemption shall be provided in accordance with the operational arrangements of DTC referred to in the Letter of Representations, and no additional published or other notice shall be provided by the University; provided, however, that the Credit Facility Issuer, if any, or Liquidity Facility Issuer, if any, shall be given prior written notice of any proposed redemption of 2018/2019 Bonds. In any event, except as otherwise set forth in the Loan Agreement, notice of redemption shall be given by the University to the Registrar who shall give notice to DTC at least 20 days prior to the proposed date of redemption during the Term Mode or Fixed Mode and at least 15 days prior to the proposed date of redemption during any other Mode. If the book-entry system is not in effect with respect to a series or subseries of

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2018/2019 Bonds, and except as otherwise set forth in the Loan Agreement, notice of redemption shall be given in the manner hereinafter provided. Unless waived by any owner of 2018/2019 Bonds to be redeemed, official notice of any such redemption shall be given by the Registrar on behalf of the University by mailing a copy of an official redemption notice by first class mail at least 20 days and not more than 60 days prior to the date fixed for redemption during the Term Mode or Fixed Mode, and at least 15 days and not more than 60 days prior to the date fixed for redemption during any other Mode, to the Registered Owner of the 2018/2019 Bond or Bonds to be redeemed at the address shown on the Bond Register or at such other address as is furnished in writing by such Registered Owner to the Registrar.

(e) Effect of Redemption. Any notice for redemption may be conditional, in which case the conditions shall be set forth therein. If an unconditional notice of redemption has been given or if a conditional notice of redemption has been given and the conditions set forth in a conditional notice of redemption have been satisfied, then on the Redemption Date the 2018/2019 Bonds or portions thereof so called for redemption shall become payable at the Redemption Price specified in such notice; and from and after the Redemption Date, interest thereon or on portions thereof so called for redemption shall cease to accrue, such 2018/2019 Bonds or portions thereof shall cease to be Outstanding and to be entitled to any benefit, protection or security hereunder or under an applicable Trust Agreement, and the Owners of such 2018/2019 Bonds or portions thereof shall have no rights in respect thereof except to receive payment of the Redemption Price upon delivery of such 2018/2019 Bonds to the Registrar. Notwithstanding the foregoing, any Bank Bonds shall remain Outstanding until the Credit Facility Issuer or Liquidity Facility Issuer or Direct Purchaser, as the case may be, is paid all amounts due in connection with such 2018/2019 Bonds or portions thereof to be redeemed on the Redemption Date. After payment to the Credit Facility Issuer or Liquidity Facility Issuer or Direct Purchaser, as the case may be, of all amounts due on Bank Bonds such Credit Facility Issuer or Liquidity Facility Issuer or Direct Purchaser shall surrender such 2018/2019 Bonds to the Registrar for cancellation.

## Section 13. Bond Fund.

The Controller of the University is hereby authorized and directed to establish the Bond Fund as a special fund of the University to be designated as the General Revenue Bond Redemption Fund, 2018/2019 (the "Bond Fund"). The University covenants to deposit into the Bond Fund from General Revenues on or prior to each interest payment date, redemption date and maturity date an amount sufficient to pay the interest on the 2018/2019 Bonds then coming due and the principal of the 2018/2019 Bonds maturing or subject to redemption and redemption premium, if any. Such payments shall be made in sufficient time to enable the Registrar to pay interest on and/or principal of and redemption price of the 2018/2019 Bonds to the Registered Owners, when due. Net income earned on investments in the Bond Fund, if any, shall be deposited in the Bond Fund.

## Section 14. Application of 2018/2019 Bond Proceeds.

(a) 2018/2019 New Money Bonds. The Authorized Representative of the University is hereby authorized and directed to create a special fund or account of the University (the "Capital Fund"). The proceeds of the 2018/2019 New Money Bonds shall be paid into the Capital Fund.

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The money on deposit in the Capital Fund shall be utilized to pay or reimburse the University for costs of the Projects and costs incidental thereto, and Issuance Costs, to the extent designated by the Authorized Representative of the University.

All or part of the proceeds of the 2018/2019 New Money Bonds may be temporarily invested in Permitted Investments that will mature prior to the date on which such money shall be needed. Except as otherwise provided in the Federal Tax Certificate, the University covenants that all investments of amounts deposited in the Capital Fund, or otherwise containing gross proceeds of the 2018/2019 Tax-Exempt Bonds (within the meaning of Section 148 of the Code) will be acquired, disposed of, and valued (as of the date that valuation is required by the Code) at Fair Market Value.

In the event that it shall not be possible or practicable to accomplish all of the Projects, the University may apply the proceeds of the 2018/2019 New Money Bonds to pay the costs of such portion thereof or such other projects as the Authorized Representative of the University shall determine to be in the best interests of the University.

Any part of the proceeds of the 2018/2019 New Money Bonds remaining in the Capital Fund after all costs referred to in this section have been paid may be used to acquire, construct, equip and make other improvements to the facilities of the University subject to the limitations of this resolution or may be transferred to the Bond Fund for the uses and purposes therein provided, and any applicable limitations set forth in the Federal Tax Certificate.

(b) 2018/2019 Refunding Bonds. The proceeds of each series of 2018/2019 Refunding Bonds shall be disbursed as provided in the related Escrow Agreement and/or Trust Agreement to redeem the Refunded Bonds on their Call Dates and/or defease the Refunded Bonds to their Call Dates through the application of proceeds of the 2018/2019 Refunding Bonds to acquire Acquired Obligations for deposit, together with cash, as provided in such Escrow Agreement and/or Trust Agreement.

## Section 15. Source of Repayment and Security for 2018/2019 Bonds.

- (a) Special Fund Obligations. The 2018/2019 Bonds shall be special fund obligations of the University, payable solely from General Revenues and the money and investments deposited into the Bond Fund. In addition, any Building Fee Revenue Bonds are payable first from money and investments in the University of Washington bond retirement account. The 2018/2019 Bonds shall not constitute an obligation, either general, special or moral, of the State, nor a general or moral obligation of the University. The Registered Owners of the 2018/2019 Bonds shall have no right to require the State, nor has the State any obligation or legal authorization, to levy any taxes or appropriate or expend any of its funds for the payment of the principal thereof or the interest or any premium thereon. The University has no taxing power.
- (b) All Bonds Have Equal Claim on General Revenues. The Bonds shall be equally and ratably payable, without preference, priority or distinction because of date of issue or otherwise from General Revenues.

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## (c) Additions to General Revenues.

- (1) The University reserves the right to include in General Revenues, at its sole option, in the future, other sources of revenue or income, specifically including, but not limited to, all or any portion of the items or any auxiliary systems added pursuant to subsection (2) of this Section 15(c), then excluded as part of General Revenues.
- (2) Such additions shall occur on the date and as provided in a certificate executed by the Controller of the University (or the successor to the functions of the Controller). The Controller shall, in the case of additions of items or auxiliaries to General Revenues, certify that for the preceding two Fiscal Years for which audited financial statements are available, the item or auxiliary maintained a "coverage ratio" of at least 125%, where the "coverage ratio" equals: (A) Net Revenue (for those items or auxiliaries whose debt has a lien on Net Revenues) or gross revenues (for those items or auxiliaries whose debt has a lien on gross revenues), divided by (B) debt service with respect to the then-outstanding revenue debt of the auxiliary or item and state-reimbursed bonds allocable to such auxiliary or item. In the event an auxiliary or item is added to General Revenues, the obligations of that auxiliary or item may remain outstanding and have a prior claim on auxiliary Net Revenue. For the purposes of clarification, by its terms this subsection applies only to auxiliary systems or items that have issued and have outstanding obligations that are secured by a lien on Net Revenues or gross revenues of such auxiliary system or item. The certification has no applicability in the case of the addition of revenues that are not encumbered by a lien, which may be added under subsection (1) above.
- (d) Deletions from General Revenues. The University reserves the right to remove, at its sole option, in the future, any revenues from General Revenues. The removal of General Revenues shall be evidenced by a certificate executed by the Controller of the University (or the successor to the functions of the Controller) identifying the items to be deleted.
- (e) Building Fee Revenue Bonds. If any of the 2018/2019 Bonds are designated as Building Fee Revenue Bonds pursuant to Section 18, such Building Fee Revenue Bonds shall be payable from and secured by a pledge of any or all of the revenues and receipts of the University of Washington bond retirement fund. In addition, Building Fee Revenue Bonds shall be payable from General Revenue and money and investments in the Bond Fund.

The Board hereby covenants to establish, maintain and collect Building Fees in such amounts that will provide money sufficient to pay the principal of and interest on all bonds, including any Building Fee Revenue Bonds, payable out of the University of Washington bond retirement fund, to set aside and maintain reserves, if any, required to secure the payment of such principal and interest, and to maintain coverage, if any, which may be required over such principal and interest. Notwithstanding the foregoing, the Board hereby orders that in the event there is ever an insufficient amount of money in the University of Washington bond retirement fund to pay principal of or interest on any Building Fee Revenue Bond when due, moneys shall be transferred from the University of Washington building account to the University of Washington bond retirement fund.

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Amounts on deposit in the University of Washington bond retirement fund shall be invested in Permitted Investments. Any money on deposit in the University of Washington bond retirement fund may be transferred to the University of Washington building account to the extent and as permitted by the Building Fee Revenue Bond Act.

Building Fee Revenue Bonds shall not be general or special obligations of the state of Washington, but shall be limited obligation bonds of the University payable only from Building Fees, money and investments in the University of Washington bond retirement fund, General Revenues and money and investments in the Bond Fund.

#### Section 16. Investment of Funds.

The University covenants to invest and reinvest money deposited in Bond Fund only in Permitted Investments. Except as otherwise provided in the Federal Tax Certificate, the University covenants that all investments of amounts deposited in the Bond Fund, or otherwise containing gross proceeds of the 2018/2019 Tax-Exempt Bonds (within the meaning of Section 148 of the Code) will be acquired, disposed of, and valued (as of the date that valuation is required by the Code) at Fair Market Value.

## Section 17. Establishment of Additional Accounts and Subaccounts.

The University reserves the right, to be exercised in its sole discretion, to establish such additional accounts within the funds established pursuant to this resolution, and subaccounts within such accounts, as it deems necessary or useful for the purpose of identifying more precisely the sources of payments herein and disbursements therefrom; provided that the establishment of any such account or subaccount does not alter or modify any of the requirements of this resolution with respect to a deposit or use of money or result in commingling of funds not permitted hereunder.

## Section 18. Additional Bonds.

The University shall have the right to issue one or more series of Additional Bonds for University purposes as permitted under the Bond Act, the Building Fee Revenue Bond Act or otherwise under State law, and the costs of issuing Additional Bonds, or to refund or advance refund any Bonds or other obligations. The University shall have the right to designate one or more series of Additional Bonds as Building Fee Revenue Bonds payable from and secured by the Building Fee and money and investments in the University of Washington bond retirement fund on a parity with the lien thereon of outstanding Building Fee Revenue Bonds to the extent permitted by the Building Fee Revenue Bond Act. The University shall have the further right to pledge Building Fees and moneys and investments in the University of Washington bond retirement fund to pay additional bonds payable from and secured solely by such Building Fees and moneys and investments on a parity with the lien thereon of outstanding Building Fee Revenue Bonds.

<u>Section 19</u>. <u>Covenants Regarding Tax Exemption</u>. The University will take all actions necessary to assure the exclusion of interest on the 2018/2019 Tax-Exempt Bonds from the gross income of the owners of the 2018/2019 Tax-Exempt Bonds to the same extent as such interest is

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permitted to be excluded from gross income under the Code as in effect on the date of issuance of the 2018/2019 Tax-Exempt Bonds, including but not limited to the following:

- (a) The University will assure that the proceeds of the 2018/2019 Tax-Exempt Bonds are not used so as to cause the 2018/2019 Tax-Exempt Bonds to satisfy the private business tests or the private loan financing test as set forth in the Federal Tax Certificate.
- (b) The University will not sell or otherwise transfer or dispose of (i) any personal property components of the Projects financed with the 2018/2019 Tax-Exempt Bonds other than in the ordinary course of an established government program or (ii) any real property components of the Projects financed with the 2018/2019 Tax-Exempt Bonds, unless it has received an opinion of nationally recognized bond counsel to the effect that such disposition will not adversely affect the treatment of interest on the 2018/2019 Tax-Exempt Bonds as excludable from gross income for federal income tax purposes as set forth in the Federal Tax Certificate.
- (c) The University will not take any action or permit or suffer any action to be taken if the result of such action would be to cause any of the 2018/2019 Tax-Exempt Bonds to be "federally guaranteed" as set forth in the Federal Tax Certificate.
- (d) The University will take any and all actions necessary to assure compliance with the rebate of excess investment earnings, if any, to the federal government, to the extent that such section is applicable to the 2018/2019 Tax-Exempt Bonds as set forth in the Federal Tax Certificate.
- (e) The University will not take, or permit or suffer to be taken, any action with respect to the proceeds of the 2018/2019 Tax-Exempt Bonds which, if such action had been reasonably expected to have been taken, or had been deliberately and intentionally taken, on the date of issuance of the 2018/2019 Tax-Exempt Bonds would have caused the 2018/2019 Tax-Exempt Bonds to be "arbitrage bonds" as set forth in the Federal Tax Certificate.
- (f) The University will maintain a system for recording the ownership of each 2018/2019 Tax-Exempt Bond that complies with the Code until all 2018/2019 Tax-Exempt Bonds have been surrendered and canceled.
- (g) The University will retain its records of all accounting and monitoring it carries out with respect to the 2018/2019 Tax-Exempt Bonds for at least three years after the 2018/2019 Tax-Exempt Bonds mature or are redeemed (whichever is earlier); however, if the 2018/2019 Tax-Exempt Bonds are redeemed and refunded, the University will retain its records of accounting and monitoring at least three years after the earlier of the maturity or redemption of the obligations that refunded the 2018/2019 Tax-Exempt Bonds.
- (h) The University will comply with the provisions of the Federal Tax Certificate with respect to the 2018/2019 Tax-Exempt Bonds, which are incorporated herein as if fully set forth

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F-6.1/207-18 7/12/18 Page 30 of 41 herein. In the event of any conflict between this Section and the Federal Tax Certificate, the provisions of the Federal Tax Certificate will prevail.

The covenants of this Section will survive payment in full or defeasance of the 2018/2019 Tax-Exempt Bonds.

## Section 20. No Recourse Against Individuals.

No owner of a 2018/2019 Bond (registered or beneficial) shall have any recourse for the payment of any part of the principal or redemption price, if any, of or interest on the 2018/2019 Bonds, or for the satisfaction of any liability arising from, founded upon, or existing by reason of, the issuance or ownership of such 2018/2019 Bonds against the officers of the University or officers or members of the Board in their individual capacities.

#### Section 21. Defeasance.

Except as otherwise set forth in the Loan Agreement, any 2018/2019 Bonds shall be deemed to have been paid and not Outstanding under this resolution and shall cease to be entitled to any lien, benefit or security of this resolution and any money and investments held hereunder, except the right to receive the money and the proceeds and income from Government Obligations set aside and pledged in the manner hereafter described, if:

- (a) in the event that any or all of 2018/2019 Bonds are to be optionally redeemed, the University shall have given to the Registrar irrevocable instructions to give such notice of redemption of such 2018/2019 Bonds as may be required by the provisions of this resolution; and
- (b) there shall have been made an Irrevocable Deposit, in trust, with the Registrar or another corporate fiduciary of money in an amount which shall be sufficient and/or noncallable Government Obligations that are direct or indirect obligations of the United States or obligations unconditionally guaranteed by the United States maturing at such time or times and bearing such interest to be earned thereon, without considering any earnings on the reinvestment thereof, as will provide a series of payments which shall be sufficient, together with any money initially deposited, to provide for the payment of the principal of and the interest on the defeased 2018/2019 Bonds, when due in accordance with their terms, or upon the earlier prepayment thereof in accordance with a refunding plan; and such money and the principal of and interest on such Government Obligations are set aside irrevocably and pledged in trust for the purpose of effecting such payment, redemption or prepayment.

Nothing contained in this Section 21 shall be construed to prohibit the partial defeasance of the lien of this resolution providing for the payment of one or more, but not all of the Outstanding 2018/2019 Bonds. In the event of such partial defeasance, this resolution shall be discharged only as to the 2018/2019 Bonds so defeased.

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## Section 22. Approval of Official Statement.

The University hereby authorizes and directs the Authorized Representative of the University to approve the information contained in each Preliminary Official Statement, if any, pertaining to 2018/2019 Bonds or 2018/2019 bonds issued on behalf of the University, to "deem final" each Preliminary Official Statement, if any, as of its date, except for the omission of information on offering prices, interest rates, selling compensation, delivery dates and any other terms or provisions of the 2018/2019 Bonds dependent on such matters, for the sole purpose of the applicable underwriter's compliance with the Rule and to authorize the distribution thereof to prospective purchasers of the series of 2018/2019 Bonds and others. The University further authorizes and directs any of such officers to approve the preparation, distribution and use of a final Official Statement or any other offering document, and to approve the information contained therein, in connection with the offering and sale of the applicable 2018/2019 Bonds or 2018/2019 bonds issued on behalf of the University, to the actual purchasers of the 2018/2019 Bonds and others. The University hereby authorizes any of such officers to execute each final Official Statement or other offering document described above to indicate such approval.

#### Section 23. Determination of Certain Matters Affecting 2018/2019 Bonds.

The Authorized Representative of the University is hereby authorized and directed to make the following determinations and/or take the following actions, prior to the sale of 2018/2019 Bonds or the refunding of Refunding Candidates, subject to the limitations described below:

- (a) determine whether the 2018/2019 Bonds shall be issued and sold in one or more series or subseries;
- (b) determine the Mode in which 2018/2019 Bonds of a series or subseries shall be issued initially;
- (c) determine the times and manner of conversion, if any, between and within Modes, and negotiate and execute documents to effect the conversion, including without limitation any Bond Purchase Contract, Reimbursement Agreement, Remarketing Agreement, Loan Agreement or Trust Agreement, or amendments thereto;
- (d) negotiate and execute at his or her discretion, one or more Escrow Agreements, Bond Purchase Contracts, Remarketing Agreements, Loan Agreements, Reimbursement Agreements, or Trust Agreements, amendments to leases with respect to Refunding Candidates, options to extend such leases, and other documents in connection with the refunding of a Refunding Candidate, and amendments thereto from time to time;
- (e) negotiate and execute a Payment Agreement, if any, in connection with the issuance of any series or subseries of 2018/2019 Bonds;
- (f) select one or more Escrow Agents, underwriters, Direct Purchasers and/or Remarketing Agents;

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- (g) select some or all of the Refunding Candidates and designate those Refunding Candidates as the "Refunded Bonds" in the applicable Bond Purchase Contract or closing certificate;
- (h) determine if it is in the best interest of the University for any or all of the 2018/2019 Bonds to be secured by a Liquidity Facility or Credit Facility and, if so, select the Liquidity Facility Issuer or Credit Facility Issuer, as applicable, pay the premium or fees therefor, issue one or more reimbursement bonds, and enter into Reimbursement Agreements, each as applicable;
- (i) subject to the limitations set forth herein, approve the Interest Rates if the 2018/2019 Bonds bear interest in Fixed Mode or Term Mode, Maturity Dates, aggregate principal amounts, principal amounts of each maturity, delayed remarketing terms, redemption rights, tender or put option rights, and other terms and conditions of the 2018/2019 Bonds;
- (j) select a Trustee for the owners of any or all of the 2018/2019 Bonds and fix its or their rights, duties, powers, and obligations under the applicable Trust Agreement;
- (k) determine whether any or all of the 2018/2019 Bonds shall be issued as 2018/2019 Tax-Exempt Bonds or as 2018/2019 Taxable Bonds;
- (l) determine whether any or all of the 2018/2019 Bonds shall be issued and sold as Direct Purchase 2018/2019 Bonds or as Underwritten 2018/2019 Bonds; and
- (l) allocate 2018/2019 Bond proceeds to Projects and determine whether all or a portion of the Projects shall be financed with CAP.

The Authorized Representative of the University is hereby authorized to approve the foregoing subject to following conditions:

- (a) the aggregate principal amount of the 2018/2019 New Money Bonds shall not exceed \$102,000,000;
- (b) the aggregate debt service to be paid on any 2018/2019 Refunding Bonds shall be less than the aggregate debt service (or aggregate rent reflecting debt service in the case of a lease with respect to a Refunding Candidate) on the Refunding Candidate to be refunded;
- (c) the final maturity date of any 2018/2019 Refunding Bonds shall not be later than the end of the fiscal year that includes the final maturity date of the Refunding Candidate to be refunded with the proceeds of such bonds, and the term of any 2018/2019 New Money Bond shall not be longer than 31 years;
- (d) the true interest cost to the University, taking into account any interest subsidy, for the 2018/2019 Bonds issued initially in the Fixed Mode does not exceed 7.0%;
- (e) the aggregate principal amount of 2018/2019 Bonds issued in the Daily Mode, Weekly Mode, Index Floating Mode and Commercial Paper Mode does not exceed 20% of the

aggregate principal amount of all then Outstanding Bonds (determined on the initial date of issuance of such 2018/2019 Bonds in the Daily Mode, Weekly Mode, Index Floating Mode or Commercial Paper Mode); and

(f) the date and time for any Closing Date is not later than July 31, 2019.

In determining the items described in this section, the Authorized Representative of the University may take into account those factors that, in his or her judgment, will result in the lowest true interest cost on the 2018/2019 Bonds to their maturity, including, but not limited to current financial market conditions and current interest rates for obligations comparable in tenor and quality to the 2018/2019 Bonds.

Upon determination by the Authorized Representative of the University that all conditions to Closing set forth in a Bond Purchase Contract or Loan Agreement have been satisfied, or upon waiver of such conditions by the appropriate parties, the Authorized Representative of the University is hereby authorized and directed (a) to cause such 2018/2019 Bonds, executed as provided in this resolution, to be authenticated and delivered to the underwriters or Direct Purchaser(s); and (b) to execute, for and on behalf of the University, and to deliver to the persons entitled to executed copies of the same, the Official Statement or other offering document and all other documents required to be delivered, at or before the Closing Date pursuant to the Bond Purchase Contract or Loan Agreement. The proper University officials are hereby authorized and directed to do everything necessary and proper for the prompt printing, execution, authentication, issuance and delivery of the 2018/2019 Bonds in exchange for the purchase price thereof.

This authorization is in addition to any previously delegated authority under the Debt Policy.

#### Section 24. Undertaking to Provide Continuing Disclosure.

An Authorized Representative of the University is authorized to, in his or her discretion, execute and deliver a certificate regarding continuing disclosure in order to assist the underwriters for 2018/2019 Bonds in complying with Section (b)(5) of the Rule.

#### Section 25. Payment Agreements.

The University may enter into a Payment Agreement providing for an exchange of Reciprocal Payments for University Payments in connection with one or more series or subseries of 2018/2019 Bonds. The following shall be conditions precedent to the use of any Payment Agreement.

(a) Opinion of Bond Counsel. The University shall obtain an opinion of its Bond Counsel on the due authorization and execution of such Payment Agreement opining that the action proposed to be taken by the University is authorized or permitted by this resolution and by Washington law and will not adversely affect the exclusion from gross income for federal income tax purposes of the interest on the applicable series or subseries of 2018/2019 Tax-Exempt Bonds.

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- (b) Certification of Financial Advisor. The University shall obtain, on or prior to the date of execution of the Payment Agreement, a written certification from a financial advisor satisfying the requirements under RCW 39.96.030.
- (c) Approval of the State Finance Committee. The Payment Agreement shall have been approved by the State Finance Committee under terms set forth in a resolution thereof, subject to final approval and authorization of the Payment Agreement by the Chair of the State Finance Committee pursuant to such terms. The approval of the State Finance Committee shall not constitute the pledge of the full faith and credit of the State. The University shall have the option to terminate the Payment Agreement in whole or in part, in the discretion of the Authorized Representative of the University.
- (d) Selection of Reciprocal Payor. Prior to selecting the Reciprocal Payor, the University shall solicit and give due consideration to proposals from at least two entities that meet the criteria set forth in RCW 39.96.040(2). Such solicitation and consideration shall be conducted in such manner as the University (or the State Treasurer if so directed by resolution of the State Finance Committee) shall determine is reasonable.
- (e) *Payments*. The Payment Agreement shall set forth the manner in which the University Payments and Reciprocal Payments are to be calculated and a schedule of Derivative Payment Dates. The University shall provide an annual report or certificate to the State Treasurer setting forth the information regarding the Payment Agreement, in form satisfactory to the State Treasurer.

## (f) Findings.

- (1) The obligations of the University under the Payment Agreement shall be paid solely from General Revenues.
- (2) If the University enters into a Payment Agreement, University Payments shall be made from the Bond Fund. Reciprocal Payments shall be paid directly into the Bond Fund or a separate account therein.
- (3) If the foregoing conditions are complied with, the Payment Agreement will lower the net cost of borrowing for the related 2018/2019 Bonds or reduce the University's exposure to fluctuations in interest rates on the related 2018/2019 Bonds. This finding shall be confirmed in a report of the Authorized Representative of the University.

#### Section 26. Supplemental Resolutions.

(a) Without Consent of Owners. The Board, from time to time and at any time, may adopt a resolution or resolutions supplemental to this resolution which supplemental resolution or resolutions thereafter shall become a part of this resolution, for any one or more or all of the following purposes:

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- (1) to add to the covenants and agreements of the University in this resolution other covenants and agreements thereafter to be observed, which shall not materially adversely affect the interests of the Registered Owners of any Outstanding 2018/2019 Bonds affected by the supplemental resolution, or to surrender any right or power herein reserved to or conferred upon the University;
- (2) to make such provisions for the purpose of curing any ambiguities or of curing, correcting or supplementing any defective provision contained in this resolution or any resolution authorizing Additional Bonds in regard to matters or questions arising under such resolutions as the Board may deem necessary or desirable and not inconsistent with such resolution and which shall not materially adversely affect the interest of the Registered Owners of Outstanding 2018/2019 Bonds.

Any such supplemental resolution of the Board may be adopted without the consent of the owners of any 2018/2019 Bonds at any time outstanding, notwithstanding any of the provisions of subsection (b) of this section.

- (b) With Consent of Owners. With the consent of the Registered Owners of not less than 51% in aggregate principal amount of all Outstanding 2018/2019 Bonds of a series affected by a supplemental resolution, the Board may adopt a resolution or resolutions supplemental hereto for the purpose of adding any provisions to or changing in any manner or eliminating any of the provisions of this resolution or of any supplemental resolution provided, however, that no such supplemental resolution shall:
- (1) extend the fixed maturity of any Outstanding 2018/2019 Bonds, or reduce the rate of interest thereon, or extend the time of payment of interest from their due date, or reduce the amount of the principal thereof, or reduce any premium payable on the redemption thereof, without the consent of the owner of each 2018/2019 Bond so affected; or
- (2) reduce the aforesaid percentage of Registered Owners required to approve any such supplemental resolution, without the consent of the Registered Owners of all of the Outstanding 2018/2019 Bonds affected by the reduction.

It shall not be necessary for the consent of Registered Owners under this subsection (b) to approve the particular form of any proposed supplemental resolution, but it shall be sufficient if such consent shall approve the substance thereof. The Reimbursement Agreement may provide rights to the Credit Facility Issuer or Liquidity Facility Issuer to consent to supplemental resolutions on behalf of Registered Owners of Bonds for which it provides credit and liquidity support or in addition to such Registered Owners.

#### Section 27. Concerning the Registered Owners.

(a) Form of Consent of Registered Owners. Any request, direction, consent or other written instrument required by this resolution to be signed or executed by the Registered Owners may be in any number of concurrent written instruments of similar tenor and may be signed or executed by such Registered Owners in person or by an agent or agents duly appointed by a written

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instrument. Proof of the execution of any such written instrument and of the ownership of the 2018/2019 Bonds shall be sufficient for any purpose of this resolution and shall be conclusive in favor of the University, and/or the Registered Owners with regard to any action taken under such instrument, if made in the following manner:

- (1) the fact and date of the execution by any Registered Owner of any such instrument may be proved by the certificate of any officer in any jurisdiction who, by the laws thereof, has power to take acknowledgments of deeds to be recorded within such jurisdiction, to the effect that the Registered Owner signing such instrument acknowledged to him or her the execution thereof, or by an affidavit of a witness to such execution; and
- (2) the ownership of 2018/2019 Bonds shall be proved by the Bond Register maintained by the Registrar.

Nothing contained in this Section 27(a) shall be construed as limiting the University to the proof above specified, it being intended that the University may accept any other evidence of the matters herein stated to which it may seem sufficient.

- (b) Waiver of Form. Except as otherwise provided herein, any notice or other communication required by this resolution to be given by delivery, publication or otherwise to the Registered Owners or any one or more thereof may be waived, at any time before such notice or communication is so required to be given, by written waivers mailed or delivered to the University by the Registered Owners of all 2018/2019 Bonds of a series or subseries entitled to such notice or communication.
- (c) Revocation; Conclusive Action. At any time prior to (but not after) the evidencing to the University of the taking of any action by the Registered Owners of the percentage in aggregate principal amount of Outstanding 2018/2019 Bonds of a series or subseries specified in this resolution in connection with such action, any Registered Owner may, by filing written notice with the University, revoke any consent given by such Registered Owner or the predecessor Registered Owner of such 2018/2019 Bond. Except as aforesaid, any such consent given by the Registered Owner of any 2018/2019 Bond shall be conclusive and binding upon such Registered Owner and upon all future Registered Owners of such 2018/2019 Bond and of any 2018/2019 Bond issued in exchange therefor or in lieu thereof, irrespective of whether or not any notation in regard thereto is made upon such 2018/2019 Bond. Any action taken by the Registered Owners of the percentage in aggregate principal amount of a series or subseries of Outstanding 2018/2019 Bonds specified in this resolution in connection with such action shall be conclusively binding upon the University and the Registered Owners of all Outstanding 2018/2019 Bonds.

## Section 28. Determination of Registered Owners' Concurrence.

In determining whether the Registered Owners of the requisite aggregate principal amount of a series or subseries of Outstanding 2018/2019 Bonds have concurred in any demand, request, direction, consent or waiver under this resolution, 2018/2019 Bonds which are owned by or held in the name of the University shall be disregarded and deemed not to be Outstanding for the purpose of any such determination. 2018/2019 Bonds so owned which have been pledged in good

-35- F-6.1/207-18 7/12/18 Page 37 of 41 faith may be regarded as Outstanding for the purposes of this Section 28 if the pledgee shall establish to the satisfaction of the University the pledgee's right to vote such 2018/2019 Bonds and that the pledgee is not the University.

## Section 29. University Acquisition of 2018/2019 Bonds.

The University may acquire 2018/2019 Bonds by (a) purchase of 2018/2019 Bonds offered to the University at any time and from time to time at such purchase price as the University deems appropriate; or (b) gift at any time and from time to time on terms as the University deems appropriate.

## Section 30. Contract-Savings Clause.

The covenants contained in this resolution, the 2018/2019 Bonds and the provisions of the Bond Act shall constitute a contract between the University and the Registered Owners of the 2018/2019 Bonds and shall be construed in accordance with and controlled by the laws of the State. If any one or more of the covenants or agreements provided in this resolution to be performed on the part of the University shall be declared by any court of competent jurisdiction and final appeal, if any appeal be taken, to be contrary to law, then such covenant or covenants, agreement or agreements shall be null and void and shall be deemed separable from the remaining covenants and agreements in this resolution and shall in no way affect the validity of the other provisions of this resolution or of the 2018/2019 Bonds.

## Section 31. No Benefits to Outside Parties.

Nothing in this resolution, express or implied, is intended or shall be construed to confer upon or to give to any person, other than the University, the Registrar, any Credit Facility Issuer, any Liquidity Facility Issuer, or the Registered Owners of Bonds, any right, remedy or claim under or by reason of this resolution; and the covenants, stipulations and agreements in this resolution are and shall be for sole and exclusive benefit of the University, the Registrar, any Credit Facility Issuer, the Liquidity Facility Issuer, and the Registered Owners of Bonds, their successors and assigns.

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# Section 32. <u>Immediate Effect</u>.

This resolution shall take effect immediately upon its adoption.

ADOPTED at an open public meeting of the Board of Regents of the University, after notice thereof was duly and regularly given as required by law, this 12<sup>th</sup> day of July, 2018.

BOARD OF REGENTS, UNIVERSITY OF WASHINGTON

By

# Exhibit A

# **Description of Refunding Candidates**

Issuer	Bond Name	Original Principal Amount
State of WA	1992B General Obligation HE-UW	11,275,000
State of WA	1992B General Obligation UW	16,105,000
State of WA	1993B General Obligation HE-UW	7,965,000
State of WA	1998C General Obligation HE-UW (Harborview R&T)	9,420,000
State of WA	1998C General Obligation HE-UW (Ocean Science Building)	8,935,000
State of WA	R-2007 General Obligation HE-UW (R-1997E)	710,000
State of WA	2010 Certificates of Participation 77 (R-1999 COP 24)	3,415,000
State of WA	2010 Certificates of Participation 78 (R-2001A COP 24b)	1,070,000
State of WA	R-2010A General Obligation HE-UW (R-1999A (R-1992A))	1,975,000
State of WA	R-2010A General Obligation UW (R-1999A (R-1992A))	2,070,000
State of WA	R-2010B General Obligation UW (R-2001C)	3,610,000
State of WA	2011 Certificates of Participation 87 (R-2001B COP 28)	3,590,000
State of WA	2011 Certificates of Participation 88 (R-2001D COP 35)	2,100,000
State of WA	2011 Certificates of Participation 89 (R-2002A COP 36)	2,915,000
State of WA	2011 Certificates of Participation 90 (R-2002E COP 40)	1,705,000
State of WA	2013 Certificates of Participation 93 (R-2003 COP 41)	1,990,000
State of WA	2013 Certificates of Participation 94 (R-2003 COP 42)	420,000
State of WA	R-2011A General Obligation UW (R-2002A)	25,925,000
State of WA	R-2011A General Obligation UW (R-2002B)	3,915,000
State of WA	R-2011B General Obligation UW (R-2002A)	6,010,000
State of WA	R-2011B General Obligation UW (R-2002B)	2,995,000
State of WA	R-2011B General Obligation UW (R-2003D)	3,980,000
State of WA	R-2011B General Obligation UW (R-2004A)	5,880,000
State of WA	R-2012A General Obligation UW (R-2003D)	1,540,000
State of WA	R-2012A General Obligation UW (R-2004A)	2,900,000
State of WA	R-2012A General Obligation UW (R-2004D)	2,750,000
State of WA	R-2012C General Obligation UW (R-2003D)	1,870,000
State of WA	R-2012C General Obligation UW (2004A)	4,400,000
State of WA	R-2012C General Obligation UW (2004D)	2,475,000
State of WA	R-2013C General Obligation HE-UW (R-2006A (R-1994A))	5,380,000
State of WA	R-2013C General Obligation UW (R-2006A (R-1994A-UW))	6,055,000
State of WA	R-2015E General Obligation HE-UW (R-2007 GO HE-UW (R-1997E))	260,000
State of WA	R-2016A General Obligation UW (R-2006A)	30,145,000
State of WA	R- 2017A GO HE-UW (R-2010A) (R-1999B))	9,130,000
University	2006 UWT Bank of America Term Loan	3,100,000
University	2009 General Revenue Bonds (Taxable Build America Bonds)	75,835,000
University	2009B General Revenue Bonds (Taxable Build America Bonds)	77,710,000
University	2010A General Revenue Bonds (Tax-Exempt)	20,265,000
University	2010B General Revenue Bonds (Taxable Build America Bonds)	144,740,000
University	2011A General Revenue Bonds	211,370,000
University	2012A General Revenue Bonds (Tax-Exempt)	233,390,000
University	2012B General Revenue Bonds (Taxable)	34,185,000
University	2012C General Revenue Bonds	299,425,000
University	2013 General Revenue Bonds	146,410,000
University	2015A General Revenue and Refunding Bonds (Taxable)	47,715,000
University	2015B General Revenue Refunding Bonds	170,555,000
University	2015C General Revenue Bonds (Tax-Exempt)	159,160,000
University	2015D General Revenue Bonds (Taxable)	36,350,000
University	2015D General Revenue Bonds (Taxable)	36,350,000

T Indianamaitan	2016 A. Connect Decrease and Defending Dende (Ten France)	105 145 000
University	2016A General Revenue and Refunding Bonds (Tax-Exempt)	195,145,000
University	2016B General Revenue Refunding Bonds (Taxable)	10,015,000
University	2018 General Revenue Bonds	133,785,000
University	FAST Loan - Genome Sciences Mass Spectrometer	500,000
University	FAST Loan - Suzzallo Library Renovation	1,000,000
University	FAST Loan - UW IT Server Replacement	5,197,324
University	FAST Loan - UWT- Pagni & Lenti Building	500,000
University	FAST Loan – Pediatric Dentistry	1,362,960
University	FAST Loan UW Information Technology	1,566,956.22
University	FAST Loan The College of the Environment (Research Vessel)	500,000
University	FAST Loan University of Washington Information Technology	4,470,472
WBRF 3	2010B Lease Revenue Bonds WBRF 3 – Build America Bonds	151,745,000
WEDFA	2013 Lease Revenue Refunding Bonds WBRP I	28,995,000
WEDFA	2014A Lease Revenue Refunding Bonds WBRPII (R-2005E & 2006J)	109,205,000
	(Tax-Exempt)	
WEDFA	2015A Lease Revenue Bonds WBRP III (Tax-Exempt)	107,615,000
WEDFA	2015B Lease Revenue Bonds WBRP III (Taxable)	24,455,000
NW Hospital	4.65% Mortgage Note Payable (OMC Refunding)	9,217,542

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#### PAYING AGENT AGREEMENT

# **University of Washington General Revenue Bonds, 2019A**

This Paying Agent Agreement (the "Agreement") is entered into as of February 1, 2019, by and between the University of Washington (the "University"), and U.S. Bank National Association, as Registrar and Paying Agent (the "Paying Agent"), in connection with the University's General Revenue Bonds, 2019A, issued pursuant to a resolution of the Board of Regents of the University adopted on July 12, 2018 (the "Bond Resolution").

#### **RECITALS**

WHEREAS, pursuant to the Bond Resolution, the University authorized the issuance of General Revenue Bonds [2018/2019] described in **Exhibit A** (the "Bonds"); and

WHEREAS, Section 23 of the Bond Resolution authorizes the Authorized Representative of the University to determine whether the Bonds shall be issued and sold in one or more series or subseries, determine the Mode in which Bonds of a series or subseries shall be issued initially, and determine the times and manner of conversion, if any, between and within Modes; and

WHEREAS, Section 4(c) of the Bond Resolution provides that the terms applicable to Bonds in the Daily Mode, the Weekly Mode, the Term Mode, the Commercial Paper Mode, the Index Floating Mode or the Fixed Mode, and provisions for conversions between and within such Modes, shall be as provided in the applicable Bond Purchase Agreement, Remarketing Agreement, Loan Agreement or Trust Agreement, as applicable; and

WHEREAS, this Agreement constitutes a "Trust Agreement" solely for the purpose of setting forth the terms applicable to various Modes, and conversions between and within Modes, for the Bonds; and

WHEREAS, the Authorized Representative of the University is authorized to negotiate and execute at his or her discretion, this Agreement setting forth the rights, duties, powers, and obligations of the Paying Agent under this Agreement;

NOW, THEREFORE, the University and the Paying Agent agree as follows:

Section 1. Appointment and Acceptance, Deposits. The University hereby appoints U.S. Bank National Association as Paying Agent solely for the purposes of the rights, duties, powers, and obligations of the Paying Agent under this Agreement. The Paying Agent accepts this appointment, acknowledging the additional duties, obligations and responsibilities of the Paying Agent as set forth in this Agreement, as an appointment supplemental to its duties as Registrar and Paying Agent with respect to the Bonds under the State Fiscal Agency Contract. The Paying Agent shall act as Paying Agent for the Bonds and in such capacity shall perform the duties expressly identified as duties of Paying Agent set forth in **Exhibit B** and incorporated by this reference. The University will from time to time deposit the funds due to be paid by it under the Bond Resolution ("Funds"), by wire transfer of immediately available funds, to the depositary account identified in Schedule A hereto (the "Deposit Account" and, as so deposited, the "Funds").

Section 2. <u>Compensation</u>. The University agrees to pay the Paying Agent fees as set forth in Exhibit C and, if applicable, to reimburse the Paying Agent for its out-of-pocket expenses including without limitation the reasonable fees, expenses, and disbursements of its agents and attorneys, incurred or made by the Paying Agent in connection with entering into, performing, or enforcing its rights under this Agreement or in connection with investigating and defending itself against any claim (whether asserted by the University, any bondholder, credit provider, remarketing agent, calculation agent or any other person or entity) or liability hereunder; provided, however, that the University shall not reimburse the Paying Agent for expenses with respect to any claim or liability to the extent that such claim or liability is determined by a court of competent jurisdiction to have been caused by the Paying Agent's negligence or willful misconduct. Such fees and expenses will be invoiced to the University. If the Paying Agent renders any service hereunder not provided for in this Agreement, or the Paying Agent is made a party to any governmental agency, administrative or regulatory proceeding or any litigation pertaining to this Agreement or institutes interpleader proceedings relative to its obligations to the University hereunder, the Paying Agent shall be compensated reasonably by the University for such services to the University. The provisions of this Section 2 shall survive the termination or discharge of this Agreement or discharge of the Bonds.

Section 3. Instructions From the University; Advice of Counsel. At any time the Paying Agent may apply to any Authorized Officer for instructions, and shall have the right, but not the obligation, to consult with counsel of its choice at the reasonable expense of the University and shall not be liable for action taken or omitted to be taken in good faith either in accordance with such instruction or such advice of counsel, or in accordance with any opinion of counsel to the University addressed or delivered to the Paying Agent.

Section 4. Concerning the Paying Agent. The Paying Agent shall have only those duties as are specifically provided herein, which shall be deemed purely ministerial in nature, and shall have the right to perform any of its duties hereunder through agents, attorneys, custodians or nominees. The Paying Agent has no discretionary or fiduciary duties of any kind. The Paying Agent shall neither be responsible for, nor chargeable with, knowledge of the terms and conditions of any other agreement, instrument or document in connection herewith, including without limitation the Bond Resolution, any Direct Purchase Agreement, Bond Purchase Agreement, Reimbursement Agreement, Remarketing Agreement, Trust Agreement or and any Credit Facility agreement. The Paying Agent shall not be answerable to the University other than for losses suffered by the University that are directly caused by the Paying Agent's negligence or willful misconduct. The Paying Agent, shall have no responsibility for the payment of debt service with respect to the Bonds. The Paying Agent shall be protected in acting upon any paper or document believed by it to be genuine and to have been signed by the proper person or persons and shall not be held to have notice of any change of authority of any person, until receipt of written notice to the contrary from the University. The Paying Agent shall not be under any obligation to prosecute any action or suit or take any other action in respect of this Agreement that, in its sole judgment, may involve it in expense or liability. In any action or suit the University shall, as often as requested, reimburse the Paying Agent for any expense or liability growing out of such action or suit by or against the Paying Agent in its agency capacity; provided, however, that no such reimbursement shall be made for any expense or liability determined by a court of competent jurisdiction to have been caused by the Paying Agent's negligence or willful misconduct. No provision of this Agreement shall require the Paying Agent to expend, advance or risk its own funds or otherwise incur any financial liability in connection with any of its duties hereunder, or in the exercise of any of its rights or powers. For the avoidance of doubt, no provision of Exhibit B shall require Paying Agent to determine the Mode or any interest rate applicable to any Bond, which determination will be made and identified in writing to Paying Agent by the University or Remarketing Agent, as applicable.

Anything in this Agreement to the contrary notwithstanding, in no event shall the Paying Agent be liable for special, punitive, indirect or consequential loss or damage of any kind whatsoever (including but not limited to lost profits), even if the Paying Agent has been advised of the likelihood of such loss or damage and regardless of the form of action.

The Paying Agent agrees to accept and act upon instructions or directions pursuant to this Agreement sent by unsecured e-mail, facsimile transmission or other similar unsecured electronic methods; provided, however, that the University shall provide to the Paying Agent an incumbency certificate listing each Authorized Representative of the University, which incumbency certificate shall be amended by the University whenever an Authorized Representative of the University is to be added or deleted. If the University elects to give the Paying Agent e-mail or facsimile instructions (or instructions by a similar electronic method) and the Paying Agent in its discretion elects to act upon such instructions, the Paying Agent's understanding of such instructions shall be deemed controlling. The Paying Agent shall not be liable for any losses, costs or expenses arising directly or indirectly from the Paying Agent's reliance upon and compliance with such instructions notwithstanding such instructions conflict or are inconsistent with a subsequently received written instruction. The University agrees to assume all risks arising out of the use of such electronic methods to submit instructions and directions to the Paying Agent, including without limitation the risk of the Paying Agent acting on unauthorized instructions, and the risk or interception and misuse by third parties.

Any banking association or corporation into which the Paying Agent may be merged or converted, with which the Paying Agent may be consolidated, or any banking association or corporation resulting from any merger, conversion or consolidation to which the Paying Agent shall be a party, or any banking association or corporation to which all or substantially all of the corporate trust business of the Paying Agent shall be transferred, shall succeed to all the Paying Agent's rights, obligations and immunities hereunder without the execution or filing of any paper or any further act on the part of the parties hereto, anything herein to the contrary notwithstanding.

<u>Section 5.</u> <u>Notices</u>. Until changed by notice in writing, communications between the parties shall be delivered to:

If to the University: University of Washington

4311 11th Avenue Northeast Seattle, Washington 98105-4608

Telephone: (206) 221-6752

If to the Paying Agent:

U.S. Bank National Association 1420 5th Avenue, 7th Floor Seattle, Washington 98101 Attn: Corporate Trust

Phone: (206) 344-4678

<u>Section 6.</u> <u>Retention of Records, Instruments and Papers</u>. The Paying Agent shall retain in its files records, instruments and papers maintained by it in relation to its agency under this Agreement for the period required by the applicable provisions of the Internal Revenue Code.

- Section 7. Resignation or Removal of Paying Agent. Any time, except during the period from the Record Date to the Interest Payment Date applicable to that Record Date, the Paying Agent may resign by giving at least 30 days' prior written notice to the University; and the Paying Agent's agency shall be terminated and its duties shall cease upon expiration of such 30 days or such lesser period of time as shall be mutually agreeable to the Paying Agent and the University. At any time, except during the period from the Record Date to the Interest Payment Date applicable to that Record Date (or such lesser period of time as shall be mutually agreeable to the Paying Agent and the University) the Paying Agent may be removed from its agency by the University upon at least 30 days' prior written notice. Such removal shall become effective upon the expiration of the notice period or agreed lesser time period, and upon payment to the Paying Agent of all amounts payable to it in connection with its agency. In such event, the Paying Agent shall deliver to the University copies of pertinent records then in the Paying Agent's possession which are reasonably requested by the University.
- Section 8. Effectiveness and Term. Subject to the provisions of Section 4 hereof, this Agreement shall remain in effect and the agency established by the Agreement shall continue until (i) termination by mutual agreement of the University and Paying Agent, (ii) the resignation or removal of the Paying Agent pursuant to Section 7, or (iii) all Bonds have been retired or defeased.
- Section 9. <u>Jury Trial Waiver</u>. Each party hereto hereby agrees not to elect a trial by jury of any issue triable of right by jury, and fully waives any right to trial by jury fully to the extent that such right shall now or hereafter exist with regard to this Agreement, or any claim, counterclaim or other action arising in connection herewith. This waiver of right to trial by jury is given knowingly and voluntarily by each party, and is intended to encompass individually each instance and each issue as to which the right to a trial by jury would otherwise accrue.
- <u>Section 10.</u> <u>Conflict with Bond Documents</u>. In the event of a conflict between the provisions of this Agreement and those of the Bond Resolution, the terms of this Agreement shall govern.
- <u>Section 11.</u> <u>Governing Law.</u> This Agreement shall be governed by and construed in accordance with the laws of the State of Washington. Venue for any dispute arising under this Agreement shall be in the Superior Court of the State of Washington in King County.
- Section 12. Patriot Act Compliance. To help the government fight the funding of terrorism and money laundering activities, Federal law requires all financial institutions to obtain, verify and record information that identifies each person who opens an account. For a non-individual person such as a business entity, a charity, a trust or other legal entity the Paying Agent may ask for documentation to verify its formation and existence as a legal entity, and may also ask to see financial statements, licenses, identification, and authorization documents from individuals claiming authority to represent the entity or other relevant documentation.
- Section 13. Entire Agreement. Except to the extent that the matters herein are covered by the State Fiscal Agent Contract, this Agreement shall constitute the entire agreement between the University and the Paying Agent with respect to the Bonds. This Agreement is intended to be for the benefit of or to be enforceable by only the University and the Paying Agent, and no third party (including but not limited to any bondholder, credit provider, remarketing agent or calculation agent) shall be entitled to claim that it is a third-party beneficiary hereof.

<u>Section 14.</u> <u>Execution in Counterparts</u>. This Agreement may be executed in counterparts, each such counterpart shall for all purposes be deemed to be an original, and all of such counterparts, or as many of them as the University and the Paying Agent shall preserve undestroyed, shall together constitute but one and the same instrument.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be signed by their duly authorized officers as of the date first above written.

	VERSITY OF WASHINGTON
Name:	
Title:	
U.S. BANI as Paying A	K NATIONAL ASSOCIATION, Agent
Name:	Carolyn Morrison

# EXHIBIT A <u>DESCRIPTION OF THE BONDS</u>

## General Revenue Bonds, 2019A (TERM RATE BONDS) \$100,000,000

Price: 108.132%

Term Rate: 5.00%

Delayed Remarketing Rate: 8.00%

First Interest Payment Date: May 1, 2019

Maturity Date: May 1, 2048

Mandatory Purchase Date: May 1, 2022

First Par Call Date: November 1, 2021

CUSIP No.: 91523NTA4

#### **EXHIBIT B**

### INTEREST RATE MODES AND RELATED PROVISIONS

- Section 1. <u>Definitions</u>. The meanings of capitalized terms used and not otherwise defined in Exhibit B shall be as set forth in the Bond Resolution. In addition, the following terms as used in this Exhibit B shall have the following meanings, except as otherwise set forth in the Direct Purchase Agreement for Direct Purchase Bonds:
- "Alternate Credit Facility" means a letter of credit, insurance policy, line of credit, surety bond or security, or other liquidity facility issued as a replacement or substitute for any Credit Facility then in effect.
- "Authorized Denomination" means (a) during any Daily Interest Rate Period, Weekly Interest Rate Period or Commercial Paper Rate Period, \$100,000 or any integral multiple of \$5,000 in excess of \$100,000; (b) during any Term Rate Period or Fixed Rate Period, \$5,000 or any integral multiple thereof; (c) during any Index Floating Rate Period, \$5,000 or any integral multiple thereof; and (d) notwithstanding the foregoing, during any Direct Purchase Period, \$250,000, or any integral multiple of \$5,000 in excess of \$250,000 or such other minimum denomination as may be set forth in the applicable Direct Purchase Agreement.
- "Bank Bond" means a Bond (or portion thereof in any Authorized Denomination) that is purchased by the Paying Agent using amounts paid or provided by a Credit Provider under a Credit Facility.
- "Bank Rate" means that rate of interest borne by a Bank Bond, as specified or determined in accordance with a Credit Facility.
- "Bond Documents" means, together, the Bond Resolution, the Bond Purchase Agreement and the Paying Agent Agreement (including, without limitation, this Exhibit B).
- "Bond Resolution" means the Resolution of the Board of Regents adopted on July 12, 2018 authorizing the issuance and sale of the Bonds.
- "Bond Purchase Agreement" means the Bond Purchase Agreement by and among the University and Citigroup Global Markets Inc. and Backstrom McCarley Berry & Co., LLC, dated as of January 17, 2019, regarding the issuance, sale and delivery of the Bonds. The Bond Purchase Agreement is not a Direct Purchase Agreement.
- "Bond Purchase Fund" means the fund established with the Paying Agent pursuant to the Paying Agent Agreement, including without limitation, this Exhibit B.
- "Bonds" mean the General Revenue Bonds, 2019A, issued pursuant to the Bond Resolution with such series and additional or alternative naming conventions as may be convenient to indicate a Series or Subseries designation.

"Business Day" means any day other than a Saturday or Sunday that is neither a legal holiday nor a day on which banking institutions are authorized or required by law or regulation to close in Seattle, Washington, or the city or cities in which the principal office of the Remarketing Agent or the Calculation Agent is located nor a day on which the New York Stock Exchange is closed or the payment system of the Federal Reserve Bank is not operational.

"Calculation Agent" means the Paying Agent.

"Commercial Paper Mode" means the Mode during which a Series or Subseries of the Bonds bear interest at a Commercial Paper Rate or Rates.

"Commercial Paper Rate" means the interest rate determined with respect to a Bond in the Commercial Paper Mode during each Commercial Paper Rate Period applicable to that Bond in accordance with Section 4(a)(5).

"Commercial Paper Rate Period" means, with respect to any Bond bearing interest at a Commercial Paper Rate, each period, which may be from one day to 270 days determined for such Bond, beginning on, and including, the Conversion Date for a Conversion to the Commercial Paper Mode and ending on, and including, a day which immediately precedes a Business Day or the Maturity Date.

"Conversion" means a conversion of a Series or Subseries of the Bonds from one Mode to another Mode (including the establishment of a new Commercial Paper Mode, Term Mode or Index Floating Mode). The following events shall not be deemed Conversions for purposes of the Bond Documents: (a) the continuation of a Daily Interest Rate at the end of a Daily Interest Rate Period, (b) the continuation of a Weekly Interest Rate at the end of a Weekly Interest Rate Period, (c) the imposition of a Delayed Remarketing Period as described in Section 8(f) of this Exhibit B, (d) during a Direct Purchase Period, a renewal or extension of the term of such Direct Purchase Period then in effect, and (e) an Extraordinary Mandatory Redemption of a Series or Subseries pursuant to a Term-Out Provision.

"Conversion Date" means the effective date of a Conversion.

"Credit Facility" means any letter of credit, insurance policy, line of credit, surety bond, or other security or other liquidity facility, if any, to be issued by the Credit Provider in connection with a Conversion to a Daily Mode, a Weekly Mode, or other Mode, that secures or supports the payment when due of the principal and Purchase Price of and interest on a Bond, including any Alternate Credit Facility, or any extensions, amendments or replacements thereof pursuant to its terms.

"Credit Facility Purchase Account" means each account with that name established within the Bond Purchase Fund pursuant to Section 12 of this Exhibit B.

"Credit Provider" means any bank, insurance company, pension fund or other financial institution that provides a Credit Facility or Alternate Credit Facility for a Series or Subseries of the Bonds.

"Daily Mode" means the Mode during which a Series or Subseries of the Bonds bear interest at the Daily Rate.

- "Daily Rate" means a variable interest rate established for a Series or Subseries of Bonds in the Daily Mode in accordance with Section 4(a)(1) of this Exhibit B.
- "Daily Interest Rate Period" means, with respect to a Series or Subseries of the Bonds, each period during which a Daily Rate is in effect.
- "Default Rate" as used in connection with any Direct Purchase Period, has the meaning set forth in the applicable Direct Purchase Agreement as identified to by the University to the Paying Agent in writing.
- "Delayed Remarketing Bond" means any Bond (or principal portion of a Bond) that is not purchased when tendered for purchase and which becomes an Delayed Remarketing Bond pursuant to Section 6(h) of this Exhibit B.
- "Delayed Remarketing Rate" means any of the following rates, as identified to the Paying Agent in writing by the University or the Remarketing Agent, as applicable: (a) for the Initial Term Rate Period, the per annum rate(s) identified as such in the Bond Purchase Agreement, which may consist of one per annum rate that applies throughout the duration of the Delayed Remarketing Period or per annum rates that increase in a stepped manner in succession through the Delayed Remarketing Period as identified in the Bond Purchase Agreement; and (b) for any subsequent Term Rate Period or other Term Rate Period, a per annum interest rate or stepped per annum interest rates as determined by the Remarketing Agent prior to the first Interest Determination Date for such period pursuant to Section 4(a)(3) or 4(a)(4)(D) of this Exhibit B.
- "Delayed Remarketing Period" means the period as set forth in Section 8(f) of this Exhibit B applicable to Delayed Remarketing Bonds.
- "Direct Purchase Agreement" means, for any Series or Subseries of the Bonds, a written agreement (including a continuing covenant agreement or other similar agreement) between the University and the direct purchaser for the purchase of all of such Series or Subseries of the Bonds during a Direct Purchase Period. The Bond Purchase Agreement is not a Direct Purchase Agreement.
- "Direct Purchase Bonds" means any Bonds or Bond sold to a Direct Purchaser pursuant to a Direct Purchase Agreement.
- "Direct Purchase Period" means each period during which the applicable Series or Subseries of the Bonds is purchased and held pursuant to a Direct Purchase Agreement, including any Term-Out Period or other period during which Unremarketed Bonds continue to be outstanding while a Direct Purchase Agreement is in effect.
- "Direct Purchaser" means any bank or other financial institution selected by the University to purchase (or to accept delivery of) one or more Direct Purchase Bonds.
- "EFFR Index" means, on any date, the Effective Federal Funds Rate (EFFR) calculated and published by the Federal Reserve Bank of New York (the "New York Fed") as a volume weighted median of overnight federal funds transactions reported in the FR 2420 Report of Selected Money Market Rates. The New York Fed publishes the EFFR for the prior Business Day on the New York Fed's website at approximately 9:00 a.m. (Eastern Time).

- "*Elect*" or "*Election*" means the election by the Authorized Representative of the University of a new Mode.
- "Event of Default" as used in connection with any Direct Purchase Period, has the meaning set forth in the applicable Direct Purchase Agreement.
- "Extraordinary Event" means, during any Mode in which a Direct Purchase Agreement or a Credit Facility is in effect, the occurrence of an extraordinary event identified under the applicable provisions of the Direct Purchase Agreement, Reimbursement Agreement or similar agreement with the, Direct Purchaser or provider of the Credit Facility.
- "Extraordinary Mandatory Redemption" means the periodic redemption of principal of Unremarketed Bonds or Bank Bonds in the amounts and on the dates set forth in a Term-Out Provision of a Direct Purchase Agreement or agreement relating to a Credit Facility.
- "Favorable Opinion of Bond Counsel" means a written legal opinion of Bond Counsel to the University, addressed (or accompanied by a reliance letter) to the Paying Agent, the Credit Provider (if any), the Index Floating Rate Holder (if any), the Direct Purchaser (if any) and the Remarketing Agent (if any), to the effect that a specified action is permitted under the Bond Documents and will not impair the exclusion of interest on the affected Bonds from gross income for purposes of federal income taxation (subject to customary exceptions).
- "Fixed Mode" means the Mode in which a Series or Subseries of the Bonds bear interest at a Fixed Rate or Fixed Rates.
- "Fixed Rate Period" means for the Bonds in the Fixed Mode, the period from the Conversion Date upon which the Series or Subseries of Bonds were converted to the Fixed Mode, to but not including the Maturity Date for such Bonds.
- "Index" means any of (a) the SIFMA Index, (b) the EFFR Index, (c) the SOFR Index, or (d) any alternate index selected by the Authorized Representative of the University, conditioned upon the delivery to the Paying Agent on or prior to the applicable Conversion Date of a Favorable Opinion of Bond Counsel.
- "Index Floating Mode" means the Mode during which a Series or Subseries of the Bonds bear interest at the Index Floating Rate.
- "Index Floating Rate" means a per annum rate of interest, established in accordance with Section 4(a)(4) of this Exhibit B on each Interest Determination Date during an Index Floating Rate Period, equal to the sum of (A) the Index Floating Rate Spread and (B) the product of Index and the Index Floating Rate Percentage.
- "Index Floating Rate Holder" means, during any Direct Purchase Period for a Series or Subseries of the Bonds, (a) during which such Series or Subseries is not held in Book-Entry Form, (1) if there is a single Registered Owner of all Bonds of such Series or Subseries, the Registered Owner of such Series or Subseries, or (2) if there is more than one Registered Owner of Bonds within a Series or Subseries, Registered Owners owning a majority of the aggregate principal amount of the then outstanding Bonds of such Series or Subseries; and (b) during which such Series or Subseries is held in Book-Entry Form, (1) if there is a single Beneficial Owner of all Bonds of such Series or

Subseries, the Beneficial Owner, or (2) if there is more than one Beneficial Owner of the Bonds of such Series or Subseries, Beneficial Owners of a majority of the aggregate principal amount of the then outstanding Bonds of such Series or Subseries.

"Index Floating Rate Percentage" means the percentage of the Index Floating Rate selected by the Authorized Representative of the University for the Bonds of such Series pursuant to Section 5(a)(4) of this Exhibit B, as applicable.

"Index Floating Rate Period" means, with respect to any Series or Subseries of the Bonds, each period during which an Index Floating Rate is in effect.

"Index Floating Rate Spread" means the spread determined on or prior to the Conversion Date that marks the beginning of such period, for the Bonds of such Series pursuant to Section 5(a)(4) of this Exhibit B, as applicable.

"Initial Term Rate Period" means, for any Series or Subseries of the Bonds, a period commencing on the Initial Issue Date and ending on the Scheduled Mandatory Purchase Date(s) set forth in the Bond Purchase Agreement, unless such Series or Subseries is earlier purchased or redeemed in connection with a mandatory tender for purchase of such Series or Subseries of the Bonds pursuant to Section 8 of this Exhibit B. In the event that a Bond becomes an Delayed Remarketing Bond, the Initial Term Rate Period shall include any immediately succeeding Delayed Remarketing Period.

"Initial Issue Date" means the date on which the Bonds are delivered to the Underwriter pursuant to the Bond Purchase Agreement.

"Interest Accrual Date" with respect to a Series or Subseries of the Bonds means (a) for any Daily Interest Rate Period, the first day thereof and, thereafter, the first day of each calendar month during such Daily Interest Rate Period; (b) for any Weekly Interest Rate Period, the first day thereof and, thereafter, the first Wednesday of each calendar month during such Weekly Interest Rate Period; (c) for any Term Rate Period or Fixed Rate Period, the first day thereof and, thereafter, each Interest Payment Date during that Term Rate Period, other than the last such Interest Payment Date; (d) for each Index Floating Rate Period, the first day thereof and, thereafter, the first Business Day of each calendar month during such Index Floating Rate Period; and (e) for each Commercial Paper Rate Period, the first day thereof.

"Interest Determination Date" means, for each Index Floating Rate Period, (a) if the Index is the SIFMA Index, the EFFR Index or the SOFR Index the first day of such Index Floating Rate Period and, thereafter, each Wednesday (or, if any such Wednesday is not a Business Day, the preceding Business Day); and (b) if any other Index has been selected by the Authorized Representative of the University, the first day of such Index Floating Rate Period and thereafter the date(s) selected by the Authorized Representative of the University in connection with the selection of such Index. Notwithstanding the foregoing, a Direct Purchase Agreement may provide for alternate Interest Determination Dates to be in effect during a Direct Purchase Period.

### "Interest Payment Date" means:

(a) for interest accrued in (1) any Daily Interest Rate Period, the first Business Day of the next succeeding calendar month; (2) any Weekly Interest Rate Period, the first Wednesday of each

calendar month, or, if the first Wednesday is not a Business Day, the next succeeding Business Day; (3) (i) with respect to the Initial Term Rate Period, May 1, 2019 and thereafter each May 1 and November 1 and with respect to any subsequent Term Rate Period or any Fixed Rate Period, each semi-annual payment date specified by the Authorized Representative of the University in connection with the Conversion of such Bonds to the Term Rate Period or Fixed Rate Period, and if such date is not a Business Day, the next succeeding Business Day, (ii) each Purchase Date, and (iii) each date on which all or a portion of the Bonds are redeemed; (4) any Index Floating Rate Period, (i) the first Business Day of each calendar month, (ii) each Purchase Date, and (iii) each date on which all or a portion of the Bonds are redeemed, unless otherwise specified in a Direct Purchase Agreement in effect for such period; or (5) for any Commercial Paper Rate Period, the first Business Day following the last day of each Commercial Paper Rate Period for such Bonds,

- (b) without duplication, the first Business Day succeeding the last day of each Interest Rate Period; and
- (c) with respect to any Bonds during a Term-Out Period or Bank Bonds, the dates set forth in the Term-Out Provision or otherwise for Bank Bonds of the applicable Direct Purchase Agreement or Credit Facility for the payment of interest on such Bonds or Bank Bonds.
- "Interest Rate Period" means each Daily Interest Rate Period, Weekly Interest Rate Period, Term Rate Period, Fixed Rate Period, Commercial Paper Rate Period, Index Floating Rate Period or, if applicable, any Direct Purchase Period.
- "Interest Reset Date" means (a) for each Index Floating Rate Period that is not a Direct Purchase Period (1) if the Index is the SIFMA Index, the EFFR Index, or the SOFR Index, Thursday of each week, or if not a Business Day, the next succeeding Business Day; and (2) if any other Index has been selected by the Authorized Representative of the University, the date(s) selected by the Authorized Representative of the University in connection with selecting the Index; and (b) for each Direct Purchase Period, either (1) the Interest Reset Dates set forth in the Direct Purchase Agreement or (2) if none are specified, the dates set forth in subsection (a) of this definition.
- "Mandatory Tender Date" means each Purchase Date on which a Series or Subseries of the Bonds is required to be tendered for purchase as set forth in Section 8(b) of this Exhibit B.
- "Maturity Date" means the final date on which the principal of a Bond is stated on its face to become due and payable as provided in this Exhibit B, regardless of any Sinking Fund Requirement or optional or mandatory redemption prior to maturity.
- "Maximum Interest Rate" means 12% per annum, calculated in the same manner as interest is calculated for the interest rate then in effect on the affected Series or Subseries of the Bonds. In no event shall the maximum interest rate exceed the maximum rate permitted by applicable law from time to time.
- "*Mode*" means the Daily Mode, Weekly Mode, Commercial Paper Mode, Index Floating Mode, Term Mode, or the Fixed Mode, as the context may require.
- "Par Call Date" means (a) with respect to the Initial Term Rate Period, the applicable Par Call Date(s) identified in the Bond Purchase Agreement; and (b) with respect to any subsequent Term Rate Period and any Index Floating Rate Period or Direct Purchaser Period, the date established by the Authorized Representative of the University and set forth in the applicable Direct

Purchase Agreement or Remarketing Agreement, and if none is established, the first Business Day after the end of the Index Floating Rate Period or Term Rate Period, as applicable. Notwithstanding the foregoing, during any Delayed Remarketing Period, the Par Call Date for any Delayed Remarketing Bond shall mean any Business Day.

- "Participant" means, with respect to the Securities Depository, a member of or participant in the Securities Depository.
- "Paying Agent Agreement" means this Agreement entered into by the University, as University, and US Bank National Association, as Paying Agent, dated as of February 1, 2019, providing for certain additional duties of the Paying Agent relating to the Bonds, into which this Exhibit B is incorporated.
- "*Purchase Date*" means each date on which a Series or Subseries of the Bonds may be or is required to be purchased pursuant to Section 8 of this Exhibit B.
- "Purchase Price" means the purchase price to be paid to the Registered Owner(s) of Bonds purchased pursuant to Section 8 of this Exhibit B, which shall be equal to the principal amount of the Bonds so tendered for purchase, without premium, plus accrued interest from the immediately preceding Interest Accrual Date to the Purchase Date (if such date is not an Interest Payment Date), plus any other accrued and unpaid interest.
- "Record Date" means (a) with respect to any Interest Payment Date in a Daily Interest Rate Period, the last Business Day of each calendar month or, in the case of the last Interest Payment Date in a Daily Interest Rate Period, the Business Day immediately preceding such Interest Payment Date, (b) with respect to any Interest Payment Date in any Term Rate Period or Fixed Rate Period, the 15th day immediately preceding that Interest Payment Date, (c) with respect to any Interest Payment Date in any Weekly Interest Rate Period, the Business Day preceding the Interest Payment Date, (d) with respect to any Interest Payment Date in any Index Floating Rate Period, the 15th day immediately preceding that Interest Payment Date, (e) with respect to any Direct Purchase Period, any date provided in a Direct Purchase Agreement then in effect (as identified by the University to the Paying Agent in writing), and (f) with respect to any Commercial Paper Rate Period, the Business Day next preceding the Interest Payment Date.
- "Reimbursement Agreement" means any agreement between the University and a Credit Provider, pursuant to which a Credit Facility or Alternate Credit Facility is issued by the Credit Provider, as the same may be amended or supplemented.
- "Remarketing Account" means each account with that name established within the Bond Purchase Fund pursuant to Section 12 of this Exhibit B.
- "Remarketing Agent" means each remarketing firm qualified under Section 10 of this Exhibit B to act as Remarketing Agent for the Bonds and appointed by the Authorized Representative of the University on behalf of the University.
- "Remarketing Agreement' means any remarketing agreement between the University and the Remarketing Agent whereby the Remarketing Agent undertakes to perform the duties of the Remarketing Agent as provided in this Exhibit B.

"SIFMA" means the Securities Industry and Financial Markets Association (formerly the Bond Market Association).

"SIFMA Index" means the seven-day high-grade market index of tax-exempt variable rate demand obligations produced by Municipal Market Data and published or made available by SIFMA or any person acting in cooperation with or under the sponsorship of SIFMA. If such index is no longer published or otherwise not available, the SIFMA Index for any day will mean the level of the "S&P Weekly High Grade Index" (formerly the J.J. Kenny Index) maintained by Standard & Poor's Securities Evaluations Inc. for a seven-day maturity as published on the Interest Reset Date or most recently published prior to the Interest Reset Date. If at any time neither such index is available, the Calculation Agent shall use instead an index that the Remarketing Agent (if any) and the Authorized Representative of the University, determines most closely approximates the SIFMA Index.

"Scheduled Mandatory Purchase Date" for the Initial Term Rate Period, shall be the date specified in the Bond Purchase Agreement. For any subsequent] Index Floating Rate Period or Term Rate Period, the Scheduled Mandatory Purchase Date shall mean the date scheduled to be the last day of the Index Floating Rate Period or Term Rate Period, as applicable, selected by the Authorized Representative of the University pursuant to Section 5(a)(3) or Section 5(a)(4), as applicable.

"Series" as used in this Exhibit B refers to the Series 2019A Bonds, unless and until consolidated or changed to another Series or Subseries designation by written direction of the Authorized Representative of the University, issued pursuant to the Bond Resolution and subject to the terms set forth in this Exhibit B.

"SOFR Index" means, on any date, the Secured Overnight Financing Rate on the Federal Reserve's Website as of 4:00 p.m. (Eastern Time) on the Business Day immediately preceding the SOFR Index Reset Date. If such index is not published or otherwise made available, then all references to the "SOFR Index" shall be deemed to be references to the rate that the Federal Reserve recommended as the replacement for the Secured Overnight Financing Rate. If no such replacement index has been established, then all references to the "SOFR Index" shall be deemed to be references to the EFFR Index.

"Subseries" as used in this Exhibit B means any Subseries of a Series designated by the Authorized Representative of the University pursuant to Section 4(a) of the Bond Resolution, unless and until consolidated or changed to another Series or Subseries designation by written direction of the Authorized Representative of the University, issued pursuant to the Bond Resolution and subject to the terms set forth in this Exhibit B.

"Term-Out Period" means a period, as determined in accordance with a Direct Purchase Agreement or Credit Facility then in effect, during which Unremarketed Bonds become subject to Extraordinary Mandatory Redemption in periodic, approximately equal installments of principal.

"Term-Out Provision" means a provision in a Direct Purchase Agreement or in a Reimbursement Agreement (or similar agreement related to a Credit Facility) that requires the Extraordinary Mandatory Redemption of principal of Unremarketed Bonds in installments payable in accordance with a scheduled amortization of such principal over a Term-Out Period, to be determined as set forth in the applicable Direct Purchase Agreement or Reimbursement Agreement (or other similar agreement related to a Credit Facility).

- "Term Rate" means (a) during the Initial Term Rate Period, the rate(s) set forth in the Bond Purchase Agreement; and (b) during any other Term Rate Period, a term, fixed (non-variable) interest rate established for Bonds of a Series or Subseries in the Term Mode in accordance with Section 4(a)(3) of this Exhibit B.
- "Term Rate Mode" means the Mode during which a Series or Subseries of Bonds bear interest at the Term Rate.
- "Term Rate Period" means, with respect to a Series or Subseries of the Bonds, each period during which a Term Rate is in effect.
- "Undelivered Bond" means any Bond which constitutes an Undelivered Bond under the provisions of Section 8(d) of this Exhibit B.
  - "Underwriter" means the initial purchasers identified in the Bond Purchase Agreement.
- "Unremarketed Bond" means any Bond (or principal portion of a Bond) that is not purchased when tendered for purchase and which becomes an Unremarketed Bond subject to a Term-Out Provision pursuant to Section 6(i) of this Exhibit B.
- "Weekly Interest Rate" means a variable interest rate for a Bond in the Weekly Mode established in accordance with Section 4(a)(2) of this Exhibit B.
- "Weekly Interest Rate Period" means, with respect to a Series of the Bonds, each period during which a Weekly Interest Rate is in effect.
- "Weekly Mode" means the Mode during which a Series or Subseries of the Bonds bear interest at the Weekly Rate.

### **Section 2. Bond Terms**.

During the Initial Term Rate Period, the Bonds have terms set forth on A-1.

### Section 3. Accrual and Payment of Interest.

- (a) **Accrual Dates.** Each Bond shall bear interest from its Interest Accrual Date. However, a Bond issued in exchange for a Bond that is surrendered for transfer or exchange shall bear interest from the date to which interest on such surrendered Bond had been paid or duly provided for (or, if no interest has been paid on such surrendered Bond, from the Interest Accrual Date of such surrendered Bond).
- (b) **Payment of Interest.** Interest shall be payable on each Interest Payment Date, on each redemption date, on each Purchase Date and on the Maturity Date, and shall be payable for the final Interest Rate Period to the date on which that Series or Subseries of the Bonds is paid in full, all in accordance with the following:

- (1) Interest on each Bond held in Book-Entry Form will be payable in the manner set forth in the Letter of Representations.
- (2) Interest on each Bond not held in Book-Entry Form will be payable as set forth in Section 9(b)(3) of the Bond Resolution.

### (c) Provisions Specific to Each Interest Rate Period.

- (1) <u>Daily Interest Rate Period</u>. Interest on a Series or Subseries of the Bonds during any Daily Interest Rate Period shall accrue on the basis of the actual number of days elapsed in a 365-day year (or a 366-day year in a leap year) and shall be payable on each Interest Payment Date for the period commencing on the Interest Accrual Date preceding the prior Interest Payment Date and ending on the last day of the month in which such Interest Accrual Date occurs.
- (2) Weekly Interest Rate Period. Interest on a Series or Subseries of the Bonds during any Weekly Interest Rate Period shall accrue on the basis of the actual number of days elapsed in a 365-day year (or a 366-day year in a leap year) and shall be payable on each Interest Payment Date for the period commencing on the preceding Interest Accrual Date (or, if any such Interest Payment Date is not a Wednesday, commencing on the second preceding Interest Accrual Date) and ending on and including the Tuesday preceding such Interest Payment Date (or, if sooner, the last day of such Weekly Interest Rate Period).
- (3) <u>Term Rate Period and Fixed Rate Period</u>. Interest on a Series or Subseries of the Bonds during any Term Rate Period or Fixed Rate Period shall accrue on the basis of a 360-day year composed of twelve 30-day months and shall be payable on each Interest Payment Date for the period commencing on the Interest Accrual Date of the preceding month and ending on the day preceding the next Interest Accrual Date.

### (4) <u>Index Floating Rate Period</u>. During an Index Floating Rate Period:

- (A) If the applicable Index is (i) the SIFMA Index, EFFR Index or SOFR Index interest shall accrue on the basis of the actual number of days elapsed in a 365-day year (or a 366-day year in a leap year); or (ii) another index selected by the Authorized Representative of the University, interest shall accrue as determined by the Authorized Representative of the University in connection with the selection of such other index in consultation with the Remarketing Agent; and
- (B) Interest shall be payable on each Interest Payment Date for the period commencing on the preceding Interest Accrual Date and ending on the day preceding the next Interest Accrual Date.
- (5) <u>Commercial Paper Rate Period</u>. Interest on a Series or Subseries of the Bonds during any Commercial Paper Rate Period shall accrue on the basis of the actual number of days elapsed in a 365-day year (or a 366-day year in a leap year) and shall be payable on the Interest Payment Date for the period commencing on the Interest Accrual Date and ending on the last day of the Commercial Paper Rate Period for such Bonds.

### **Section 4. Determination of Interest Rates.**

- (a) **Determination of Interest Rates.** Interest rates shall be periodically reset as follows, except as set forth in a Direct Purchase Agreement for Direct Purchase Bonds:
- (1) <u>Determination of Daily Interest Rate</u>. Each Series or Subseries of the Bonds for which a Daily Interest Rate Period has been selected shall bear interest at the Daily Interest Rate, which shall be determined by the Remarketing Agent by 9:30 a.m., New York time, on each Business Day. The Daily Interest Rate for any day that is not a Business Day shall be the same as the Daily Interest Rate for the preceding Business Day. Each Daily Interest Rate shall be the rate of interest per annum determined by the Remarketing Agent (based on an examination of obligations comparable, in the judgment of the Remarketing Agent, to such Series or Subseries of the Bonds and known by the Remarketing Agent to have been priced or traded under then-prevailing market conditions) to be the minimum interest rate that, if borne by such Series of the Bonds, would enable the Remarketing Agent to sell all of that Series or Subseries of the Bonds on such Business Day at a price (without regard to accrued interest) equal to the principal amount thereof. If no Daily Interest Rate is established by the Remarketing Agent, then the Daily Interest Rate for such Business Day shall be the same as the preceding Daily Interest Rate, and such Daily Interest Rate shall continue to be in effect until the earlier of (A) the date on which the Remarketing Agent determines a new Daily Interest Rate or (B) the seventh day succeeding the first day on which the Daily Interest Rate was not determined by the Remarketing Agent. If the Daily Interest Rate is held to be invalid or unenforceable by a court of law, or if the Remarketing Agent fails to determine the Daily Interest Rate for a period of seven days as described in clause (B) of the preceding sentence, then the Daily Interest Rate shall be equal (in the case of 2018/2019 Tax-Exempt Bonds) to 110% of the SIFMA Index (or 110% of the SIFMA Index in the case of 2018/2019 Taxable Bonds), or if such index is no longer available, 85% of the interest rate (in the case of 2018/2019 Tax-Exempt Bonds and 100% in the case of 2018/2019 Taxable Bonds) on 30-day high grade unsecured commercial paper notes sold through dealers by major corporations as reported in The Wall Street Journal on the Business Day such Daily Interest Rate would otherwise have been determined, until the Daily Interest Rate is again validly determined by the Remarketing Agent.
- (2) Determination of Weekly Interest Rate. Each Series or Subseries of the Bonds for which a Weekly Interest Rate Period has been selected shall bear interest at the Weekly Interest Rate, which shall be determined by the Remarketing Agent by 5:00 p.m., New York time, on Tuesday of each week, or if such day is not a Business Day, then on the succeeding Business Day. The first Weekly Interest Rate for each Weekly Interest Rate Period shall be determined on or prior to the first day of such Weekly Interest Rate Period and shall be in effect for the period commencing on and including the first day of such Weekly Interest Rate Period and ending on and including the succeeding Tuesday. Thereafter, each Weekly Interest Rate shall be in effect for the period commencing on and including Wednesday and ending on and including the succeeding Tuesday, unless such Weekly Interest Rate Period ends on a day other than Tuesday, in which event the last Weekly Interest Rate for such Weekly Interest Rate Period shall be in effect for the period commencing on and including the Wednesday preceding the last day of such Weekly Interest Rate Period and ending on and including the last day of such Weekly Interest Rate Period. Each Weekly Interest Rate shall be the rate of interest per annum determined by the Remarketing Agent (based on an examination of obligations comparable, in the judgment of the Remarketing Agent, to such Series or Subseries of the Bonds and known by the Remarketing Agent to have been priced or traded under then-prevailing market conditions) to be the minimum interest rate which, if borne by the applicable Series or Subseries of the Bonds, would enable the Remarketing Agent to sell all of that Series of the Bonds on the effective date of that rate at a price (without regard to accrued interest) equal to the principal amount thereof. If no Weekly Interest Rate is established by the Remarketing Agent, then

the Weekly Interest Rate shall be the same as the preceding Weekly Interest Rate if such Weekly Interest Rate was determined by the Remarketing Agent. If the preceding Weekly Interest Rate was not determined by the Remarketing Agent, or if the Weekly Interest Rate determined by the Remarketing Agent is held to be invalid or unenforceable by a court of law, then the Weekly Interest Rate shall be equal (in the case of 2018/2019 Tax-Exempt Bonds) to 110% of the SIFMA Index or 110% of the SIFMA Index in the case of 2018/2019 Taxable Bonds, or if such index is no longer available, 85% of the interest rate (in the case of 2018/2019 Tax-Exempt Bonds and 100% in the case of 2018/2019 Taxable Bonds) on 30-day high grade unsecured commercial paper notes sold through dealers by major corporations as reported in The Wall Street Journal on the day such Weekly Interest Rate would otherwise have been determined, until the Weekly Interest Rate is again validly determined by the Remarketing Agent.

- (3) Determination of Term Rate or Fixed Rate. Each Series or Subseries of the Bonds for which a Term Rate Period or Fixed Rate Period has been selected shall bear interest at the Term Rate or Fixed Rate, as applicable, which shall be determined by the Remarketing Agent on a Business Day no later than the first day of such Term Rate Period or Fixed Rate Period, as applicable. The Term Rate shall be the rate of interest per annum determined by the Remarketing Agent (based on an examination of obligations comparable, in the judgment of the Remarketing Agent, to such Series or Subseries of the Bonds and known by the Remarketing Agent to have been priced or traded under then-prevailing market conditions) to be the minimum interest rate at which the Remarketing Agent will agree to purchase such Series of the Bonds on the effective date of that rate and as set forth in the Remarketing Agreement. The Delayed Remarketing Rate(s) applicable during the Initial Term Rate Period shall be set forth in the Bond Purchase Agreement. For any subsequent Term Rate Period, the Delayed Remarketing Rate(s) to be in effect during a Delayed Remarketing Period shall be set forth in the Remarketing Agreement or an amendment thereto. For any Term Rate Period, the Delayed Remarketing Rate(s) shall be determined on a Business Day no later than the first day of such Term Rate Period and shall remain in effect throughout such period. The Fixed Rate shall remain in effect until the Maturity Date for such Series or Subseries of Bonds in the Fixed Mode.
- (4) <u>Determination of Index Floating Rate</u>. Each Series or Subseries of the Bonds for which an Index Floating Rate Period has been selected shall bear interest at the Index Floating Rate, determined as follows:
- (A) Index Floating Rate Periods. The Index Floating Rate for any Index Floating Rate Period shall be determined by the Remarketing Agent after consultation with and approval by the Authorized Representative of the University on the first Interest Determination Date for such Index Floating Rate Period, in accordance with the following:
  - (i) The Index and the term of the Index Rate Floating Rate Period shall be selected by the Authorized Representative of the University. The Index Floating Rate shall be the sum of (i) the Index multiplied by the Index Floating Rate Percentage, plus (ii) the Index Floating Rate Spread.
  - (ii) The Index Floating Rate Percentage shall be selected by the Authorized Representative of the University in connection with each Index Floating Rate Period (and if not so selected, shall be equal to 100%) and shall remain in effect throughout such period.

- (iii) The Index Floating Rate Spread shall be determined on or prior to the first Interest Determination Date with respect to an Index Floating Rate Period and shall remain in effect throughout such period. The Index Floating Rate Spread shall be the spread to such index determined by the Remarketing Agent (based on an examination of tax-exempt obligations comparable, in the judgment of the Remarketing Agent and known by the Remarketing Agent to have been priced or traded under then-prevailing market conditions) to be the minimum spread which, when added to the Index (multiplied by the Index Floating Rate Percentage), equals the interest rate at which, if borne by such Series of the Bonds, the Remarketing Agent will agree to purchase such Series of the Bonds on the effective date of that rate and as set forth in the Remarketing Agreement at a price equal to the principal amount thereof.
- (B) Calculation of Index Floating Rate Reset on Interest Determination Dates. The first Index Floating Rate for any Index Floating Rate Period shall be in effect for the period commencing on the first day of such Index Floating Rate Period to but excluding the first Interest Reset Date of such Index Floating Rate Period. With respect to each Interest Reset Date, the Index Floating Rate shall be calculated by the Remarketing Agent on each Interest Determination Date, and such Index Floating Rate shall be in effect for the period commencing on each Interest Reset Date to but excluding the following Interest Reset Date.
- (C) Delayed Remarketing Period; Delayed Remarketing Rate. The Delayed Remarketing Rate(s) applicable during the Index Floating Rate Period, the Delayed Remarketing Rate(s) to be in effect during a Delayed Remarketing Period shall be set forth in the Remarketing Agreement. For any Index Floating Rate Period, the Delayed Remarketing Rate(s) shall be determined on or prior to the first Interest Determination Date for such Index Floating Rate Period and shall remain in effect throughout such period.
- (5) <u>Determination of Commercial Paper Rates</u>. Each Series or Subseries of the Bonds for which a Commercial Paper Rate Period has been selected shall bear interest at the Commercial Paper Rate, which shall be determined by the Remarketing Agent on a Business Day no later than the first day of such Commercial Paper Rate Period. The Commercial Paper Rate Period and the Commercial Paper Rate for each Bond need not be the same for any two Bonds, even if determined on the same date (and the University may designate Subseries as necessary to accommodate different Commercial Paper Rate Periods or Commercial Paper Rates). Each Commercial Paper Rate shall be for a period of days within the range or ranges announced as possible Commercial Paper Rates no later than 12:30 p.m. (New York Time) on the first day of each Commercial Paper Rate Period by the Remarketing Agent. The Commercial Paper Rate for each Bond in a Commercial Paper Rate Period shall be the rate of interest per annum determined by the Remarketing Agent to be the minimum interest rate which, if borne by such Bond, would enable the Remarketing Agent to sell such Bond on the effective date of such rate at a price (without regarding accrued interest) equal to the principal amount thereof.
- (b) **Determinations of Remarketing Agent Binding.** The Remarketing Agent shall provide prompt notice of each determination of the interest rate for each Series or Subseries of the Bonds to the University, Paying Agent, and Credit Provider (if any). The Paying Agent shall provide notice of such interest rate determination to the Registered Owner of any Bond upon request. Absent manifest

error, each such determination shall be conclusive and binding upon the University, the Paying Agent, the Credit Provider (if any) and the Owner of each Bond.

- (c) **Rounding Convention.** All percentages resulting from any calculation of any interest rate for any Series or Subseries of the Bonds shall be rounded upward to the second decimal place, unless otherwise provided during a Direct Purchase Period.
- (d) **Maximum Interest Rate; Excess Interest.** Notwithstanding any provision in this Exhibit B to the contrary, at no time shall any Series or Subseries of the Bonds bear interest at a rate higher than the Maximum Interest Rate.
- Section 5. Election of Interest Rate Periods. The Interest Rate Period for any Series of the Bonds may be adjusted pursuant to an Election by the Authorized Representative of the University, pursuant to this section, to effect a Conversion in accordance with Section 6 of this Exhibit B. The Interest Rate Period for a Series of the Bonds may not be adjusted except on a Purchase Date and except for a Conversion of all outstanding Bonds of such Series or Subseries.
- (a) **Available Modes.** Each Series of the Bonds shall bear interest in one of the following Modes: Daily Mode, Weekly Mode, Commercial Paper Mode, Index Floating Mode, Term Mode, or the Fixed Mode. All Bonds of a single Series must be in the same Mode.
- (1) Election of Daily Interest Rate Period. The Authorized Representative of the University, on behalf of the University may, from time to time, by written notice to the Paying Agent, Calculation Agent, Credit Provider (if any) and Remarketing Agent (if any), Elect that any Series or Subseries of the Bonds bear interest at a Daily Interest Rate. The notice of Election given by the Authorized Representative of the University shall (A) specify the proposed Conversion Date, which shall be (i) in each case, a Business Day not earlier than the 30th day following the second Business Day after receipt by the Paying Agent of such notice; (ii) in the case of a Conversion from a Commercial Paper Rate Period, the day following the last day of such Commercial Paper Rate Period or a day on which such Series or Subseries of the Bonds would otherwise be subject to optional redemption pursuant to Section 7(a) of this Exhibit B if such Conversion did not occur; and (iii) in the case of a Conversion from an Index Floating Rate Period or Term Rate Period, the day following the last day of such Index Floating Rate Period or Term Rate Period or on or after a Par Call Date; and (B) state whether a Credit Facility is to be in effect on the Conversion Date.
- (2) <u>Election of Weekly Interest Rate Period</u>. The Authorized Representative of the University, on behalf of the University, may, from time to time, by written notice to the Paying Agent, Calculation Agent, Credit Provider (if any), and Remarketing Agent (if any), Elect that any Series or Subseries of the Bonds bear interest at a Weekly Interest Rate. The notice of Election given by the Authorized Representative of the University shall (A) specify the proposed Conversion Date, which shall be (i) in each case, a Business Day not earlier than the 30th day following the second Business Day after receipt by the Paying Agent of such notice; (ii) in the case of a Conversion from a Commercial Paper Rate Period, the day following the last day of such Commercial Paper Rate Period or a day on which that Series of the Bonds would otherwise be subject to optional redemption pursuant to Section 7(a) of this Exhibit B if such Conversion did not occur; and (iii) in the case of a Conversion from an Index Floating Rate Period or Term Rate Period, the day following the last day of such Index Floating Rate Period or Term Rate Period, the day following the last day of such Index Floating Rate Period or Term Rate Period or on or after a Par Call Date; and (B) state whether a Credit Facility is to be in effect on the Conversion Date.

- (3) <u>Election of Term Rate Period or Fixed Rate Period</u>. The Authorized Representative of the University, on behalf of the University may by written notice to the Paying Agent, Calculation Agent, Credit Provider (if any) and Remarketing Agent (if any), Elect that any Series or Subseries of the Bonds bear, or continue to bear, interest at the Term Rate or bear interest at the Fixed Rate. The notice of Election given by the Authorized Representative of the University shall (A) specify the proposed Conversion Date, which shall be (i) in each case, a Business Day not earlier than the 30th day following the second Business Day after receipt by the Paying Agent of such notice; (ii) in the case of a Conversion from a Commercial Paper Rate Period, the day following the last day of such Commercial Paper Rate Period or a day on which such Series of the Bonds would otherwise be subject to optional redemption pursuant to Section 7(a) of this Exhibit B if such Conversion did not occur; and (iii) in the case of a Conversion from an Index Floating Rate Period or another Term Rate Period, the day following the last day of such Index Floating Rate or Term Rate Period or on or after a Par Call Date; (B) the last day of the Term Rate Period for Bonds in the Term Mode, which shall be either the day prior to the Maturity Date or a day that both immediately precedes a Business Day and is at least 181 days after the proposed Conversion Date; and (C) whether some or all of the Bonds to be converted shall be converted to Serial Bonds and, if so, the applicable serial maturity dates and serial payments.
- (4) Election of Index Floating Rate Period. The Authorized Representative of the University, on behalf of the University may, from time to time, by written notice to the Paying Agent, Calculation Agent, Credit Provider (if any) and Remarketing Agent (if any), Elect that any Series or Subseries of the Bonds bear, or continue to bear, interest at an Index Floating Rate. The notice of Election given by the Authorized Representative of the University shall (A) specify the proposed Conversion Date, which shall be (i) in each case, a Business Day not earlier than the 30th day following the second Business Day after receipt by the Paying Agent of such notice; (ii) in the case of a Conversion from a Commercial Paper Rate Period, the day following the last day of such Commercial Paper Rate Period or a day on which such Series of the Bonds would otherwise be subject to optional redemption pursuant to Section 7(a) of this Exhibit B if such Conversion did not occur; (iii) in the case of a Conversion from an Index Floating Rate Period or Term Rate Period, the day following the last day of such Index Floating Rate Period or Term Rate Period or on or after a Par Call Date (iv) and, if applicable, the day specified pursuant to a Direct Purchase Agreement then in effect; (B) the date on which the Index Floating Rate Period is to end (which date shall be a Scheduled Mandatory Purchase Date) or, if applicable, a statement that the Index Floating Rate Period is to end on the day prior to the Maturity Date; (C) the Index that is to be in effect, the Index Floating Rate Percentage (if other than 100%); and (D) the Par Call Date for such Index Floating Rate Period.
- (5) Election of Commercial Paper Rate Period. The Authorized Representative of the University, on behalf of the University may, from time to time, by written notice to the Paying Agent, Calculation Agent, Credit Provider (if any) and Remarketing Agent (if any), Elect that any Series or Subseries of the Bonds bear, or continue to bear, interest at a Commercial Paper Rate. The notice of Election given by the Authorized Representative of the University shall (A) specify the proposed Conversion Date, which shall be (i) in each case, a Business Day not earlier than the 30th day following the second Business Day after receipt by the Paying Agent of such notice; (ii) in the case of a Conversion from another Commercial Paper Rate Period, the day following the last day of such Commercial Paper Rate Period or a day on which such Series of the Bonds would otherwise be subject to optional redemption pursuant to Section 7(a) of this Exhibit B if such Conversion did not occur; (iii) in the case of a Conversion from an Index Floating Rate Period or Term Rate Period, the

day following the last day of such Index Floating Rate Period or Term Rate Period or on or after a Par Call Date and (iv) if applicable, the day specified pursuant to a Direct Purchase Agreement then in effect; (B) the date on which the Commercial Paper Rate Period is to end; and (C) state whether a Credit Facility is to be in effect on the Conversion Date.

- (b) Rescission of Election to Effect a Conversion. The Authorized Representative of the University may rescind any Election to effect a Conversion by delivering to the Paying Agent, Calculation Agent, Credit Provider (if any) and Remarketing Agent (if any), on or prior to 10:00 a.m., New York time, on the second Business Day preceding a proposed Conversion Date, a notice to the effect that the University has determined to rescind its Election to effect such Conversion. If the University rescinds its Election to effect a Conversion of a Series of the Bonds, then such Series shall bear interest as follows: (1) if a Daily Interest Rate Period is in effect immediately prior to the proposed Conversion, such Series shall continue to bear interest at the Daily Interest Rate; (2) if a Weekly Interest Rate Period is in effect immediately prior to the proposed Conversion, such Series shall bear interest at a Weekly Interest Rate commencing on the proposed Conversion Date; (3) if an Index Floating Rate Period or Term Rate Period such Series shall continue to bear interest at the applicable Index Floating Rate or Term Rate, or (4) if a Direct Purchase Period is in effect immediately prior to the proposed Conversion, the effect of a rescission shall be that the Bonds remain outstanding under and subject to the terms of such Direct Purchase Agreement. Unless otherwise provided in a Direct Purchase Agreement then in effect, if notice of a Conversion of a Series of the Bonds to an Index Floating Rate Period has been mailed to the Registered Owner(s) of such Series of the Bonds as provided in Section 6(d), and the University subsequently rescinds its Election to effect such Conversion, such Series of the Bonds shall nevertheless be subject to mandatory tender for purchase on the proposed Conversion Date.
- (c) **Provisions Applicable to Direct Rate Periods.** In connection with any Election to effect a Conversion of a Series or Subseries to a Direct Purchase Period or to amend, extend or renew a Direct Purchase Agreement then in effect, the Authorized Representative of the University, on behalf of the University may negotiate, execute and deliver a Direct Purchase Agreement (or an agreement amending, renewing, extending, restating or otherwise modifying a Direct Purchase Agreement then in effect) on behalf of the University, consistent with the Bond Documents, in such form as shall be approved by the Authorized Representative of the University.
- Section 6. Conversion of Interest Rate Periods. The Paying Agent shall provide notice of the University's Election to effect a conversion of a Series or Subseries of the Bonds to a new Mode, not less than 20 days prior to the proposed Conversion Date, as directed in writing by the University. At the direction of the Authorized Representative of the University and in his or her sole discretion, the notice of Conversion may be combined with the notice of mandatory tender by inclusion of the information required under Section 8(c) of this Exhibit B. The notice to be provided to the Registered Owner(s) of the affected Series or Subseries of the Bonds (at their addresses as they appear on the Bond Register as of the date of such notice) must state, if applicable, that the Beneficial Owners may not elect to retain ownership of the Bonds, and must provide the following information:
- (a) Notice of Conversion to Daily Interest Rate Period. In connection with a Conversion to a Daily Interest Rate Period pursuant to Section 5(a)(1) of this Exhibit B, the notice of the Paying Agent must state: (1) that the interest rate will be converted to a Daily Interest Rate unless the University rescinds its Election pursuant to Section 5(b) of this Exhibit B; (2) the proposed Conversion Date; (3) that such Series or Subseries shall be subject to mandatory tender for purchase

on the proposed Conversion Date after the giving of a notice of mandatory tender pursuant to Section 8(c) of this Exhibit B; (4) the Purchase Price; and (5) the place of delivery for purchase of such Series or Subseries of the Bonds.

- (b) **Notice of Conversion to Weekly Interest Rate Period.** In connection with a Conversion to a Weekly Interest Rate Period pursuant to Section 5(a)(2) of this Exhibit B, the notice of the Paying Agent must state: (1) that the interest rate will be converted to a Weekly Interest Rate unless the University rescinds its Election pursuant to Section 5(b) of this Exhibit B; (2) the proposed Conversion Date; (3) that such Series or Subseries shall be subject to mandatory tender for purchase on the proposed Conversion Date; (4) the Purchase Price; and (5) the place of delivery for purchase of such Series or Subseries of the Bonds.
- (c) **Notice of Conversion to Term Rate Period.** In connection with a Conversion to a Term Rate Period pursuant to Section 5(a)(3) of this Exhibit B, the notice of the Paying Agent must state: (1) that the interest rate will be converted to, or continue to be, the Term Rate unless either (A) the University rescinds its Election pursuant to Section 5(b) of this Exhibit B, or (B) all of such Series of the Bonds is not remarketed on the proposed Conversion Date; (2) the proposed Conversion Date; (3) the last day of the new Term Rate Period (or, if applicable, that the Term Rate Period is to end on the day prior to the Maturity Date); (4) that such Series shall be subject to mandatory tender for purchase on the proposed Conversion Date; (5) the Purchase Price; and (6) the place of delivery for purchase of such Series of the Bonds.
- (d) Notice of Conversion to Fixed Rate Period. In connection with a Conversion to a Fixed Rate Period pursuant to Section 5(a)(3) of this Exhibit B, the notice of the Paying Agent must state: (1) that the interest rate will be converted to the Fixed Rate unless either (A) the University rescinds its Election pursuant to Section 5(b) of this Exhibit B, or (B) all of such Series or Subseries of the Bonds is not remarketed on the proposed Conversion Date; (2) the proposed Conversion Date; (3) that the Fixed Rate Period is to end on the day prior to the Maturity Date; (4) that such Series or Subseries shall be subject to mandatory tender for purchase on the proposed Conversion Date; (5) the Purchase Price; and (6) the place of delivery for purchase of such Series or Subseries of the Bonds.
- (e) Notice of Conversion to Index Floating Rate Period. In connection with a Conversion to an Index Floating Rate Period pursuant to Section 5(a)(4) of this Exhibit B, the notice of the Paying Agent must state: (1) that the interest rate will be converted to, or continue to be, an Index Floating Rate, unless the University rescinds its Election pursuant to Section 5(b) of this Exhibit B; (2) the proposed Conversion Date; (3) the last day of the new Index Floating Rate Period (or, if applicable, that the Index Floating Rate Period is to end on the day prior to the Maturity Date); (4) that such Series of the Bonds shall be subject to mandatory tender for purchase on the proposed Conversion Date; (5) the Purchase Price; and (6) the place of delivery for purchase of such Series of the Bonds.
- (f) Notice of Conversion to Commercial Paper Rate Period. In connection with a Conversion to a Commercial Paper Rate Period pursuant to Section 5(a)(5) of this Exhibit B, the notice of the Paying Agent must state: (1) that the interest rate will be converted to, or continue to be, the Commercial Paper Rate unless the University rescinds its Election pursuant to Section 5(b) of this Exhibit B; (2) the proposed Conversion Date; (3) the last day of the new Commercial Paper Rate Period (or, if applicable, that the Commercial Paper Rate Period is to end on the day prior to the Maturity Date); (4) that such Series or Subseries shall be subject to mandatory tender for purchase on

the proposed Conversion Date; (5) the Purchase Price; and (6) the place of delivery for purchase of such Series or Subseries of the Bonds.

- (g) Certain Additional Conditions. No Conversion shall take effect unless each of the following conditions, to the extent applicable, has been satisfied and the Paying Agent may conclusively assume, without inquiry, investigation or notice to any other party, that each such condition has been satisfied in connection with any notice of Conversion it is instructed to provide under this Section 6:
- (1) If the notice of the Authorized Representative of the University's Election to convert indicates that a Credit Facility will be in effect during the subsequent Interest Rate Period, such Credit Facility must be in effect on the Conversion Date;
- (2) If a Direct Purchase Agreement or an agreement entered into in connection with a Credit Facility is in effect prior to the Conversion and requires consent of the Index Floating Rate Holder, Direct Purchaser or Credit Provider, such consent must have been obtained or waived as of the Conversion Date;
- (3) The University must obtain a Favorable Opinion of Bond Counsel with respect to such Conversion dated as of the Conversion Date; and
- (4) Except as provided in subsection (h) of this section with respect to Delayed Remarketing Bonds and as provided in subsection (i) of this section with respect to Unremarketed Bonds, the Paying Agent must have sufficient funds on hand from remarketing or refunding proceeds, proceeds of a draw on the Credit Facility or other funds made available by the University, to pay the Purchase Price of such Series or Subseries of the Bonds on the Conversion Date.
- (h) **Delayed Remarketing Bonds; Delayed Remarketing Period.** Bonds in an Index Floating Mode or Term Mode that are subject to a Delayed Remarketing Period as set forth in Section 8(f) of this Exhibit B shall be deemed to be Delayed Remarketing Bonds. Unless otherwise provided in a Direct Purchase Agreement applicable to such Bonds, each Delayed Remarketing Bond shall bear interest at the Delayed Remarketing Rate until such Bond ceases to be an Delayed Remarketing Bond. A Bond shall cease to be an Delayed Remarketing Bond only if such Delayed Remarketing Bond is remarketed and transferred, or such Delayed Remarketing Bond is redeemed in full.
- (i) **Unremarketed Bonds.** Unremarketed Bonds may become subject to Extraordinary Mandatory Redemption in accordance with a Direct Purchase Agreement then in effect.
- (j) **Bank Bonds**. Bonds (or any principal portion thereof) that become Bank Bonds as set forth in Section 9(d) shall bear interest at the Bank Rate until such Bonds are no longer Bank Bonds. Bank Bonds may become subject to Extraordinary Mandatory Redemption in accordance with a Reimbursement Agreement, or other agreement relating to the applicable Credit Facility.

### **Section 7. Redemption and Payment of Bonds.**

- (a) **Optional Redemption.** The Resolution provides that any notice for redemption may be conditional, in which case the conditions shall be set forth therein. The University may make such redemption conditioned upon the occurrence of any specified event or events, including the deposit of funds, and if such event or events shall not occur, then the University may cancel such redemption by delivering a written notice of rescission to the Registrar rescinding such notice of redemption not later than 5:00 p.m. Pacific Time on the second business day prior to the redemption date and such notice of redemption and redemption shall be rescinded, cancelled and of no force of effect. Upon such receipt of the rescission notice from the University, the Registrar shall send a copy of the Notice to the Owners of the 2018/2019 Bonds subject to the notice in the same manner as the notice of redemption was given.
- (1) Weekly or Daily Interest Rate Period. During a Daily Interest Rate Period or a Weekly Interest Rate Period, each Series or Subseries of the Bonds then in a Daily Interest Rate or Weekly Interest Rate Period shall be subject to optional redemption at the written direction of the Authorized Representative of the University on any Business Day, in whole or in part, at a redemption price of 100% of the principal amount thereof plus interest, if any, accrued to the date fixed for redemption.
- (2) <u>Commercial Paper Rate Period</u>. During a Commercial Paper Rate Period, each Series or Subseries of the Bonds then in a Commercial Paper Rate Period shall not be subject to optional redemption.
- (3) <u>Fixed Rate Period</u>. During a Fixed Rate Period, each Series or Subseries of the Bonds then in a Fixed Rate Period shall be subject to optional redemption at the written direction of the Authorized Representative of the University on any day during the periods specified below in whole or in part, at the redemption prices (expressed as a percentage of principal amount) specified in the schedule of redemption prices set forth below (plus interest, if any, accrued to the date fixed for redemption):

Length to End of Interest Rate Period (years)	Redemption Prices
Greater than 10	after 10 years at 100%
Less than or equal to 10	after eight years at 101%, declining by 0.5% every year to 100%

The Authorized Representative of the University may select an alternate schedule of redemption prices by delivery to the Paying Agent, prior to the Conversion Date of (A) a certificate of the Authorized Representative of the University or other agreement setting forth the alternate schedule of redemption prices to apply during such Fixed Rate Period, and (B) a Favorable Opinion of Bond Counsel.

If the Conversion Date for a Series or Subseries of the Bonds converted to a Fixed Rate is other than a day that would be an Interest Payment Date during such Fixed Rate Period, then the date on which such Series or Subseries is first subject to redemption pursuant to the foregoing table (after the first day of such Fixed Rate Period) shall be the first Interest Payment Date succeeding the date

on which such Series or Subseries otherwise would be subject to redemption, and the redemption price shall be adjusted on each anniversary of that Interest Payment Date as provided in such table.

- (4) <u>Index Floating Rate Period or Term Rate Period</u>. During an Index Floating Rate Period or Term Rate Period, each Series or Subseries of the Bonds then in an Index Floating Rate Period or Term Rate Period, as applicable, shall be subject to optional redemption at the written direction of the Authorized Representative of the University on any Business Date on or after any Par Call Date, in whole or in part, at a redemption price of 100% of the principal amount thereof plus interest, if any, accrued to the date fixed for redemption.
- (5) <u>During Delayed Remarketing Period</u>. Delayed Remarketing Bonds in a Delayed Remarketing Period are subject to optional redemption upon the written direction of the Authorized Representative of the University, on any Business Day, in whole or in part, at a redemption price of 100% of the principal amount thereof plus interest, if any, accrued to the date fixed for redemption.
- (b) Mandatory Sinking Fund Redemption. Each Series or Subseries of the Bonds designated as Term Bonds shall, if not redeemed or purchased at the University's option prior to the Maturity Date, be redeemed at a price equal to the principal amount thereof to be redeemed plus accrued interest, on the dates in each of the years and the Sinking Fund Requirements set forth in Exhibit A to the Paying Agent Agreement (or the Remarketing Agreement or Direct Purchase Agreement, as applicable).
- (c) Extraordinary Mandatory Sinking Fund Redemption. In the case of a Series or Subseries that is subject to a Direct Purchase Agreement or Credit Facility with a Term-Out Provision, Unremarketed Bonds may be subject to Extraordinary Mandatory Redemption during the Term-Out Period in the amounts, on the dates and in the manner as set forth in the University's written direction to the Paying Agent, which direction shall be consistent with the Term-Out Provision of the applicable Direct Purchase Agreement or Credit Facility.

### Section 8. Optional and Mandatory Tender and Purchase.

- (a) **Optional Tender for Purchase.** During any Weekly Interest Rate Period or Daily Interest Rate Period, the Bonds shall be subject to tender for purchase at the option of the Registered Owner (or Beneficial Owner, if such Series or Subseries of the Bonds is held in Book Entry Form) as set forth below, and if tendered in accordance with this subsection (a), shall be payable as set forth in subsection (e).
- (1) <u>Daily Interest Rate Period</u>. Bonds of a Series or Subseries that is in a Daily Interest Rate Period may be tendered for purchase in any Authorized Denomination (provided that the amount of such Series that is not tendered for purchase must also be in an Authorized Denomination) upon delivery by a Registered Owner of such Bonds to the Paying Agent and Remarketing Agent by no later than 11:00 a.m., New York time, on any Business Day, of an irrevocable written notice (or an irrevocable telephonic notice, promptly confirmed by email or other written notice), which states (A) the principal amount of such Bonds to be purchased and (B) the Purchase Date, which may be any succeeding Business Day. Any such notice delivered to the Paying Agent after 11:00 a.m., New York time, shall be deemed to have been received on the succeeding Business Day. If the Bonds so tendered for purchase are not registered in the name of the Securities Depository, the Registered Owner must deliver the Bonds to the Paying Agent at its designated office for delivery of Bonds at or

prior to 12:00 noon, New York time, on the Purchase Date, accompanied by an instrument of transfer in form satisfactory to the Paying Agent.

- (2) Weekly Interest Rate Period. Bonds of a Series or Subseries that is in a Weekly Interest Rate Period may be tendered for purchase in any Authorized Denomination (provided that the amount of such Series that is not tendered for purchase must also be in an Authorized Denomination) upon delivery by the Registered Owner to the Paying Agent and to the Remarketing Agent of an irrevocable written notice which states (A) the principal amount of such Bonds to be purchased and (B) the Purchase Date, which may be any Business Day not prior to the seventh day after the date of the delivery of such notice to the Paying Agent and the Remarketing Agent. Any such notice delivered to the Paying Agent after 4:00 p.m., New York time, shall be deemed to have been received on the succeeding Business Day. If the Bonds so tendered for purchase are not registered in the name of the Securities Depository, the Registered Owner shall deliver the Bonds to the Paying Agent at its designated office for delivery of Bonds at or prior to 10:00 a.m., New York time, on the Purchase Date, accompanied by an instrument of transfer in form satisfactory to the Paying Agent.
- (3) <u>Irrevocable Notice Deemed to be Tender of Bonds</u>. The giving of notice of optional tender for purchase by a Registered Owner or Participant as provided in this subsection (a) shall constitute the irrevocable tender for purchase of those Bonds with respect to which such notice is given regardless of whether such Bonds are delivered to the Paying Agent for purchase on the applicable Purchase Date. If Bonds tendered for purchase are registered in the name of the Securities Depository, such tender is subject to confirmation by the Securities Depository to the Paying Agent that the Participant has the required Ownership interest in those Bonds.

### (b) Mandatory Tender for Purchase.

- (1) <u>Bonds Subject to Mandatory Tender</u>. Each Series or Subseries of the Bonds shall be subject to mandatory tender for purchase at the Purchase Price on the following Purchase Dates (without duplication):
  - (i) on any Scheduled Mandatory Purchase Date for a Series or Subseries of the Bonds;
  - (ii) on the first day of each Interest Rate Period (except if such new Interest Rate Period is the result of an extension or renewal of a Direct Purchase Agreement in connection with a Direct Purchase Period);
  - (iii) on each proposed Conversion Date for which notice of mandatory tender has been given to the Registered Owner(s) pursuant to subsection (c) of this section;
  - (iv) on each proposed redemption date on or after the Par Call Date for which notice of mandatory tender has been given to the Registered Owner(s) pursuant to subsection (c) of this section;
  - (v) during any Interest Rate Period in which the Series or Subseries is subject to a Credit Facility, in the event that such Series or Subseries ceases to be subject to that Credit Facility, as set forth in subsection (b)(2) of this section;

- (vi) at any time during a Delayed Remarketing Period, upon notice given by the Remarketing Agent to the Paying Agent in accordance with Section 11 of this Exhibit B of a successful remarketing and the availability of funds sufficient to pay the Purchase Price for all such Bonds (in Authorized Denominations), without regard to any notice requirements set forth in subsection (c) of this section; and
- (vii) during any Direct Purchase Period, as specified in a Direct Purchase Agreement then in effect.
- (2) Mandatory Tender of Bonds Upon Expiration or Termination of Credit Facility. In addition, each Series or Subseries of the Bonds with respect to which a Credit Facility is then in effect shall be subject to mandatory tender for purchase if at any time the Paying Agent receives notice that such Series or Subseries will cease to be subject to purchase pursuant to such Credit Facility as a result of (A) the termination, replacement or expiration of such Credit Facility (including termination at the option of the University in accordance with the terms of any Reimbursement Agreement or upon an event of default under the Reimbursement Agreement), or (B) a Conversion. The Purchase Date for such mandatory tender shall be determined by the University as (A) the fifth Business Day preceding any such expiration or termination of such Credit Facility (if no Alternate Credit Facility is to be delivered to the Paying Agent), (B) the Business Day on which such Alternate Credit Facility is delivered to the Paying Agent, or (C) the Conversion Date.
- (c) **Notice of Mandatory Tender for Purchase.** In connection with any mandatory tender for purchase of a Series or Subseries of the Bonds pursuant to subsection (b) of this section, the Paying Agent shall be directed by the University in writing to give notice to the Registered Owner(s) of the affected Bonds (at their addresses as they appear on the Bond Register as of the date of such notice) not less than 20 days prior to the Purchase Date. A notice of mandatory tender must contain the following information (and may, at the direction of the Authorized Representative of the University and in his or her sole discretion, be combined with a notice of Conversion delivered to the Registered Owner(s) under Section 6):
- (1) Each notice shall state that if the Purchase Price is provided to the Paying Agent from remarketing or refunding proceeds, proceeds of a draw on the Credit Facility or other funds made available by the University, such Series will be purchased on the Purchase Date, and, in the case of an Index Floating Rate Period or Term Rate Period, the Bonds not purchased will be subject to a Delayed Remarketing Period and will bear interest at the Delayed Remarketing Rate as set forth in subsection (f) of this section; and
- (2) In the case of a mandatory tender for purchase pursuant to subsection (b)(1), the notice shall state (A) the Purchase Date, and (B) if in conjunction with a Conversion, the type of Interest Rate Period to which such Series or Subseries will be converted on the Purchase Date;
- (3) In the case of a mandatory tender for purchase pursuant to subsection (b)(2), the notice shall state (A) that the Credit Facility will expire, terminate or be replaced, (B) that after the Purchase Date, such Series or Subseries will no longer be purchased pursuant to the Credit Facility then in effect, and (C) that the short-term ratings applicable to such Series may be lowered or withdrawn; and
- (4) In the case of a Series or Subseries that is not in Book-Entry Form, the notice shall state that (A) the Purchase Price will be payable only upon surrender of such Bonds to the Paying

Agent at its designated office for delivery of Bonds, accompanied by an instrument of transfer, in form satisfactory to the Paying Agent, executed in blank by the Registered Owner or its duly authorized representative, with such signature guaranteed by a commercial bank, trust company or member firm of the New York Stock Exchange, and (B) if the Registered Owner of any such Bond does not surrender that Bond to the Paying Agent for purchase on the Purchase Date, then that Bond shall be deemed to be an Undelivered Bond, no interest shall accrue on such Bond on and after the Purchase Date and the Registered Owner shall have no rights under the Bond Documents other than to receive payment of the Purchase Price for such Undelivered Bond.

- (d) Delivery of Bonds Subject to Mandatory Tender; Undelivered Bonds. Payment of the Purchase Price of a Series or Subseries subject to mandatory tender for which a notice has been given in accordance with subsection (c) shall be as set forth in subsection (e), below. Bonds to be so purchased that are not registered in the name of the Securities Depository must be delivered at or prior to 10:00 a.m., New York time, on the Purchase Date to the Paying Agent at its designated office for delivery of Bonds, accompanied by an instrument of transfer in form satisfactory to the Paying Agent and satisfying the conditions set forth in the notice of mandatory tender. If the Registered Owner of a Bond subject to mandatory tender for purchase that is not registered in the name of the Securities Depository fails to deliver its Bond to the Paying Agent at the place and on the Purchase Date and by the time specified, or fails to deliver its Bond properly endorsed, such Bond shall constitute an Undelivered Bond. If funds in the amount of the Purchase Price of an Undelivered Bond are available for payment to the Registered Owner thereof on the Purchase Date at the time specified, then from and after the Purchase Date and time of that required delivery (1) the Undelivered Bond shall be deemed to be purchased and shall no longer be deemed to be outstanding under the Bond Documents; (2) interest shall no longer accrue on the Undelivered Bond; and (3) funds in the amount of the Purchase Price of the Undelivered Bond shall be held uninvested and without liability for interest by the Paying Agent for the benefit of the Registered Owner thereof, to be paid on delivery (and proper endorsement) of the Undelivered Bond to the Paying Agent at its designated office for delivery of Bonds.
- (e) Payment of Purchase Price. Bonds tendered for purchase under subsection (a) or (b) of this section shall be purchased on the Purchase Date specified in the applicable notice by payment of the Purchase Price made by the Paying Agent, from the sources specified in this subsection, payable in immediately available funds to the Registered Owner (and not to any Participant), by 3:00 p.m., New York time, on the Purchase Date, or as soon as practicable thereafter upon the receipt by the Paying Agent of the Purchase Price in the Bond Purchase Fund as set forth in Section 12. The Purchase Price of any Bonds to be purchased on any Purchase Date shall be made from the following sources in the following order of priority as directed by the University in writing: (1) proceeds of the remarketing of such Bonds; (2) proceeds of refunding bonds issued by the University; (3) proceeds of a draw on the Credit Facility; and (4) other funds made available by the University (which may include General Revenues, to the extent legally available for such purpose consistent with the Bond Documents).
- (f) Failure to Pay Purchase Price of Bonds in Index Floating Rate Period or Term Rate Period; Delayed Remarketing Bonds. During any Index Floating Rate Period or any Term Rate Period, if the entire Purchase Price for any Series or Subseries of the Bonds subject to mandatory tender for purchase under subsection (b)(1) of this section cannot be paid on the applicable Purchase Date, then the Bonds of such Series or Subseries shall not be purchased and shall become Delayed Remarketing Bonds or Unremarketed Bonds, subject to the following:

- (1) <u>Delayed Remarketing Period No Direct Purchase Agreement in Effect.</u> With respect to Delayed Remarketing Bonds for which no Direct Purchase Agreement is in effect, a Delayed Remarketing Period will commence on the Purchase Date with respect to the Bonds for which funds were insufficient to pay the entire Purchase Price. During a Delayed Remarketing Period, the following will apply: (A) the Delayed Remarketing Bonds will bear interest at the Delayed Remarketing Rate; (B) interest shall continue to be due and payable on each Interest Payment Date and also shall be payable on the last day of the Delayed Remarketing Period for the Delayed Remarketing Bonds; (C) the Remarketing Agent (if any) will continue to be obligated to remarket the applicable Bonds; (D) the Delayed Remarketing Bonds will continue to be subject to optional redemption by the University as described in Section 7; (E) the Authorized Representative of the University on behalf of the University, by notice to the Paying Agent and the Remarketing Agent, may Elect to effect a Conversion of the Delayed Remarketing Bonds as described in Sections 5 and 6; and (F) if and when the Delayed Remarketing Bonds are successfully remarketed as described in Section 11, the Registered Owner(s) of the Delayed Remarketing Bonds will be obligated to tender their Bonds to the Paying Agent for purchase.
- (2) <u>Delayed Remarketing Period When Direct Purchase Agreement in Effect</u>. If a Direct Purchase Agreement is then in effect for such Series or Subseries, then the Unremarketed Bonds shall remain subject to the provisions of the Direct Purchase Agreement then in effect, which may include Extraordinary Mandatory Redemption of such Unremarketed Bonds in the amounts and on the dates as set forth in a Term-Out Provision (if any) if the failure to purchase the Unremarketed Bonds occurred on a Mandatory Tender Date. To the extent not inconsistent with the Direct Purchase Agreement then in effect, Unremarketed Bonds will continue to be subject to optional redemption by the University pursuant to Section 7 of this Exhibit B and the Authorized Representative of the University may Elect to effect a Conversion pursuant to Sections 5 and 6 of this Exhibit B.

### Section 9. Credit Facility; Bank Bonds.

- (a) **Draws on a Credit Facility.** If any portion of the principal, Purchase Price or interest on the Bonds shall become due for payment but shall be unpaid by reason of the University's failure to timely deposit sufficient funds with the Paying Agent, the University hereby requests the Paying Agent to process a draw on the Credit Facility on the University's behalf for such amounts by delivering to the Credit Provider a draw request substantially in the form provided by the University to the Paying Agent; provided, however, that the University acknowledges the Paying Agent agrees to process such draw solely as an accommodation to the University and that the University shall remain solely responsible for ensuring that funds equal to the unpaid principal of and interest on the Bonds are timely deposited and under no circumstance will the Paying Agent be responsible to the University for the failure of such timely deposit either by the University or the Credit Provider, whether due to the Paying Agent 's failure to properly or timely process such draw or for any other reason except to the extent that such failure is directly caused by the Paying Agent.
- (b) **Delivery of Credit Facility.** If at any time there are delivered to the Paying Agent (1) a Credit Facility, together with written draw instructions (2) confirmation from the University that it has received all required legal opinions and information (if any), and (3) all information required to give the notice of mandatory tender for purchase of a Series or Subseries, then the Paying Agent shall draw upon such Credit Facility as set forth in Section 9(a) and, after the date of the mandatory tender for purchase established pursuant to Section 8(b), promptly surrender any Credit Facility then in effect to the University thereof for cancellation in accordance with its terms.

- (c) **Notice of Termination.** The Paying Agent shall, pursuant to the University's written direction, give notice to the Remarketing Agent and the Registered Owner(s) of such Series or Subseries of the termination or expiration of any Credit Facility in accordance with its terms.
- (d) **Bank Bonds.** A Credit Facility may provide that a Bond that is purchased by the Paying Agent with amounts paid or provided by a Credit Provider under a Credit Facility shall become a Bank Bond and shall bear interest at the Bank Rate for each day from and including the day such Bank Bond becomes a Bank Bond to and excluding the day such Bank Bond ceases to be a Bank Bond or is paid in full. Interest on each Bank Bond shall be calculated and be payable on the dates and in the manner specified in the Credit Facility or Reimbursement Agreement (as the Paying Agent is directed in writing by the University). To the extent there are not remarketing proceeds or refunding bond proceeds available to pay a Bank Bond on any interest or principal payment date for those Bank Bonds, the University shall make such payment to the Paying Agent from the Parity Bond Fund. A Credit Facility or Reimbursement Agreement may include a Term-Out Provision applicable to Bank Bonds, providing for the Extraordinary Mandatory Redemption of such Bank Bonds in accordance with the Sinking Fund Requirements specified in the Credit Facility or Reimbursement Agreement.
- (e) Liability. The Paying Agent shall have no obligation to the Credit Provider and the Credit Provider shall have no rights against the Paying Agent under this Agreement or any such Credit Facility, Reimbursement Agreement or any related agreement.

**Remarketing Agent.** If the Authorized Representative of the University on Section 10. behalf of the University Elects to effect a Conversion of any Series or Subseries to a Daily Interest Rate Period, Weekly Interest Rate Period, Commercial Paper Period, Fixed Rate Period, Term Rate Period or an Index Floating Rate Period, the Authorized Representative of the University shall appoint and enter into a Remarketing Agreement with a Remarketing Agent to carry out the remarketing of such Series or Subseries on the Purchase Date. A Remarketing Agent appointed by the Authorized Representative of the University on behalf of the University shall designate its principal office in the Remarketing Agreement. The Remarketing Agent shall signify its acceptance of the duties and obligations imposed upon it under the Bond Documents by a written instrument of acceptance (which may be the Remarketing Agreement) delivered to the University, the Paying Agent and the Credit Provider (if any), under which the Remarketing Agent shall agree to keep such books and records related to the remarketing of such Series as is consistent with prudent industry practice and to make such books and records related to the remarketing of such Series or Subseries available for inspection by the University, the Paying Agent and the Credit Provider (if any), at all reasonable times.

To be eligible to serve as Remarketing Agent, an institution must have a combined capital stock, surplus and undivided profits of at least \$50,000,000, and be authorized by law to perform all the duties imposed upon it by the Bond Documents and the Remarketing Agreement. The Remarketing Agent must also be acceptable to the relevant Credit Provider (if any). A Remarketing Agent may at any time resign and be discharged of the duties and obligations created by this Exhibit B by giving notice to the University, Paying Agent and Credit Provider (if any). Such resignation shall take effect on the 30th day after the receipt by the University of the notice of resignation. A Remarketing Agent may be removed at any time on 15 days prior written notice, by an instrument signed by the Authorized Representative of the University, approved by the Credit Provider (if any), and delivered to the Remarketing Agent, Paying Agent and Credit Provider (if any).

### **Section 11.** Remarketing of Bonds; Notice of Interest Rates.

- (a) **Remarketing.** Upon a mandatory tender for purchase of a Series or Subseries as required by Section 8(b) or notice of optional tender for purchase of a Series or Subseries under Section 8(a), the Remarketing Agent shall offer for sale and use its best efforts to sell such Bonds on the Purchase Date and, if not remarketed on the Purchase Date, thereafter until sold, at the Purchase Price.
- (b) **Notice of Purchase and Remarketing.** The Remarketing Agent shall give notice to the Paying Agent and the University by facsimile transmission, telephone, e-mail or similar electronic means promptly confirmed by a written notice, in no event later than 9:30 a.m., New York time, on each Purchase Date on which Bonds are purchased pursuant to a tender for purchase under Section 8, specifying the principal amount of such Bonds successfully remarketed. If such Bonds are not in Book-Entry Form, the Remarketing Agent shall also provide a list of the purchasers showing the names and Authorized Denominations in which such Bonds are to be registered and the addresses and taxpayer identification numbers of such purchasers.
- (c) **During a Delayed Remarketing Period.** During a Delayed Remarketing Period, in accordance with Section 8(f) of this Exhibit B, the Registered Owner(s) of Delayed Remarketing Bonds and Unremarketed Bonds will be obligated to tender their Bonds to the Paying Agent for purchase upon notice given as set forth in subsection (b) of this section, on any date on which any of the Delayed Remarketing Bonds or Unremarketed Bonds, as applicable, have been successfully remarketed, on any redemption date including any Par Call Date or any Conversion Date.
- Section 12. Bond Purchase Fund. In conjunction with any remarketing, the Paying Agent agrees to establish and maintain on behalf of the University a separate fund to be designated the "Bond Purchase Fund." The Paying Agent further agrees to establish within the Bond Purchase Fund a separate account to be designated the "Remarketing Account" and, if a Credit Facility is delivered in connection with a Conversion, a separate account to be designated the "Credit Facility Purchase Account" as follows:
- (b) **Remarketing Account.** Upon receipt of the proceeds of a remarketing of a Series or Subseries of the Bonds on a Purchase Date, the Paying Agent shall deposit such proceeds in the Remarketing Account of the Bond Purchase Fund for application to the Purchase Price of such Series or Subseries of the Bonds.
- (c) Credit Facility Purchase Account. Upon receipt from the Credit Provider of immediately available funds, the Paying Agent shall deposit such funds in the Credit Facility Purchase Account of the Bond Purchase Fund for application to the Purchase Price of such Bonds required to be purchased on a Purchase Date to the extent that the money on deposit in the Remarketing Account of the Bond Purchase Fund is not sufficient. Any amounts deposited in the Credit Facility Purchase Account and not needed on any Purchase Date for the payment of the Purchase Price for any Bonds shall be promptly returned to the Credit Provider. Any amounts in the Credit Facility Purchase Account shall be used only to purchase such Bonds.
- (d) **Other University Funds.** Amounts contributed by the University to the Purchase Price as provided in Section 8(e) shall be transferred to the Paying Agent and deposited into the Remarketing Account for use in accordance with subsection (a) of this section.

Section 13. <u>Time</u>. Time is of the essence of every provision herein contained. In the computation of any period of time provided for in this Exhibit B or by law, the day of the act or event from which said period of time runs shall be excluded, and the last day of such period shall be included, unless it is not a Business Day, in which case the period shall be deemed to run until 5:00 p.m. (New York Time) of the next day that is a Business Day. Except as otherwise expressly provided herein, all time periods expiring on a specified date or period herein shall be deemed to expire at 5:00 p.m. (New York Time) on such specified date or period.

Section 14. Amendments. The Agreement, including without limitation, this Exhibit B may be amended as to any Series or Subseries of Bonds on any Mandatory Purchase Date for such Series or Subseries, as applicable, by written instrument executed by the University and the Paying Agent. The owners of such Series or Subseries of Bonds shall be deemed to have consented to any amendment proposed to become effective on the Mandatory Purchase Date for such Series or Subseries of Bonds.



### APPENDIX B

# AUDITED FINANCIAL STATEMENTS AND REQUIRED SUPPLEMENTAL INFORMATION OF THE UNIVERSITY (FISCAL YEAR ENDED JUNE 30, 2018)





Supplementary Information

June 30, 2018

(With Independent Auditors' Report Thereon)



KPMG LLP Suite 2900 1918 Eighth Avenue Seattle, WA 98101

### Independent Auditors' Report on Supplementary Information

The Board of Regents University of Washington:

We have audited the financial statements of the business-type activities and discretely presented component unit of the University of Washington (the University), an agency of the state of Washington, as of and for the year ended June 30, 2018, and have issued our report thereon dated October 19, 2018, which contained unmodified opinions on those financial statements that collectively comprise the University's basic financial statements. Our audit was performed for the purpose of forming opinions on the financial statements. We have not performed any procedures with respect to the audited financial statements subsequent to October 19, 2018.

The supplementary information included on pages 2 through 5 is presented for the purposes of additional analysis and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the basic financial statements as a whole.

This report is intended solely for the information and use of the Board of Regents and management of the University of Washington and rating agencies and bondholders who have previously received the financial statements of the University of Washington as of and for the year ended June 30, 2018, and our unmodified opinions thereon, for use in evaluating those financial statements, and is not intended to be, and should not be used for any other purpose.



October 19, 2018

### Reconciliation of Total University Revenue to General Revenue

Year ended June 30, 2018

(Dollars in thousands)

General revenue:	•	0.405.000
Total revenue	\$	6,425,908
Less:		
State appropriations		362,267
Grant and contract direct costs		1,196,554
Gifts		166,721
Revenues of component units		705,687
Student activities fees and U-Pass fees		44,907
Student technology fees, student building fees, and student loan funds		74,728
Trust and endowment income, net unrealized gains on noninvested funds		
investments, Metropolitan Tract net operating income, component unit		
investment income, and other restricted investment income		368,191
Capital appropriations		26,399
Capital grants, gifts and other		142,573
Other nonoperating revenues		4,749
Gifts to permanent endowments		95,890
Total general revenue	\$	3,237,242
General revenue components:		
Student tuition and fees (less student activities fees, U-Pass fees, technology fees,		
building fees, and loan funds)	\$	882,236
Grant and contract indirect costs		263,865
Invested funds distribution and net invested funds unrealized gains and		
losses (note 2)		36,221
Sales and services of educational departments		242,886
Patient services		1,331,023
Auxiliary systems		383,503
Other operating revenues		97,508
Total general revenue	\$	3,237,242

See accompanying notes to supplementary information.

## Reconciliation of Total University of Washington Unrestricted Net Position to General Net Position

June 30, 2018

(Dollars in thousands)

Total University unrestricted net position per financial statements \$	5	(1,237,656)
Less:		
Student and activities fees		25,625
Net position (deficit) of component units:		
Association of University Physicians		145,250
UW Neighborhood Clinics		(2,243)
Northwest Hospital		(53,077)
Real estate entities		(9,582)
Total to be excluded, net		105,973
General net position, including pensions and other post-employment		
benefits (OPEB)		(1,343,629)
Impact of GASB 68 – Pensions		706,142
Impact of GASB 75 – OPEB		1,763,597
General net position, excluding GASB 68 pensions and OPEB *	§	1,126,110

<sup>\*</sup> There are other noncash adjustments to Unrestricted Net Position not shown here

See accompanying notes to supplementary information.

Notes to Supplementary Information
June 30, 2018

### (1) Basis of Presentation

The General Revenue schedule presents the general income of the University of Washington (University) that is not restricted in its use by law, regulation, or contract. General Revenues, as defined in the bond agreements, are revenues pledged to bondholders under the University's General Revenue Bond platform. The supplementary information included herein reconciles total University revenue to General Revenue pledged to bondholders. For example, the following items are restricted and, therefore, excluded from General Revenues:

- a. Appropriations to the University by the state of Washington (state) from the state's General Fund;
- b. Revenues from gifts or grants restricted by the terms of the gift or grant either in writing or otherwise by the donor;
- c. Fees imposed upon students as a condition of enrollment at the University, including but not limited to services and activities fees, building fees, and technology fees; and
- d. Revenues and receipts attributable to the Metropolitan Tract Revenue, which are appropriated to the University by the state.

Unrestricted fund balances, to the extent that they were accumulated from money that was received as General Revenues, also are included and available to pay obligations secured by General Revenues. Any interest subsidy received from the federal government with respect to General Revenue Bonds is included and available to pay obligations secured by General Revenues.

As of June 30, 2018, Unrestricted Net Position reflects a deficit due to the implementation of GASB Statement No. 68, *Accounting and Financial Reporting for Pensions* during fiscal year 2015, and the implementation of GASB Statements No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions* (OPEB) during fiscal year 2018. These Statements require the University to record its proportionate share of the state of Washington's actuarially determined liabilities for pensions and OPEB. The University's Unrestricted Net Position, excluding the impacts of GASB 68 Pensions and OPEB, is reflected on the Reconciliation of Total University of Washington Unrestricted Net Position to General Net Position.

### (2) Invested Funds Distributions and Net Invested Funds Unrealized Gains and Losses

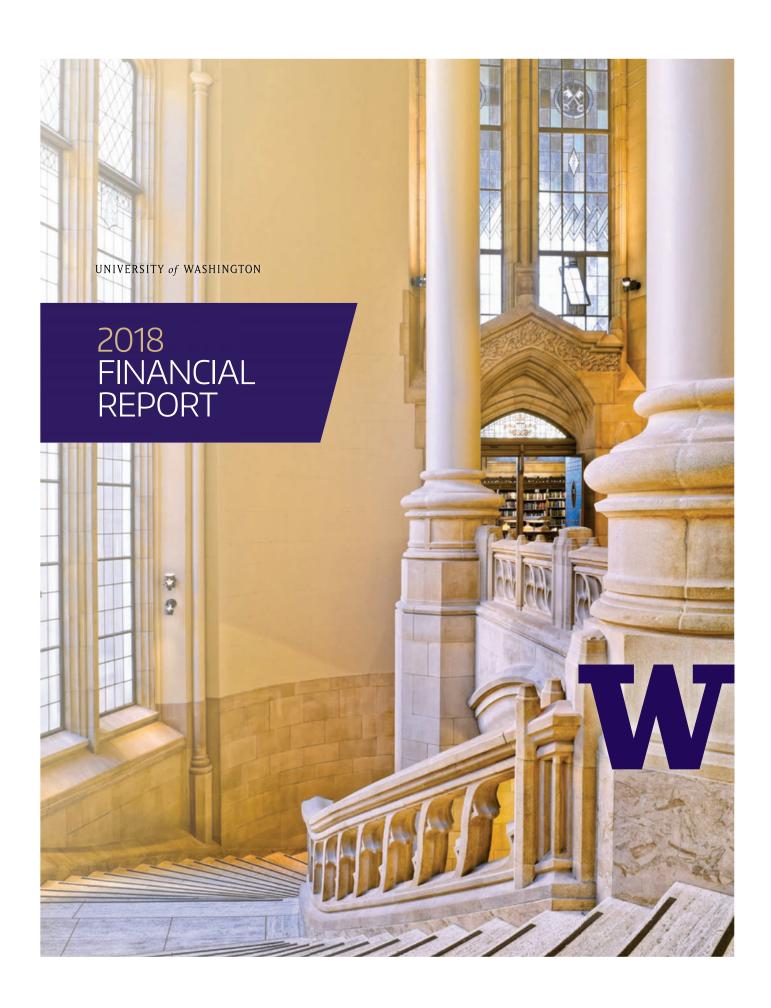
These amounts represent the net interest, dividends, and realized gains or losses earned on the Invested Funds that are distributed to departments for operations, in addition to or offset by any unrealized gains and losses on the portfolio.

4 (Continued)

Notes to Supplementary Information
June 30, 2018

### (3) Adoption of Governmental Accounting Standards Board (GASB) Statements

On July 1, 2017, the University adopted GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions (OPEB), which establishes new actuarial methods and discount rate standards for the measurement and recognition of the cost of postemployment benefits provided to the employees of state and local governmental employers. This Statement replaces the requirements of GASB Statement No. 45, Accounting and Financial Reporting by Employers for Postemployment Benefits Other than Pensions. As a result of implementing Statement No. 75, the University has recognized its proportionate share of the state of Washington's actuarially determined total OPEB liability, deferred inflows of resources and deferred outflows of resources, and OPEB expense. Prior to adopting this Statement the University's financial statements did not reflect any OPEB liability or associated deferred inflows or outflows, and reported OPEB expense based on cash contributions paid to the OPEB plan administrator. In addition to the reporting changes described above, implementation of this Statement resulted in the restatement of fiscal year 2018 beginning unrestricted net position, reducing it by \$1,660,447,000. The University's Statement of Net Position, Statement of Revenues, Expenses and Changes in Net Position, and the Statement of Cash Flows present only one fiscal year, since the change in accounting treatment required by Statement No. 75 is not able to be applied to the prior fiscal year due to the constraints of available information.



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### **University Facts**

Offiversity races	FISCAL YEAR 2018 Academic Year 2017–2018	FISCAL YEAR 2013 Academic Year 2012–2013	FISCAL YEAR 2008 Academic Year 2007–2008
STUDENTS			
Autumn Enrollment (headcount)			
Undergraduate	41,670	36,785	32,355
Graduate	14,059	12,782	10,591
Professional	2,126	1,999	1,803
TOTAL	57,855	51,566	44,749
Professional and Continuing Education – Course and Conference Registrations	79,503	74,922	56,097
Number of Degrees Awarded			
Bachelor's	11,179	9,782	8,181
Master's	4,514	3,906	2,904
Doctoral	820	763	622
Professional	551	566	504
TOTAL	17,064	15,017	12,211
FACULTY 1	4,380	4,356	3,984
FACULTY AND STAFF <sup>2</sup>	30,932	26,315	24,468
RESEARCH FUNDING – ALL SOURCES (in thousands of dollars)	\$ 1,350,767	\$ 1,122,933	\$ 1,010,941
SELECTED REVENUES (in thousands of dollars)			
Net Patient Service and Other Medical-Related Revenues <sup>3</sup>	\$ 2,710,758	\$ 1,971,451	\$ 968,215
Gifts, Grants, and Contracts	1,627,139	1,458,196	1,115,974
Tuition and Fees <sup>4</sup>	989,912	808,053	419,690
Auxiliary Enterprises and Other Revenues	660,442	473,167	312,515
Investment Income	404,412	341,241	77,379
State Appropriations (Operating)	362,267	218,165	388,485
SELECTED EXPENSES (in thousands of dollars)			
Medical-Related <sup>3</sup>	\$2,335,063	\$ 1,785,696	\$ 748,832
Instruction, Academic Support and Student Services	1,981,058	1,426,386	1,193,775
Research and Public Service	834,139	803,980	654,468
Institutional Support and Physical Plant	836,674	687,481	524,900
Auxiliary Enterprises	494,956	203,615	161,807
CONSOLIDATED ENDOWMENT FUND <sup>5</sup> (in thousands of dollars)	\$3,407,000	\$2,347,000	\$ 2,161,000
SQUARE FOOTAGE <sup>6</sup> (in thousands of square feet)	25,700	21,773	18,535

Prior to 2018, this number represents headcount for core faculty (Professorial, Instructional and Research). Starting in 2018, this number represents full time faculty from all campuses including the Medical Centers.

<sup>&</sup>lt;sup>2</sup> Full time equivalents - restated (historically) using centralized data source and enterprise definitions

<sup>&</sup>lt;sup>3</sup> Includes Valley Medical Center and Northwest Hospital in 2018 and 2013 only

 $<sup>^4 \ \</sup>text{Net of scholarship allowances of $154,854,000 in 2018, $135,354,000 in 2013 and $69,027,000 in 2008}$ 

<sup>&</sup>lt;sup>5</sup> Stated at fair value

 $<sup>^{\</sup>rm 6}\,$  Gross square footage, all campuses



KPMG LLP Suite 2900 1918 Eighth Avenue Seattle, WA 98101

#### **Independent Auditors' Report**

The Board of Regents University of Washington:

#### **Report on the Financial Statements**

We have audited the accompanying financial statements of the business-type activities and the discretely presented component unit of the University of Washington (the University), an agency of the state of Washington, as of and for the year ended June 30, 2018, and the related notes to the financial statements, which collectively comprise the University's basic financial statements as listed in the table of contents.

#### Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with U.S. generally accepted accounting principles; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

#### **Auditors' Responsibility**

Our responsibility is to express opinions on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

#### **Opinions**

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activities and the discretely presented component unit of the University of Washington as of June 30, 2018, and the respective changes in financial position and, where applicable, cash flows thereof for the year then ended in accordance with U.S. generally accepted accounting principles.



#### **Emphasis of Matters**

As discussed in note 1 to the financial statements, the financial statements of the University of Washington, an agency of the state of Washington, are intended to present the financial position, the changes in financial position, and where applicable, cash flows of only the respective portion of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of the state of Washington that are attributable to the transactions of the University of Washington and its discretely presented component unit. They do not purport to, and do not, present fairly the financial position of the state of Washington as of June 30, 2018, the changes in its financial position or, where applicable, its cash flows for the year then ended, in accordance with U.S. generally accepted accounting principles. Our opinion is not modified with respect to this matter.

As discussed in note 1 to the financial statements, on July 1, 2017, the University adopted new accounting guidance requiring governments providing postemployment benefits other than pensions (OPEB) to employees of state and local government employers to recognize the OPEB liability, as well as recognize most changes in the OPEB liability within benefits expense. Our opinion is not modified with respect to this matter.

As discussed in note 1 to the financial statements, on July 1, 2017, the University adopted new accounting guidance requiring governments receiving irrevocable split-interest agreements to recognize assets, liabilities, and deferred inflows of resources at the inception of the agreement. Our opinion is not modified with respect to this matter.

#### **Other Matters**

#### Required Supplementary Information

U.S. generally accepted accounting principles require that the management's discussion and analysis on pages 3 through 14, and the schedules of required supplementary information on pages 49 through 51, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

#### Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the University's basic financial statements. The accompanying information under the table of contents titled "University Facts" is presented for purposes of additional analysis and is not a required part of the basic financial statements. This information has not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on it.



Seattle, WA October 19, 2018



### Management's Discussion and Analysis

The discussion and analysis below provides an overview of the financial position and activities of the University of Washington ("University") for the year ended June 30, 2018. This discussion has been prepared by management, and since it includes highly summarized data, should be read in conjunction with the financial statements and accompanying notes which follow this section.

### Financial Highlights for Fiscal Year 2018

The University recorded a decrease in net position of \$1.2 billion in fiscal year 2018, compared to an increase of \$214 million in fiscal year 2017. GASB Statement No. 75, which was implemented in 2018, changed the way the University reflects costs associated with other post-employment benefits (OPEB), was the primary reason for this decrease in net position. Positive operating results helped to partially offset the impact from this accounting change, and contributed \$490 million in 2018, compared to \$362 million in 2017.

#### Key Financial Results for Fiscal Years 2018 and 2017

(in millions)	2018	2017
Total operating revenues	\$ 5,172	\$ 4,893
Total operating expenses	5,859	5,666
Operating loss	(687)	(773)
State appropriations	362	342
Gifts	167	166
Investment income	404	442
Other nonoperating revenues, net	244	185
Increase in net position	490	362
Cumulative effect of accounting changes (described below):	6,267	6,053
GASB 73 – UW Supplemental Retirement pension	_	(215)
GASB 75 – Other post-employment benefits	(1,660)	-
GASB 81 – Split interest agreements	-	67
Net position, beginning of year as restated	4,607	5,905
Net position, end of year	\$ 5,097	\$ 6,267

#### **OPERATING REVENUES**

Operating revenues increased \$279 million, or 6%, in 2018 driven by strong gains associated with each of the University's core missions. Student tuition and fees increased \$48 million as a result of operating fee increases together with growing student enrollment. Net patient services revenue increased \$139 million due to greater patient volumes and case acuity. Grant and contract revenue increased \$50 million, driven by a \$23 million increase in revenue from Federal sponsors, and an \$18 million increase from nongovernmental sponsors, most notably the Bill & Melinda Gates Foundation.

#### **OPERATING EXPENSES**

Operating expenses increased \$193 million, or 3%, in 2018 mostly driven by increased costs associated with employee salaries and benefits. Salaries expense increased \$80 million due to merit increases, and benefits expense increased \$61 million primarily due to the implementation of GASB Statement No. 75 which requires the University to begin reporting costs associated with OPEB benefits as they are earned instead of based on cash funding.

#### **NONOPERATING REVENUES**

Revenues from nonoperating and other sources increased \$42 million, or 4%, in 2018 primarily due to \$20 million of additional state operating appropriations and an \$85 million capital gift from the Bill & Melinda Gates Foundation for the University's Population Health Initiative. These were offset, however, by a \$37 million decrease in investment income for the year, and a \$38 million decrease in capital appropriations as a result of having no state capital budget for the first six months of fiscal year 2018. The University adjusts the carrying value of investments to market value each year, with the change recorded as investment income or loss.

Governmental Accounting Standards Board (GASB) principles require that revenues from state appropriations, investment income and gifts be considered nonoperating while the expenses funded from these revenues are categorized as operating. As a result, the University will typically reflect an operating loss on its Statements of Revenues, Expenses and Changes in Net Position.

#### **CHANGES IN ACCOUNTING STANDARDS**

The University implemented GASB Statement No. 73, "Accounting and Financial Reporting for Pensions and Related Assets That Are Not Within the Scope of GASB Statement 68, and Amendments to Certain Provisions of GASB Statements 67 and 68" during fiscal year 2017. This statement changed how the University reports its obligation for retiree benefits associated with the University of Washington Supplemental Retirement Plan (UWSRP). Prior to implementing this Statement, the UWSRP pension liability was being ratably accrued over several years, and UWSRP pension expense was equal to the actuarially determined Annual Required Contribution. Under Statement No. 73, the University must record the total pension liability, and most changes in the total pension liability are now reflected in pension expense in the period of the change, while others are reported as Deferred Inflows or Deferred Outflows of Resources, and amortized to expense over future periods. With the adoption of GASB Statement No. 73, unrestricted net position was restated at July 1, 2016 by a decrease of \$215 million for the difference between the beginning total pension liability and the amount previously reported as the UWSRP pension liability.

The University implemented GASB Statement No. 75, "Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions" (OPEB) during fiscal year 2018. As a result of implementing Statement No. 75, the University has recognized its proportionate share of the state of Washington's actuarially determined total OPEB liability, deferred inflows of resources and deferred outflows of resources, and OPEB expense. Prior to adopting this Statement the University's financial statements did not reflect any OPEB liability or associated deferred inflows or outflows, and reported OPEB expense based on cash contributions paid to the OPEB plan administrator. In addition to the reporting changes described above, unrestricted net position was restated at July 1, 2017 by a decrease of \$1.7 billion. Fiscal year 2018 financial results reflect application of the accounting

changes required by Statement No. 75, but those changes have not been applied to fiscal year 2017 amounts due to the constraints of available information from the Washington State Office of the State Actuary.

The University also implemented GASB Statement No. 81, "Irrevocable Split-Interest Agreements" during fiscal year 2018. This Statement changes the way that governments reflect resources received pursuant to irrevocable split-interest agreements, both at inception and throughout the life of the associated contract. Specifically, where the University has a remainder interest in a trust that is also managed by the University, revenues will no longer be recognized when the asset is acquired and upon periodic revaluation, but will instead be recorded as a deferred inflow of resources and recognized at termination of the contract. This change has resulted in the restatement of July 1, 2016 restricted non-expendable net position together with an increase in deferred inflows. Additionally, where the University has a lead interest in a trust that is not managed by the University, revenues will now be recognized both when the asset is received or communicated to the University, and upon periodic revaluation. These events were previously not reflected in the financial statements of the University. This change has also resulted in the restatement of July 1, 2016 restricted non-expendable net position, together with an increase in investments. The net impact of implementing these accounting changes has been an increase in beginning restricted nonexpendable net position of \$67 million. Fiscal years 2017 and 2018 in this management's discussion and analysis both reflect application of the accounting changes required by Statement No. 81. This is different than the Basic Financial Statements following this section, which reflect these restatements applied as of July 1, 2017 due to the single-year presentation.

### Using the Financial Statements

The University's financial statements are prepared in accordance with GASB principles, which establish standards for external financial reporting for public colleges and universities. GASB standards require that financial statements be presented on a consolidated basis in order to focus on the University as a whole. These financial statements include the following components:

- Independent Auditors' Report presents an unmodified opinion prepared by our auditors, KPMG LLP, on the fairness in all material respects of our financial statements.
- Statements of Net Position present the assets and deferred outflows of resources, liabilities and deferred inflows of resources, and net position of the University at a point in time (June 30, 2018). Their purpose is to present a financial snapshot of the University. This statement aids the reader in determining the assets available to continue the University's operations, how much the University owes to employees and vendors, whether the University has any deferred outflows or inflows other than assets or liabilities, and provides a picture of net position and its availability for expenditure by the University.
- Statements of Revenues, Expenses and Changes in Net Position present the total revenues earned and expenses incurred by the University for operating, nonoperating and other related activities, during a period of time (the fiscal

- year ended June 30, 2018). Their purpose is to assess the University's operating and nonoperating activities.
- Statements of Cash Flows present cash receipts and payments of the University during a period of time (the fiscal year ended June 30, 2018). Their purpose is to assess the University's ability to generate net cash flows and meet its obligations as they come due.
- Notes to the Financial Statements present additional information to support the financial statements. Their purpose is to clarify and expand on the information in the financial statements. Notes are referenced in this discussion to indicate where details of the financial highlights may be found.

The University has had a strategic alliance with Valley Medical Center, a Washington public hospital district, since 2011. GASB standards require that this entity be presented as a discrete component unit of the University; therefore, its financial position at June 30, 2018, and results of operations for the year ended June 30, 2018, are reported in a separate column for financial statement presentation purposes (see Note 1 to the Financial Statements). The analysis which follows includes the consolidated balances of the University of Washington and its blended component units, but excludes the financial position and results of operations of Valley Medical Center.

### Financial Health

#### STATEMENTS OF NET POSITION

A summarized comparison of the University's assets, liabilities, deferrals and net position as of June 30, 2018 and 2017, is shown below:

#### **Summarized Statements of Net Position**

(in millions)	2018	2017
Current assets	\$ 1,486	\$ 1,427
Noncurrent assets:		
Capital assets, net	4,980	4,737
Investments, net of current portion	5,105	4,834
Other	481	454
Total assets	12,052	11,452
Deferred outflows	244	269
Total assets and deferred outflows	12,296	11,721
Current liabilities	1,267	1,315
Noncurrent liabilities:		
Bonds payable	2,334	2,275
Pensions and OPEB	2,750	1,422
Other	332	287
Total liabilities	6,683	5,299
Deferred inflows	516	155
Total liabilities and deferred inflows	7,199	5,454
Net position	\$ 5,097	\$ 6,267

Current assets include those that may be used to support current operations, and consist primarily of cash, short-term investments and accounts receivable. Current liabilities generally are due and payable over the course of the following fiscal year, and include

### Management's Discussion and Analysis (continued)

accounts payable and other accrued liabilities, unearned revenues, and the current portion of long-term debt.

The excess of current assets over current liabilities of \$219 million in 2018, and \$112 million in 2017, reflects the continuing ability of the University to meet its short-term obligations. Current assets increased \$59 million, or 4%, in 2018 mostly due to an \$80 million increase in cash, offset by a \$33 million decrease in short term investments. Current liabilities decreased \$48 million, or 4%, during the year, due in part to an \$87 million decrease in the accrual for investment purchases not yet settled, \$16 million decrease in the current portion of Revenue Bonds Payable, and a \$10 million decrease in the current portion of the self-insurance reserve. These were partly offset by a \$23 million increase in commercial paper debt.

Noncurrent assets increased \$541 million, or 5%, in 2018 driven by an increase in long-term investments of \$271 million as a result of strong investment returns during the year, an increase in capital assets of \$243 million, and a \$17 million increase in the University's equity interest in the Seattle Cancer Care Alliance.

Noncurrent liabilities increased \$1.4 billion, or 36%, during 2018 primarily due to implementation of GASB Statement No. 75. The ending OPEB liability, recognized for the first time in 2018 due to the requirements of Statement No. 75, was \$1.6 billion. In addition, the long-term portion of bonds payable increased during the year by \$59 million due to the net increase in general revenue bonds outstanding. These were offset by a decrease in the University's pension liabilities of \$238 million during the year, primarily those representing the University's proportionate share of the pension plans administered by the Washington Department of Retirement Systems (DRS). The DRS net pension liability was favorably impacted during the year by stronger than expected investment returns on pension plan assets.

Deferred outflows of resources and deferred inflows of resources primarily represent pension and OPEB-related deferrals, and the University's remainder interest in splitinterest agreements. The decrease in deferred outflows of \$25 million, or 9%, in 2018 primarily reflects the University's proportionate share of a decrease in the state-wide amounts reported by the DRS due to differences between projected and actual investment earnings on pension plan assets, offset by the first-time deferral of \$25 million representing post-measurement date OPEB contributions associated with the implementation of GASB Statement No. 75. Deferred inflows were impacted during 2018 by the University's corresponding proportionate share of an increase in the state-wide difference between projected and actual earnings on pension plan assets (total deferred outflow and deferred inflow change for 2018 equaled \$190 million). This was accompanied by the first-time deferral of \$216 million representing the University's proportionate share of state-wide deferred inflows related to changes in actuarial assumptions used in the 2018 OPEB valuation.

#### **Endowment and Other Investments**

Investment returns provide an important source of revenue for the University's programs. Among the funds invested by the University are endowments, operating reserves, life income trusts, annuities and gifts.

Endowed gifts supply permanent capital and an ongoing stream of current earnings to the University. Most endowments are commingled in the Consolidated Endowment Fund (CEF), a diversified investment fund. As in a mutual fund, each individual endowment maintains a separate identity and owns units in the fund.

The CEF has experienced considerable growth over the past 10 years due to gifts and endowment returns. The number of individual endowments in the CEF has grown significantly, from 3,118 at June 30, 2009 to 4,904 at June 30, 2018. The market value of the CEF has similarly increased from \$1.6 billion at June 30, 2009 to \$3.4 billion at June 30, 2018.

The impact to program support has been substantial, with \$929 million distributed over the past 10 years touching every part of the University. Programs supported by endowment returns include academic programs, scholarships, fellowships, professorships, chairs and research activities. Under the Board of Regents' approved long-term spending policy for the CEF, quarterly distributions to programs are made based on an annual percentage rate of 4%, applied to the five-year rolling average of the CEF's market valuation. An additional 1% is distributed to support fundraising and stewardship activities (0.80%) and investment management (0.20%). Similar to program distributions, the fee is based on the endowment's five-year average market value.

The University of Washington Board of Regents is vested by statute with responsibility for the University's properties and investments, and for establishing investment policy. The University of Washington Investment Management Company (UWINCO), led by the Chief Investment Officer, carries out the day-to-day activities of the investment portfolios. The University of Washington Investment Management Company Board ("UWINCO Board"), which consists of both Board of Regents' members and external investment professionals, serves as an advisory board to UWINCO.

Endowment portfolios are commonly managed around a core set of objectives focused on the need to provide support for endowed programs in perpetuity. The Board of Regents, in conjunction with the UWINCO Board, establishes the policy asset allocation judged to be most appropriate for the University from a long-term potential return and risk perspective. The policy asset allocation is reviewed annually for its continuing fit with the University's risk profile and with consideration of the changing dynamics of the capital markets.

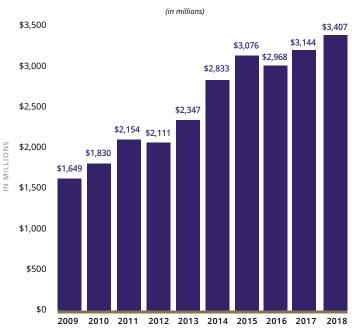
The CEF asset allocation includes two clearly defined categories of investments: those which facilitate growth or appreciation (Capital Appreciation), and those which preserve endowment values (Capital Preservation). At June 30, 2018, 72% of the CEF was invested in Capital Appreciation and 28% in Capital Preservation. Following an expectation that market returns for equities will exceed bonds over the next decade, a medium-term objective is maintained of generally overweighting equity-oriented strategies with a focus on quality companies and downside protection. The University also maintains ample liquidity within Capital Preservation to meet its funding

requirements, as well as to take advantage of market dislocations if opportunities arise.

For the fiscal year ending June 30, 2018, the CEF returned +9.6% versus +7.3% for the passive benchmark. The CEF's Real Assets and Private Equity strategies led absolute returns this year. The CEF's Capital Appreciation and Capital Preservation portfolios substantially outperformed their respective passive benchmarks.

All major equity indexes posted gains in 2018, led by US equities. Trade tensions and policy uncertainty appear to be on the rise. Forecasted returns have been trending down and a lower return, high-volatility environment is expected.

#### Consolidated Endowment Fund Market Value



The CEF has consistently maintained solid relative performance, beating both the passive benchmark and the median returns for public peers over most periods.

A portion of the University's operating funds are invested in the CEF. As of June 30, 2018, these funds comprise \$643 million of the CEF market value.

#### **Capital Improvements**

The University continues to expand its campuses and renovate existing facilities to meet the needs of its students, patients, faculty and staff. Significant capital asset expenditures (greater than \$20 million) during fiscal year 2018 included \$119 million for Phase 4a of the Housing Master Plan and the construction of McCarty, Madrona and Willow student residential buildings, \$70 million for the Life Sciences Building, \$44 million for the Bill & Melinda Gates Center for Computer Science & Engineering, \$28 million for the new Burke Museum, and \$25 million for Phase 2 of the University of Washington Medical Center expansion.

Key projects placed in service during 2018 include:

- Willow Hall \$83 million. Phase 4a of the Housing Master Plan included demolition of the existing McCarty Hall and construction of a new McCarty Hall along with Madrona and Willow Halls. Willow was available for occupancy in June 2018, whereas the remaining two facilities opened in September.
   Willow is a 221-unit residential building with various size units, most including private baths, and a dining facility called Center Table.
- New Burke Museum \$68 million. The existing Burke
  Museum was constructed in 1962 as a two-story brick building
  with 69,000 gross square feet (GSF). This project provided a
  new building to address the limitations and shortcomings
  of the existing facility, which does not meet contemporary
  standards for museum environments, collections storage, or
  public-use facilities. The new building size is 110,000 GSF.
- Fluke Hall Renovation \$36 million. This project renovated the Washington Nano Fabrication Facility (WNF) located on the first floor of Fluke Hall. The scope of work included roof replacement and refurbishment of other existing building infrastructure to allow the building to serve as a long-term core University research facility supporting academic research, industry partnership and a commercialization incubator.
- University of Washington Medical Center Expansion Phase 2

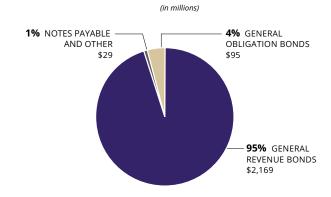
   \$31 million. This project included a build-out of three bed floors and the OR suite within the new Montlake Tower (Phase 1), and renovation of approximately 125,000 square feet within the existing Cascade and Pacific Towers.

#### Debt

The University's Debt Policy governs the type and amount of debt the University may incur. It is designed to maintain access to capital markets and to minimize the risk-adjusted cost of capital.

The University's debt portfolio consists primarily of fixed rate debt in the form of Revenue Bonds and General Obligation Bonds. As of June 30, 2018, the University had \$2.3 billion of bonds and notes payable outstanding, an increase of 2% from June 30, 2017. Debt outstanding on the Metropolitan Tract is not included in these amounts (see Note 7).

### Bonds and Notes Payable



### Management's Discussion and Analysis (continued)

In February 2018, the University issued \$134 million of taxexempt General Revenue bonds with an all-in true interest cost of 3.48%. Proceeds were used to fund various facilities including the construction of new residential housing (Phase 4a of the Housing Master Plan) and the new Life Sciences Building.

The University has a \$250 million commercial paper program, which is typically used to fund project expenditures until long-term funding is secured. As of June 30, 2018, there was \$90 million in commercial paper outstanding.

Credit ratings are an indicator of the University's effectiveness in managing its financial resources. During fiscal year 2018, both Moody's (Aaa) and Standard and Poor's (AA+) reaffirmed the University's credit ratings, though Moody's did place the University on negative credit watch. These strong ratings carry substantial advantages for the University: continued and wider access to capital markets, lower interest rates on bonds, and the ability to negotiate favorable bond terms. The University's short-term credit ratings were also affirmed at P-1 (Moody's) and A-1+ (Standard and Poor's).

Moody's Fiscal Year 2017
Public College and University Rating Distribution
(As of the June 2018 Moody's Median Report)



The Board of Regents typically authorizes the long-term debt (excluding commercial paper) issuance on a fiscal year basis. For fiscal year 2019, the Board authorized \$102 million of issuance in July. Any increase would require additional approval by the Board.

Debt beyond fiscal year 2019 is managed through a process in which the University estimates debt capacity. Updated annually, key debt related financial metrics are benchmarked to peer institutions. Current estimates assume outstanding debt will remain flat for the next five years.

#### **Net Position**

The difference between total assets and deferred outflows, and total liabilities and deferred inflows, is referred to as net position or "equity". Over time, the change in net position is one indicator of the improvement or decline in the University's overall financial health when considered with nonfinancial factors such as enrollment, research awards, patient levels, and the condition of facilities.

The University reports its "equity" in four categories:

- Net Investment in Capital Assets This is the University's total investment in capital assets, net of accumulated depreciation and amortization and outstanding debt obligations related to those capital assets.
- Restricted Net Position:
  - Nonexpendable net position, primarily endowments, represents gifts to the University's permanent endowment funds. These are funds on which the donor or other external party has imposed the restriction that the corpus is not available for expenditure, but rather for investment purposes only, in order to produce income that is to be expended for the purposes specified.
  - Expendable net position consists of resources which the University is legally or contractually obligated to spend in accordance with time or purpose restrictions placed by donors and/or other external parties, and includes the net appreciation of permanent endowments.
- Unrestricted Net Position This is all other funds available to the University for any purpose associated with its mission. Unrestricted net position is not subject to externally imposed stipulations, but often is internally designated for specific purposes.

The University's net position at June 30, 2018 and 2017 is summarized as follows:

#### Categories of Net Position

2018	2017
\$ 2,484	\$ 2,455
1,722	1,603
2,129	1,859
(1,238)	350
\$ 5,097	\$ 6,267
	\$ 2,484 1,722 2,129 (1,238)

Net investment in capital assets increased \$29 million, or 1%, in 2018. This balance typically increases as debt is paid off, or when the University funds fixed asset purchases without the use of external financing, for example by using internal reserves. This balance decreases as assets are depreciated. The increase in 2018 reflects greater additions to net capital assets during the year than the associated increase in capital asset-related debt, reflecting continued capital spend on previously approved projects together with a reduced pace for new debt issuances.

Restricted nonexpendable net position increased \$119 million, or 7%, in 2018. This primarily reflects the receipt of \$96 million of new endowment gifts during the year, together with investment income and an increase in the market value of underwater endowment investments.

Restricted expendable net position increased \$270 million, or 15%, in 2018. This category is primarily affected by new operating and capital gifts, and earnings or losses on restricted investments, including endowments. Unrealized gains in the market value for the CEF of \$219 million were the primary reason for the increase during the year, offset by \$77 million of realized losses. Additionally, unspent capital gifts increased \$73 million as a result of giving by the Bill & Melinda Gates Foundation to the University's Population Health Initiative.

Unrestricted net position decreased \$1.6 billion in 2018, primarily due to the impact of restating fiscal year 2018 beginning net position as a result of implementing GASB Statement No. 75. The change in accounting treatment required by Statement No. 75 reduced beginning unrestricted net position by \$1.7 billion, representing the University's proportionate share of the state of Washington's beginning total OPEB liability, less OPEB contributions paid by the University in the prior fiscal year. Excluding the impact of this accounting change, unrestricted net position increased by \$72 million, or 21%, in 2018. Operating losses associated with unrestricted activities were \$435 million for the year, together with interest expense on capital asset-related debt of \$77 million. These were offset by \$362 million of state operating appropriations, and \$213 million of investment income on unrestricted investments.

At June 30, 2018, Unrestricted Net Position reflects a deficit of \$1.2 billion due to the implementation of GASB Statement No. 68 (pensions) during fiscal year 2015, and the implementation of Statement No. 75 (OPEB) during fiscal year 2018. These Statements require the University to record its proportionate share of the state of Washington's actuarially determined liabilities for pensions and OPEB. As a result of implementation, Unrestricted Net Position is negative despite historically positive operating results. The University's Unrestricted Net Position, excluding the impacts from Statement No's 68 and 75, is as follows:

#### **Unrestricted Net Position Excluding Pensions and OPEB**

Unrestricted net position, excluding pensions and OPEB	\$ 1,232	\$ 1,112
Impact of GASB 75 - OPEB	1,764	
Impact of GASB 68 - Pensions	706	762
Unrestricted net position, as reported	\$ (1,238)	\$ 350
(in millions)	2018	2017

# STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

The Statements of Revenues, Expenses and Changes in Net Position present the University's results of operations and nonoperating items that result in the changes in net position for the year. In accordance with GASB reporting principles, revenues and expenses are classified as either operating or nonoperating. A condensed comparison of the University's revenues, expenses and changes in net position for the years ended June 30, 2018 and 2017 follows:

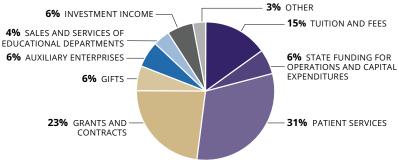
#### **Operating Results**

(in millions)	2018	2017
Tuition and fees	\$ 990	\$ 942
Patient services	2,008	1,869
Grants and contracts	1,409	1,359
Other operating revenues	765	723
Total operating revenues	5,172	4,893
Salaries and benefits	3,661	3,519
Other Operating Expenses	2,198	2,147
Operating Loss	(687)	(773)
State appropriations	362	342
Gifts	167	166
Investment income	404	442
Other nonoperating revenues	321	262
Interest on capital asset-related debt	(77)	(77)
Increase in Net Position	\$ 490	\$ 362

The University's operating loss decreased to \$687 million in 2018, from \$773 million in 2017. State appropriations are shown as nonoperating revenue, pursuant to GASB standards. If state appropriations were classified as operating revenue, the operating loss would have been \$325 million in 2018, and \$431 million in 2017.

The University has a diversified revenue base. No single source generated more than 31% of the total fiscal year 2018 revenues of \$6.4 billion.

#### Sources of Funds



### Management's Discussion and Analysis (continued)

The following table summarizes revenues from all sources for the years ended June 30, 2018 and 2017:

#### **Revenues from All Sources**

(in millions)	20	018	20	017
Net Patient services	\$ 2,008	31%	\$ 1,869	31%
Grants and contracts	1,468	23%	1,422	23%
Tuition and fees	990	15%	942	15%
Investment income	404	6%	442	7%
Auxiliary enterprises	403	6%	374	6%
Gifts	398	6%	289	5%
State funding for operations	362	6%	342	6%
Sales and services of educational				
departments	243	4%	217	4%
State funding for capital projects	26	0%	64	1%
Other	124	3%	144	2%
Total revenue – all sources	\$ 6,426	100%	\$ 6,105	100%

#### **Patient Services-UW Medicine**

The financial statements of the University include the operations of the School of Medicine (SOM), three hospitals, associated physician group and clinics, Airlift Northwest, and the University's share of two joint ventures. These entities, together with Harborview Medical Center (not included in the University's financial statements - see Note 14) and shared services providing IT, accounting, and finance revenue cycle services, comprise UW Medicine. UW Medicine is governed and administered as an enterprise of the University whose mission is to improve the health of the public. UW Medicine also strives to facilitate the education of physicians and other health care providers, support research activities in collaboration with the SOM and render other services designed to achieve the "Triple Aim" which is to improve the healthcare experience for the individual, improve health of the population, and provide more affordable care.

Patient care activities included in the University's financial statements include:

**UW Medical Center** (UWMC) is a 529-bed hospital that provides comprehensive healthcare services to the Puget Sound community and patients from throughout the Pacific Northwest and beyond. UWMC also serves as the major clinical, teaching and research site for students and faculty in the Health Sciences at the University. Over 19,000 patients receive inpatient care at UWMC each year. Specialized inpatient care needs are met by the Cancer Center, the Regional Heart Center, the Neonatal Intensive Care Unit and the Organ Transplantation program.

**Valley Medical Center** (VMC) is a 321-bed acute care hospital and network of clinics that treats over 18,000 inpatients per year, and is the oldest and largest public district hospital in the state of Washington. VMC joined UW Medicine in July, 2011. VMC's Statement of Net Position and Statement of Revenues, Expenses and Changes in Net Position are presented in a discrete column on the financial statements of the University.

**Northwest Hospital & Medical Center** (NWH) is a full-service medical facility with 281 beds, and treats approximately 10,000 inpatients per year. NWH joined UW Medicine in January, 2010. Specialized patient needs are met by the Stroke Center, Multiple Sclerosis Center, and other inpatient and outpatient services to the surrounding community.

**UW Neighborhood Clinics** (Neighborhood Clinics) is a network of clinics with 14 neighborhood locations throughout the greater Puget Sound area, providing primary, urgent and selected specialty care with a staff of 120 healthcare providers.

**UW Physicians** (UWP) is the physician practice group for more than 2,200 faculty physicians and healthcare providers associated with UW Medicine.

**Airlift Northwest** provides rapid emergency air transport services to critically ill or injured patients throughout Washington, Alaska, Montana and Idaho.

**Joint Ventures** – The University is also a participant in two joint ventures: Seattle Cancer Care Alliance and Children's University Medical Group. The University's share of these activities is reflected in the University's financial statements.

In combination, these organizations (not including VMC) contributed \$2,008 million in net patient services revenue in fiscal year 2018 and \$1,869 million in fiscal year 2017. UWMC generated 59% of this revenue in 2018 and 60% in 2017. UWMC admissions were 19,350 in 2018, a 2% increase from 2017. The increase in net patient services revenue during 2018 was primarily due to strong volumes in inpatient stays, surgery cases, cardiology, pharmacy and solid organ transplants. Despite strong volumes, reimbursement pressures from payers have continued to result in reduced levels of reimbursement.

#### **Grant Revenue**

One of the largest sources of revenue (23%) continues to be grants and contracts. Total grant and contract revenue increased \$55 million, or 4%, in 2018.

Federal revenue increased \$23 million, or 2%, primarily driven by genome sequencing and HIV clinical service delivery projects within the National Institutes of Health and the Centers for Disease Control and Prevention.

State and local revenue saw a 10% increase largely attributable to a \$9 million contract with the Washington State Department of Early Learning to implement a regional evaluation system, offer high-quality professional development opportunities to early learning professionals, and implement evidence-based curriculum training.

Consistent with 2017, increases to nongovernmental revenue were largely attributable to The Bill & Melinda Gates Foundation's continued support of the University's Institute for Health Metrics and Evaluation.

Grants and contracts provide the opportunity for graduate and undergraduate students to work with nationally recognized faculty in research as part of their educational experience.

Grant and contract revenue is earned when direct expenditures (such as researchers' compensation or purchases of goods and services) are made; therefore, there is little effect on the University's operating margin as a result of this direct expense reimbursement process.

Facility and administrative expenses necessary to support grants and contracts are reimbursed by sponsors, along with direct costs, by an indirect cost recovery. The current indirect cost recovery rate for research grants is approximately 30 cents on every direct expenditure dollar.

#### **Primary Nongrant Funding Sources**

The University relies primarily on student tuition and fees and state appropriations as revenue sources to support its nongrant-funded educational operating expenses. State support for education has increased during the last few fiscal years, but is still significantly below historical levels.

#### **Operating Support for Instruction**

(in millions)	20	18	20	017
Operating tuition and fees	\$ 675	50%	\$ 639	50%
Fees for self-sustaining educational programs	315	23%	303	23%
Subtotal - tuition and fees	990	73%	942	73%
State operating appropriations	362	27%	342	27%
Total educational support	\$1,352	100%	\$1,284	100%

Noncapital state appropriations are considered nonoperating revenue under GASB principles, and are reflected in the nonoperating section of the Statements of Revenues, Expenses and Changes in Net Position; however, they are used solely for operating purposes.

Revenue from tuition and fees increased to \$990 million, compared to \$942 million in fiscal year 2017. These amounts are net of scholarship allowances of \$155 million in 2018 and \$159 million in 2017. The increase in 2018 was partially due to the state allowing a 2.2% operating fee increase in resident undergraduate tuition. Other tuition categories also contributed to this increase. Nonresident operating fees increased by 3%, graduate and professional operating fees increased by 0-10%, and fee-based program rates also increased by 0-10%. Increases varied by program. Some of the increase was also due to enrollment growth. Full-time equivalent (FTE) enrollment in undergraduate tuition and fee-based programs increased by 1.5% in the resident student category, and by 2.9% in the nonresident student category. FTE enrollment in graduate and professional tuition- and fee-based programs increased by 0.7% in the resident student category and by 3.1% in the nonresident student category.

Fees for self-sustaining educational programs (fee-supported programs) include the following amounts for fiscal years 2018 and 2017: UW Continuum College (the continuing education branch of the University) \$113 million and \$113 million, respectively, summer quarter tuition \$55 million and \$50 million, respectively, and for the combination of Business School and School of Medicine programs \$60 million and \$50 million, respectively.

#### Gifts, Endowments and Investment Revenues

Net investment income for the years ended June 30, 2018 and 2017 consisted of the following:

#### Net Investment Income

(in millions)	2	2018	2	2017
Interest and dividends, net	\$	72	\$	68
Metropolitan Tract net income		16		23
Seattle Cancer Care Alliance change in equity		17		15
Realized Gains		62		48
Unrealized Gains		237		288
Net investment income	\$	404	\$	442

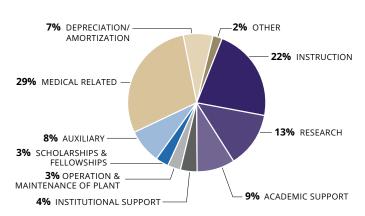
Net investment income decreased \$38 million, or 9%, in 2018 primarily due to the change in realized and unrealized gains and losses during the year.

Donor support increased by \$109 million, or 38%, to \$398 million in 2018 from \$289 million in 2017. Much of this increase was due to \$85 million in support received from the Bill & Melinda Gates Foundation to benefit the University's Population Health Initiative. The 2018 amount does not reflect \$23 million received from the sale of premium seats to athletic events. This type of revenue was reported as gifts in 2017 due to their deductibility for federal tax purposes, but has been reported as operating revenue in 2018 due to passage of the Tax Cuts and Jobs Act of 2017. Gifts are a key and necessary source of support for a variety of purposes including capital improvements, scholarships, research, and endowments for various academic and research positions.

#### **Expenses**

Two primary functions of the University, instruction and research, comprised 35% of total operating expenses. These dollars provided instruction to nearly 58,000 students and funded nearly 5,400 research awards. Medical-related expenses, such as those related to patient care, also continue to be one of the largest individual components.

#### **Uses of Funds**



### Management's Discussion and Analysis (continued)

A comparative summary of the University's expenses by functional classification (purpose for which the costs are incurred) for the years ended June 30, 2018 and 2017 follows:

#### **Operating Expenses by Function**

(in millions)	2018	3	2017	
Operating expenses:				
Educational and general instruction	\$ 1,268	22%	\$ 1,204	21%
Research	785	13%	768	14%
Public service	49	1%	39	1%
Academic support	512	9%	507	9%
Student services	53	1%	49	1%
Institutional support	251	4%	240	4%
Operation and maintenance of plant	201	3%	206	4%
Scholarships and fellowships	149	3%	137	2%
Auxiliary enterprises	495	8%	495	9%
Medical-related	1,712	29%	1,658	29%
Depreciation/amortization	384	7%	363	6%
Total operating expenses	\$ 5,859	100%	\$ 5,666	100%

Overall, the University's operating expenses increased \$193 million, or 3%, during 2018. Approximately 62% of amounts incurred for operating expenses in both 2018 and 2017 were related to faculty and staff compensation and benefits.

Expense associated with faculty and staff salaries increased \$80 million, or 3%, in 2018. The impact from employee merit increases during the year was somewhat offset by an overall 1% reduction in University FTE's.

Benefits expense increased \$61 million, or 7%, in 2018 primarily due to the implementation of GASB Statement No. 75. Expenses associated with OPEB benefits used to be recorded as expense based on cash funding paid to the OPEB plan administrator. Implementation of Statement No. 75 now requires the University to record its proportionate share of the state of Washington's actuarially determined OPEB expense, representing OPEB subsidies earned during the year by eligible employees, together with interest on the total OPEB liability and current amortization of other changes in that liability that do not immediately impact expense. For 2018, the difference between cash funding paid to the plan administrator and OPEB expense reflecting application of Statement No. 75 is an increase in expense of approximately \$100 million. This increase in benefits expense was offset, however, by a \$28 million reduction in expense associated with the defined-benefit pension plans administered by the DRS due to better than expected earnings on plan investments, and an \$11 million reduction in pension expense associated with the UW Supplemental Retirement Plan.

Scholarships and fellowships expense increased \$13 million, or 9%, in 2018. This category of student financial aid represents amounts paid directly to students for expenses other than tuition. Financial aid which reduces amounts owed for tuition

are reflected as scholarship allowances, and reported by the University as a reduction of gross tuition revenues. The combination of aid paid directly to students, and amounts which reduced the tuition owed by students, was 27% of gross tuition and fees revenue for both 2018 and 2017.

Utilities expense decreased \$4 million, or 6%, during 2018 primarily due to a decrease in electricity usage across all University campuses.

Supplies and materials expense increased \$41 million, or 8%, in 2018 primarily due to increased costs associated with drugs and medical supplies used at UW Medicine of \$21 million, together with other, much smaller, increases associated with SOM and the University's blended component units.

# Economic Factors That May Affect the Future

#### STATE OPERATING AND CAPITAL APPROPRIATIONS

The state of Washington, which provided 6% of the University's total revenues in fiscal year 2018, continues to emerge from the recession with moderate economic growth and commensurate increases in state tax collections. However, additional state tax collections, as well as new revenue, were largely consumed by the state needing to meet court-mandated increases to K-12 education funding (McCleary v. Washington). As a result, non-mandatory state programs, including higher education, did not receive significant additional funding for the current 2017-19 biennium. Looking forward, state economic and revenue forecasts reflect a strong state economy, and projections for future state revenue collections continue to increase with each forecast.

During the 2013-15 biennium, the University committed to freezing resident undergraduate tuition rates in 2014 and 2015 in exchange for increases in state funding in both years. In the 2015-17 biennium, the state reduced resident undergraduate tuition rates to 5% below the 2015 rates in 2016, and to 15% below the 2015 rates in 2017. The state provided funds to offset the lost tuition revenue in both years. The same tuition policy allowed for future increases tied to a rolling average of median hourly wage in the state. Under this current policy, the state is allowing resident undergraduate tuition to increase by roughly 2.2% in each 2018 and 2019. While the legislature can always modify its policy, if current policy continues, resident undergraduate tuition increases will be limited to approximately 2% each year for the near future. The University's Board of Regents continues to have broad tuition and fee setting authority for categories other than resident undergraduate tuition.

The University's fiscal year 2019 general operating appropriation from the state (excluding certain amounts appropriated for specific purposes) is approximately \$368 million. This amount is an increase from approximately \$353 million in 2018 and \$332 million in 2017. Recent increases are largely attributable to targeted investments in compensation, medical education,

and science, technology, engineering and math (STEM) enrollments. The University's priority requests to the state for the upcoming biennium include additional funding for competitive compensation for faculty and staff, increases in STEM enrollment slots, and support for safety net hospital and dental clinic operations.

After failing to pass a biennial state capital budget during their 2017 legislative session, the state approved a compromise 2017-19 biennial capital budget when they reconvened in 2018. Therefore, some projects that were slated to receive funding for the beginning of 2018 were delayed by several months. State funding for capital appropriations continues to be constrained, but the University received some state bonding capacity for critical capital projects. The University's priority capital requests to the state include a health sciences education building, STEM-related buildings across all three campuses, and seismic upgrades.

#### **UW MEDICINE**

The healthcare industry, in general, and the acute care hospital business, in particular, are experiencing significant regulatory uncertainty based, in large part, on legislative efforts to significantly modify or repeal and potentially replace the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010 (Affordable Care Act or ACA). It is difficult to predict the full impact of these actions on future revenues and operations. Changes to the ACA may significantly impact UW Medicine.

The ability to increase profitability will depend, in part, on successfully executing UW Medicine strategies. In general, these strategies are intended to improve financial performance through reducing costs and streamlining the provision of clinical care, as well as mitigating the recent negative reimbursement trends being experienced within the market. With a continued focus on patient volumes shifting from inpatient to outpatient settings due to technological advancements and demand for care that is more convenient, affordable and accessible, and the industry-wide migration to value-based payment models as government and private payers shift risk to providers, successfully managing costs and efficiently delivering care are paramount.

#### UW Medicine/MultiCare Alliance

In July 2017, UW Medicine and MultiCare Health System (MultiCare) announced the formation of a new alliance that will expand access to high-quality healthcare and allow the two organizations to engage in joint activities to further the mission of each organization. Through the alliance, UW Medicine and MultiCare will provide cost-effective and clinically integrated healthcare in communities throughout the Puget Sound region while supporting the education of the next generation of clinicians and advancing research. The

parties' joint activities will be guided by four core principles: the provision of high-quality, patient-centered care; a commitment to teaching and research; ensuring strong financial stewardship to deliver value to the payers of healthcare services; and a focus on improving the health of populations served by the alliance. In June 2018, the University Board of Regents approved formation of the Clinically Integrated Network (CIN) legal entity, which is expected to occur in late 2018.

#### **UW Medicine Accountable Care Network**

In 2014, UW Medicine formed an Accountable Care Network (ACN) with other selected healthcare organizations and healthcare professionals in Western Washington to form a care delivery network to assume responsibility for the healthcare of contracted patient populations to achieve the Triple Aim: improved healthcare experience for the individual, improved health of the population, and more affordable care.

- The ACN has contracted with the Washington Health Care Authority (HCA) to participate in its Puget Sound Accountable Care Program (ACP) as a healthcare benefit option for Public Employees Benefits Board (PEBB) members. The ACP is offered to all PEBB members who reside in Snohomish, King, Kitsap, Pierce, and Thurston counties. This contract with HCA covering PEBB members began January 1, 2016.
- A subset of the network members have also agreed to participate with the ACN in a contract with Premera as part of its Accountable Health System (AHS) product. As an AHS, the UW Medicine ACN will share in accountability for the quality and cost of healthcare for Premera members who select this plan. This product was sold both on and off the Washington Health Exchange in select counties with coverage that began January 1, 2016. The AHS must have 5,000 planwide members per product, per region for the UW Medicine ACN to share in financial savings and risk. The ACN is not at risk for the AHS product in 2017, but is at risk in calendar year 2018.
- The UW Medicine ACN also entered into an agreement to provide health care services to nonunion employees of a large local employer with coverage that began January 1, 2015.

These arrangements provide an opportunity for shared savings between the ACN and the contracted entity based on achieving quality and financial benchmarks. If certain financial benchmarks are not attained, UW Medicine, along with its network members, is at risk for reductions in payment levels from the contracted entity based on the agreement.

#### **Investments in Information Technology**

In July, 2018, the University Board of Regents granted approval to proceed with the UW Medicine clinical transformation program. This multi-year program will allow UW Medicine to improve patient engagement, physician and practitioner experience and to achieve business and operating efficiencies through development of foundational systems and improved staffing workflows. Patient engagement will be enhanced

### Management's Discussion and Analysis (continued)

through development of a single online patient portal for activities between the patient and UW Medicine. More online service opportunities and easy navigation will create additional opportunities for communication between the patient and their care team. UW Medicine will achieve business and operating efficiencies through simplification and standardization across operations and IT, resulting in revenue cycle improvements and optimized resource utilization. Total program costs are estimated to be \$180 million. Program kick-off will be in November, 2018 with initial implementation occurring in April, 2020.

#### **Northwest Hospital Integration**

In February, 2018, the University Board of Regents granted approval to proceed with the dissolution of and subsequent integration of Northwest Hospital into UW Medical Center. Adopting a new model of one hospital on two campuses will provide many opportunities for cost savings and improved coordination of care. Upon dissolution of the Northwest Hospital corporation, Northwest Hospital assets and debts will be assumed by UW Medical Center and Northwest Hospital staff will become University employees. Full integration is expected to occur no later than January 1, 2020.

#### **OTHER**

Rising benefit costs, particularly for pensions and healthcare, continue to impact the University. Employer pension funding rates for the Public Employees Retirement System (PERS) pension plans increased 14% during fiscal year 2018, from 11.18% to 12.70% of covered salary, but will remain unchanged during fiscal year 2019. Likewise, the monthly employer base rate paid by the University for employee healthcare increased 3% during fiscal year 2018, from \$888 to \$913 per active employee, but will be mostly unchanged during fiscal year 2019. Both rates, however, are likely to continue increasing over the next few years.



# **Statements of Net Position**

	UNIVERSITY OF WASHINGTON	DISCRETE COMPONENT UNIT
	June 30,	June 30,
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES	2018	2018
CURRENT ASSETS:		
CASH AND CASH EQUIVALENTS (NOTE 2)	\$ 144,136	\$ 48,186
INVESTMENTS, CURRENT PORTION (NOTE 6)	552,641	41,431
ACCOUNTS RECEIVABLE (NET OF ALLOWANCE OF \$19,447) (NOTE 5)	738,743	83,950
OTHER CURRENT ASSETS	50,482	53,314
TOTAL CURRENT ASSETS	1,486,002	226,881
NONCURRENT ASSETS:		
DEPOSIT WITH STATE OF WASHINGTON (NOTE 3)	67,655	-
INVESTMENTS, NET OF CURRENT PORTION (NOTE 6)	5,104,848	1,377
METROPOLITAN TRACT (NOTE 7)	152,233	-
STUDENT LOANS RECEIVABLE (NET OF ALLOWANCE OF \$4,339) (NOTE 4)	63,541	-
OTHER NONCURRENT ASSETS	197,948	81,399
CAPITAL ASSETS (NET OF ACCUMULATED DEPRECIATION OF \$4,607,053) (NOTE 8)	4,979,731	380,445
TOTAL NONCURRENT ASSETS	10,565,956	463,221
TOTAL ASSETS	12,051,958	690,102
DEFERRED OUTFLOWS OF RESOURCES (NOTE 12)	244,041	12,491
TOTAL ASSETS AND DEFERRED OUTFLOWS OF RESOURCES	\$12,295,999	\$ 702,593
ACCOUNTS PAYABLE AND ACCRUED LIABILITIES	\$ 784,036	\$ 108,245
UNEARNED REVENUES	188,077	-
OTHER CURRENT LIABILITIES	158,082	-
LONG-TERM LIABILITIES, CURRENT PORTION (NOTES 9-11)	136,517	10,208
TOTAL CURRENT LIABILITIES	1,266,712	118,453
NONCURRENT LIABILITIES:		
U.S. GOVERNMENT GRANTS REFUNDABLE	45,535	_
LONG-TERM LIABILITIES, NET OF CURRENT PORTION (NOTES 9-11)	2,620,587	299,262
PENSION LIABILITIES (NOTE 15)	1,184,852	-
OTHER POST-EMPLOYMENT BENEFITS (NOTE 16)	1,565,213	-
TOTAL NONCURRENT LIABILITIES	5,416,187	299,262
TOTAL LIABILITIES	6,682,899	417,715
DEFERRED INFLOWS OF RESOURCES (NOTE 12)	516,323	25,031
TOTAL LIABILITIES AND DEFERRED INFLOWS OF RESOURCES	7,199,222	442,746
NET POSITION		
NET INVESTMENT IN CAPITAL ASSETS	2,483,814	87,817
RESTRICTED:		
NONEXPENDABLE	1,721,927	<del>-</del>
EXPENDABLE	2,128,692	8,240
UNRESTRICTED	(1,237,656)	163,790
TOTAL NET POSITION	5,096,777	259,847
TOTAL LIABILITIES, DEFERRED INFLOWS OF RESOURCES AND NET POSITION	\$12,295,999	\$ 702,593

# Statements of Revenues, Expenses and Changes in Net Position

	DISCRETE
UNIVERSITY OF	COMPONENT
WASHINGTON	UNIT

,	Year	ended	lune	30.	Year	ended	lune	30

PEVENUE	Year ended June 30, 2018	Year ended June 30 2018
OPERATING REVENUES:		
STUDENT TUITION AND FEES (NET OF SCHOLARSHIP ALLOWANCE OF \$154,854)	\$ 989,912	\$ -
NET PATIENT SERVICE REVENUES (NET OF PROVISION FOR UNCOLLECTIBLE ACCOUNTS OF \$29,411)	2,008,317	598,633
FEDERAL GRANTS AND CONTRACTS	1,048,088	390,033
STATE AND LOCAL GRANTS AND CONTRACTS	103,267	_
NONGOVERNMENTAL GRANTS AND CONTRACTS	257,966	_
SALES AND SERVICES OF EDUCATIONAL DEPARTMENTS	242,886	_
AUXILIARY ENTERPRISES:	242,000	_
HOUSING AND FOOD SERVICES	131,369	_
SPORTS PROGRAMS (NET OF SCHOLARSHIP ALLOWANCE OF \$7,590)	91,924	
OTHER AUXILIARY ENTERPRISES	179,574	_
OTHER AUXILIARY ENTERFRISES  OTHER OPERATING REVENUE	118,497	38,092
TOTAL OPERATING REVENUES	5,171,800	636,725
TOTAL OF EIGHT ING REVEROLS	3,171,000	030,723
EXPENSES		
OPERATING EXPENSES (NOTE 13):		
SALARIES	2,736,630	315,905
BENEFITS	924,253	75,902
SCHOLARSHIPS AND FELLOWSHIPS	149,378	-
UTILITIES	59,884	5,179
SUPPLIES AND MATERIALS	588,476	83,246
PURCHASED SERVICES	844,729	73,613
DEPRECIATION/AMORTIZATION	384,004	33,167
OTHER	171,442	36,082
TOTAL OPERATING EXPENSES	5,858,796	623,094
OPERATING INCOME (LOSS)	(686,996)	13,631
NONOREDATING REVENUES (EVRENCES)		
NONOPERATING REVENUES (EXPENSES)	262.267	
STATE APPROPRIATIONS  GIFTS	362,267	-
	166,721	2.460
INVESTMENT INCOME (NET OF INVESTMENT EXPENSE OF \$10,790)	404,412	2,468
INTEREST ON CAPITAL ASSET-RELATED DEBT	(76,642)	(14,258)
PELL GRANT REVENUE	51,097	
PROPERTY TAX REVENUE	-	22,722
OTHER NONOPERATING REVENUES	4,749	15,723
NET NONOPERATING REVENUES	912,604	26,655
INCOME BEFORE OTHER REVENUES	225,608	40,286
CAPITAL APPROPRIATIONS	26,399	-
CAPITAL GRANTS, GIFTS AND OTHER	142,573	-
GIFTS TO PERMANENT ENDOWMENTS	95,890	-
TOTAL OTHER REVENUES	264,862	-
INCREASE IN NET POSITION	490,470	40,286
NET POSITION		
NET POSITION – BEGINNING OF YEAR, AS RESTATED (NOTE 1)	4,606,307	219,561
NET POSITION – END OF YEAR	\$ 5,096,777	\$ 259,847

# **Statement of Cash Flows**

	UNIVERSITY OF WASHIN
	Year Ended June 30
CASH FLOWS FROM OPERATING ACTIVITIES	2018
STUDENT TUITION AND FEES	\$ 958,966
PATIENT SERVICES	1,989,098
GRANTS AND CONTRACTS	1,376,235
PAYMENTS TO SUPPLIERS	(567,439)
PAYMENTS FOR UTILITIES	(59,381)
PURCHASED SERVICES	(832,124)
OTHER OPERATING DISBURSEMENTS	(169,606)
PAYMENTS TO EMPLOYEES	(2,732,923)
PAYMENTS FOR BENEFITS	(823,136)
PAYMENTS FOR SCHOLARSHIPS AND FELLOWSHIPS	(149,378)
LOANS ISSUED TO STUDENTS	(17,148)
COLLECTION OF LOANS TO STUDENTS	18,614
AUXILIARY ENTERPRISE RECEIPTS	401,799
SALES AND SERVICES OF EDUCATIONAL DEPARTMENTS	260,364
RECEIPTS FROM OUTSIDE AFFILIATED AGENCIES	904,189
DISBURSEMENTS TO OUTSIDE AFFILIATED AGENCIES	(901,659)
OTHER RECEIPTS	116,012
NET CASH USED BY OPERATING ACTIVITIES	(227,517)
CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES	
STATE APPROPRIATIONS	362,267
GIFTS AND GRANTS FOR OTHER THAN CAPITAL PURPOSES	51,097
PRIVATE GIFTS	132,796
PERMANENT ENDOWMENT RECEIPTS	95,890
DIRECT LENDING RECEIPTS	237,500
DIRECT LENDING DISBURSEMENTS	(241,317)
OTHER	4,700
NET CASH PROVIDED BY NONCAPITAL FINANCING ACTIVITIES	642,933
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES	
PROCEEDS FROM CAPITAL DEBT	186,339
STATE CAPITAL APPROPRIATIONS	24,228
CAPITAL GRANTS AND GIFTS RECEIVED	141,648
ACQUISITION AND CONSTRUCTION OF CAPITAL ASSETS	(622,412)
PRINCIPAL PAYMENTS ON CAPITAL-RELATED DEBT AND LEASES	(116,809)
INTEREST PAYMENTS ON CAPITAL-RELATED DEBT AND LEASES	(90,401)
OTHER	(1,205)
NET CASH USED BY CAPITAL AND RELATED FINANCING ACTIVITIES	(478,612)

#### UNIVERSITY OF WASHINGTON

Year Ended June 30,

	. cai	Linaca janic
CASH FLOWS FROM INVESTING ACTIVITIES		2018
PROCEEDS FROM SALES OF INVESTMENTS	•	10,549,300
DISBURSEMENTS FOR PURCHASES OF INVESTMENTS	('	10,493,626)
INVESTMENT INCOME		87,623
NET CASH PROVIDED BY INVESTING ACTIVITIES		143,297
NET INCREASE IN CASH AND CASH EQUIVALENTS		80,101
CASH AND CASH EQUIVALENTS-BEGINNING OF THE YEAR		64,035
CASH AND CASH EQUIVALENTS-END OF THE YEAR	\$	144,136
RECONCILIATION OF OPERATING LOSS TO NET CASH USED BY OPERATING ACTIVITIES		
OPERATING LOSS	\$	(686,996)
ADJUSTMENTS TO RECONCILE OPERATING LOSS TO NET CASH USED BY OPERATING ACTIVITIES:		
DEPRECIATION/AMORTIZATION EXPENSE		384,004
CHANGES IN ASSETS, LIABILITIES, AND DEFERRED OUTFLOWS AND INFLOWS OF RESOURCES:		
RECEIVABLES		(52,983)
OTHER ASSETS		(20,093)
PENSION AND OPEB RELATED DEFERRED OUTFLOWS AND INFLOWS OF RESOURCES		387,381
PENSION LIABILITIES		(237,559)
OPEB LIABILITY		(95,235)
ACCOUNTS PAYABLE AND ACCRUED LIABILITIES		59,732
UNEARNED REVENUE		(7,776)
OTHER LONG-TERM LIABILITIES		40,541
U.S. GOVERNMENTAL GRANTS REFUNDABLE		(4,373)
LOANS TO STUDENTS		5,840
NET CASH USED BY OPERATING ACTIVITIES	\$	(227,517)
NONCASH INVESTING, CAPITAL AND FINANCING ACTIVITIES		
STOCK GIFTS	\$	31,729
INCREASE IN INTEREST IN SEATTLE CANCER CARE ALLIANCE		17,332
NET UNREALIZED GAINS		237,197
EXTERNALLY MANAGED TRUSTS		112,821
TOTAL NONCASH INVESTING, CAPITAL AND FINANCING ACTIVITIES	\$	399,079

### **Notes to Financial Statements**

#### NOTE 1:

### Summary of Significant Accounting Policies

#### FINANCIAL REPORTING ENTITY

The University of Washington (University), an agency of the state of Washington, is governed by a 10-member Board of Regents appointed by the governor and confirmed by the state senate.

The financial statements include the individual schools, colleges and departments of the University, the University of Washington Medical Center (UWMC), Portage Bay Insurance (a wholly-owned subsidiary of the University) and certain affiliated operations determined to be a part of the University's financial reporting entity. Affiliated organizations are evaluated for inclusion in the reporting entity as component units based on the significance of their relationship with the University.

Harborview Medical Center (HMC), a component unit of King County, Washington, is a related party to the University, but is not reflected as part of the financial reporting entity (Note 14).

Component units are legally separate organizations for which the University is financially accountable. Financial accountability is demonstrated when one of several conditions exist such as when the University appoints a voting majority of the organization's board, is able to impose its will on the organization, receives specific financial benefit or incurs specific financial burdens from the organization, or the organization is fiscally dependent on the University. These entities may be reported in the financial statements of the University in one of two ways: the component units' amounts may be blended with the amounts reported by the University, or they may be shown in a separate column, depending on the application of the criteria of Governmental Accounting Standards Board (GASB) code section 2600, "Reporting Entity and Component Unit Presentation and Disclosure". All component units of the University meet the criteria for blending except Valley Medical Center. It is reported discretely since it has a separate board of directors, it does not provide services exclusively to the University, and it is not a nonprofit corporation with the University being the sole corporate member.

#### **BLENDED COMPONENT UNITS**

The following entities are presented as blended component units of the University. Financial information for these affiliated organizations is available from their respective administrative offices.

#### **MEDICAL ENTITIES**

#### Northwest Hospital & Medical Center (NWH)

NWH is a Washington nonprofit corporation formed in 1949, whose sole corporate member is the University. NWH is a 281 licensed-bed, full-service medical facility primarily serving the healthcare needs of residents of King and Snohomish counties in Washington. NWH had operating revenues of \$370,770,000 in 2018.

#### The Association of University Physicians dba UW Physicians (UWP)

UWP is a Washington nonprofit corporation formed in 1983 for the exclusive benefit of the University of Washington School of Medicine (SOM). UWP employs SOM faculty and bills and collects for their clinical services as an agent for the SOM. UWP had operating revenues of \$329,817,000 in 2018.

#### **UW Medicine Neighborhood Clinics (Neighborhood Clinics)**

The Neighborhood Clinics is a Washington nonprofit corporation formed in 1996 for the benefit of the SOM, UWP and its affiliated medical centers, HMC and UWMC, exclusively for charitable, scientific and educational purposes. Neighborhood Clinics was organized to coordinate and develop patient care in a community clinical setting. They enhance the academic environment of the SOM by providing additional sites of primary care practice and training for faculty, residents and students. Neighborhood Clinics had operating revenues of \$27,851,000 in 2018.

#### **REAL ESTATE ENTITIES**

The entities listed below are nonprofit corporations that were formed to acquire or construct certain real properties for the benefit of the University in fulfilling its educational, medical or scientific research missions. These entities issue tax-exempt and taxable bonds to finance these activities.

- · Washington Biomedical Research Properties I
- · Washington Biomedical Research Properties II
- · Washington Biomedical Research Facilities 3
- · Washington Biomedical Research Properties 3.2
- Washington Biomedical Research Properties 3.3

These entities collectively had net capital assets of \$360,479,000, and long-term debt of \$370,803,000, in 2018. These amounts are reflected in the University's financial statements.

#### **DISCRETELY PRESENTED COMPONENT UNIT**

#### **Valley Medical Center**

The University and Public Hospital District No. 1 of King County, a Washington public hospital district dba Valley Medical Center (VMC), participate in a Strategic Alliance Agreement. Under this agreement, VMC is managed as a discretely presented component unit of the University. VMC owns and operates a 321-bed full-service acute care hospital and 45 clinics located throughout southeast King County. The audited financial statements of VMC are available by contacting VMC at 400 S. 43rd Street, Renton, Washington 98055 or online at the following address: valleymed.org/about-us/financial-information.

#### **JOINT VENTURES**

The University, together with Seattle Children's Hospital and Fred Hutchinson Cancer Research Center, established the Seattle Cancer Care Alliance (SCCA). The SCCA integrates the cancer research, teaching and clinical cancer programs of all three institutions to provide state-of-the-art cancer care. Each member of the SCCA has a one-third interest. The University accounts for its interest in the SCCA under the equity method and has recorded \$159,149,000 in Other Assets, together with \$17,332,000 in Investment Income, for its share of the joint venture in 2018.

The University and Seattle Children's Hospital established Children's University Medical Group (CUMG) to assist the organizations in carrying out their pediatric patient care, charitable, educational, and scientific missions. CUMG employs SOM faculty physicians, and bills and collects for their services as an agent for the SOM. The University records revenue from CUMG based on the income distribution plan effective December 31, 2008. The University's patient services receivable (Note 5) includes amounts due from CUMG of \$17.552.000 in 2018.

#### **BASIS OF ACCOUNTING**

The financial statements of the University have been prepared in accordance with GASB, code section Co5, "Colleges and Universities". The University is reporting as a special-purpose government engaged in business-type activities (BTA). In accordance with BTA reporting, the University presents Management's Discussion and Analysis, Statements of Net Position, Statements of Revenues, Expenses and Changes in Net Position, Statement of Cash Flows and Notes to the Financial Statements. The financial statements are prepared using the economic resources measurement focus and the accrual basis of accounting.

Under the accrual basis of accounting, revenue is recognized when earned, and expense is recorded when an obligation has been incurred. Significant intra-entity transactions have been eliminated. The University reports capital assets net of accumulated depreciation/amortization (as applicable), and reports depreciation/amortization expense in the Statements of Revenues, Expenses and Changes in Net Position.

On July 1, 2017, the University adopted GASB Statement No. 75, "Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions" (OPEB), which establishes new actuarial methods and discount rate standards for the measurement and recognition of the cost of postemployment benefits provided to the employees of state and local governmental employers. This Statement replaces the requirements of GASB Statement No. 45, "Accounting and Financial Reporting by Employers for Postemployment Benefits Other than Pensions." As a result of implementing Statement No. 75, the University has recognized its proportionate share of the state of Washington's actuarially determined total OPEB liability, deferred inflows of resources and deferred outflows of resources, and OPEB expense. Prior to adopting this Statement the University's financial statements did not reflect any OPEB liability or associated deferred inflows or outflows, and reported OPEB expense based on cash contributions paid to the OPEB plan administrator. In addition to the reporting changes described above, implementation of this Statement resulted in the restatement of fiscal year 2018 beginning Unrestricted Net Position, reducing it by \$1,660,447,000. The University's Statement of Net Position, Statement of Revenues, Expenses and Changes in Net Position, and the Statement of Cash Flows present only one fiscal year, since the change in accounting treatment required by Statement No. 75 is not able to be applied to the prior fiscal year due to the constraints of available information.

On July 1, 2017, the University adopted GASB Statement No. 81, "Irrevocable Split-Interest Agreements." Irrevocable split-interest agreements are a specific type of giving arrangement used by donors to provide resources to two or more beneficiaries, including governments. This Statement changes the way that governments reflect resources received pursuant to irrevocable split-interest agreements, both at inception and throughout the life of the associated contract. Specifically, where the University has a remainder interest in a trust that is also managed by the University, revenues will no longer be recognized when the asset is received and upon periodic revaluation, but will instead be deferred and recognized at termination of the contract. This change has resulted in the restatement of fiscal year 2018 beginning

Restricted Non-Expendable Net Position, reducing it by \$47,172,000, together with an increase in Deferred Inflows. Where the University has a lead interest in a trust that is not managed by the University, revenues will now be recognized both when the asset is received and upon periodic revaluation. These events were previously not reflected in the financial statements of the University. Revenue will also continue to be recognized as periodic payments are received, the same as prior to GASB 81. This change has also resulted in the restatement of fiscal year 2018 beginning Restricted Non-Expendable Net Position, increasing it by \$112,820,000, together with an increase in Investments. The net impact of implementing these accounting changes has been an increase in beginning Restricted Non-Expendable Net Position of \$65,648,000.

With the adoption of GASB Statements No. 75 and No. 81, net position was restated at July 1, 2017. Below is a reconciliation of total net position as previously reported at June 30, 2017, to the restated net position.

NET POSITION AT JULY 1, 2017, AS RESTATED	\$ 4,606,307
ADOPTION OF GASB STATEMENT NO. 81	65,648
ADOPTION OF GASB STATEMENT NO. 75	(1,660,447)
NET POSITION AT JUNE 30, 2017, AS PREVIOUSLY REPORTED	\$ 6,201,106
(Dollars in thousands)	

#### **ACCOUNTING STANDARDS IMPACTING THE FUTURE**

In November 2016, the GASB issued Statement No. 83, "Certain Asset Retirement Obligations," which will be effective for the fiscal year ending June 30, 2019. An Asset Retirement Obligation (ARO) is a legally enforceable liability associated with the retirement of a tangible capital asset. Governments that have legal obligations to perform future tangible asset retirement activities will need to recognize a liability and offsetting deferred outflow of resources when incurred and reasonably estimable. The basis of the estimate is the current value of the future outlays expected to be incurred, and is to be adjusted annually for inflation and any changes of relevant factors. The deferral is to be recognized as expense in a systematic and rational manner over the life of the tangible capital asset. The liability is derecognized as retirement costs are paid. Required disclosures include information about the nature of a government's AROs, the methods and assumptions used for the estimates of the liabilities, and the estimated remaining useful life of the associated tangible capital assets. The University's 2015 Decommissioning Funding Plan, prepared in accordance with Washington Administrative Code 246-235-075, has estimated disposal and clean-up costs related to several Cyclotrons used in research and medical services of approximately \$100,000,000 and discussions are underway to determine the applicability of this standard to University X-ray and MRI machines.

In January 2017, the GASB issued Statement No. 84, "Fiduciary Activities," which will be effective for the fiscal year ending June 30, 2020. This Statement establishes criteria for identifying fiduciary activities of all state and local governments. Governments with activities meeting the criteria should present a Statement of Fiduciary Net Position and a Statement of Changes in Fiduciary Net Position. Custodial assets held for three months or less are exempt from the reporting requirements. The University will be required to report fiduciary activities that do not meet the exception criteria, primarily consisting of funds invested by other agencies and organizations in the Consolidated Endowment Fund.

In June 2017, the GASB issued Statement No. 87, "Leases," which will be effective for the fiscal year ending June 30, 2021. This Statement changes the current classification of lease arrangements as either operating or capital leases, and establishes a single model for lease accounting based on the foundational principle that leases represent a financing transaction associated with the right to use an underlying asset. This Statement applies to contracts that convey the right to use a non-financial asset in an exchange or exchange-like transaction for a term exceeding 12 months. Lessees will be required to recognize a lease liability and an intangible right-to-use lease asset, and lessors will be required to recognize a lease receivable and a deferred inflow of resources. The University is currently analyzing the impact from implementation of this Statement.

In March 2018, the GASB issued Statement No. 88, "Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements," which will be effective for the fiscal year ending June 30, 2019. This Statement requires that additional essential information related to debt be disclosed in the Notes to Financial Statements such as unused lines of credit, assets pledged as collateral, significant default and termination events with finance-related consequences, and significant subjective acceleration clauses. This Statement also requires that currently existing disclosure requirements related to long-term liabilities be provided for direct borrowings and direct placements of debt separately from other debt disclosures. The Statement will not impact the recognition or measurement of liabilities, and will have no impact on the University's net position.

In June 2018, the GASB issued Statement No. 89, "Accounting for Interest Cost Incurred before the End of a Construction Period," which will be effective for the fiscal year ending June 30, 2021. This Statement requires that interest cost incurred before the end of a construction period be recognized as expense in the period in which the cost is incurred for financial statements prepared using the economic resources measurement focus. As a result, these costs will no longer be included in the capitalized cost of capital assets reported by the University. This Statement will be applied on a prospective basis, and interest costs capitalized prior to implementation will continue to be recognized as those assets are depreciated. The University estimates that implementation of this Statement will result in approximately \$10,000,000 of additional interest expense being recognized annually.

In August 2018, the GASB issued Statement No. 90, "Majority Equity Interests," which will be effective for the fiscal year ending June 30, 2020. This Statement modifies previous guidance for reporting a government's majority equity interest in a legally separate organization. When a majority equity interest meets the definition of an investment as defined by GASB, the equity interest is to be reported as an investment for financial reporting purposes and measured using the equity method. Majority equity interests that do not meet the definition of an investment are to be reported as a component unit. This Statement also provides guidance for valuing the acquisition of assets and liabilities of 100% equity interests that remain legally separate, and brings this reporting in line with existing standards that apply to acquisitions that do not remain legally separate. Initial review of the University's equity interests has not revealed any majority interests that would fall within the scope of this Statement, however, further review is ongoing.

The preparation of financial statements in conformity with U.S. Generally Accepted Accounting Principles involves management estimates that affect the reported amounts of assets, liabilities, deferrals, revenues and expenses during the reporting period. Actual results could differ from those estimates; however, in each case, the University believes that allowances, reserves and estimates of expected liabilities are adequate.

The University estimates the pollution remediation liability (Note 9) by reviewing the current status of known polluted sites and developing estimates of cleanup costs. These estimates are subject to change due to improvements in technology, inflation, changes in the scope of work, and the pursuit of reimbursement from other responsible parties.

Allowances (Notes 4 and 5) are estimates based on the historical experience of the University and current economic circumstances with respect to the collectability of accounts and loans receivable.

The University's share of pension and other post-employment benefit plan assets, liabilities, deferrals and expenses, are based on actuarial valuations prepared by an external actuary. The results of an actuarial valuation are estimates based on historical data, actuarial assumptions, and the demographics of the employee and retiree populations.

The self-insurance reserve (Note 17) is estimated through an externally prepared actuarial calculation using individual case-basis valuations and statistical analyses. Considerable variability is inherent in such estimates.

Alternative investments, which are not readily marketable, are carried at the estimated fair values provided by the investment managers. The University reviews and evaluates the values provided by the investment managers and agrees with the valuation methods and assumptions used in determining the fair value of the alternative investments. Those estimated fair values may differ significantly from the values that would have been used had a ready market for these securities existed.

#### **OTHER ACCOUNTING POLICIES**

**Investments.** Investments are carried at fair value. The fair value of all debt and equity securities with a readily determinable fair value is based on quotations from major securities exchanges.

Investments under long-term strategies are considered noncurrent. Short-term investments consist primarily of cash equivalents and fixed income vehicles which management has identified as available to meet the day-to-day obligations of the University.

**Inventories.** Inventories are carried at the lower of cost or market value and are reflected on the Statements of Net Position in Other Current Assets. Consumable inventories, consisting of expendable materials and supplies, are generally valued using the weighted-average method. Merchandise inventories are generally valued using the first-in, first-out method.

**Capital Assets.** Land, buildings, equipment, library books and intangibles are stated at cost or, if acquired by gift, at fair market value at the date of the gift. Additions, replacements, major repairs and renovations are capitalized. Depreciation and amortization are computed using the straight-line method over the estimated useful lives of the assets, generally 15 to 50 years for building components, 20 to 50 years for infrastructure and land improvements, 5 to 7 years for equipment, 15 years for library books, and 3 to 15 years for intangibles.

Capital assets which are financed by capital leases are depreciated in the same manner as other capital assets.

Interest incurred on capital asset-related debt was \$91,799,000 in 2018. The University capitalized \$15,157,000 of this cost in 2018.

**Unearned Revenues.** Unearned revenues occur when funds have been collected in advance of when the associated goods or services have been provided, such as advance ticket sales, summer quarter tuition and unspent cash advances on certain grants.

Cost-Sharing Pension Plans. The net pension asset or liability is measured as the University's proportionate share of the collective total pension liability, less the fiduciary net position, of the cost-sharing pension plans in which the University participates. The total pension liability is determined by discounting projected benefit payments based on the benefit terms and legal agreements existing at the pension plan's fiscal year-end. Projected benefit payments are required to be discounted using a single rate that reflects the expected rate of return on investments, to the extent that plan assets are available to pay benefits. The University's proportionate share is determined based on the relationship of University contributions to total contributions to the plan by all participating employers. Pension expense is recognized for benefits earned during the period, interest on the unfunded liability and changes in benefit terms. Differences between expected and actual experience, and changes in assumptions about future economic or demographic factors, are reported as deferred inflows of resources or deferred outflows of resources, and are recognized over the average expected remaining service period for employees eligible for pension benefits. Differences between expected and actual investment returns are reported as deferred inflows of resources or deferred outflows of resources, and are recognized over five years. Contributions made to the plan subsequent to the measurement date and prior to the University's fiscal year-end are reported as a deferred outflow of resources, and recognized in the subsequent fiscal year. The measurement date for the net pension asset or liability is June 30 of the prior fiscal year.

**Single Employer Pension Plan (UW Supplemental Retirement Plan).** The total pension liability is determined by discounting projected benefit payments for current participants and retirees, based on the benefit terms and legal agreements existing at the pension plan's fiscal year-end. The discount rate used is the yield or index rate for 20 year tax-exempt general obligation municipal bonds with average credit rating AA/Aa or higher rating. Pension expense is recognized for benefits earned during the period, interest on the unfunded liability and changes in benefit terms. Differences between expected and actual experience, and changes in assumptions about future economic or demographic factors, are reported as deferred inflows of resources or deferred outflows of resources, and are recognized over the average expected remaining service period for employees eligible for pension benefits. The measurement date for the total pension liability is June 30, 2018.

Other Post Employment Benefits (OPEB). The total OPEB liability is measured as the University's proportionate share of the state of Washington total OPEB liability, with proportionate share determined based on the relationship of the University's healthcare-eligible headcount to the total healthcare-eligible headcount for the state. The total OPEB liability is determined by discounting projected benefit subsidies for current employees and retirees based on the discount rate required by GASB Statement No. 75 for OPEB plans which do not have assets residing in a qualified trust. OPEB expense is recognized for subsidies earned during the period, interest on the total OPEB liability and changes in benefit terms. Differences between expected and actual experience, and changes in assumptions about future economic or demographic factors, are reported as deferred inflows of resources or deferred outflows of resources, and are recognized over the average expected remaining service period for healthcare-eligible employees. Contributions made to the plan subsequent to the measurement date and prior to the University's fiscal year-end are reported as a deferred outflow of resources, and recognized in the subsequent fiscal year. The measurement date for the total OPEB liability is June 30 of the prior fiscal year.

**Split-Interest Agreements.** Under such agreements, donors make gifts to the University but the University is not the sole beneficiary and receives either a lead interest (distributions during the term of the agreement) or a remainder interest (distribution of assets remaining at the end of the agreement). Charitable trusts, charitable gift annuities, pooled income funds and beneficial interests in charitable trusts are examples of split-interest gifts. Where the University holds a remainder interest in a trust that is also administered by the University, an asset related to these agreements is recorded at fair market value, a deferred inflow is recorded for the remainder value, and a liability is recorded equal to the present value of expected future distributions to the income beneficiaries. The liability is calculated using discount rates ranging from 3.3% to 7.5%. Additionally, donors have established and funded trusts which are administered by organizations other than the University. Under the terms of these trusts, the University has the irrevocable right to receive all or a portion of the income earned on the trust assets in perpetuity. The University does not control the assets held by the outside trusts but recognizes an interest in the trusts, based on the fair value of the assets contributed to the trusts, mostly as permanently restricted contributions. Fluctuation in the fair value of these assets are recorded annually as revenue and impact Restricted Non-Expendable Net Position.

**Compensated Absences.** University employees accrue annual leave at rates based on length of service, and for sick leave at the rate of one day per month. Sick leave balances, which are unlimited, can be converted to monetary compensation

annually at 25% of the employees' normal compensation rate for any balance that exceeds 480 hours, or for any balance upon retirement or death. Annual leave accrued at June 30, 2018 was \$126,990,000, and is included in Accounts Payable and Accrued Liabilities. Sick leave accrued at June 30, 2018 was \$49,635,000 and is included in Long-Term Liabilities (Note 9).

**Scholarship Allowances.** Tuition and Fees are reported net of scholarship allowances that are applied to students' accounts from external funds that have already been recognized as revenue by the University. Student aid paid directly to students is reported as scholarships and fellowships expense.

**Net Patient Service Revenue.** Patient service revenue is recorded at the estimated net realizable amounts from patients, third-party payers and others for services rendered, including estimated retroactive adjustments under reimbursement agreements with third-party payers. Retroactive adjustments are accrued on an estimated basis in the period the related services are rendered and adjusted in future periods as final settlements are determined. Revenue related to financial assistance provided to patients is excluded from net patient service revenue.

Third-party payer agreements with Medicare and Medicaid provide for payments at amounts different from established rates and are part of contractual adjustments to net patient service revenue. Medicare reimbursements are based on a tentative rate, with final settlement determined after submission of annual cost reports and audits thereof by the Medicare fiscal intermediary. The estimated final settlements for open years are based on preliminary cost findings after giving consideration to interim payments that have been received on behalf of patients covered under these programs.

For more information about Net Patient Service Revenue, see the audited financial statements of the UW Medicine Clinical Enterprise - UW Division, which are contained in the latest Bondholders Report at finance.uw.edu/treasury/bondholders/other-investor-material.

**Financial Assistance.** Financial assistance provides patient care without charge to patients who meet certain criteria under the financial assistance policy. Records are maintained to identify and monitor the level of financial assistance provided. These records include charges foregone for services and supplies furnished under the financial assistance policy to the uninsured and the underinsured. Collection of these amounts is not pursued and as such they are not reported as net patient service revenue. The cost of financial assistance provided is calculated based on the aggregate relationship of costs to charges. The estimated cost of financial assistance provided during 2018 was \$21,943,000.

**State Appropriations.** The state of Washington appropriates funds to the University on both annual and biennial bases. This revenue is reported as nonoperating revenue in the Statements of Revenues, Expenses and Changes in Net Position when underlying expenditures are made.

**Operating Activities.** The University's policy for reporting operating activities in the Statements of Revenues, Expenses and Changes in Net Position is to include activities that generally result from exchange transactions. Examples of exchange transactions are payments received for tuition, patient services or grants under which services are performed, as well as payments made for the delivery of goods or services. Certain other significant revenue streams used for operations, such as state appropriations, Pell grants, gifts and investment income are recorded as nonoperating revenues, as prescribed by GASB Statement No. 35.

**Net Position.** The University's Net Position is classified as follows:

*Net investment in capital assets:* The University's investments in capital assets, less accumulated depreciation/amortization, net of outstanding debt obligations related to capital assets;

Restricted net position – nonexpendable: Net position subject to externally-imposed requirements that it be maintained permanently by the University, including permanent endowment funds and annuity and life income trusts;

Restricted net position – expendable: Net position that the University is obligated to spend in accordance with restrictions imposed by external parties, generally for scholarships, research and departmental uses;

*Unrestricted net position:* Net position not subject to externally-imposed restrictions, but which may be designated for specific purposes by management or the Board of Regents.

**Tax Exemption.** The University, as an agency of the state of Washington, is not subject to federal income tax pursuant to Section 115 of the Internal Revenue Code, except for tax on unrelated business income and certain federal excise taxes.

#### NOTE 2:

### Cash and Cash Equivalents

Cash includes cash on hand, petty cash and bank deposits. Cash equivalents includes treasury securities with maturities of less than 90 days and money market funds with remaining maturities of one year or less at the time of purchase. Most cash, except for cash held at the University and cash held in foreign banks, is covered by the Federal Deposit Insurance Corporation (FDIC), or if greater than FDIC limits, by collateral held in a multiple financial institution collateral pool administered by the Washington Public Deposit Protection Commission.

#### NOTE 3:

### Deposit with State of Washington

State law requires the University to deposit certain funds with the state treasurer, who holds and invests the funds. These deposits include amounts held for the University's permanent land grant funds, and the University building fee collected from students, and is recorded as a noncurrent asset on the Statement of Net Position. The fair value of these funds approximates the carrying value.

#### NOTE 4:

#### Student Loans Receivable

Net student loans of \$63,541,000 at June 30, 2018 consist of \$48,576,000 from Federal programs, and \$14,965,000 from University programs. Interest income from student loans for the year ended June 30, 2018 was \$1,673,000. These unsecured loans are made primarily to students who reside in the state of Washington.

#### NOTE 5:

#### Accounts Receivable

The major components of accounts receivable as of June 30, 2018 were:

(Dollars in thousands)	2018
NET PATIENT SERVICES	\$ 319,956
GRANTS AND CONTRACTS	204,602
DUE FROM OTHER AGENCIES	86,993
INVESTMENTS	57,092
SALES AND SERVICES	34,816
TUITION	12,563
STATE APPROPRIATIONS	7,688
ROYALTIES	3,090
OTHER	31,390
SUBTOTAL	758,190
LESS: ALLOWANCE FOR DOUBTFUL ACCOUNTS	(19,447)
TOTAL	\$ 738,743

#### NOTE 6:

#### Investments

#### **INVESTMENTS - GENERAL**

The University of Washington Board of Regents is vested by statute with responsibility for the University's properties and investments, and for establishing investment policy. The University of Washington Investment Management Company (UWINCO), led by the Chief Investment Officer, carries out the day-to-day activities of the investment portfolios. The University of Washington Investment Management Company Board ("UWINCO Board"), which consists of both Board of Regents' members and external investment professionals, serves as an advisory board to UWINCO.

The University holds significant amounts of investments that are measured at fair value on a recurring basis. Shown below is a tabular format for disclosing the levels within the fair value hierarchy. The three-tier hierarchy of inputs is summarized as follows:

- Level 1 Inputs Quoted prices (unadjusted) in active markets for identical assets or liabilities that a government can access at the measurement date
- Level 2 Inputs Inputs other than quoted prices included within Level 1 that are observable for an asset or liability, either directly or indirectly
- · Level 3 Inputs Unobservable inputs for an asset or liability

TABLE 1 – INVESTMENTS (Dollars in thousands)						
		Fair Value Measurement Inputs				
INVESTMENTS BY FAIR VALUE LEVEL	2018	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)		
FIXED INCOME SECURITIES						
U.S. TREASURY SECURITIES	\$ 652,611	\$ 3,967	\$ 648,644	\$ -		
U.S. GOVERNMENT AGENCY	545,478	10,879	534,599	-		
MORTGAGE BACKED	231,974	-	231,974	-		
ASSET BACKED	175,449	-	175,449	-		
CORPORATE AND OTHER	495,926	72,390	423,536	-		
TOTAL FIXED INCOME SECURITIES	2,101,438	87,236	2,014,202	-		
EQUITY SECURITIES						
GLOBAL EQUITY INVESTMENTS	719,261	711,232	8,029	-		
PRIVATE EQUITY AND VENTURE CAPITAL FUNDS	27,224	-	25,885	1,339		
REAL ESTATE	10,097	5,016	-	5,081		
OTHER	11,385	6,917	-	4,468		
TOTAL EQUITY SECURITIES	767,967	723,165	33,914	10,888		
EXTERNALLY MANAGED TRUSTS	122,686	-	-	122,686		
TOTAL INVESTMENTS BY FAIR VALUE LEVEL	2,992,091	\$ 810,401	\$2,048,116	\$ 133,574		

#### INVESTMENTS MEASURED USING NET ASSET VALUE (NAV)

GLOBAL EQUITY INVESTMENTS	1,311,637
ABSOLUTE RETURN STRATEGY FUNDS	622,479
PRIVATE EQUITY AND VENTURE CAPITAL FUNDS	369,888
REAL ASSETS FUNDS	193,341
OTHER	48,228
TOTAL INVESTMENTS MEASURED USING NAV	2,545,573
TOTAL INVESTMENTS MEASURED AT FAIR VALUE	5,537,664
CASH EQUIVALENTS AT AMORTIZED COST	119,825
TOTAL INVESTMENTS	\$ 5,657,489

Fixed income and equity securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities. Fixed income and equity securities classified in Level 2 are valued using other observable inputs including quoted prices for similar securities and interest rates. Private equity, real assets and other investments classified in Level 3 are valued using either discounted cash flow or market comparable techniques.

The University's interests in certain non-readily marketable alternative investments, such as hedge funds and private equity limited partnerships, are stated at fair value based on NAV estimates used as a practical expedient reported to the University by investment fund managers. The valuation method for investments measured using NAV per share (or its equivalent) is presented in the following table.

TABLE 2 – INVESTMENTS MEASURED USING NAV (Dollars in thousands)								
2018	Fair Value	Unfunded Commitments	Redemption Frequency (If Currently Eligible)	Redemption Notice Period				
INVESTMENTS	\$ 1,311,637	\$ 22,308	MONTHLY TO ANNUALLY	15-180 DAYS				
ABSOLUTE RETURN STRATEGY FUNDS	622,479	-	QUARTERLY TO ANNUALLY	30-90 DAYS				
PRIVATE EQUITY AND VENTURE CAPITAL FUNDS	369,888	347,263	N/A	-				
REAL ASSETS FUNDS	193,341	55,105	N/A	-				
OTHER	48,228	850	QUARTERLY TO ANNUALLY	30-95 DAYS				
TOTAL INVESTMENTS MEASURED USING NAV	\$ 2,545,573							

- **1. Global Equity:** This investment category includes public equity investments in separately managed accounts, long-only comingled funds, unconstrained limited partnerships, and passive market indices. For 2018, approximately 72% of the value of the investments in this category can be redeemed within 90 days, and 92% can be redeemed within one year.
- 2. Absolute Return: This category includes investments in stable income and low-to-medium beta funds. Management of these funds seeks low correlation to broad equity markets by investing in assets that exhibit low volatility, deep discounts, and/or hedges against market downturns. Approximately 88% of the value of the investments in this category can be redeemed within one year.
- **3. Private equity:** This category includes buyout, venture, and special situations funds. These investments can never be redeemed with the funds. Distributions from each fund will be received as the underlying investments of the funds are liquidated. It is expected that the majority of underlying assets of the funds will be liquidated over the next 7 to 10 years.
- **4. Real assets:** This category includes real estate, natural resources, and other hard assets. These investments can never be redeemed with the funds. Distributions from each fund will be received as the underlying investments of the funds are liquidated. It is expected that the majority of underlying assets of the funds will be liquidated over 7 to 10 years.
- **5. Other:** This category consists of opportunistic investments and includes various types of non-investment grade and non-rated credit plus nominal equity exposure. Approximately 15% of the value of the investments in this category can be redeemed or anticipate distribution within one year. The remaining balance of these investments contain restrictions on redemption within one year or will be distributed as underlying investments are liquidated. It is expected that the underlying assets of the funds will be liquidated over the next 10 years.

#### **INVESTMENT POOLS**

The University combines most short-term cash balances into the Invested Funds Pool. At June 30, 2018, the Invested Funds Pool totaled \$1,788,142,000. The Invested Funds Pool also owns units in the Consolidated Endowment Fund (CEF) valued at \$643,098,000 at June 30, 2018. By University policy, departments with qualifying funds in the Invested Funds Pool receive distributions based on their average balances and on the type of balance. Campus depositors received 0.75% in fiscal year 2018. University Advancement received 3% of the average balances in endowment operating and gift accounts in fiscal year 2018. The difference between the actual earnings of the Invested Funds Pool and the calculated distributions is used to support activities benefiting all University departments.

The majority of the endowed funds are invested in the CEF, a pooled fund. Individual endowments purchase units in the pool on the basis of a per-unit valuation of the CEF at fair value on the last business day of the calendar quarter. Income is distributed based on the number of units held. RCW 24.55 of the Washington State Code and the Uniform Prudent Management of Institutional Funds Act allow for total return expenditure under comprehensive prudent standards.

Under the CEF spending policy approved by the Board of Regents, quarterly distributions to programs are based on an annual percentage rate of 4.0%, applied to the five-year rolling average of the CEF's market valuation. Additionally, the policy allows for an administrative fee of 1.0% supporting campus-wide fundraising and stewardship activities (0.80%) and offsetting the internal cost of managing endowment assets (0.20%).

The University records its permanent endowments at the lower of original gift value or current market value in the Restricted Nonexpendable Net Position category. Of the endowments that are recorded at current market value, the net deficiency from the original gift value is \$398,000 at June 30, 2018.

Net appreciation (depreciation) in the fair value of investments includes both realized and unrealized gains and losses on investments. The University realized net gains of \$62,260,000 in fiscal year 2018 from the sale of investments. The calculation of realized gains and losses is independent of the net appreciation of the fair value of investments. Realized gains and losses on investments that have been held in more than one fiscal year and are sold in the current year include the net appreciation (depreciation) of these investments reported in the prior year(s). The net appreciation in the fair value of investments during the year ended June 30, 2018 was \$299,457,000.

#### **FUNDING COMMITMENTS**

The University enters into contracts with investment managers to fund alternative investments. As of June 30, 2018, the University had outstanding commitments to fund alternative investments of \$425,526,000. These commitments are expected to be called over a multi-year time frame, generally 2-5 years depending on the type of fund. The University believes it has adequate liquidity and funding sources to meet these obligations.

#### **DERIVATIVES**

The University's investment policies allow investing in various derivative instruments, including futures, swaps and forwards, to manage exposures within or across the portfolio and to improve the portfolio's risk/return profile.

Futures are financial contracts obligating the buyer to purchase an asset at a predetermined future date and price. Total return swaps involve commitments to pay interest in exchange for a market-linked return, both based on notional amounts. Derivative instruments are recorded on the contract date and are carried at fair value using listed price quotations or amounts that approximate fair value. The notional amount and fair value of investment derivative instruments outstanding at June 30, 2018, categorized by type, are as follows:

TABLE 3 - INVESTMENT DERIVATIVES (Dollars in thousands)							
Notational Amount as of June 30 Fair Value as of June 30 Change in Fair Value							
DESCRIPTION	2018	ASSET CLASSIFICATION	2018	INCOME CLASSIFICATION	2	2018	
OPTIONS PURCHASED-PUTS	\$ 161	INVESTMENTS	\$ 137	INVESTMENT INCOME	\$	(24)	
SWAPS FIXED INCOME - LONG	119,807	INVESTMENTS	119,010	INVESTMENT INCOME		(797)	
SWAPS FIXED INCOME SHORT	(119,001)	INVESTMENTS	(115,391)	INVESTMENT INCOME		3,610	
FUTURES ON CONTRACTS - LONG	180,216	INVESTMENTS	180,268	INVESTMENT INCOME		52	
FUTURES ON CONTRACTS - SHORT	(64,727)	INVESTMENTS	(65,075)	INVESTMENT INCOME		(348)	

Credit exposure represents exposure to counterparties relating to financial instruments, where gains exceed collateral held by the University or losses are less than the collateral posted by the University. There was no credit exposure as of June 30, 2018. No derivative instruments have been reclassified from a hedging instrument to an investment instrument.

Details on foreign currency derivatives are disclosed under Foreign Exchange Risk.

#### **INTEREST RATE RISK**

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of fixed income securities. The University manages interest rate risk through its investment policies and the investment guidelines established with each manager. Each fixed income manager is assigned a maximum boundary for duration as compared to the manager's relevant benchmark index. The goal is to allow ample freedom for the manager to perform, while controlling the interest rate risk in the portfolio. Effective duration is a commonly used measure of interest rate risk. The longer the duration, the more sensitive the portfolio is to changes in interest rates. The weighted average effective duration of the University's fixed income portfolio was 1.74 years at June 30, 2018.

#### CREDIT RISK

Fixed income securities are also subject to credit risk, which is the risk that the issuer or other counterparty to a financial instrument will not fulfill its obligations, or that negative perceptions of the issuer's ability to make these payments will cause prices to decline. Concentration of credit risk is the risk of loss attributed to the magnitude of a government's investment in a single issuer. The University Investment Policies limit fixed income exposure to investment grade assets. The Investment Policy for the Invested Funds' cash pool requires each manager to maintain an average quality rating of

"AA" as issued by a nationally recognized rating organization. The Invested Funds' liquidity pool requires each manager to maintain an average quality rating of "A" and to hold 25% of their portfolios in government and government agency issues. The Investment Policy for the CEF reflects its long-term nature by specifying average quality rating levels by individual manager, but still restricting investment to investment grade credits.

Duration is a calculation of the number of years required to recover the true cost of a bond. The duration measures presented in Table 4 below represent a broad average across all fixed income securities held in the CEF, the Invested Funds Pool (IF or operating funds) and debt service reserve funds. The CEF and IF portfolios are managed to have a duration below their policy benchmarks to protect principal and provide liquidity to the overall portfolio.

Duration and credit risk figures at June 30, 2018 exclude \$16,274,000 of fixed income securities held by component units. These amounts make up 0.77% of the University's fixed income investments, and are not included in the duration figures detailed in Table 4.

The composition of fixed income securities at June 30, 2018, along with credit quality and effective duration measures, is summarized as follows:

TABLE 4 - FIXED INCOME: CREDIT QUALITY AND EFFECTIVE DURATION (Dollars in thousands)							
2018							
Investments	U.S. Government	Investment Grade*	Non-Investment Grade	Not Rated	Total	Duration (in years)	
U.S. TREASURY SECURITIES	\$ 648,644	\$ -	\$ -	\$ -	\$ 648,644	1.85	
U.S. GOVERNMENT AGENCY	540,529	-	-	-	540,529	2.85	
MORTGAGE BACKED	-	164,675	42,247	25,052	231,974	1.99	
ASSET BACKED	-	147,713	1,134	26,602	175,449	0.71	
CORPORATE AND OTHER	-	368,800	31,830	87,938	488,568	1.14	
TOTAL	\$ 1,189,173	\$ 681,188	\$ 75,211	\$ 139,592	\$ 2,085,164	1.74	

<sup>\*</sup> Investment Grade securities are those that are rated BBB and higher by Standard and Poor's or Baa and higher by Moody's.

#### **FOREIGN EXCHANGE RISK**

Foreign exchange risk is the risk that investments denominated in foreign currencies may lose value due to adverse fluctuations in the value of the U.S. dollar relative to foreign currencies. The University's investment policies permit investments in international equity and other asset classes, which can include foreign currency exposure. The University also enters into foreign currency forward contracts, futures contracts, and options to manage the foreign currency exposure. The University held non-U.S. denominated securities at June 30, 2018 of \$1,458,133,000.

TABLE 5 – INVESTMENTS DENOMINATED IN FOREIG	IN CURRENCY
(Dollars in thousands)	2018
CHINESE RENMINBI (CNY)	\$ 232,898
EURO (EUR)	161,709
INDIAN RUPEE (INR)	154,962
JAPANESE YEN (JPY)	141,518
CANADIAN DOLLAR (CAD)	97,112
BRAZIL REAL (BRL)	78,752
BRITISH POUND (GBP)	78,660
SOUTH KOREAN WON (KRW)	58,605
HONG KONG DOLLAR (HKD)	55,290
SWISS FRANC (CHF)	41,690
MEXICAN PESO (MXN)	33,643
TAIWANESE DOLLAR (TWD)	33,151
RUSSIAN RUBLE (RUB)	30,289
AUSTRALIAN DOLLAR (AUD)	24,972
SWEDISH KRONA (SEK)	21,674
ARGENTINE PESO (ARS)	19,925
INDONESIAN RUPIAH (IDR)	17,949
SOUTH AFRICAN RAND (ZAR)	17,856
PHILIPPINE PESO (PHP)	13,943
REMAINING CURRENCIES	143,535
TOTAL	\$ 1,458,133

#### NOTE 7:

### Metropolitan Tract

The University of Washington Metropolitan Tract (Metropolitan Tract), located in downtown Seattle, comprises approximately 11 acres of developed property including office space, retail space, residential apartments, parking, and a luxury hotel. This land was the original site of the University from 1861 until 1895 when the University moved to its present location on Lake Washington. Since the early 1900s, the University has managed the Metropolitan Tract by leasing to third party tenants, and ground leasing to entities responsible for developing and operating new buildings.

The balance as of June 30, 2018 of \$152,233,000 represents the asset value net of operating liabilities and long-term debt on the property. The asset value is comprised primarily of land, buildings, building improvements and operating assets.

Total debt outstanding on the Metropolitan Tract was \$31,300,000 as of June 30, 2018, which will be repaid by proceeds from the properties. The debt was issued in 2015 to refund commercial paper and acquire the leasehold on the Cobb Building. This amount is reflected in the balance for Metropolitan Tract on the Statement of Net Position, and is therefore not included in Note 9 or Note 11.

In 2014, the University entered into an agreement with Wright Runstad to undertake redevelopment of the Rainier Square (Predevelopment Agreement). The agreement commenced on November 1, 2014 and expires upon the completion of certain development milestones. The Predevelopment Agreement provides for the execution of a ground lease for the development of a multi-use office tower (Rainier Square Tower Lease) and a separate ground lease for a luxury hotel (Rainier Square Hotel Lease).

On September 12, 2017, the University executed the Rainier Square Tower Lease with Wright Runstad and amended the Predevelopment Agreement to allow for a separate future closing of the Rainier Square Hotel Lease. The Tower Lease has an 80 year term, requires Wright Runstad to complete development of the approved building in four years, is unsubordinated, and requires minimum ground rent during construction and 8% of adjusted gross revenue from the project thereafter. Demolition of the old Rainier Square building occurred in November 2017 and construction of the new Rainier Square Tower commenced thereafter.

In connection with the Tower Lease, the University executed an Operating Agreement with Wright Runstad that regulates how the existing Rainier Tower and the lessees of the Rainier Square Tower and the Rainier Square Hotel will operate shared mix use space on the Rainier Square block. The Predevelopment Agreement still applies to the Rainier Square Hotel Lease site.

#### NOTE 8:

#### Capital Assets

Capital asset activity for the period ended June 30, 2018 is summarized as follows:

(Dollars in thousands)	Balance at June 30, 2017	Additions/ Transfers	Retirements	Balance at June 30, 2018
LAND	\$ 144,211	\$ 413	\$ -	\$ 144,624
INFRASTRUCTURE	310,088	1,265	55	311,298
BUILDINGS	6,151,073	286,982	2,606	6,435,449
FURNITURE, FIXTURES AND EQUIPMENT	1,476,943	106,634	67,257	1,516,320
LIBRARY MATERIALS	364,491	14,253	1,989	376,755
CAPITALIZED COLLECTIONS	7,248	117	-	7,365
INTANGIBLE ASSETS	208,528	12,462	302	220,688
CONSTRUCTION IN PROGRESS	349,699	221,651	4,562	566,788
INTANGIBLES IN PROCESS	10,510	(2,190)	823	7,497
TOTAL COST	9,022,791	641,587	77,594	9,586,784
LESS ACCUMULATED DEPRECIATION/AMORTIZATION:				
INFRASTRUCTURE	120,556	8,708	55	129,209
BUILDINGS	2,600,309	218,775	2,597	2,816,487
FURNITURE, FIXTURES AND EQUIPMENT	1,193,473	116,503	58,535	1,251,441
LIBRARY MATERIALS	273,171	14,140	1,521	285,790
INTANGIBLE ASSETS	98,248	25,878	-	124,126
TOTAL ACCUMULATED DEPRECIATION/AMORTIZATION	4,285,757	384,004	62,708	4,607,053
CAPITAL ASSETS, NET	\$ 4,737,034	\$ 257,583	\$ 14,886	\$ 4,979,731

#### NOTE 9:

### Long-Term Liabilities

#### **UNIVERSITY OF WASHINGTON**

Long-term liability activity for the period ended June 30, 2018 is summarized as follows:

(Dollars in thousands)	Balance at June 30, 2017	Additions/ Transfers	Reductions	Balance at June 30, 2018	Current Portion 2018
BONDS PAYABLE:					
GENERAL OBLIGATION BONDS PAYABLE (NOTE 11)	\$ 109,199	\$ -	\$ 13,890	\$ 95,309	\$ 13,920
REVENUE BONDS PAYABLE (NOTE 11)	2,112,330	133,785	77,250	2,168,865	61,375
UNAMORTIZED PREMIUM ON BONDS	157,204	22,800	17,106	162,898	17,535
TOTAL BONDS PAYABLE	2,378,733	156,585	108,246	2,427,072	92,830
NOTES PAYABLE AND CAPITAL LEASES:					
NOTES PAYABLE & OTHER - CAPITAL ASSET RELATED (NOTE 11)	26,639	6,537	5,620	27,556	5,507
NOTES PAYABLE & OTHER - NONCAPITAL ASSET RELATED (NOTE 11)	1,479	86	134	1,431	1,351
CAPITAL LEASE OBLIGATIONS (NOTE 10)	12,829	216	2,943	10,102	2,556
TOTAL NOTES PAYABLE AND CAPITAL LEASES	40,947	6,839	8,697	39,089	9,414
OTHER LONG-TERM LIABILITIES:					
OBLIGATIONS UNDER SPLIT-INTEREST AGREEMENTS	54,683	8,214	5,712	57,185	5,712
POLLUTION REMEDIATION LIABILITY (NOTE 1)	21,000	-	-	21,000	1,000
HMC ITS FUNDING (NOTE 14)	30,258	3,025	3,564	29,719	11,500
SICK LEAVE (NOTE 1)	46,771	6,066	3,202	49,635	4,061
SELF-INSURANCE (NOTE 17)	78,484	42,033	8,307	112,210	12,000
OTHER NONCURRENT LIABILITIES	19,206	2,133	145	21,194	-
TOTAL OTHER LONG-TERM LIABILITIES	250,402	61,471	20,930	290,943	34,273
TOTAL LONG-TERM LIABILITIES	\$ 2,670,082	\$ 224,895	\$ 137,873	\$ 2,757,104	\$ 136,517

#### **COMPONENT UNIT**

Long-term liability activity for the period ended June 30, 2018 is summarized as follows:

(Dollars in thousands)	Balance at June 30, 2017	Additions/ Transfers	Reductions	Balance at June 30, 2018	Current Portion 2018
VALLEY MEDICAL CENTER					
LIMITED TAX GENERAL OBLIGATION BONDS	\$ 238,359	\$ -	\$ 8,509	\$ 229,850	\$ 8,260
REVENUE BONDS	14,318	-	1,725	12,593	1,870
BUILD AMERICA BONDS	61,155	-	-	61,155	-
NOTES PAYABLE & OTHER	5,555	561	244	5,872	78
TOTAL LONG-TERM LIABILITIES	\$ 319,387	\$ 561	\$ 10,478	\$ 309,470	\$ 10,208

### **NOTE 10:**

#### Leases

Future minimum lease payments under capital leases, and the present value of the net minimum lease payments as of June 30, 2018, are as follows:

### **CAPITAL LEASES**

Year (Dollars in thousands)	Future Payments	
2019	\$ 2,791	
2020	2,383	
2021	2,054	
2022	1,851	
2023	1,494	
THEREAFTER	120	
TOTAL MINIMUM LEASE PAYMENTS	10,693	
LESS: AMOUNT REPRESENTING INTEREST COSTS	591	
PRESENT VALUE OF MINIMUM PAYMENTS	\$ 10,102	

#### **OPERATING LEASES**

The University has certain lease agreements in effect that are considered operating leases, which are primarily for leased building space. During the year ended June 30, 2018, the University recorded rent expense of \$87,508,000 for these leases. Future lease payments as of June 30, 2018 are as follows:

Year (Dollars in Thousands)	Future Payments	
2019	\$ 77,380	
2020	72,815	
2021	62,720	
2022	54,870	
2023	48,397	
2024 - 2028	115,060	
2029 - 2033	52,831	
2034 - 2038	56,224	
2039 - 2043	63,917	
2044 - 2048	75,102	
2049 - 2053	82,084	
2054 - 2058	97,545	
2059 - 2063	109,630	
TOTAL MINIMUM LEASE PAYMENTS	\$ 968,575	

#### **NOTE 11:**

### Bonds and Notes Payable

The bonds and notes payable at June 30, 2018 consist of state of Washington General Obligation and Refunding Bonds, University Revenue Bonds, and Notes Payable. These obligations have fixed interest rates ranging from 1.40% to 6.62%. Debt service requirements at June 30, 2018 were as follows:

BONDS AND NOTES PAYABLE (Dollars in thousands)						
		/ASHINGTON GATION BONDS	UNIVERSITY OF WASHINGTON GENERAL REVENUE BONDS		NOTES PAYABLE AND OTHER	
Year	Principal	Interest	Principal Interest		Principal	Interest
2019	\$ 13,920	\$ 4,473	\$ 61,375	\$ 101,965	\$ 6,858	\$ 1,001
2020	10,275	3,824	63,015	99,242	5,565	813
2021	10,765	3,305	66,640	96,362	5,216	624
2022	11,230	2,753	69,685	93,194	2,901	469
2023	11,790	2,162	69,345	89,858	1,304	355
2024 - 2028	35,705	3,528	370,220	397,394	4,509	1,089
2029 - 2033	1,624	33	383,650	304,007	2,634	264
2034 - 2038	-	-	421,580	209,936	_	-
2039 - 2043	-	-	477,385	95,182	-	=
2044 - 2048	-	-	185,970	14,142	_	-
TOTAL PAYMENTS	\$ 95,309	\$ 20,078	\$ 2,168,865	\$ 1,501,282	\$ 28,987	\$ 4,615

State law requires that the University reimburse the state for debt service payments relating to its portion of the state of Washington General Obligation and Refunding Bonds from medical center patient revenues, tuition, timber sales and other revenues.

#### **ISSUANCE ACTIVITY**

On February 15, 2018, the University issued \$133,785,000 in General Revenue & Refunding Bonds, 2018, at a premium of \$22,800,000. The proceeds were used to fund various projects such as Phase 4a of the Housing Master Plan, and construction of the Life Sciences Building. In addition, proceeds were used to pay off \$125,881,000 in commercial paper. The 2018 bonds have a coupon rate of 5.00%. The average life of the 2018 General Revenue Bonds is 15.62 years with final maturity on April 1, 2048.

#### **COMMERCIAL PAPER PROGRAM**

The University has a commercial paper program with a maximum borrowing limit of \$250,000,000, payable from University general revenues. This short-term borrowing program is primarily used to fund capital expenditures. As of June 30, 2018, there was \$90,000,000 in outstanding commercial paper recorded in Other Current Liabilities on the Statement of Net Position.

During fiscal year 2018, the University issued \$178,000,000 of commercial paper debt. \$125,881,000 of this was refunded with General Revenue Bonds, Series 2018, \$6,119,000 was refunded with University funds and \$23,000,000 was refunded with state appropriated funds.

#### SUBSEQUENT DEBT ACTIVITY

On July 16, 2018, the University repaid \$25,000,000 of commercial paper debt with University funds.

On August 8, 2018, the University issued \$35,000,000 of commercial paper. The proceeds will be used to fund the Life Sciences Building and Phase 4a of the Housing Master Plan.

#### **NOTE 12:**

#### Deferred Outflows and Deferred Inflows of Resources

The composition of deferred outflows and deferred inflows of resources at June 30 are summarized as follows:

DEFERRED OUTFLOWS AND INFLOWS OF RESOURCES (Dollars in thousands)					
2018	Pensions	ОРЕВ	Split-Interest Agreements	Other	Total
DEFERRED OUTFLOWS OF RESOURCES	\$ 189,227	\$ 24,771	\$ -	\$ 30,043	\$ 244,041
DEFERRED INFLOWS OF RESOURCES	248,192	223,156	44,975	-	516,323

#### **NOTE 13:**

### Operating Expenses by Function

Operating expenses by functional classification for the year ended June 30, 2018 are summarized as follows:

<b>OPERATING EXPENSES</b> (Dollars in thousands)	2018
INSTRUCTION	\$ 1,267,799
RESEARCH	785,223
PUBLIC SERVICE	48,916
ACADEMIC SUPPORT	511,931
STUDENT SERVICES	51,950
INSTITUTIONAL SUPPORT	251,569
OPERATION & MAINTENANCE OF PLANT	201,101
SCHOLARSHIPS & FELLOWSHIPS	149,378
AUXILIARY ENTERPRISES	494,956
MEDICAL-RELATED	1,711,969
DEPRECIATION/AMORTIZATION	384,004
TOTAL OPERATING EXPENSES	\$ 5,858,796

### Instruction

Instruction includes expenses for all activities that are part of an institution's instructional programs. Expenses for credit and noncredit courses; academic, vocational, and technical instruction; and tutorial instruction are included in this category. The University's professional and continuing education programs are also included.

### Research

The research category includes all expenses for activities specifically organized to produce research, which are funded by federal, state, and private institutions.

### **Public Service**

Public service includes activities conducted primarily to provide non-instructional services to individuals and groups other than the University and its students, such as community service programs, conferences, institutes and general advisory services.

The activities of the University's public radio stations, Center for Educational Leadership and clinical trials are included in this category.

### **Academic Support**

Academic support includes expenses incurred to provide support services for the institution's primary missions: instruction, research, and public service. The activities of the University's academic administration, libraries, museums and galleries, and information technology support for academic activities are included in this category.

### **Student Services**

The student services category includes the Offices of Admissions and the University Registrar. The activities of the Center for Undergraduate Advising, Diversity, and Student Success, and the operations of the Rubenstein Pharmacy in the student health center are also included in this category.

# **Institutional Support**

The institutional support category includes central activities that manage long-range planning for the institution, such as planning and programming operations, legal services, fiscal operations, space management, procurement and activities concerned with community and alumni relations. The University's central administration departments and information technology support for non-academic activities are included in this category.

# **Operation and Maintenance of Plant**

The operation and maintenance of plant category includes the administration, operation, maintenance, preservation, and protection of the institution's physical plant.

# **Scholarships and Fellowships**

This category includes expenses for scholarships and fellowships and other financial aid not funded from existing University resources. Financial aid funded from existing University resources are considered scholarship allowances, which are reflected as an offset to tuition revenues. Expenditure of amounts received from the Washington State Need grant, Washington Higher Education grant, and Pell grants are reflected in this manner.

# **Auxiliary Enterprises**

Auxiliary enterprises furnish goods or services to students, faculty, staff or the general public. These units charge a fee directly related to the cost of the goods or services. A distinguishing characteristic of an auxiliary enterprise is that it operates as a self-supporting activity. The activities of the University's Intercollegiate Athletics, Commuter Services and Housing and Food Services departments are included in this category.

### Medical-related

The medical-related category includes all expenses associated with patient-care operations, including nursing and other professional services, general services, administrative services, and fiscal services. The activities of UWMC, UWP, NWH, Airlift Northwest and Neighborhood Clinics are included in this category.

# **Depreciation/Amortization**

Depreciation and amortization reflect a periodic expensing of the cost of capitalized assets such as buildings, equipment, software or other intangible assets, spread over their estimated useful lives.

# **NOTE 14:**

# **Related Parties**

**Harborview Medical Center (HMC)**, a hospital and Level I adult and pediatric trauma center located in Seattle, is a component unit of King County, Washington. It has been managed by the University under a management contract between King County and the University since 1967. In February 2016, the University and King County entered into a Hospital Services Agreement. The agreement has a ten-year term and may be renewed by the parties for two successive ten-year terms.

Under the Hospital Services Agreement, King County retains title to all real and personal properties acquired for King County with HMC capital or operating funds. These real and personal properties are recorded on HMC's books and facility revenues for the operation of HMC are deposited in a King County account that is separate from general King County accounts.

The University is responsible for the operations of HMC, including the provision of medical, dental and management services. All of the individuals employed at HMC, including physicians, are employees of the University. HMC expenses, including payroll, are reimbursed to the University from HMC fund sources.

HMC revenues and expenses are not recognized in the University's financial statements. The University's financial statements do, however, include accounts receivable from HMC of \$32,455,000 as of June 30, 2018, as well as HMC investments of \$3,832,000, current accrued liabilities of \$32,554,000 and long-term liabilities of \$29,719,000.

Under an annual agreement, HMC provides strategic funding to Neighborhood Clinics. Funding from HMC to Neighborhood Clinics was \$11,334,000 during fiscal year 2018, and is presented as Other Operating Revenue in the Statement of Revenues, Expenses and Changes in Net Position.

**UW Medicine Information Technology** operates as a self-sustaining activity of the University (ITS department). The ITS department records enterprise-wide information technology capital assets that are purchased for use by UW Medicine entities. The HMC ITS funding reflected in long-term liabilities (Note 9) of \$29,719,000 at June 30, 2018, represents HMC's funding of the enterprise-wide information technology capital assets which will be included in the recharge rates of the ITS department over the useful life of the assets.

**The University of Washington Foundation (UWF)** is a nonprofit organization that performs fundraising activities on behalf of the University. The UWF is not included in the University's financial statements as a component unit because gifts and grants that are made to the UWF are immediately transferred to the University. In 2018, the UWF transferred \$132,469,000 to the University in gifts and grants received on its behalf; these are included in the financial statements of the University. The remaining amounts retained by the UWF are not significant to the University's financial statements.

**The University of Washington Alumni Association** is a tax-exempt entity that was established to connect and celebrate alumni and to support the University's mission. The Alumni Association received \$3,989,000 from the University in support of its operations in fiscal year 2018. These amounts were expensed by the University.

### **NOTE 15:**

# **Pension Plans**

The University offers four contributory pension plans: 1) the Washington State Public Employees' Retirement System (PERS) plan, 2) the Washington State Teachers' Retirement System (TRS) plan, 3) the Law Enforcement Officers' and Fire Fighters' Retirement System (LEOFF) plan, and 4) the University of Washington Retirement Plan (UWRP). PERS, TRS, and LEOFF are cost sharing multiple-employer defined-benefit pension plans administered by the Washington State Department of Retirement Systems (DRS). UWRP is a defined-contribution plan with a supplemental noncontributory defined-benefit plan component, and is administered by the University.

As of June 30, 2018, the University's share of the total unfunded liabilities associated with the defined-benefit pension plans administered by the DRS was \$772,371,000. The liability associated with the defined benefit pension plan administered by the University was \$412,481,000, but does not reflect assets segregated in a separate investment account to pay future retiree benefits of \$261,087,000. For the year ended June 30, 2018, total pension expense recorded by the University related to both the DRS and University plans was \$92,338,000.

# PLANS ADMINISTERED BY DRS

# **PLAN DESCRIPTION**

# **Public Employees' Retirement System**

PERS retirement benefit provisions are contained in chapters 41.34 and 41.40 of the Revised Code of Washington (RCW). PERS is a cost-sharing multiple-employer retirement system comprised of three separate pension plans for membership purposes. PERS Plan 1 and PERS Plan 2 are defined-benefit plans, and PERS Plan 3 is a defined-benefit plan with a defined-contribution component. PERS members include higher education employees not participating in other higher education retirement programs.

For accounting purposes, PERS is reported as three separate plans. Plan 1 accounts for the defined benefits of Plan 1 members, Plan 2/3 accounts for the defined benefits of Plan 2 and Plan 3 members, and Plan 3 accounts for the defined-contribution portion of Plan 3 members. The defined-benefit portions of Plan 2 and Plan 3 are accounted for in the same pension trust fund, and all assets of Plan 2/3 may legally be used to pay the defined benefits of any of the Plan 2 or Plan 3 members or beneficiaries.

# **Teachers' Retirement System**

TRS retirement benefit provisions are contained in chapters 41.32 and 41.34 of the RCW. TRS is a cost-sharing, multiple-employer retirement system, comprised of three separate pension plans for membership purposes; TRS Plan 1 and TRS Plan 2 are defined-benefit plans and TRS Plan 3 is a defined-benefit plan with a defined-contribution component. TRS eligibility for membership requires service as a certificated public school employee working in an instructional, administrative or supervisory capacity.

For accounting purposes, similar to PERS, TRS is reported as three separate plans. Plan 1 accounts for the defined benefits of Plan 1 members, Plan 2/3 accounts for the defined benefits of Plan 2 and Plan 3 members, and Plan 3 accounts for the defined-contribution portion of Plan 3 members. The defined-benefit portions of Plan 2 and Plan 3 are accounted for in the same pension trust fund, and all assets of Plan 2/3 may legally be used to pay the defined benefits of any of the Plan 2 or Plan 3 members or beneficiaries.

# Law Enforcement Officers' and Fire Fighters' Retirement System

LEOFF retirement benefit provisions are contained in chapter 41.26 of the RCW. LEOFF is a cost-sharing multiple- employer retirement system comprised of two separate pension plans for both membership and accounting purposes. The University participates in LEOFF Plan 2, which is a defined-benefit plan. LEOFF membership includes full-time, fully compensated, local law enforcement commissioned officers, firefighters, and as of July 24, 2005, emergency medical technicians.

# **VESTING AND BENEFITS PROVIDED**

# PERS Plan 1 and TRS Plan 1

PERS Plan 1 and TRS Plan 1 provide retirement, disability and death benefits. Both plans are closed to new entrants. All members were vested after the completion of five years of eligible service. Retirement benefits are determined as two percent of the member's average final compensation (AFC) times the member's years of service. The AFC is the average of the member's 24 highest-paid consecutive service months. The retirement benefit may not exceed 60% of the AFC.

Members are eligible for retirement from active status at any age with at least 30 years of service, at age 55 with at least 25 years of service, or at age 60 with at least five years of service. Members retiring from inactive status prior to the age of 65 may receive actuarially reduced benefits. Other benefits include duty and nonduty disability payments, an optional cost-of-living allowance, and a one-time duty-related death benefit, if the member is found eligible by the Washington State Department of Labor and Industries.

# PERS Plan 2/3 and TRS Plan 2/3

PERS Plan 2/3 and TRS Plan 2/3 provide retirement, disability and death benefits. PERS Plan 2 and TRS Plan 2 members are vested after completion of five years of eligible service. PERS Plan 3 and TRS Plan 3 members are vested in the defined-benefit portion of their plan after 10 years of service, or after five years of service if 12 months are earned after age 44. Retirement benefits are determined as 2% of the member's AFC times the member's years of service for Plan 2, and 1% of AFC times the member's years of service for Plan 3. The AFC is the average of the member's 60 highest-paid consecutive service months. There is no cap on years of service credit.

Members are eligible for retirement with a full benefit at age 65 with at least five years of service credit. Retirement before age 65 is considered early retirement. Members are eligible for early retirement with a reduced benefit at age 55 with at least 20 years of service credit. The benefit is reduced by a factor that varies according to age, for each year before age 65.

Retirement benefits are actuarially reduced to reflect the choice of a survivor benefit. Other benefits include duty and non-duty disability payments, a cost-of-living allowance (based on the Consumer Price Index) capped at three percent annually, and a one-time duty-related death benefit, if the member is found eligible by the Washington State Department of Labor and Industries.

# **LEOFF Plan 2**

LEOFF Plan 2 provides retirement, disability and death benefits. Members are vested after completing five years of eligible service. Retirement benefits are determined as 2% of the final average salary (FAS) per year of service, based on the member's 60 highest-paid consecutive service months. Members are eligible for retirement with a full benefit at age 53 with at least five years of service credit. Members who retire prior to age 53 receive reduced benefits.

Other benefits include duty and non-duty disability payments, a cost-of-living allowance (based on the Consumer Price Index) capped at 3% annually, and a one-time duty-related death benefit if the member is found eligible by the Washington State Department of Labor and Industries.

# FIDUCIARY NET POSITION

The pension plans' fiduciary net positions have been determined on the same basis as they are reported by the pension plans. DRS financial statements have been prepared in conformity with generally accepted accounting principles. The retirement plans are accounted for in pension trust funds using the flow of economic resources measurement focus and the accrual basis of accounting. Member contributions are recognized as revenues in the period in which the contributions are earned. Employer contributions are recognized when due, and the employer has made a formal commitment to provide the contributions. Benefits and refunds are recognized when due and payable, in accordance with the terms of each plan.

Chapter 43.33A of the RCW authorizes the Washington State Investment Board (WSIB) with investment management responsibility for the pension funds. Investments are reported at fair value, and unrealized gains and losses are included as investment income in the Statement of Changes in Fiduciary Net Position presented in the DRS Comprehensive Annual Financial Report. Purchases and sales of investments are recorded on a trade-date basis.

DRS publishes an annual report for retirement plans, which is available at drs.wa.gov/administration/annual-report/default.htm.

### **ACTUARIAL ASSUMPTIONS**

Accounting requirements dictate the use of assumptions to best estimate the impact that pension obligations will have on the University. The professional judgments used in determining these assumptions are important, and can significantly impact the resulting actuarial estimates. Differences between actual results compared to these assumptions could have a significant effect on the University's financial statements.

The total pension liability for each DRS plan was determined by an actuarial valuation, conducted by the Washington State Office of the State Actuary (OSA). The University's 2018 pension liability is based on an OSA valuation performed as of June 30, 2016, with the results rolled forward to the measurement date of June 30, 2017. The following actuarial assumptions have been applied to all prior periods included in the measurement:

INFLATION	3.0% TOTAL ECONOMIC INFLATION, 3.75% SALARY INFLATION
SALARY INCREASE	EXPECTED TO GROW BY PROMOTIONS AND LONGEVITY IN ADDITION TO SALARY INFLATION ASSUMPTION OF 3.75%
INVESTMENT RATE OF RETURN	7.50%

Mortality rates were based on the RP-2000 Combined Healthy Table and Combined Disabled Table published by the Society of Actuaries' Retirement Plans Experience Committee (RPEC). As recommended by the RPEC, the OSA applied offsets to the base table and recognized future improvements in mortality by projecting the mortality rates using 100% Scale BB. Mortality rates are applied on a generational basis, meaning members are assumed to receive additional mortality improvements in each future year, throughout their lifetimes.

The actuarial assumptions used in the June 30, 2016 valuation were based on the results of the 2007-2012 Experience Study Report and the 2015 Economic Experience Study. Additional assumptions for subsequent events and law changes are current as of the 2016 actuarial valuation report.

The long-term expected rate of return on pension plan investments was determined by the WSIB using a building block method in which a best estimate of expected future rates of return (expected returns, net of pension plan investment expense, but including inflation) are developed for each major asset class. Those expected returns make up one component of WSIB's Capital Market Assumptions (CMAs). WSIB uses the CMAs and their target asset allocation to simulate future investment returns over various time horizons.

The long-term expected rate of return of 7.50% approximately equals the median of the simulated investment returns over a 50-year time horizon, adjusted to remove or damper any short-term changes that are not expected over the entire 50-year measurement period.

Best estimates of arithmetic real rates of return for each major asset class included in the target asset allocation for each pension plan, as of the measurement date of June 30, 2017, are summarized in the following table:

2018 (Measurement Date 2017)

Asset Class	Target Allocation	Long-Term Expected Arithmetic Real Rate of Return
FIXED INCOME	20.00%	1.70%
TANGIBLE ASSETS	5.00%	4.90%
REAL ESTATE	15.00%	5.80%
GLOBAL EQUITY	37.00%	6.30%
PRIVATE EQUITY	23.00%	9.30%

The inflation component used to create the above table is 2.20%, and represents WSIB's most recent long-term estimate of broad economic inflation.

### **DISCOUNT RATE**

The discount rate used to measure the total pension liabilities as of June 30, 2018 was 7.50%. The projection of cash flows used to determine the discount rate assumed that contributions from plan members will be made at contractually required rates, and that contributions from employers will be made at statutorily required rates, actuarially determined (including the component of PERS 2/3 and TRS 2/3 employer rates pertaining to the unfunded actuarial accrued liabilities for PERS 1 and TRS 1, respectively). Based on those assumptions, the fiduciary net position for each pension plan was projected to be sufficient to make all projected future benefit payments of the current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Using the WSIB long-term expected rate of return, a 7.50% future investment rate of return on pension plan investments was assumed. The expected return on plan assets is the estimated long-term rate of return that will be earned on the investments used to fund the pension obligation. Contributions from plan members and employers were assumed to continue to be made at contractually required rates (including the component of PERS 2/3 and TRS 2/3 employer rates pertaining to the unfunded actuarial accrued liabilities for PERS 1 and TRS 1, respectively, as provided for in chapter 41.45 of the RCW).

# SENSITIVITY OF THE NET PENSION LIABILITY (ASSET) TO CHANGES IN THE DISCOUNT RATE

The following table presents the University's proportionate net pension liability calculated using the discount rate of 7.50% as well as what the net pension liability would be if it were calculated using a discount rate that is one-percentage-point lower (6.50%) or one-percentage-point higher (8.50%) than the current rate.

DISCOUNT RATE	SENSITIVITY - NET PENS	ION LIABILITY (ASSE	T)
(Dollars in thousand:	s)	2018	
Plan	1% Decrease	Current Discount Rate	1% Increase
PERS 1	\$ 487,796	\$ 400,426	\$ 324,746
PERS 2/3	980,851	364,073	(141,285)
TRS 1	7,555	6,076	4,795
TRS 2/3	6,099	1,796	(1,699)
LEOFF 2	648	(2,995)	(5,963)

# **EMPLOYER CONTRIBUTION RATES**

Employer contribution rates are developed in accordance with Chapter 41.45 of the RCW by the OSA, and include an administrative expense component that is currently set at 0.18% of compensation reported to DRS. The statute provides authority to the Pension Funding Council to adopt changes to economic assumptions and contribution rates. The contribution rates and required contributions for each DRS plan in which the University participates are shown in the table below.

<b>Description</b> (Dollars in Thousands)	PERS 1	PERS 2/3 <sup>a</sup>	TRS 1	TRS 2/3 <sup>a</sup>	LEOFF 2
2018					
CONTRIBUTION RATE	12.70%	12.70%	15.20%	15.20%	8.93%
CONTRIBUTIONS MADE	\$ 54,839	\$ 79,047	\$ 1,006	\$ 1,053	\$ 392

<sup>&</sup>lt;sup>a</sup> Plan 2/3 employer rate includes a component to address the Plan 1 unfunded actuarial accrued liability

### UNIVERSITY PROPORTIONATE SHARE

Collective pension amounts are determined as of a measurement date, which can be no earlier than an employer's prior fiscal year. The measurement date for the net pension liabilities recorded by the University as of June 30, 2018 was June 30, 2017. Employer contributions received and processed by the DRS during the fiscal year ended June 30, 2017 have been used as the basis for determining each employer's proportionate share of the collective pension amounts reported by the DRS in their June 30, 2017 Schedules of Employer and Nonemployer Allocations. The University's proportionate share for each DRS plan is shown in the table below.

PROPORTIONATE SHARE					
PLAN	PERS 1	PERS 2/3	TRS 1	TRS 2/3	LEOFF 2
YEAR ENDED JUNE 30, 2018	8.44%	10.48%	0.20%	0.19%	0.22%

# **UNIVERSITY AGGREGATED BALANCES**

The University's aggregated balance of net pension liabilities and net pension asset as of June 30, 2018 is presented in the table below.

(Dollars in Thousands)	PERS 1	PERS 2/3	TRS 1	TRS 2/3	LEOFF 2	TOTAL
2018						
NET PENSION LIABILITY	\$ 400,426	\$ 364,073	\$ 6,076	\$ 1,796	\$ -	\$ 772,371
NET PENSION ASSET	=	-	-	=	2,995	2,995

### PENSION EXPENSE, DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES

The tables below summarize the University's pension expense, deferred outflows of resources and deferred inflows of resources related to the DRS pension plans, together with the related future year impacts to pension expense from amortization of those deferred amounts. Note that deferred outflows of resources related to University contributions subsequent to the measurement date are recognized as a reduction of the net pension liability in the following year, and are not amortized to pension expense.

PROPORTIONATE SHARE OF PENSION EXPENSE (Dollars in	thousands)					
	PERS 1	PERS 2/3	TRS 1	TRS 2/3	LEOFF 2	TOTAL
YEAR ENDED JUNE 30, 2018	\$ 23,229	\$ 55,060	\$ 1,747	\$ 927	\$ (144)	\$ 80,819
DEFERRED OUTFLOWS OF RESOURCES (Dollars in thousands	)					
2018	PERS 1	PERS 2/3	TRS 1	TRS 2/3	LEOFF 2	TOTAL
CHANGE IN ASSUMPTIONS	\$ -	\$ 3,867	\$ -	\$ 21	\$ 4	\$ 3,892
DIFFERENCE BETWEEN EXPECTED AND ACTUAL EXPERIENCE	-	36,889	-	448	132	37,469
CHANGE IN UNIVERSITY'S PROPORTIONATE SHARE	-	10,216	-	1,038	276	11,530
UNIVERSITY CONTRIBUTIONS SUBSEQUENT TO THE MEASUREMENT DATE OF THE COLLECTIVE NET PENSION LIABILITY $\ensuremath{^{(o)}}$	54,839	79,047	1,005	1,053	392	136,336
TOTAL	\$ 54,839	\$ 130,019	\$ 1,005	\$ 2,560	\$ 804	\$ 189,227
(a) Recognized as a reduction of the net pension liability as of June 30, 2019						
DEFERRED INFLOWS OF RESOURCES (Dollars in thousands)						
2018	PERS 1	PERS 2/3	TRS 1	TRS 2/3	LEOFF 2	TOTAL
DIFFERENCE BETWEEN PROJECTED AND ACTUAL EARNINGS ON PLAN INVESTMENTS, NET	\$ 14,943	\$ 97,053	\$ 257	\$ 650	\$ 672	\$113,575
DIFFERENCE BETWEEN EXPECTED AND ACTUAL EXPERIENCE	-	11,974	-	92	114	12,180
CHANGE IN UNIVERSITY'S PROPORTIONATE SHARE	-	-	-	-	239	239
TOTAL	\$ 14,943	\$ 109,027	\$ 257	\$ 742	\$ 1,025	\$125,994

Amounts reported as deferred outflows of resources, exclusive of contributions made after the measurement date, and deferred inflows of resources will be recognized in pension expense as follows:

AMORTIZATION (	OF DEFERRED INFLOV	VS AND DEFERRED (	OUTFLOWS OF RESOL	JRCES (a) (Dollars in the	ousands)	
YEAR	PERS 1	PERS 2/3	TRS 1	TRS 2/3	LEOFF 2	TOTAL
2019	\$ (10,100)	\$ (34,293)	\$ (189)	\$ 27	\$ (335)	\$ (44,890)
2020	3,189	13,561	71	361	43	17,225
2021	(741)	(7,525)	(6)	144	(71)	(8,199)
2022	(7,291)	(38,522)	(133)	(168)	(323)	(46,437)
2023	-	3,793	-	84	13	3,890
THEREAFTER	-	4,931	-	317	60	5,308
TOTAL	\$ (14,943)	\$ (58,055)	\$ (257)	\$ 765	\$ (613)	\$ (73,103)

<sup>(</sup>a) Negative amounts shown in the table above represent a reduction of expense

# PLANS ADMINISTERED BY UNIVERSITY OF WASHINGTON

# University of Washington Retirement Plan

# **PLAN DESCRIPTION**

UWRP, a single-employer 403(b) defined-contribution plan, is administered by the University. Faculty, librarians and professional staff are eligible to participate in the UWRP.

Contributions to the plan are invested by participants in annuity contracts or mutual fund accounts offered by one or more fund sponsors. Employees have at all times a 100% vested interest in their accumulations. Benefits from the plan are available upon separation or retirement at the member's option. RCW 28B.10.400 et. seq. assigns the authority to the University of Washington Board of Regents to establish and amend benefit provisions.

The number of participants in the UWRP as of June 30, 2018 was 16,815.

# **Funding Policy**

Employee contribution rates, based on age, are 5%, 7.5% or 10% of salary. The University matches 100% of employee contributions. Within parameters established by the legislature, contribution requirements may be established or amended by the University of Washington Board of Regents. Employer contributions for the year ended June 30, 2018 were \$122,840,000.

# University of Washington Supplemental Retirement Plan (UWSRP)

### **PLAN DESCRIPTION**

UWSRP, a single-employer 401(a) defined-benefit retirement plan administered by the University, operates in tandem with the 403(b) plan to supplement the expected defined-contribution retirement savings accumulated under the UWRP. The UWSRP was closed to new participants effective March 1, 2011. UWSRP membership requires participation in the UWRP.

NUMBER OF PARTICIPANTS	As of June 30, 2018
ACTIVE EMPLOYEES	7,046
INACTIVE EMPLOYEES RECEIVING BENEFITS	696
INACTIVE EMPLOYEES ENTITLED TO, BUT NOT RECEIVING, BENEFITS	4

# **VESTING AND BENEFITS PROVIDED**

UWSRP retirement benefit provisions are contained in RCW 28B.10.400, et. seq. which assigns the authority to establish and amend benefit provisions to the University of Washington Board of Regents. Members are eligible for calculation of a possible retirement benefit under this plan when they have reached age 62 and have 10 years of service with the University. Upon retirement, a calculation is performed which compares "goal income" to "assumed income" to determine if benefits have been earned under the plan.

Goal income is the product of a service factor multiplied by average monthly compensation, and then by eligible years of participation. Average monthly compensation is defined as the average annual basic salary, not to exceed annual limits established by the Internal Revenue Code, paid to a participant for their highest 24 consecutive months of service.

Assumed income must be calculated by an independent actuary, and represents a theoretical amount of monthly income that would have been generated if actual employee and University contributions to the UWRP had been allocated equally between fixed and variable dollar annuities.

When the goal income exceeds the assumed income, the participant is entitled to benefits under this plan. Benefit payments made during the fiscal year ending June 30, 2018 were \$6,130,000.

# TOTAL PENSION LIABILITY (TPL)

Assets set aside to pay UWSRP benefits are not held in a qualified trust as defined by GASB. A qualified trust requires that contributions from employers be irrevocable, dedicated to providing pension benefits to plan members, and are legally protected from creditors of the employer and plan administrator. As a result, the University reports the total UWSRP pension liability. This is different from the DRS plans (PERS, TRS, and LEOFF2), which have trusted assets and, therefore, are reported as a net pension liability. The University has set aside \$261,087,000 to pay future UWSRP retiree benefits. These assets are segregated in a separate investment account, and included in Investments, Net of Current Portion on the Statement of Net Position.

SCHEDULE OF CHANGES IN TOTAL PENSION LIABILITY (Dollars in thousand	ds)
2018	
BEGINNING BALANCE	\$ 438,753
SERVICE COST	14,788
INTEREST ON TPL	16,127
DIFFERENCE BETWEEN EXPECTED AND ACTUAL EXPERIENCE	(33,952)
CHANGE IN ASSUMPTIONS	(17,105)
BENEFIT PAYMENTS	(6,130)
ENDING BALANCE	\$ 412,481

The TPL is based on an actuarial valuation performed as of June 30, 2016 using the entry age actuarial cost method. Update procedures performed by the Office of the State Actuary were used to roll forward the TPL to the measurement date of June 30, 2018.

UWSRP pension expense for the fiscal year ending June 30, 2018 was \$11,519,000.

# **ACTUARIAL ASSUMPTIONS**

Accounting requirements dictate the use of assumptions to best estimate the impact that pension obligations will have on the University. The professional judgments used in determining these assumptions are important, and can significantly impact the resulting actuarial estimates. Differences between actual results compared to these assumptions could have a significant effect on the University's financial statements.

SIGNIFICANT ASSUMPTIONS USED TO	MEASURE THE TOTAL PENSION LIABILITY (Dollars in thousands)
2018	
INFLATION	2.75%
SALARY CHANGES	4.25%
SOURCE OF MORTALITY ASSUMPTIONS	RP-2000 COMBINED HEALTHY TABLE, WITH GENERATIONAL MORTALITY IMPROVEMENTS USING SCALE BB
DATE OF EXPERIENCE STUDY	APRIL 2016
DISCOUNT RATE	3.87%
SOURCE OF DISCOUNT RATE	BOND BUYER'S 20 BOND INDEX AS OF 6/30/2018
TPL MEASUREMENT AT DISCOUNT RATE	\$ 412,481
TPL DISCOUNT RATE INCREASED 1%	\$ 361,760
TPL DISCOUNT RATE DECREASED 1%	\$ 473,624

Material assumption changes during the measurement period include updating the GASB 73 discount rate from 3.58% to 3.87% ("Change in assumption" which decreased the TPL). Additionally, actual returns for CREF investments, which are used in determining a member's "assumed income", were materially higher during the measurement period at 12.32% versus the assumed return of 6.25% ("Difference between expected and actual experience" which also decreased the TPL).

# **DEFERRED INFLOWS OF RESOURCES**

The tables below summarize the University's deferred inflows of resources related to the UWSRP, together with the related future year impacts to pension expense from amortization of those deferred amounts:

(19,397)

(25.213)

\$ (122,198)

DEFERRED INFLOWS OF RESOURCES (Dollars in thousands)		
2018		
DIFFERENCE BETWEEN EXPECTED AND ACTUAL EXPERIENCE	\$	85,844
CHANGE IN ASSUMPTIONS		36,354
TOTAL	\$	122,198
AMORTIZATION OF DEFERRED INFLOWS OF RESOURCES (a)	(Dollars in thousands)	
AMORTIZATION OF DEFERRED INFLOWS OF RESOURCES (a) Year	(Dollars in thousands)	
	(Dollars in thousands)	(19,397)
Year	, ,	(19,397) (19,397)
<b>Year</b> 2019	, ,	. , ,

(a) Negative amounts shown in the table above represent a reduction of expense

### **NOTE 16:**

2023

THEREAFTER

TOTAL

# Other Post Employment Benefits (OPEB)

# **PLAN DESCRIPTION**

OPEB are benefits provided to retired employees (and their spouses) beyond those provided by their pension plans. These programs for employees of the state of Washington are administered by the Washington State Health Care Authority (HCA). Per RCW 41.05.065, the Public Employees' Benefits Board (PEBB), created within the HCA, is authorized to design benefits and determine terms and conditions of employee and retired employee participation and coverage. Benefits provided by this single-employer defined benefit OPEB plan include medical, prescription drug, life, dental, vision, disability, and long-term care insurance. Retirees have access to all of these benefits, however medical, prescription drug and vision insurance comprise the bulk of the monetary assistance, or subsidies, provided by PEBB OPEB.

The OPEB relationship between PEBB employers and their employees and retirees is not formalized in a contract or plan document. Rather, the benefits are provided in accordance with a substantive plan. A substantive plan is one in which the plan terms are understood by the employers and plan members. This understanding is based on communications between the employers and plan members and the historical pattern of practice with regard to the sharing of benefit costs. The understanding by the employer and plan members is that there is no contractual obligation to continue the substantive plan as an employee benefit on an ongoing basis. Nevertheless the actuarial assumptions used in the valuations presented in this footnote assume that this substantive plan will be carried forward into the future.

The HCA has two claim pools: one covering employees and non-Medicare eligible retirees, and the other covering retirees enrolled in Medicare Parts A and B. For retirees, participating employers provide two different subsidies: an implicit subsidy and an explicit subsidy.

The implicit subsidy, set up under RCW 41.05.022, is not a direct payment from the employer on behalf of the retiree. Retirees who are not yet eligible for Medicare benefits may currently continue to participate in the state's non-Medicare community-rated health insurance risk pool. Claims experience for employees and non-Medicare eligible retirees are pooled when determining premiums. Therefore, these retired members pay a premium based on a pool of members that, on average, are younger and healthier. This results in an implicit subsidy since the premiums paid by retirees are lower than they would have been if the retirees were insured separately.

The explicit subsidy, permitted under RCW 41.05.085, is a straightforward, set dollar amount which lowers the monthly premium paid by members enrolled in Medicare Parts A and B. PEBB determines the amount of the explicit subsidy annually. The dollar amount of the explicit subsidy was set at \$150 per member per month for fiscal year 2018.

The OPEB plan is currently available to employees who elect to continue coverage and pay the administratively established premiums at the time they retire. PEBB member data used in the valuation of the OPEB liability include members enrolled in a PEBB program as well as other active employees who were eligible to enroll but waived coverage.

The table below shows the University's PEBB membership data as of June 30, 2018:

2018	(Measurement Date 2017)
ACTIVE EMPLOYEES	32,648
INACTIVE EMPLOYEES RECEIVING BENEFITS	8,626
INACTIVE EMPLOYEES ENTITLED TO, BUT NOT RECEIVING, BENEFITS	1,612

### **ACTUARIAL ASSUMPTIONS**

Accounting requirements dictate the use of assumptions to best estimate the impact that OPEB obligations will have on the University. The professional judgments used by the Washington State Office of the State Actuary (OSA) in determining the assumptions used to value the state of Washington OPEB liability are important, and can significantly impact the resulting actuarial estimates. Differences between actual results compared to these assumptions could have a significant effect on the University's financial statements.

SIGNIFICANT ASSUMPTIONS USED TO MEASURE THE TO	OTAL OPEB LIABILITY (TOL) (Dollars in thousands)
2018	
INFLATION	3.00%
HEALTHCARE COST TREND RATE	TREND RATE ASSUMPTIONS VARY SLIGHTLY BY MEDICAL PLAN. INITIAL RATE IS 7.00%, REACHING AN ULTIMATE RATE OF APPROXIMATELY 5.00% IN 2080.
SALARY INCREASE	3.75%, INCLUDING SERVICE-BASED SALARY INCREASES
SOURCE OF MORTALITY ASSUMPTIONS	RP-2000 COMBINED HEALTHY TABLE AND COMBINED DISABLED TABLE, WITH FUTURE IMPROVEMENTS IN MORTALITY PROJECTED USING 100 PERCENT SCALE BB AND UPDATED BASED ON RESULTS OF THE 2007-2012 EXPERIENCE STUDY REPORT
DATE OF EXPERIENCE STUDY	2007-2012 EXPERIENCE STUDY REPORT
DISCOUNT RATE	3.58%
SOURCE OF DISCOUNT RATE	BOND BUYER GENERAL OBLIGATION 20-BOND MUNICIPAL BOND INDEX AS OF 6/30/17 (MEASUREMENT DATE)
POST-RETIREMENT PARTICIPATION PERCENTAGE	65.00%
TOL MEASUREMENT AT DISCOUNT RATE	\$ 1,565,213
TOL DISCOUNT RATE INCREASED 1%	\$ 1,298,594
TOL DISCOUNT RATE DECREASED 1%	\$ 1,909,753
TOL MEASUREMENT AT HEALTHCARE COST TREND RATE	\$ 1,565,213
TOL HEALTHCARE COST TREND RATE INCREASED 1%	\$ 1,968,827
TOL HEALTHCARE COST TREND RATE DECREASED 1%	\$ 1,264,476

Material assumption changes during the measurement period include updating the discount rate as of each measurement date, as required by GASB 75. The discount rate used for the beginning TOL was 2.85% and the discount rate used for the ending TOL was 3.58%, resulting in a reduction of the TOL.

# CHANGES IN THE TOTAL OPEB LIABILITY

The TOL for the state of Washington was determined by an actuarial valuation, conducted by the OSA, using data as of January 1, 2017. The TOL reported at June 30, 2018 was calculated as of the valuation date, and projected to the measurement date of June 30, 2017. OPEB implicit and explicit subsidies are funded by required contributions made by participating employers, such as the University. These contributions are made on behalf of all active, healthcare-eligible employees regardless of enrollment status. As such, the allocation method used to determine the University's proportionate share of the statewide TOL is the relationship of University active, healthcare-eligible employee headcount to the corresponding statewide total.

The University's proportionate share percentage was 26.9% and 27.0% as of June 30, 2018 and 2017, respectively.

The OPEB plan is funded on a pay-as-you-go basis. Accordingly, contributions from employers to the HCA occur only when benefits become due (after retirement). No qualified trust fund has been established dedicated to these benefits and there are no associated assets. As a result, the University reports a proportionate share of the state's total OPEB liability.

SCHEDULE OF CHANGES IN TOTAL OPEB LIABILITY	(Dollars in thousands)	
2018		
BEGINNING BALANCE		\$ 1,685,909
SERVICE COST		106,112
INTEREST ON TOL		49,703
CHANGE IN ASSUMPTIONS		(242,454)
BENEFIT PAYMENTS		(25,330)
CHANGES IN PROPORTIONATE SHARE		(8,727)
ENDING BALANCE		\$ 1,565,213

# OPEB EXPENSE, DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES

The tables below summarize the University's OPEB expense, deferred outflows of resources and deferred inflows of resources related to the OPEB plan, together with the related future year impacts to OPEB expense from amortization of those deferred amounts. Note that deferred outflows of resources related to University contributions subsequent to the measurement date are recognized as a reduction of the total OPEB liability in the following year, and are not amortized to OPEB expense.

PROPORTIONATE SHARE OF OPEB EXPENSE (Dollars in Thousands)	
YEAR ENDED JUNE 30, 2018	\$ 127,921
DEFERRED OUTFLOWS OF RESOURCES (Dollars in Thousands)	
2018	
University contributions subsequent to the measurement date of the collective total opeb liability $^{\rm (a)}$	\$ 24,771
(a) Recognized as a reduction of the total OPEB Liability as of June 30, 2019	
DEFERRED INFLOWS OF RESOURCES (Dollars in Thousands)	
2018	
CHANGE IN ASSUMPTIONS	\$ 215,515
CHANGES IN PROPORTION	7,641
TOTAL	\$ 223,156

Amounts reported as deferred inflows of resources will be recognized as a component of the University's OPEB expense as follows:

AMORTIZATION OF DEFERRED INFLOWS OF RESOURCES (a) (Dollars in Thousands)							
YEAR							
2019	\$	(27,894)					
2020		(27,894)					
2021		(27,894)					
2022		(27,894)					
2023		(27,894)					
THEREAFTER		(83,686)					
TOTAL	\$	(223,156)					

(a) Negative amounts shown in the table above represent a reduction of expense

# **NOTE 17:**

# Commitments and Contingencies

Authorized expenditures for construction projects unexpended as of June 30, 2018 were \$105,944,000. These expenditures will be funded from institutional reserves, debt proceeds and state appropriations.

The University receives and expends substantial amounts under federal and state grants, contracts and programs. This funding is used for research, student aid, Medical Center operations and other programs, and is subject to audit by governmental granting agencies. Certain grant and contract costs billed to the federal government are subject to audit under 2 CFR 200, "Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards."

The University is also involved in various other claims and legal actions arising in the ordinary course of business. University management believes that any liabilities arising from these matters will not have a material effect on the University's financial statements.

The University is exposed to risk of loss related to tort liability, injuries to employees and loss of property. The University purchases insurance protection for workers' compensation as well as marine, aviation and certain other risks. The University also purchases insurance protection for loss of property at self-sustaining units, bond-financed buildings and where otherwise required by contract; otherwise, the risk of property loss is retained, unfunded. For medical professional, general, employment practices, automobile liability, and information security and privacy protection, the University maintains a program of self-insurance reserves and excess insurance coverage. The self-insurance reserve represents the estimated ultimate cost of settling claims resulting from events that have occurred on or before the Statements of Net Position date. The reserve includes the undiscounted amounts that will be required for future payments of claims that have been reported, and claims related to events that have occurred but have not yet been reported.

The self-insurance reserve is estimated through an actuarial calculation and included in Long-Term Liabilities. Changes in the self-insurance reserve for the year ended June 30, 2018 are noted below:

RESERVE AT END OF FISCAL YEAR	\$ 112,210
CLAIM PAYMENTS	(8,307)
INCURRED CLAIMS AND CHANGES IN ESTIMATES	42,033
RESERVE AT BEGINNING OF FISCAL YEAR	\$ 78,484
(Dollars in thousands)	2018

### **REGULATORY COMPLIANCE**

The healthcare industry is subject to numerous laws and regulations of federal, state, and local governments. These laws and regulations include, but are not limited to, matters such as licensure, accreditation, governmental healthcare program participation requirements, reimbursement for patient services, and Medicare and Medicaid fraud and abuse. Government agencies are actively conducting investigations concerning possible violations of fraud and abuse statutes and regulations by healthcare providers. Violations of these laws and regulations could result in expulsion from government healthcare programs, together with the imposition of significant fines and penalties, as well as significant repayments for patient services previously billed. Through its compliance program, UW Medicine maintains an effective and safe program for reporting and addressing potential regulatory concerns. Compliance with such laws and regulations can be subject to future government review and interpretation as well as regulatory actions known or unasserted at this time.

Between April 4 and April 12, 2018, the Washington State Department of Health on behalf of the Centers for Medicare and Medicaid Services (CMS) conducted a survey at UW Medical Center. In a letter dated May 15, 2018, CMS informed UW Medical Center that based on the results of the survey, UW Medical Center was not in compliance with certain Medicare Conditions of Participation. The deficiencies identified within the survey relate primarily to UW Medical Center's relationship with the Seattle Cancer Care Alliance inpatient hospital located within the same building as UW Medical Center, including related policies, clinical areas, support services and personnel sharing between the two organizations. CMS has informed UW Medical Center that unless such deficiencies are remedied by November 15, 2018, UW Medical Center's Medicare provider agreement could be terminated. CMS has discretion to extend that termination date. UW Medical Center is cooperating with CMS and has submitted a Plan of Correction (the Plan) in response to the CMS survey and is taking steps to comply with the components of the Plan. CMS is currently reviewing the proposed Plan. When CMS approves a Plan, UW Medicine management will take necessary actions to comply with that Plan so UW Medical Center continues to participate in the Medicare program.

# **NOTE 18:**

# **Blended Component Units**

Condensed combining statements for the University and its blended component units are shown below:

(Dollars in thousands) Statements of Net Position – June 30, 2018	Combined Entities	Eli	minations		University of Washington		tal Blended omponent Units		Medical Entities		Real Estate Entities
· · · · · · · · · · · · · · · · · · ·											
ASSETS											
TOTAL CURRENT ASSETS	\$ 1,486,002	\$	(24,968)	\$	1,315,967	\$	195,003	\$	161,358	\$	33,645
NONCURRENT ASSETS:											
TOTAL OTHER ASSETS	5,586,225		(133,929)		5,537,440		182,714		157,842		24,872
CAPITAL ASSETS, NET	4,979,731		-		4,503,524		476,207		115,728		360,479
TOTAL ASSETS	12,051,958		(158,897)		11,356,931		853,924		434,928		418,996
DEFERRED OUTFLOWS OF RESOURCES	244,041		_		237,148		6,893		6,893		_
TOTAL ASSETS AND DEFERRED OUTFLOWS OF RESOURCES	\$ 12,295,999	\$	(158,897)	\$	11,594,079	\$	860.817	\$	441,821	\$	418,996
	,,,		(122,221,		, ,	•	220,222		,		,
LIABILITIES											
TOTAL CURRENT LIABILITIES	\$ 1,266,712	\$	(8,099)	\$	1,139,878	\$	134.933	\$	97.011	\$	37.922
TOTAL NONCURRENT LIABILITIES	5,416,187	4	(146,270)	4	5,040,769	Ψ.	521,688	4	145,217	4	376,471
TOTAL LIABILITIES	6,682,899		(154,369)		6,180,647		656,621		242,228		414,393
DEFERRED INFLOWS OF RESOURCES	516,323		_		516,323		_		_		_
TOTAL LIABILITIES AND DEFERRED											
INFLOWS OF RESOURCES	7,199,222		(154,369)		6,696,970		656,621		242,228		414,393
NET POSITION											
NET INVESTMENT IN CAPITAL ASSETS	2,483,814		-		2,362,957		120,857		106,672		14,185
RESTRICTED:											
NONEXPENDABLE	1,721,927		-		1,719,547		2,380		2,380		-
EXPENDABLE	2,128,692		-		2,128,081		611		611		-
UNRESTRICTED	(1,237,656)		(4,528)		(1,313,476)		80,348		89,930		(9,582)
TOTAL NET POSITION	5,096,777		(4,528)		4,897,109		204,196		199,593		4,603
TOTAL LIABILITIES, DEFERRED INFLOWS											
OF RESOURCES AND NET POSITION	\$ 12,295,999	\$	(158,897)	\$	11,594,079	\$	860,817	\$	441,821	\$	418,996

-END OF THE YEAR

(Dollars in thousands) Statements of Revenues, Expenses and Changes in Net Position–Year ended June 30, 2018	Combined Entities	Eliminations	University of Washington	Total Blended Component Units	Medical Entities	Real Estate Entities
REVENUES						
OPERATING REVENUES:						
STUDENT TUITION AND FEES	\$ 989,912	\$ -	\$ 989,912	\$ -	\$ -	\$ -
PATIENT SERVICES	2,008,317	(8,362)	1,331,023	685,656	685,656	
GRANT REVENUE	1,409,321	(-,,	1,409,321	-	-	_
OTHER OPERATING REVENUE	764,250	(123,249)	740,306	147,193	76,613	70,580
TOTAL OPERATING REVENUE	5,171,800	(131,611)	4,470,562	832,849	762,269	70,580
EXPENSES						
OPERATING EXPENSES:						
OTHER OPERATING EXPENSES	5,474,792	(99,445)	4,827,842	746,395	727,133	19,262
DEPRECIATION / AMORTIZATION	384,004	-	351,293	32,711	18,132	14,579
TOTAL OPERATING EXPENSES	5,858,796	(99,445)	5,179,135	779,106	745,265	33,841
OPERATING INCOME (LOSS)	(686,996)	(32,166)	(708,573)	53,743	17,004	36,739
NONODEDATING DEVENUES (EXPENSES)						
NONOPERATING REVENUES (EXPENSES) STATE APPROPRIATIONS	362,267	_	362,267	_	_	
GIFTS	166,721	_	165,910	811	811	-
INVESTMENT INCOME	404,412	(2,895)	398,948	8,359	8,359	_
OTHER NONOPERATING REVENUES (EXPENSES)	(20,796)	35,977	(45,389)	(11,384)	(572)	(10,812)
NET NONOPERATING REVENUES (EXPENSES)	912,604	33,082	881,736	(2,214)	8,598	(10,812)
INCOME BEFORE OTHER REVENUES	225,608	916	173,163	51,529	25,602	25,927
CAPITAL APPROPRIATIONS, GRANTS,		7.0	.,,,,,,,,	0.,025		
GIFTS AND OTHER	168,972	(360)	168,871	461	461	-
GIFTS TO PERMANENT ENDOWMENTS	95,890		95,890	-	-	-
TOTAL OTHER REVENUES	264,862	(360)	264,761	461	461	-
INCREASE IN NET POSITION	490,470	556	437,924	51,990	26,063	25,927
NET POSITION						
NET POSITION – BEGINNING OF YEAR, AS RESTATED	4,606,307	(5,084)	4,459,185	152,206	173,530	(21,324)
NET POSITION - END OF YEAR	\$ 5,096,777	\$ (4,528)	\$ 4,897,109	\$ 204,196	\$ 199,593	\$ 4,603
(Dollars in thousands) Statements of Cash Flows -Year ended June 30, 2018	Combined Entities	Eliminations	University of Washington	Total Blended Component Units	Medical Entities	Real Estate Entities
NET CASH PROVIDED (USED) BY:						
OPERATING ACTIVITIES	\$ (227,517)	\$ -	\$ (241,349)	\$ 13,832	\$ 21,701	\$ (7,869)
NONCAPITAL FINANCING ACTIVITIES	642,933	-	629,142	13,791	13,791	-
CAPITAL AND RELATED FINANCING ACTIVITIES	(478,612)	-	(423,927)	(54,685)	(17,160)	(37,525)
INVESTING ACTIVITIES	143,297	-	93,158	50,139	(277)	50,416
NET INCREASE IN CASH AND CASH EQUIVALENTS	80,101	-	57,024	23,077	18,055	5,022
CASH AND CASH EQUIVALENTS  -BEGINNING OF THE YEAR  CASH AND CASH EQUIVALENTS	64,035	-	33,342	30,693	29,165	1,528

\$ 144,136 \$ - \$ 90,366 \$ 53,770

\$ 47,220

\$ 6,550

# **Schedules of Required Supplementary Information**

# PERS 1 - SCHEDULE OF PROPORTIONATE SHARE OF THE NET PENSION LIABILITY

(Dollars in thousands)	2018	2017	2016	2015
UNIVERSITY'S PROPORTION OF THE NET PENSION LIABILITY	8.44%	8.46%	8.33%	8.28%
UNIVERSITY'S PROPORTIONATE SHARE OF THE NET PENSION LIABILITY	\$ 400,426	\$ 454,341	\$ 435,853	\$ 417,231
UNIVERSITY'S COVERED-EMPLOYEE PAYROLL	\$1,043,335	\$ 987,405	\$ 927,002	\$ 882,215
UNIVERSITY'S PROPORTIONATE SHARE OF THE NET PENSION LIABILITY AS A PERCENTAGE OF COVERED-EMPLOYEE PAYROLL	38.38%	46.01%	47.02%	47.29%
PLAN FIDUCIARY NET POSITION AS A PERCENTAGE OF THE TOTAL PENSION LIABILITY	61.24%	57.03%	59.10%	61.19%

(Amounts determined as of the measurement date)

# PERS 1 - SCHEDULE OF CONTRIBUTIONS

(Dollars in thousands)		2018		2017	2016	2015
CONTRACTUALLY REQUIRED CONTRIBUTION	\$	1,582	\$	1,788	\$ 2,155	\$ 2,058
CONTRIBUTIONS IN RELATION TO THE CONTRACTUALLY REQUIRED CONTRIBUTION	\$	1,578	\$	1,769	\$ 2,155	\$ 2,059
CONTRIBUTION DEFICIENCY (EXCESS)	\$	4	\$	19	\$ -	\$ (1)
UNIVERSITY'S COVERED-EMPLOYEE PAYROLL	\$1,	074,943	\$1,	043,335	\$ 987,405	\$ 927,002
CONTRIBUTIONS AS A PERCENTAGE OF COVERED-EMPLOYEE PAYROLL		0.15%		0.17%	0.22%	0.22%

(Amounts determined as of the fiscal year end)

# PERS 2/3 - SCHEDULE OF PROPORTIONATE SHARE OF THE NET PENSION LIABILITY

(Dollars in thousands)	2018	2017	2016	2015
UNIVERSITY'S PROPORTION OF THE NET PENSION LIABILITY	10.48%	10.36%	10.20%	10.00%
UNIVERSITY'S PROPORTIONATE SHARE OF THE NET PENSION LIABILITY	\$ 364,073	\$ 521,777	\$ 364,303	\$ 202,225
UNIVERSITY'S COVERED-EMPLOYEE PAYROLL	\$1,027,338	\$ 967,955	\$ 904,661	\$ 856,839
UNIVERSITY'S PROPORTIONATE SHARE OF THE NET PENSION LIABILITY AS A PERCENTAGE OF COVERED-EMPLOYEE PAYROLL	35.44%	53.91%	40.27%	23.60%
PLAN FIDUCIARY NET POSITION AS A PERCENTAGE OF THE TOTAL PENSION LIABILITY	90.97%	85.82%	89.20%	93.29%

(Amounts determined as of the measurement date)

# PERS 2/3 - SCHEDULE OF CONTRIBUTIONS

(Dollars in thousands)	2018	2017	2016	2015
CONTRACTUALLY REQUIRED CONTRIBUTION	\$ 134,239	\$ 114,852	\$ 107,424	\$ 83,323
CONTRIBUTIONS IN RELATION TO THE CONTRACTUALLY REQUIRED CONTRIBUTION	\$ 134,366	\$ 114,968	\$ 108,413	\$ 83,342
CONTRIBUTION DEFICIENCY (EXCESS)	\$ (127)	\$ (116)	\$ (989)	\$ (19)
UNIVERSITY'S COVERED-EMPLOYEE PAYROLL	\$1,062,415	\$1,027,338	\$ 967,955	\$ 904,661
CONTRIBUTIONS AS A PERCENTAGE OF COVERED-EMPLOYEE PAYROLL	12.64%	11.18%	11.10%	9.21%

(Amounts determined as of the fiscal year end)

# TRS 1 - SCHEDULE OF PROPORTIONATE SHARE OF THE NET PENSION LIABILITY

(Dollars in thousands)	2018	2017	2016	2015
UNIVERSITY'S PROPORTION OF THE NET PENSION LIABILITY	0.20%	0.16%	0.13%	0.10%
UNIVERSITY'S PROPORTIONATE SHARE OF THE NET PENSION LIABILITY	\$ 6,076	\$ 5,463	\$ 4,049	\$ 2,881
UNIVERSITY'S COVERED-EMPLOYEE PAYROLL	\$ 10,967	\$ 7,813	\$ 5,790	\$ 3,905
UNIVERSITY'S PROPORTIONATE SHARE OF THE NET PENSION LIABILITY AS A PERCENTAGE OF COVERED-EMPLOYEE PAYROLL	55.40%	69.92%	69.93%	73.78%
PLAN FIDUCIARY NET POSITION AS A PERCENTAGE OF THE TOTAL PENSION LIABILITY	65.58%	62.07%	65.70%	68.77%

(Amounts determined as of the measurement date)

# TRS 1 - SCHEDULE OF CONTRIBUTIONS

(Dollars in thousands)	2018 2		2017		2016		2015
CONTRACTUALLY REQUIRED CONTRIBUTION	\$ 48	\$	39	\$	38	\$	44
CONTRIBUTIONS IN RELATION TO THE CONTRACTUALLY REQUIRED CONTRIBUTION	\$ 48	\$	40	\$	38	\$	42
CONTRIBUTION DEFICIENCY (EXCESS)	\$ -	\$	(1)	\$	-	\$	2
UNIVERSITY'S COVERED-EMPLOYEE PAYROLL	\$ 13,986	\$	10,967	\$	7,813	\$	5,790
CONTRIBUTIONS AS A PERCENTAGE OF COVERED-EMPLOYEE PAYROLL	0.34%		0.36%		0.49%		0.76%

(Amounts determined as of the fiscal year end)

# Schedules of Required Supplementary Information (continued)

# TRS 2/3 - SCHEDULE OF PROPORTIONATE SHARE OF THE NET PENSION LIABILITY

(Dollars in thousands)	2018	2017	2016	2015
UNIVERSITY'S PROPORTION OF THE NET PENSION LIABILITY	0.19%	0.15%	0.12%	0.08%
UNIVERSITY'S PROPORTIONATE SHARE OF THE NET PENSION LIABILITY	\$ 1,796	\$ 2,077	\$ 969	\$ 252
UNIVERSITY'S COVERED-EMPLOYEE PAYROLL	\$ 10,669	\$ 7,507	\$ 5,367	\$ 3,391
UNIVERSITY'S PROPORTIONATE SHARE OF THE NET PENSION LIABILITY AS A PERCENTAGE OF COVERED-EMPLOYEE PAYROLL	16.83%	27.67%	18.05%	7.43%
PLAN FIDUCIARY NET POSITION AS A PERCENTAGE OF THE TOTAL PENSION LIABILITY	93.14%	88.72%	92.48%	96.81%

(Amounts determined as of the measurement date)

# TRS 2/3 - SCHEDULE OF CONTRIBUTIONS

(Dollars in thousands)	2018	2017	2016	2015
CONTRACTUALLY REQUIRED CONTRIBUTION	\$ 2,036	\$ 1,401	\$ 956	\$ 558
CONTRIBUTIONS IN RELATION TO THE CONTRACTUALLY REQUIRED CONTRIBUTION	\$ 2,029	\$ 1,410	\$ 985	\$ 555
CONTRIBUTION DEFICIENCY (EXCESS)	\$ 7	\$ (9)	\$ (29)	\$ 3
UNIVERSITY'S COVERED-EMPLOYEE PAYROLL	\$ 13,664	\$ 10,669	\$ 7,507	\$ 5,367
CONTRIBUTIONS AS A PERCENTAGE OF COVERED-EMPLOYEE PAYROLL	14.90%	13.13%	12.73%	10.40%

(Amounts determined as of the fiscal year end)

# LEOFF 2 - SCHEDULE OF PROPORTIONATE SHARE OF THE NET PENSION LIABILITY

(Dollars in thousands)		2018		2017		2016	2015
UNIVERSITY'S PROPORTION OF THE NET PENSION LIABILITY (ASSET)		0.22%		0.25%		0.20%	0.21%
UNIVERSITY'S PROPORTIONATE SHARE OF THE NET PENSION LIABILITY (ASSET)	\$	(2,995)	\$	(1,430)	\$	(2,083)	\$ (2,844)
UNIVERSITY'S COVERED-EMPLOYEE PAYROLL	\$	4,061	\$	4,474	\$	3,534	\$ 3,581
UNIVERSITY'S PROPORTIONATE SHARE OF THE NET PENSION LIABILITY (ASSET) AS A PERCENTAGE OF ITS COVERED-EMPLOYEE PAYROLL	-	73.74%		-31.97%		-58.94%	-79.42%
PLAN FIDUCIARY NET POSITION AS A PERCENTAGE OF THE TOTAL PENSION LIABILITY	1	13.36%	1	106.04%	1	11.67%	116.75%
(Amounts determined as of the measurement date)							

# **LEOFF 2 - SCHEDULE OF CONTRIBUTIONS**

(Dollars in thousands)	2018	2017	2016	2015
CONTRACTUALLY REQUIRED CONTRIBUTION	\$ 400	\$ 348	\$ 384	\$ 303
CONTRIBUTIONS IN RELATION TO THE CONTRACTUALLY REQUIRED CONTRIBUTION	\$ 403	\$ 352	\$ 384	\$ 300
CONTRIBUTION DEFICIENCY (EXCESS)	\$ (3)	\$ (4)	\$ -	\$ 3
UNIVERSITY'S COVERED-EMPLOYEE PAYROLL	\$ 4,487	\$ 4,061	\$ 4,474	\$ 3,534
CONTRIBUTIONS AS A PERCENTAGE OF COVERED-EMPLOYEE PAYROLL	8.91%	8.57%	8.58%	8.57%

(Amounts determined as of the fiscal year end)

UNIVERSITY OF WASHINGTON SUPPLEMENTAL RETIREMENT PLAN (UW SCHEDULE OF CHANGES IN THE TOTAL PENSION LIABILITY (TPL)	(SRP)	
(Dollars in thousands)	2018	2017
TOTAL PENSION LIABILITY – BEGINNING	\$ 438,753	\$ 512,372
SERVICE COST	14,788	19,892
INTEREST ON TPL	16,127	15,097
DIFFERENCES BETWEEN EXPECTED AND ACTUAL EXPERIENCE	(33,952)	(74,919)
CHANGES IN ASSUMPTIONS	(17,105)	(28,553)
BENEFIT PAYMENTS	(6,130)	(5,136)
TOTAL PENSION LIABILITY - ENDING	\$ 412,481	\$ 438,753
UWSRP COVERED-EMPLOYEE PAYROLL	\$ 759,688	\$ 801,161
TOTAL PENSION LIABILITY AS PERCENTAGE OF COVERED-EMPLOYEE PAYROLL	54.30%	54.76%

SCHEDULE OF CHANGES IN TOTAL OPEB LIABILITY (TOL)	
(Dollars in thousands)	2018
TOTAL OPEB LIABILITY-BEGINNING	\$ 1,685,909
SERVICE COST	106,112
INTEREST ON TOL	49,703
CHANGE IN ASSUMPTIONS	(242,454)
BENEFIT PAYMENTS	(25,330)
CHANGES IN PROPORTIONATE SHARE	(8,727)
TOTAL OPEB LIABILITY-ENDING	\$ 1,565,213
OPEB COVERED-EMPLOYEE PAYROLL	\$ 2,529,127
TOTAL OPEB LIABILITY AS PERCENTAGE OF COVERED-EMPLOYEE PAYROLL	61.89%

# NOTES TO REQUIRED SUPPLEMENTARY INFORMATION FOR THE YEAR ENDED JUNE 30, 2018

# Plans administered by DRS

OSA calculates the actuarially determined contributions (ADC) based on the results of an actuarial valuation consistent with the state's funding policy defined in chapter 41.45 of the RCW. Consistent with the state's contribution-rate adoption process, the results of an actuarial valuation with an odd-numbered year valuation date determine the ADC for the biennium that ensues two years later. For example, the actuarial valuation with a June 30, 2015, valuation date, completed in the fall of 2016, determines the ADC for the period beginning July 1, 2017, and ending June 30, 2019. Adopted contribution rates could be different pending the actions of the governing bodies. For instance, for the period beginning July 1, 2015, and ending June 30, 2017, the contribution rates the Pension Funding Council adopted, which the Legislature did not change, reflect a phasing in of the increase to contribution rates that resulted from a change to the mortality assumption. The increase is expected to be phased in over three biennia for PERS Plans 1, 2 and 3 and TRS Plans 1, 2 and 3.

For cost-sharing plans, OSA calculates the contractually required contributions (CRC) using the same assumptions and methods as the ADC except the CRC reflect the adopted contribution rates for the time period shown, which might differ from the contribution rates produced for the ADC.

# Plans administered by the University

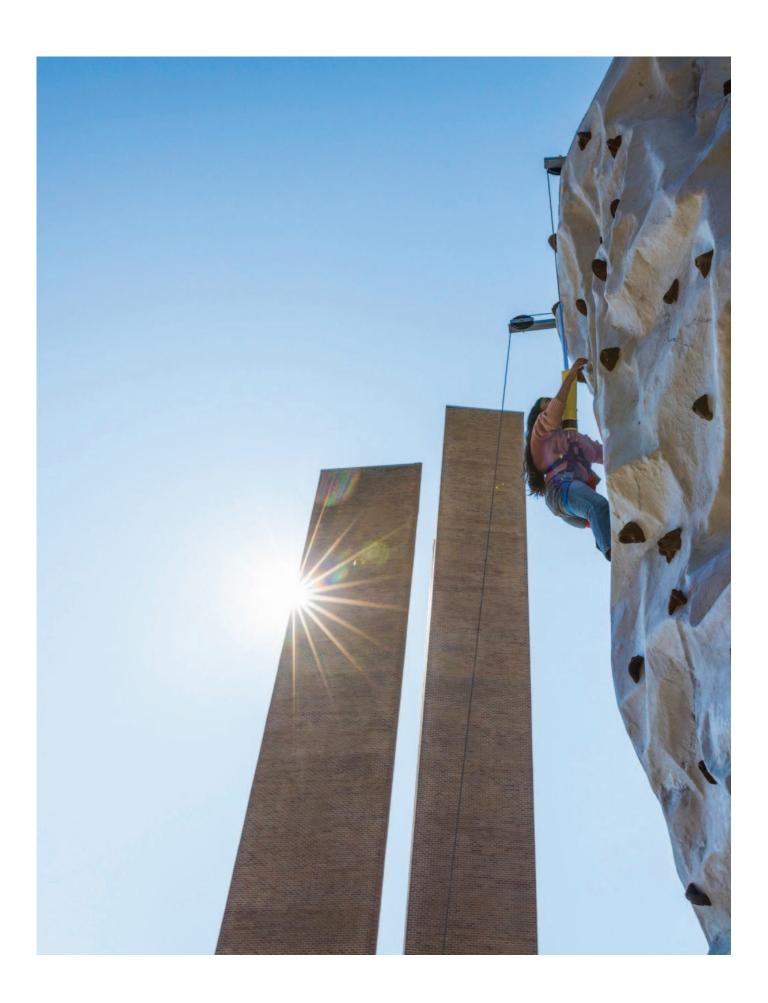
The University of Washington Supplemental Retirement Plan has no assets accumulated in a trust that meets the criteria in GASB statement 73, paragraph 4 to pay related benefits.

Material assumption changes during the measurement period include updating the GASB 73 discount rate from 3.58% to 3.87% ("Change in assumption" which decreased the TPL). Additionally, actual returns for CREF investments, which are used in determining a member's "assumed income", were materially higher during the measurement period at 12.32% versus the assumed return of 6.25% ("Difference between expected and actual experience" which also decreased the TPL).

# **OPEB Plan administered by the Healthcare Authority of Washington State**

The OPEB Plan has no assets accumulated in a trust that meets the criteria in GASB statement 75, paragraph 4 to pay related benefits.

Material assumption changes during the period was an increase in the Bond Buyer General Obligation 20-Bond Municipal Bond Index from 2.85% for the June 30, 2016 measurement date to 3.58% for the June 30, 2017 measurement date.



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The 2018 UW Financial Report and reports from previous years are available at annualreport.uw.edu.

For more information, contact Financial Accounting at 206.221.7845 or accountg@uw.edu

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# APPENDIX C

# FORM OF BOND COUNSEL OPINION

February 7, 2019

University of Washington Seattle, Washington

Citigroup Global Markets, Inc. New York, New York

Backstrom McCarley Berry & Co., LLC San Francisco, California

Re: University of Washington, General Revenue Bonds, 2019A - \$100,000,000

Ladies and Gentlemen:

We have examined a certified transcript of all of the proceedings taken in the matter of the issuance by the University of Washington (the "University") of its General Revenue Bonds, 2019A, in the aggregate principal amount of \$100,000,000 (the "Bonds"). The Bonds are issued pursuant to a resolution of the Board of Regents of the University adopted on July 12, 2018 (the "Resolution") and a Paying Agent Agreement dated as of February 1, 2019 between the University and U.S. Bank National Association. Capitalized terms used in this opinion which are not otherwise defined shall have the meanings given to such terms in the Resolution.

The Bonds are subject to redemption prior to their scheduled maturity as set forth in the Official Statement dated January 17, 2019. The University has not designated the Bonds as "qualified tax-exempt obligations" within the meaning of Section 265(b)(3) of the Internal Revenue Code of 1986, as amended (the "Tax Code").

Regarding questions of fact material to our opinion, we have relied on representations of the University in the Resolution and in the certified proceedings and on other certifications of public officials and others furnished to us without undertaking to verify the same by independent investigation.

Based on the foregoing, we are of the opinion that, under existing law:

- 1. The Bonds have been legally issued and constitute valid and binding obligations of the University, except to the extent that the enforcement of the rights and remedies of the owners of the Bonds may be limited by laws relating to bankruptcy, reorganization or other similar laws of general application affecting the rights of creditors.
- 2. The Bonds are special fund obligations of the University. Both principal of and interest on the Bonds are payable solely from General Revenues and the money and investments deposited to a special fund of the University known as the General Revenue Bond Redemption Fund, 2019 created pursuant to the Resolution (the "Bond Fund"). The University has obligated and bound itself to set aside and pay into the Bond Fund out of General Revenues amounts sufficient to pay the principal of and interest on the Bonds as the same become due. The Bonds are equally and ratably payable, without preference, priority or distinction because of date of issue or otherwise from General Revenues. The University has reserved the right to issue Additional Bonds payable from General Revenues and has previously issued General Revenue obligations.
- 3. Interest on the Bonds is excludable from gross income for federal income tax purposes and is not an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals. The opinion set forth in the preceding sentence is subject to the condition that the University comply with all requirements of the Tax Code, that must be satisfied subsequent to the issuance of the Bonds in order that the interest thereon be, and continue to be, excludable from gross income for federal income tax purposes. The University has covenanted to

comply with all applicable requirements. Failure to comply with certain of such covenants may cause interest on the Bonds to be included in gross income for federal income tax purposes retroactively to the date of issuance of the Bonds.

Except as expressly stated above, we express no opinion regarding any tax consequences related to the ownership, sale or disposition of the Bonds, or the amount, accrual or receipt of interest on, the Bonds. Owners of the Bonds should consult their tax advisors regarding the applicability of any collateral tax consequences of owning the Bonds.

We have not been engaged nor have we undertaken to review the accuracy, completeness or sufficiency of the official statement or other offering material related to the Bonds (except to the extent, if any, stated in the official statement), and we express no opinion relating thereto, or relating to the undertaking by the University to provide ongoing disclosure pursuant to Securities and Exchange Commission Rule 15c2-12.

This opinion is given as of the date hereof, and we assume no obligation to update, revise or supplement this opinion to reflect any facts or circumstances that may hereafter come to our attention or any changes in law that may hereafter occur.

Very truly yours, PACIFICA LAW GROUP LLP

# APPENDIX D

# BOOK-ENTRY ONLY SYSTEM

The following information has been provided by DTC. The University makes no representation regarding the accuracy or completeness thereof. Beneficial Owners should therefore confirm the following with DTC or the Direct Participants (as hereinafter defined). Language in [brackets] with strike through has been deleted as permitted by DTC as it does not pertain to the Bonds.

- 1. The Depository Trust Company ("DTC"), New York, NY, will act as securities depository for the securities (the "Securities"). The Securities will be issued as fully-registered securities registered in the name of Cede & Co. (DTC's partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully-registered Security certificate will be issued for [each issue of] the Securities, [each] in the aggregate principal amount of such issue, and will be deposited with DTC. [If, however, the aggregate principal amount of [any] issue exceeds \$500 million, one certificate will be issued with respect to each \$500 million of principal amount, and an additional certificate will be issued with respect to any remaining principal amount of such issue.]
- DTC, the world's largest securities depository, is a limited-purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code, and a "clearing agency" registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues, and money market instruments (from over 100 countries) that DTC's participants ("Direct Participants") deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerized book-entry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants"). DTC has Standard & Poor's rating of AA+. The DTC Rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at www.dtcc.com.
- 3. Purchases of Securities under the DTC system must be made by or through Direct Participants, which will receive a credit for the Securities on DTC's records. The ownership interest of each actual purchaser of each Security ("Beneficial Owner") is in turn to be recorded on the Direct and Indirect Participants' records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the Securities are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in Securities, except in the event that use of the book-entry system for the Securities is discontinued.
- 4. To facilitate subsequent transfers, all Securities deposited by Direct Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of Securities with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Securities; DTC's records reflect only the identity of the Direct Participants to

whose accounts such Securities are credited, which may or may not be the Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers.

- 5. Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. [Beneficial Owners of Securities may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the Securities, such as redemptions, tenders, defaults, and proposed amendments to the Security documents. For example, Beneficial Owners of Securities may wish to ascertain that the nominee holding the Securities for their benefit has agreed to obtain and transmit notices to Beneficial Owners. In the alternative, Beneficial Owners may wish to provide their names and addresses to the Trustee and request that copies of notices be provided directly to them.]
- [6. Redemption notices shall be sent to DTC. If less than all of the Securities within an issue are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such issue to be redeemed.]
- 7. Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to Securities unless authorized by a Direct Participant in accordance with DTC's MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to Issuer as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts Securities are credited on the record date (identified in a listing attached to the Omnibus Proxy).
- 8. Redemption proceeds, distributions, and dividend payments on the Securities will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts upon DTC's receipt of funds and corresponding detail information from Issuer or Agent, on payable date in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC, Agent, or Issuer, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of redemption proceeds, distributions, and dividend payments to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of Issuer or Agent, disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners will be the responsibility of Direct and Indirect Participants.
- [9. A Beneficial Owner shall give notice to elect to have its Securities purchased or tendered, through its Participant, to [Tender/Remarketing] Agent, and shall effect delivery of such Securities by causing the Direct Participant to transfer the Participant's interest in the Securities, on DTC's records, to [Tender/Remarketing] Agent. The requirement for physical delivery of Securities in connection with an optional tender or a mandatory purchase will be deemed satisfied when the ownership rights in the Securities are transferred by Direct Participants on DTC's records and followed by a book entry credit of tendered Securities to [Tender/Remarketing] Agent's DTC account.]
- 10. DTC may discontinue providing its services as depository with respect to the Securities at any time by giving reasonable notice to Issuer or Agent. Under such circumstances, in the event that a successor depository is not obtained, Security certificates are required to be printed and delivered.
- 11. Issuer may decide to discontinue use of the system of book-entry-only transfers through DTC (or a successor securities depository). In that event, Security certificates will be printed and delivered to DTC.
- 12. The information in this section concerning DTC and DTC's book-entry system has been obtained from sources that Issuer believes to be reliable, but Issuer takes no responsibility for the accuracy thereof.

# APPENDIX E

# FORM OF CONTINUING DISCLOSURE CERTIFICATE

This Continuing Disclosure Undertaking (the "Undertaking") dated as of February 7, 2019, is hereby made by the University of Washington (the "University") in connection with the issuance of its General Revenue Bonds, 2019A (the "Bonds") pursuant to a resolution of the University adopted on July 12, 2018 (the "Resolution") and a Paying Agent Agreement with U.S. Bank National Association dated as of February 1, 2019.

The University covenants and agrees as follows:

SECTION 1. <u>Purpose of the Undertaking</u>. This Undertaking is being executed and delivered by the University for the benefit of the Holders and Beneficial Owners of the Bonds and in order to assist the Participating Underwriters in complying with Securities and Exchange Commission Rule 15c2-12(b)(5).

SECTION 2. <u>Definitions</u>. In addition to the definitions set forth in the Resolution, which apply to any capitalized term used in this Undertaking unless otherwise defined in this Section, the following capitalized terms shall have the following meanings:

**Annual Report** shall mean any Annual Report provided by the University pursuant to, and as described in, Sections 3 and 4 of this Undertaking.

**Beneficial Owner** shall mean any person which (a) has the power, directly or indirectly, to vote or consent with respect to, or to dispose of ownership of, any Bonds (including persons holding Bonds through nominees, depositories or other intermediaries), or (b) is treated as the owner of any Bonds for federal income tax purposes.

**Dissemination Agent** shall mean the University, or any successor Dissemination Agent designated in writing by the University and which has filed with the University a written acceptance of such designation.

*Holders* shall mean the registered holders of the Bonds, as recorded in the registration books of the Paying Agent.

MSRB means the Municipal Securities Rulemaking Board or any successors to its functions.

**Notice Event** shall mean any of the following events:

- 1. Principal and interest payment delinquencies;
- 2. Nonpayment related defaults, if material;
- 3. Unscheduled draws on debt service reserves reflecting financial difficulties;
- 4. Unscheduled draws on credit enhancements reflecting financial difficulties;
- 5. Substitution of credit or liquidity providers, or their failure to perform;
- 6. Adverse tax opinions, the issuance by the Internal Revenue service of proposed or final determines of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the security, or other material or events affecting the tax status of the Bonds:
  - 7. Modifications to the rights of Bond Owners, if material;
- 8. Optional, contingent or unscheduled calls of any Bonds other than scheduled sinking fund redemptions for which notice is given pursuant to Exchange Act Release 34-23856, if material, and tender offers;
  - 9. Defeasances;
  - 10. Release, substitution or sale of property securing repayment of the Bonds, if material;
  - 11. Rating changes;
  - 12. Bankruptcy, insolvency, receivership or similar event of the University;
- 13. The consummation of a merger, consolidation, or acquisition of the University or the sale of all or substantially all of the assets of the University, other than in the ordinary course of business, the

entry into a definitive agreement to undertake such an action or the termination of a definitive agreement to undertake such an action, other than pursuant to its terms, if material;

14. Appointment of a successor or additional trustee or the change of name of the trustee, if material.

Official Statement shall mean the Official Statement dated January 17, 2019, with respect to the Bonds.

**Participating Underwriter** shall mean any of the original purchaser or underwriter of the Bonds required to comply with the Rule in connection with offering of the Bonds.

**Rule** shall mean Rule 15c2-12(b)(5) adopted by the Securities and Exchange Commission under the Securities Exchange Act of 1934, as the same may be amended from time to time.

State shall mean the State of Washington.

# SECTION 3. Provision of Annual Reports.

- (a) The University shall, or shall cause the Dissemination Agent to, not later than seven months after the end of the University's Fiscal Year (presently January 31, 2020, for the Fiscal Year ended June 30, 2019), commencing with the report for Fiscal Year 2019, provide to the MSRB an Annual Report which is consistent with the requirements of Section 4 of this Undertaking. The Annual Report may be submitted as a single document or as separate documents comprising a package, and may cross-reference other information as provided in Section 4 of this Undertaking; provided that the audited financial statements of the University may be submitted separately from the balance of the Annual Report and later than the date required above for the filing of the Annual Report if they are not available by that date. The University may adjust such Fiscal Year by providing written notice of the change of Fiscal Year to the MSRB.
- (b) Not later than fifteen (15) Business Days prior to said date, the University shall provide the Annual Report to the Dissemination Agent (if other than the University). If the University is unable to provide to the MSRB an Annual Report by the date required in subsection (a), the University shall send a notice to the MSRB stating that the University is unable to provide the Annual Report by the date required in subsection (a), and stating when the University expects to provide the Annual Report.
- (c) If the Dissemination Agent is not the University, the Dissemination Agent shall file a report with the University certifying that the Annual Report has been provided pursuant to this Undertaking and stating the date it was provided.
- SECTION 4. <u>Content of Annual Reports</u>. The University's Annual Report shall contain or include by reference (without duplication) the following:
  - 1. The audited financial statements of the University for the prior fiscal year, prepared in accordance with generally accepted accounting principles as promulgated to apply to governmental entities from time to time by the Governmental Accounting Standards Board. If the University's audited financial statements are not available by the time the Annual Report is required to be filed pursuant to Section 3(a), the Annual Report shall contain unaudited financial statements in a format similar to the financial statements contained in the final Official Statement, and the audited financial statements shall be filed in the same manner as the Annual Report when they become available.
  - 2. Updates to the following financial and operating data of the University to the extent the updates are not included in the audited financial statements provided under subsection 1:
    - The amount of University revenue and other debt outstanding in that fiscal year.
    - Student enrollment information for that fiscal year, generally of the type provided in the table entitled "Applications, Students and Enrollment" under the heading

- "ADMISSIONS, STUDENT ENROLLMENT AND FACULTY INFORMATION" and distribution of undergraduate enrollment among University campuses.
- Information regarding the number of faculty and tenure rate for that fiscal year, generally of the type provided in the table entitled "FACULTY DATA."
- Information regarding room and board fees, autumn opening occupancy and occupancy for that fiscal year, generally of the type provided in the table entitled "HOUSING AND DINING DATA."
- General Revenues and General Revenue components for that fiscal year, generally of the
  type provided in the table entitled "GENERAL REVENUES" under the headings General
  Revenue (Exclusions from Total Revenue) and General Revenue (By Component) and
  for the line item General Net Position. Illustrative information, if any, regarding effects of
  certain GASB Statements on General Net Position may be provided in narrative, tabular
  or other form.
- Grant and contract revenues for that fiscal year, and amount or percentage of grant and contract revenues from federal sources.
- Information regarding the amount or percentage of revenues from Medicare or Medicaid payments in that fiscal year.
- Operating expenses by type of expenditure in that fiscal year.
- Expenditures of State capital and operating appropriations to the University for such fiscal year, generally of the type provided in the table entitled "Expenditures of State Appropriations to the University by Type"
- Patient activity statistics for the UW Medicine hospitals with revenues included in General Revenues for such fiscal year
- Financial information for the UW Medicine hospitals with revenues included in General Revenues for such fiscal year
- Value of investments, including operating fund investments and the Consolidated Endowment Fund ("CEF"), for that fiscal year.
- A narrative description of any material changes to the University's investment policy or CEF distribution policy during the preceding fiscal year.
- Gift revenue for that fiscal year.
- University revenue by source for that fiscal year, generally of the type provided in the chart titled "University Total Revenue by Source, Fiscal Year 2018"
- Total University expenditures by category for that fiscal year
- A description of any material changes to the University's obligations with respect to its pension plans, generally of the type presented under the heading "LABOR, RISK MANAGEMENT AND RETIREMENT INFORMATION."
- A description of any material changes to the University's obligations with respect to other post-employment benefits, generally of the type presented under the heading

- "LABOR, RISK MANAGEMENT AND RETIREMENT INFORMATION Healthcare and Life Insurance Benefits; Other Post-Employment Benefits ("OPEB")."
- Amount of the University's self-insurance reserve, generally of the type presented under the heading "LABOR, RISK MANAGEMENT AND RETIREMENT INFORMATION—Risk Management."

Any or all of the items listed above may be included by specific reference to other documents, including official statements of debt issues of the University or related public entities, which are available to the public on the MSRB's internet website. The University shall clearly identify each such other document so included by reference.

- SECTION 5. <u>Reporting of Notice Events</u>. The University shall give, or cause to be given, notice of the occurrence of any Notice Event with respect to the Bonds not in excess of ten business days after the occurrence of the Notice Event.
- SECTION 6. <u>Termination of Reporting Obligation</u>. The University's obligations under this Undertaking shall terminate upon the legal defeasance, prior redemption or payment in full of all of the Bonds. If such termination occurs prior to the final maturity of the Bonds, the University shall give notice of such termination in the same manner as for a Notice Event.
- SECTION 7. <u>Dissemination Agent</u>. The University may, from time to time, appoint or engage a successor Dissemination Agent to assist it in carrying out its obligations under this Undertaking, and may discharge any such successor Dissemination Agent, with or without appointing another successor Dissemination Agent. The successor Dissemination Agent shall not be responsible in any manner for the content of any notice or report prepared by the University pursuant to this Undertaking.
- SECTION 8. <u>Amendment; Waiver</u>. Notwithstanding any other provision of this Undertaking, the University may amend this Undertaking, and any provision of this Undertaking may be waived, provided that the following conditions are satisfied:
  - (a) If the amendment or waiver relates to the provisions of Sections 3(a), 4 or 5, it may only be made in connection with a change in circumstances that arises from a change in legal requirements, change in law or change in the identity, nature or status of an obligated person with respect to the Bonds or the type of business conducted;
  - (b) The undertaking, as amended or taking into account such waiver, would, in the opinion of nationally recognized bond counsel, have complied with the requirements of the Rule at the time of the original issuance of the Bonds, after taking into account any amendments or interpretations of the Rule as well as any change in circumstances; and
  - (c) The amendment or waiver either (i) is approved by the Holders of the Bonds in the same manner as provided in the Resolution for amendments to the Resolution with the consent of the Holders, or (ii) does not, in the opinion of nationally recognized bond counsel, materially impair the interests of the Holders or Beneficial Owners of the Bonds.

In the event of any amendment or waiver of a provision of this Undertaking, the University shall describe such amendment in the next Annual Report, and shall include, as applicable, a narrative explanation of the reason for the amendment or waiver and its impact on the type (or in the case of a change of accounting principles, on the presentation) of financial information or operating data being presented by the University. In addition, if the amendment relates to the accounting principles to be followed in preparing financial statements, the Annual Report for the year in which the change is made should present a comparison (in narrative form and also, if feasible, in quantitative form) between the financial statements as prepared on the basis of the new accounting principles and those prepared on the basis of the former accounting principles.

SECTION 9. <u>Additional Information</u>. Nothing in this Undertaking shall be deemed to prevent the University from disseminating any other information, using the means of dissemination set forth in this Undertaking or any other means of communication, or including any other information in any Annual Report or notice of occurrence of a Notice Event, in addition to that which is required by this Undertaking. If the University chooses to include any information in any Annual Report in addition to that which is specifically required by this Undertaking, the University shall have no obligation under this Undertaking to update such information or include it in any future Annual Report.

SECTION 10. <u>Default</u>. In the event of a failure of the University to comply with any provision of this Undertaking, any Holder or Beneficial Owner of the Bonds may take such actions as may be necessary and appropriate, including seeking mandate or specific performance by court order, to cause the University to comply with its obligations under this Undertaking. A default under this Undertaking shall not be deemed an Event of Default under the Resolution, and the sole remedy under this Undertaking in the event of any failure of the University to comply with this Undertaking shall be an action to compel performance.

SECTION 11. <u>Beneficiaries</u>. This Undertaking shall inure solely to the benefit of the University, the Dissemination Agent, the Participating Underwriters and Holders and Beneficial Owners from time to time of the Bonds, and shall create no rights in any other person or entity.

SECTION 12. EMMA; Format for Filing with the MSRB. Until otherwise designated by the MSRB or the Securities and Exchange Commission, any filing required to be made with the MSRB under this Undertaking is to be submitted through the MSRB's Electronic Municipal Market Access system, currently located at www.emma.msrb.org (which website is not incorporated herein). All notices, financial information and operating data required by this Undertaking to be provided to the MSRB must be in an electronic format as prescribed by the MSRB. All documents provided to the MSRB pursuant to this Undertaking must be accompanied by identifying information as prescribed by the MSRB.

UNIVERSITY OF WASHINGTON
Authorized Signer



# UNIVERSITY of WASHINGTON

