

In the opinion of Co-Bond Counsel, interest on the 2019A Bonds (including any original issue discount properly allocable to a holder thereof) is excluded 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. In the opinion of Co-Bond Counsel, interest on the 2019B Bonds is not excluded from gross income for federal income tax purposes. Co-Bond Counsel is also of the opinion that under existing law, interest on the Bonds is exempt from Pennsylvania personal income tax and from Pennsylvania corporate net income tax and the Bonds are exempt from personal property taxes in Pennsylvania. For a discussion of other federal tax consequences arising with respect to the Bonds, see "TAX MATTERS."

Pennsylvania Higher Educational Facilities Authority
\$18,690,000 University Revenue Bonds, Series A of 2019
(Duquesne University)
\$10,000,000 University Revenue Bonds, Series B of 2019
(Duquesne University) (Federally Taxable)

Dated: Date of Delivery

Due: See Inside Cover

The Pennsylvania Higher Educational Facilities Authority University Revenue Bonds, Series A of 2019 (Duquesne University) (the "2019A Bonds") and University Revenue Bonds, Series B of 2019 (Duquesne University) (Federally Taxable) (the "2019B Bonds" and, together with the 2019A Bonds, the "Bonds") are limited obligations of the Pennsylvania Higher Educational Facilities Authority (the "Authority"), payable solely from and secured by, and only by, the Trust Estate (as defined hereinafter) pledged by the Authority to secure the Bonds pursuant to a Trust Indenture dated as of March 1, 2019 (the "Indenture") between the Authority and The Bank of New York Mellon Trust Company, N.A., Pittsburgh, Pennsylvania, as trustee (the "Trustee"), which Trust Estate includes payments received by the Authority pursuant to the Loan Agreement (as defined below) and other funds pledged under the Indenture.

The Bonds will mature on the dates and in the aggregate principal amounts set forth on the inside cover hereof. Interest on the Bonds is payable on March 1 and September 1 of each year, commencing September 1, 2019, until maturity or earlier redemption by the Trustee. The Bonds are issuable only in fully registered form without coupons and, when issued, will be registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York ("DTC"). So long as Cede & Co. is the registered owner, reference herein to the registered owners of the Bonds shall mean Cede & Co. and not the Beneficial Owners (as defined herein). DTC will act as securities depository of the Bonds, and purchases of beneficial ownership interest in the Bonds will be made in book-entry form only, in denominations of \$5,000 or integral multiples thereof. Beneficial Owners will not receive certificates representing their interest in the Bonds. See "THE BONDS – Description of the Bonds" and "DTC AND BOOK-ENTRY."

Pursuant to a Loan and Security Agreement dated as of March 1, 2019 (the "Loan Agreement") between the Authority and Duquesne University of the Holy Spirit, a Pennsylvania nonprofit corporation (the "University"), the Authority will loan the proceeds derived from the sale of the Bonds to the University to be applied for the purposes described below. The University is required under the terms of the Loan Agreement to make payments to the Trustee for the account of the Authority in amounts and at times sufficient to pay the principal of, premium (if any) on and interest on the Bonds. The University's obligation to make the payments required by the Loan Agreement is a general obligation of the University that is not limited to any particular source of funds or revenues. The Bonds will be secured by a lien on and security interest in the University's Tuition and Student Fees, each as defined in the Indenture, which lien and security interest is on a parity with liens and security interests heretofore or hereafter granted with respect to other indebtedness of the University and may be released without consent of the Trustee or the holders of the Bonds under specified circumstances described hereinafter. See "SECURITY FOR AND SOURCES OF PAYMENT OF THE BONDS" and APPENDIX D – Summary of the Indenture, Loan Agreement and Intercreditor Agreement.



The proceeds of the sale of the Bonds will be loaned to the University for a project consisting of financing all or a portion of the costs of (i) renovations to the A.J. Palumbo Center and other miscellaneous capital projects, and (ii) issuance of the Bonds. See "THE BONDS – Redemption of the Bonds."

THE BONDS ARE LIMITED OBLIGATIONS OF THE AUTHORITY AND ARE PAYABLE SOLELY FROM AND SECURED SOLELY BY FUNDS HELD BY THE TRUSTEE PURSUANT TO THE INDENTURE AND MONEYS AND REVENUES PAYABLE UNDER THE LOAN AGREEMENT. THE BONDS AND THE INTEREST THEREON WILL NEVER CONSTITUTE AN INDEBTEDNESS OF THE AUTHORITY WITHIN THE MEANING OF ANY CONSTITUTIONAL PROVISION OR STATUTORY LIMITATION AND WILL NEVER CONSTITUTE OR GIVE RISE TO PECUNIARY LIABILITY OF THE AUTHORITY, NOR WILL ANY BOND OR INTEREST THEREON BE A CHARGE AGAINST THE GENERAL CREDIT OF THE AUTHORITY OR THE GENERAL CREDIT AND TAXING POWER OF THE COMMONWEALTH OF PENNSYLVANIA OR ANY POLITICAL SUBDIVISION THEREOF. NEITHER THE FAITH AND CREDIT NOR THE TAXING POWER OF THE COMMONWEALTH OF PENNSYLVANIA OR ANY POLITICAL SUBDIVISION THEREOF IS PLEDGED TO THE PAYMENT OF THE PRINCIPAL OF, PREMIUM, IF ANY, ON OR INTEREST ON THE BONDS, OR OTHER COSTS INCIDENTAL THERETO. THE AUTHORITY HAS NO TAXING POWER.

This cover page contains limited 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 making an informed investment decision.

The Bonds are offered when, as and if issued by the Authority and received by the Underwriter, subject to prior sale, or to withdrawal or modification of the offer without notice, and subject to the approving opinion of Cohen & Grigsby, P.C., Pittsburgh, Pennsylvania, and Turner Law, P.C., Co-Bond Counsel. Certain legal matters will be passed upon for the University by Madelyn A. Reilly, Esquire, Vice President for Legal Affairs and General Counsel of the University, and by Eckert Seamans Cherin & Mellott, LLC, disclosure counsel to the University, for the Authority by Barley Snyder LLP, Lancaster, Pennsylvania, counsel to the Authority, and for the Underwriter by Dinsmore & Shohl LLP, Pittsburgh, Pennsylvania, counsel to the Underwriter. The Bonds are expected to be delivered on or about March 27, 2019.

Wells Fargo Securities

Dated: March 21, 2019

\$18,690,000
Pennsylvania Higher Educational Facilities Authority
University Revenue Bonds, Series A of 2019
(Duquesne University)

<u>Maturity Date</u> <u>(March 1)</u>	<u>Principal</u> <u>Amount</u>	<u>Interest</u> <u>Rate</u>	<u>Yield</u>	<u>Price</u>	<u>CUSIP No.*</u>
2036	\$4,360,000	5.000%	2.960%	117.435**	70917S4C4
2037	4,575,000	4.000%	3.350%	105.449**	70917S4D2
2038	4,760,000	5.000%	3.070%	116.406**	70917S4E0
2039	4,995,000	5.000%	3.100%	116.127**	70917S4F7

\$10,000,000
Pennsylvania Higher Educational Facilities Authority
University Revenue Bonds, Series B of 2019
(Duquesne University) (Federally Taxable)

<u>Maturity Date</u> <u>(March 1)</u>	<u>Principal</u> <u>Amount</u>	<u>Interest</u> <u>Rate</u>	<u>Yield</u>	<u>Price</u>	<u>CUSIP No.*</u>
2035	\$10,000,000	4.123%	4.123%	100.000	70917S4B6

* The above CUSIP (Committee on Uniform Securities Identification Procedures) numbers have been assigned by an organization not affiliated with the Authority, the University or the Underwriter, and such parties are not responsible for the selection or use of the CUSIP numbers. The CUSIP numbers are included solely for the convenience of bondholders and no representation is made as to the correctness of such CUSIP numbers. CUSIP numbers assigned to securities may be changed during the term of such securities based on a number of factors including, but not limited to, the refunding or defeasance of such issue or the use of secondary market financial products. None of the Authority, the University or the Underwriter has agreed to, and there is no duty or obligation to, update this Official Statement to reflect any change or correction in the CUSIP numbers set forth above.

** Priced to the first optional redemption date of March 1, 2029.

PENNSYLVANIA HIGHER EDUCATIONAL FACILITIES AUTHORITY
(Commonwealth of Pennsylvania)
1035 Mumma Road
Wormleysburg, Pennsylvania 17043

BOARD MEMBERS OF THE AUTHORITY

Honorable Thomas W. Wolf Governor of the Commonwealth of Pennsylvania	President
Honorable Ryan P. Aument Designated by the President Pro Tempore of the Senate	Vice President
Honorable Andrew E. Dinniman Designated by the Minority Leader of the Senate	Vice President
Honorable Stanley E. Saylor Designated by the Speaker of the House of Representatives	Vice President
Honorable Joseph M. Torsella State Treasurer	Treasurer
Honorable Curtis M. Topper Secretary of General Services	Secretary
Honorable Anthony M. DeLuca Designated by the Minority Leader of the House of Representatives	Board Member
Honorable Eugene A. DePasquale Auditor General	Board Member
Honorable Pedro A. Rivera Secretary of Education	Board Member

ACTING EXECUTIVE DIRECTOR
Beverly M. Nawa

AUTHORITY COUNSEL
(Appointed by the Office of General Counsel)
Barley Snyder LLP
Lancaster, Pennsylvania

THE UNIVERSITY
Duquesne University of the Holy Spirit
Pittsburgh, Pennsylvania

TRUSTEE
The Bank of New York Mellon Trust Company, N.A.
Pittsburgh, Pennsylvania

FINANCIAL ADVISOR
George K. Baum & Company
Pittsburgh, Pennsylvania

CO-BOND COUNSEL
(Appointed by the Office of General Counsel)
Cohen & Grigsby, P.C. **Turner Law, P.C.**
Pittsburgh, Pennsylvania Philadelphia, Pennsylvania

DISCLOSURE COUNSEL
Eckert Seamans Cherin & Mellott, LLC
Pittsburgh, Pennsylvania

UNDERWRITER'S COUNSEL
Dinsmore & Shohl, LLP
Pittsburgh, Pennsylvania

The information set forth herein has been obtained from the Pennsylvania Higher Educational Facilities Authority (the "**Authority**") as to information concerning the Authority, and from Duquesne University of the Holy Spirit (the "**University**") and other sources which are believed to be reliable, but the information provided by sources other than the Authority is not guaranteed as to accuracy or completeness by the Authority. The information and expressions of opinions herein are subject to change without notice and neither the delivery of this Official Statement nor any sale made hereunder shall, under any circumstances, create any implication that there has been no change in any of the information set forth herein since the date hereof.

The Underwriter has provided the following sentence for inclusion in this Official Statement. The Underwriter has reviewed the information in this Official Statement in accordance with, and as part of, its responsibilities to investors under the federal securities law as applied to the facts and circumstances of this transaction, but the Underwriter does not guarantee the accuracy or completeness of such information.

No dealer, broker, salesperson or other person has been authorized by the Authority, the Underwriter or the University to give any information or to make any representations with respect to the Bonds other than those contained in this Official Statement, and if given or made, such other information or representations must not be relied upon as having been authorized by any of the foregoing. This Official Statement does not constitute an offer to sell or the solicitation of any offer to buy any of the Bonds in any jurisdiction in which it is unlawful to make such an offer, solicitation, or sale.

The Bonds are not and will not be registered under the Securities Act of 1933, or under any state securities laws, and the Indenture has not been and will not be qualified under the Trust Indenture Act of 1939, as amended, because of available exemptions therefrom. Neither the Securities and Exchange Commission nor any federal, state, municipal, or other governmental agency will pass upon the accuracy, completeness, or adequacy of this Official Statement.

For purposes of compliance with Rule 15c2-12 of the United States Securities and Exchange Commission, as amended, and in effect on the date hereof, this Official Statement constitutes an official statement of the Authority that has been deemed final by the Authority as of its date except for the omission of no more than the information permitted by Rule 15c2-12.

References to website addresses presented herein are for informational purposes only and may be in the form of a hyperlink solely for the reader's convenience. Unless specified otherwise, such websites and the information or links contained therein are not incorporated into, and are not part of, this Official Statement.

IN CONNECTION WITH THIS OFFERING, THE UNDERWRITER MAY OVER-ALLOT OR EFFECT TRANSACTIONS THAT STABILIZE OR MAINTAIN THE MARKET PRICE OF THE BONDS AT A LEVEL ABOVE THAT WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME.

THE ORDER AND PLACEMENT OF MATERIALS IN THIS OFFICIAL STATEMENT, INCLUDING THE APPENDICES, ARE NOT TO BE DEEMED TO BE A DETERMINATION OF RELEVANCE, MATERIALITY, OR IMPORTANCE, AND THIS OFFICIAL STATEMENT, INCLUDING THE APPENDICES, MUST BE CONSIDERED IN ITS ENTIRETY. THE OFFERING OF THE BONDS IS MADE ONLY BY MEANS OF THIS ENTIRE OFFICIAL STATEMENT.

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Pennsylvania Higher Educational Facilities Authority
\$18,690,000 University Revenue Bonds, Series A of 2019
(Duquesne University)
and
\$10,000,000 University Revenue Bonds, Series B of 2019
(Duquesne University) (Federally Taxable)

INTRODUCTION

General

This Official Statement, including the cover page and appendices, sets forth certain information concerning the Pennsylvania Higher Educational Facilities Authority (the "**Authority**"), Duquesne University of the Holy Spirit (the "**University**") and the Authority's University Revenue Bonds, Series A of 2019 (Duquesne University) in the aggregate principal amount of \$18,690,000 (the "**2019A Bonds**") and University Revenue Bonds, Series B of 2019 (Duquesne University) (Federally Taxable) in the aggregate principal amount of \$10,000,000 (the "**2019B Bonds**" and, together with the 2019A Bonds, the "**Bonds**"). The Authority is a body corporate and politic constituting a public corporation and a public instrumentality of the Commonwealth of Pennsylvania, created by The Pennsylvania Higher Educational Facilities Authority Act (Act No. 318 of the General Assembly of the Commonwealth, approved December 6, 1967), as amended (the "**Act**"). See "THE AUTHORITY" herein for certain information about the Authority.

This Introduction is not a summary of this Official Statement and is intended only for quick reference. It is only a brief description of and guide to, and is qualified in its entirety by reference to, more complete and detailed information contained in the entire Official Statement, including the cover page and the Appendices, and the documents summarized or described herein. Investors should fully review the entire Official Statement. The offering of the Bonds to potential investors is made only by means of the entire Official Statement, including the Appendices hereto. No person is authorized to detach this Introduction from the Official Statement or otherwise to use it without the entire Official Statement.

Purpose of the Bonds

The proceeds of the sale of the Bonds will be loaned to the University for a project (the "**Project**") consisting of financing a portion of the costs of: (a) renovations to the A.J. Palumbo Center and other miscellaneous capital projects, and (b) issuance of the Bonds. See "PLAN OF FINANCE."

Description of the Bonds

Redemption. The Bonds are subject to redemption prior to stated maturity. See "THE BONDS –Redemption of the Bonds."

Denominations. The authorized denominations of the Bonds will be \$5,000 and any integral multiple thereof (an "**Authorized Denomination**"). See "THE BONDS–Description of the Bonds."

Registration; Registration of Transfer and Exchange. Ownership of the Bonds shall be registered on the registration books of the Authority maintained by the Trustee (as hereinafter defined). The Bonds will initially be issued only as book-entry securities. The Depository Trust Company ("**DTC**"), New York, New York, will act as securities depository for the Bonds. Ownership of the Bonds may be registered, transferred and exchanged in the manner described under "THE BONDS–Description of the Bonds" and "DTC AND BOOK-ENTRY."

For a more complete description of the Bonds and the basic documentation pursuant to which they are being issued, see "THE BONDS" and APPENDIX D – Summary of the Indenture, Loan Agreement and Intercreditor Agreement.

Security and Sources of Payment for the Bonds

The Bonds are being issued pursuant to a Trust Indenture dated as of March 1, 2019 (the "**Indenture**") between the Authority and The Bank of New York Mellon Trust Company, N.A., Pittsburgh, Pennsylvania, as trustee (the "**Trustee**"). Pursuant to the Indenture, the Authority will assign and pledge to the Trustee as security for the Bonds the Trust Estate (as defined in the Indenture and in APPENDIX D to this Official Statement), which includes all of the Authority's right, title and interest in and to the Loan Agreement (as defined below) and the payments due thereunder, excluding certain rights to payment of expenses and indemnification, together with all moneys and securities from time to time held by the Trustee under the terms of the Indenture (other than the Rebate Fund) and all income and receipts thereon, subject to the provisions of the Indenture permitting the application of such amounts for the purposes and on the terms and conditions set forth in the Indenture. The Trust Estate also includes all right, title and interest of the Authority in and to the Tuition and Student Fees (each as defined below and in the Indenture) pledged by the University pursuant to the Loan Agreement. See "SECURITY FOR AND SOURCES OF PAYMENT OF THE BONDS" and APPENDIX D – Summary of the Indenture, Loan Agreement and Intercreditor Agreement.

Pursuant to a Loan and Security Agreement dated as of March 1, 2019 (the "**Loan Agreement**") between the Authority and the University, the Authority will loan the proceeds derived from the sale of the Bonds to the University to be applied for the purposes described above. The University is required under the terms of the Loan Agreement to make payments to the Trustee for the account of the Authority in amounts and at times sufficient to pay the principal of, redemption premium (if any), and interest on the Bonds. The University's obligation to make the payments required by the Loan Agreement is a general obligation of the University that is not limited to any particular source of funds or revenues. See "SECURITY FOR AND SOURCES OF PAYMENT OF THE BONDS" and APPENDIX D – Summary of the Indenture, Loan Agreement and Intercreditor Agreement.

The Bonds will be equally and ratably secured by a lien on and a security interest in all revenues of the University derived from tuition and the proceeds thereof ("**Tuition**") and all revenues of the University derived from student fees and the proceeds thereof ("**Student Fees**") granted by the University pursuant to the Loan Agreement. Such lien and security interest will be on a parity with the lien and security interest granted by the University with respect to the following series of bonds that will be outstanding as of the date of issuance of the Bonds (and will be subject to release as described below), which bonds were outstanding as of March 1, 2019 in the respective principal amounts shown below:

- (i) The Allegheny County Higher Education Building Authority University Revenue Refunding Bonds (Duquesne University Project) Series of 1998 (the "**1998 Bonds**"), outstanding in the amount of \$1,250,000;
- (ii) The Allegheny County Higher Education Building Authority University Revenue Bonds, Series A of 2011 (Duquesne University) (the "**2011A Bonds**"), outstanding in the amount of \$9,710,000;
- (iii) The Allegheny County Higher Education Building Authority University Revenue Bonds, Series A of 2013 (Duquesne University) (the "**2013A Bonds**"), outstanding in the amount of \$28,440,000;
- (iv) The Allegheny County Higher Education Building Authority University Revenue Refunding Bonds, Series A of 2014 (Duquesne University) (the "**2014A Bonds**"), outstanding in the amount of \$30,665,000;
- (v) The Allegheny County Higher Education Building Authority University Revenue Refunding Bonds, Series of 2016 (Duquesne University) (the "**2016 Bonds**"), outstanding in the amount of \$56,770,000;
- (vi) The Allegheny County Higher Education Building Authority University Revenue Refunding Bonds, Series of 2018 (Duquesne University) (the "**2018 Bonds**"), outstanding in the amount of \$17,760,000; and

(vii) Other University obligations issued in the future that are secured by a lien on and security interest in the University's Tuition and Student Fees, to the extent permitted as Permitted Encumbrances under the provisions of the Loan Agreement.

The Bonds and the obligations described in clauses (i) through (vii) above are referred to collectively as "**Revenue Secured Debt**". See APPENDIX D – Summary of the Indenture, Loan Agreement and Intercreditor Agreement.

On the date of issuance of the Bonds, the Trustee will enter into a joinder agreement (the "**Joinder Agreement**") by which it will become a party to the Intercreditor Agreement dated as of March 1, 1996, by and among Mellon Bank, N.A. (now The Bank of New York Mellon Trust Company, N.A., as successor trustee), as trustee for the 1998 Bonds, The Bank of New York Mellon Trust Company, N.A., as trustee for the 2011A Bonds, The Bank of New York Mellon Trust Company, N.A., as trustee for the 2013A Bonds, The Bank of New York Mellon Trust Company, N.A., as trustee for the 2014A Bonds, The Bank of New York Mellon Trust Company, N.A., as trustee for the 2016 Bonds, The Bank of New York Mellon Trust Company, N.A., as trustee for the 2018 Bonds, and the University (the "**Intercreditor Agreement**"). The Intercreditor Agreement provides, among other things, that, upon an Event of Default in connection with any Revenue Secured Debt, all recoveries realized from the enforcement of the Indenture and the Loan Agreement and/or the documents relating to the issuance of the 1998 Bonds, the 2008 Bonds, the 2011A Bonds, the 2013A Bonds, the 2014A Bonds, the 2016 Bonds and the 2018 Bonds shall be shared on a pari passu basis among the holders of the Bonds and all holders of the other Revenue Secured Debt. See APPENDIX D hereto for a description of the Intercreditor Agreement. **The University's pledge of its Tuition and Student Fees securing the Bonds and the other Revenue Secured Debt may be released if certain conditions are satisfied. For a description of the conditions for the release of such pledge, see APPENDIX D - Summary of the Indenture, Loan Agreement and Intercreditor Agreement.**

The Bonds are not secured by a mortgage on any real property of the University. However, the University has entered into separate covenants, for the benefit of the holders of the 1998 Bonds, the 2011A Bonds, the 2013A Bonds, the 2014A Bonds, the 2016 Bonds, the 2018 Bonds and the Bonds, that it will not grant a lien on any property to secure any Long-Term Debt unless a lien of equal or superior rank and priority is granted in favor of the trustee for the applicable series of bonds for the benefit of the holders of such bonds. Currently, no Long-Term Debt of the University is secured by any mortgage.

The Bonds are limited obligations of the Authority. Neither the general credit of the Authority nor the credit or the taxing power of the Commonwealth of Pennsylvania (the "*Commonwealth*") or any political subdivision thereof is pledged for the payment of the principal of, premium, if any, or interest on the Bonds, nor shall the Bonds be or be deemed to be general obligations of the Authority or obligations of the Commonwealth or any political subdivision thereof, nor shall the Commonwealth or any political subdivision thereof be liable for the payment of the principal of, premium, if any, or interest on the Bonds. The Authority has no taxing power. See "SECURITY AND SOURCES OF PAYMENT FOR THE BONDS" herein.

Tax Exemption

In the opinion of Co-Bond Counsel, interest on the 2019A Bonds (including any original issue discount properly allocable to a holder thereof) is excluded from gross income for federal income tax purposes. Furthermore, interest on the Bonds is not an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals. In the opinion of Co-Bond Counsel, interest on the 2019B Bonds is **not** excluded from gross income for federal income tax purposes.

Co-Bond Counsel is also of the opinion that under existing law, interest on the Bonds is exempt from Pennsylvania personal income tax and from Pennsylvania corporate net income tax and the Bonds are exempt from personal property taxes in Pennsylvania. See "APPENDIX C — Form of Opinion of Co-Bond Counsel" for the form of opinion Co-Bond Counsel propose to deliver in connection with the issuance of the Bonds. For a more complete discussion of such opinions and certain tax consequences incident to the ownership of the Bonds, see "TAX MATTERS."

Trustee and Bond Registrar

The Bank of New York Mellon Trust Company, N.A., Pittsburgh, Pennsylvania, will act as Trustee and Bond Registrar for the Bonds. The designated corporate trust office of the Trustee (the "*Designated Office*") is 500 Ross Street, 12th Floor, Pittsburgh, PA 15262.

Legal Authority

The Bonds are being issued and secured pursuant to the Act. The Bonds have been authorized pursuant to a resolution of the Authority adopted on February 28, 2019 (the "*Bond Resolution*"). The Loan Agreement was executed and delivered in accordance with the Act, the Bond Resolution and resolutions adopted by the Board of Directors of the University.

Offering and Delivery of the Bonds

The Bonds are offered subject to prior sale when, as and if issued by the Authority and accepted by the Underwriter, subject to the approval of legality by Cohen & Grigsby, P.C., Pittsburgh, Pennsylvania, and Turner Law, P.C., Philadelphia, Pennsylvania, Co-Bond Counsel. It is anticipated that the approving opinion will be in substantially the form attached hereto as APPENDIX C. Legal matters pertinent to the Authority will be passed upon by its counsel, Barley Snyder LLP, Lancaster, Pennsylvania. Certain legal matters will be passed upon for the University by Madelyn A. Reilly, Esquire, Vice President for Legal Affairs and General Counsel of the University, and by Eckert Seamans Cherin & Mellott, LLC, disclosure counsel to the University. Certain legal matters will be passed upon for the Underwriter by Dinsmore & Shohl LLP, Pittsburgh, Pennsylvania, counsel to the Underwriter. It is expected that the Bonds will be available for delivery on or about March 27, 2019.

Continuing Disclosure

On the date of issuance and delivery of the Bonds, the University will enter into a continuing disclosure certificate with respect to the Bonds, as required by Rule 15c2-12 promulgated by the Securities and Exchange Commission ("*Rule 15c2-12*"). See "CONTINUING DISCLOSURE" and "APPENDIX E – Summary of Continuing Disclosure Certificate" herein.

Other Information

This Official Statement speaks only as of its date, and the information contained herein is subject to change without notice. All references in this Official Statement to the Indenture, the Loan Agreement and the Intercreditor Agreement are qualified in their entirety by reference to such documents, copies of which are available upon request from, and upon payment of a reasonable copying charge to, the Trustee. All references to the Bonds are qualified in their entirety by reference to the definitive forms thereof and the information with respect thereto contained in the applicable Indenture. For definitions of capitalized terms used herein and not otherwise defined, see APPENDIX D – Summary of the Indenture, Loan Agreement and Intercreditor Agreement.

THE UNIVERSITY

The University, initially founded in 1878 on its present site, is a private, non-profit corporation, incorporated as a university in 1911 under the laws of the Commonwealth of Pennsylvania. The University's campus is located in the City of Pittsburgh, Allegheny County, Pennsylvania, and is situated adjacent to the downtown area of the City of Pittsburgh. The University provides undergraduate and graduate education in a number of disciplines. See APPENDIX A for certain information on the history, organization, operations, and financial condition of the University. See APPENDIX B for the financial statements of the University as of and for the years ended June 30, 2018 and 2017.

THE AUTHORITY

The Authority is a body corporate and politic, constituting a public corporation and a governmental instrumentality of the Commonwealth, created by the Act. The Authority's address is 1035 Mumma Road, Wormleysburg, Pennsylvania 17043.

Under the Act, the Authority consists of the Governor of the Commonwealth of Pennsylvania, the State Treasurer, the Auditor General, the Secretary of the Department of Education, the Secretary of the Department of General Services, the President Pro Tempore of the Senate, the Speaker of the House of Representatives, the Minority Leader of the Senate, and the Minority Leader of the House of Representatives. The President Pro Tempore of the Senate, the Speaker of the House of Representatives, the Minority Leader of the Senate and the Minority Leader of the House of Representatives may designate a member of his or her respective legislative body to act as a member of the Authority in his or her stead. The members of the Authority serve without compensation but are entitled to reimbursement for all necessary expenses incurred in connection with the performance of their duties as members. The powers of the Authority are exercised by a governing body consisting of the members of the Authority acting as a board.

The Authority is authorized under the Act, among other things, to acquire, construct, finance, improve, maintain, operate, hold and use any educational facility (as therein defined) and, with respect to a college, to finance projects by making loans, to lease as lessor or lessee, to transfer or sell any educational facility or property, to charge and collect amounts for the payment of expenses of the Authority and for payment of the principal of and interest on its obligations, to issue bonds and other obligations for the purpose of paying the cost of projects, to issue refunding bonds and to pledge all or any of the revenues of the Authority for all or any of such obligations, and to enter into trust indentures providing for the issuance of such obligations and for their payment and security.

As of December 31, 2018, revenue bonds and notes of the Authority issued to finance various projects in the Commonwealth were outstanding in the amount of \$5,761,695,168. None of the revenues of the Authority with respect to its revenue bonds and notes issued for the benefit of other institutions will be pledged as security for the Bonds or any other bonds or notes issued for the benefit of the University. Further, no revenue bonds and notes issued for the benefit of other institutions will be payable from or secured by the revenues of the Authority or other moneys securing the Bonds or any other bonds or notes issued for the benefit of the University.

The Authority has issued, and expects to continue to issue, other series of revenue bonds and notes for the purpose of financing projects of other higher educational institutions in the Commonwealth. Each such series of bonds, to the extent issued to benefit educational institutions other than the University, is or will be secured by instruments separate and apart from the Indenture securing the Bonds.

The Act provides that the Authority is to obtain from the Pennsylvania State Public School Building Authority ("*SBSBA*"), for a fee, those executive, fiscal and administrative services which are not available from the colleges and universities, as may be required to carry out the functions of the Authority under the Act. Accordingly, the Authority and SPSBA share an executive, fiscal and administrative staff and operate under a joint administrative budget.

The following are key staff members of the Authority who are involved in the administration of the financing and projects:

Beverly M. Nawa, Acting Executive Director

Ms. Nawa serves as the Acting Executive Director of both the Authority and SPSBA. She has been with the Authorities since August 2004. Prior to her present position, she served as an Administrative Officer for both Authorities. She also worked for the Pennsylvania Department of the Auditor General. Ms. Nawa is a graduate of Alvernia University with a bachelor's degree in business administration.

David Player, Comptroller & Director of Financial Management

Mr. Player serves as the Comptroller & Director of Financial Management of both the Authority and SPSBA. He has been with the Authorities since 1999. Prior to his present position, he served as Senior Accountant for both Authorities and as an auditor with the Pennsylvania Department of the Auditor General. Mr. Player is a graduate of the Pennsylvania State University and a Certified Public Accountant.

Neither the principal of the Bonds nor the interest accruing thereon shall ever constitute a general indebtedness of the Authority or indebtedness of the Commonwealth of Pennsylvania or any political subdivision, agency or instrumentality thereof within the meaning of any constitutional or statutory provision whatsoever or shall ever constitute or give rise to a pecuniary liability of the Authority or the Commonwealth of Pennsylvania or any political subdivision thereof, nor will the Bonds be, or be deemed to be, an obligation of the Commonwealth of Pennsylvania or any political subdivision, agency or instrumentality thereof. The Authority has no taxing power.

THE AUTHORITY HAS NOT PREPARED OR ASSISTED IN THE PREPARATION OF THIS OFFICIAL STATEMENT, EXCEPT THE STATEMENTS UNDER THIS SECTION AND UNDER THE HEADING "LEGAL MATTERS - ABSENCE OF MATERIAL LITIGATION" AS IT PERTAINS TO THE AUTHORITY. EXCEPT AS AFORESAID, THE AUTHORITY IS NOT RESPONSIBLE FOR ANY STATEMENTS MADE HEREIN AND DISCLAIMS RESPONSIBILITY FOR THE DISCLOSURES SET FORTH HEREIN WHICH ARE MADE IN CONNECTION WITH THE OFFER, SALE AND DISTRIBUTION OF THE BONDS.

THE BONDS

Description of the Bonds

The Bonds will be issued in two series as fully registered bonds without coupons in denominations of \$5,000 or any whole multiple thereof. The Bonds of each series shall bear interest on the unpaid principal at the rates and mature in the amounts and on the dates set forth on the inside cover page of this Official Statement and are subject to redemption prior to maturity, as set forth herein. See "THE BONDS – Redemption of the Bonds" herein. While the Bonds are held in book-entry-only form pursuant to the book-entry-only system described below under "DTC AND BOOK-ENTRY", references in this Official Statement to the "Owner" or the "Registered Owner" are to Cede & Co., as nominee of DTC. Each beneficial owner of a Bond may desire to make arrangements with a DTC Participant to receive notices or communications with respect to matters described herein. See "DTC AND BOOK-ENTRY" herein.

Interest on the Bonds shall be computed on the basis of twelve 30-day months and a 360-day year and shall be payable semiannually on March 1 and September 1 of each year (each, an "**Interest Payment Date**") commencing on September 1, 2019. When the date of maturity of interest on or principal of any Bond or the date fixed for redemption of any Bond shall not be a Business Day, then payment of such principal, premium, if any, or interest need not be made on such date but may be made on the next succeeding Business Day with the same force and effect as if made on the date of maturity or the date fixed for redemption, and no additional interest shall be payable on such succeeding Business Day as a result of such deferral of payment. A "**Business Day**" means a day which is not a Saturday, Sunday or legal holiday on which banking institutions in the Commonwealth of Pennsylvania, the State of New York or the state in which the Designated Office of the Trustee is located are authorized by law to close for a reason not related to financial condition.

Each Bond will be dated as of the date of authentication thereof, and will bear interest from the Interest Payment Date next preceding the authentication date thereof, unless such Bond is (1) authenticated on or after an Interest Payment Date on which interest has been paid or provided for, in which event it shall bear interest from such Interest Payment Date, (2) authenticated on or prior to August 15, 2019, in which event it shall bear interest from the date of issuance and delivery thereof, (3) authenticated after a Record Date but before the next succeeding Interest Payment Date, in which event it shall bear interest from such succeeding Interest Payment Date, or (4) interest on such Bond shall be in default, in which case such Bond shall bear interest from the last date on which interest was last paid or provided for.

So long as DTC or its nominee, Cede & Co., is the registered owner of the Bonds, payments of the principal of, premium, if any, and interest on the Bonds will be made by the Trustee directly to Cede & Co. Disbursement of such payments to the DTC Participants (as hereinafter defined) is the responsibility of DTC. Disbursement of such payment to the owners of the beneficial interest in the Bonds is the responsibility of the DTC Participants and the Indirect Participants (as hereinafter defined). See "DTC AND BOOK-ENTRY" herein. At all other times, the principal of the Bonds shall be payable at the Designated Office of the Trustee in Pittsburgh, Pennsylvania, or such other office or corporate trust office as may be designated by the Trustee as its Designated Office, in such coin or currency of the United States of America as at the time and place of payment is legal tender for public and private debts. Interest shall be paid by check drawn upon the Trustee and mailed to the persons in whose names the Bonds are registered at the close of business on the fifteenth (15th) day (whether or not a Business Day) of the month immediately preceding the month of the relevant Interest Payment Date (the "**Regular Record Date**") at the addresses shown on the registration records for the Bonds (the "**Bond Register**") kept by the Trustee. Notwithstanding the foregoing, if and to the extent there shall be a default in the payment of interest due on an Interest Payment Date, such defaulted interest shall be paid on a special payment date established by the Trustee, to the Registered Owners in whose names the Bonds are registered at the close of business on a special record date (the "**Special Record Date**" and together with the Regular Record Date, the "**Record Date**") to be fixed by the Trustee, such date to be not more than 30 days (whether or not a Business Day) nor less than 10 days prior to the date of payment of the defaulted interest.

The principal of, premium, if any, and interest on the Bonds shall be payable in any currency of the United States of America which, at the respective dates of payment thereof, is legal tender for the payment of public and private debts, and such principal and premium, if any, shall be payable at the Designated Office of the Trustee upon presentation and surrender thereof.

Payment of the interest on any Bond shall be made to the person appearing on the Bond Register as the registered owner thereof as of the Record Date and shall be paid: (i) by check of the Trustee mailed to such Bondholder on the Interest Payment Date at such Bondholder's address as it appears on the Bond Register or at such other address as is furnished to the Trustee in writing by such owner; (ii) in the case of an interest payment to any owner of \$1,000,000 or more in aggregate principal amount of Bonds as of the close of business of the Trustee on the Record Date for a particular Interest Payment Date, by wire transfer to such Bondholder as of the close of business on such Interest Payment Date upon written notice from such Bondholder containing the wire transfer address (which shall be in the continental United States) to which such Bondholder wishes to have such wire directed, which written notice is received not less than one (1) Business Day prior to such Record Date; or (iii) in such other fashion as is agreed upon between the Bondholder and the Trustee.

Delivery of Certificates; Registered Owners

Subject to the provisions described under "DTC AND BOOK-ENTRY" below, in the event that (i) after written notice to the Authority and the Trustee, DTC determines to resign as securities depository for the Bonds and no successor securities depository has been designated pursuant to the Indenture, or (ii) after written notice to DTC and the Trustee, the Authority is advised by the University that the University has determined that continuation of the system of book-entry transfers through DTC (or through a successor securities depository) is not in the best interests of the University, Bond certificates in fully registered form will be printed and delivered as directed by DTC. The ownership of the Bonds so delivered (and any Bonds thereafter delivered upon a transfer or exchange described below) shall be registered in the Bond Register kept by the Trustee at its Designated Office, and the Authority, the University and the Trustee shall be entitled to treat the registered owners of such Bonds, as their names appear in such Bond Register as of the appropriate dates, as the owners thereof for all purposes described in the Indenture.

Transfer and Exchange

Subject to the provisions described under "DTC AND BOOK-ENTRY" below, a Bond may be transferred or exchanged only upon presentation thereof to the Trustee. Such Bond must be accompanied by a written instrument or instruments of transfer or exchange, in form and with guaranty of signatures satisfactory to the Trustee, duly executed by the Registered Owner thereof or his duly authorized agent or legal representative. Upon surrender of any Bonds to be transferred or exchanged, the Trustee shall record the transfer or exchange in its Bond Register and shall authenticate and deliver new Bonds appropriately registered and in appropriate authorized denominations. Neither the Authority nor the Trustee shall be required to effect or register any transfer or exchange of any Bond

during the period beginning on any Record Date and ending on the corresponding Interest Payment Date, except that Bonds of a series properly surrendered for partial redemption may be exchanged for new Bonds of such series, in authorized denominations, equal in the aggregate to the unredeemed portion. No charge will be imposed in connection with any transfer or exchange, except for taxes or governmental charges related thereto. No service charge shall be made for any transfer of any Bond, but the Authority or the Trustee may require payment of any sum sufficient to cover any tax or other governmental charge that may be imposed in connection with any transfer or exchange of Bonds.

Redemption of the Bonds

Optional Redemption of 2019A Bonds. The 2019A Bonds maturing on and after March 1, 2036 shall be subject to redemption prior to maturity at the option of the Authority, upon the Written Request of the University, on or after March 1, 2029, in whole or in part at any time and from time to time at a redemption price of 100% of the principal amount thereof plus interest, if any, accrued thereon to the date fixed for redemption. Any such redemption shall be made in the order of maturity selected by the University and within any maturity by lot, as selected by the Trustee.

Optional Redemption of 2019B Bonds at Make-Whole Redemption Price. The 2019B Bonds shall be subject to redemption prior to maturity at the option of the Authority, upon the Written Request of the University, in whole or in part at any time and from time to time at the Make-Whole Redemption Price, which includes interest accrued to, but not including, the applicable redemption date, on the 2019B Bonds or portions thereof being redeemed.

"***Make-Whole Redemption Price***" with respect to 2019B Bonds being redeemed at the option of the University means an amount equal to the greater of:

- (1) 100% of the principal amount of the 2019B Bonds to be redeemed; and
- (2) The sum of the present values of the remaining scheduled payments of principal of and interest on the 2019B Bonds (exclusive of interest accrued and unpaid as of the redemption date), discounted to the redemption date on a semi-annual basis (assuming a 360-day year consisting of twelve 30-day months), at the Treasury Rate plus 20 basis points;

plus, in each case, accrued and unpaid interest on the 2019B Bonds to be redeemed to the redemption date.

Any such redemption shall be made in the order of maturity selected by the University and within any maturity by lot, as selected by the Trustee.

"***Business Day***" means any day other than (A) a Saturday or Sunday or legal holiday or a day on which banking institutions in the city or cities in which the designated corporate office of the Trustee is located are authorized by law or executive order to close or (B) a day on which the New York Stock Exchange is closed.

"***Comparable Treasury Issue***" means the United States Treasury security selected by a Designated Investment Banker as having an actual maturity comparable to the remaining average life of the 2019B Bonds to be optionally redeemed that would be utilized, at the time of selection and in accordance with customary financial practice, in pricing new issues of corporate debt securities of comparable remaining average life of such 2019B Bonds to be redeemed.

"***Comparable Treasury Price***" means, with respect to any redemption date, (a) the average of Reference Treasury Dealer Quotations for such redemption date, after excluding the highest and lowest of such Reference Treasury Dealer Quotations, or (B) if the Designated Investment Banker obtains fewer than four such Reference Treasury Dealer Quotations, the average of all such Reference Treasury Dealer Quotations.

"Designated Investment Banker" means one of the Reference Treasury Dealers appointed by the University.

"Reference Treasury Dealer" means Wells Fargo Bank, N.A. and three additional firms, as designated by the University, and the respective affiliates of each that are primary U.S. Government securities dealers (each a **"Primary Treasury Dealer"**), together with the respective successors of each of the foregoing; provided that, if any of them ceases to be a Primary Treasury Dealer, the University shall substitute therefor another Primary Treasury Dealer.

"Reference Treasury Dealer Quotations" means, with respect to each Reference Treasury Dealer and any redemption date, the average, as determined by the Designated Investment Banker, of the bid and asked prices for the applicable Comparable Treasury Issue (expressed in each case as a percentage of its principal amount) quoted in writing to the Designated Investment Banker and communicated to the Trustee by such Reference Treasury Dealer at 3:30 p.m., New York City time, on the third (3rd) Business Day preceding such redemption date.

"Treasury Rate" means, with respect to any redemption date, the rate per annum equal to the semiannual yield to maturity (on a day count basis) of the Comparable Treasury Issue, assuming a price for the Comparable Treasury Issue (expressed as a percentage of its principal amount) equal to the Comparable Treasury Price for such redemption date.

Extraordinary Redemption. The Bonds are subject to redemption and payment prior to the stated maturity thereof, at the option of the University, in whole or in part at any time, at a redemption price equal to 100% of the principal amount thereof, plus accrued interest thereon to the date fixed for redemption, without premium, upon the occurrence of any of the following events (such redemption is referred to hereinafter as an **"Extraordinary Redemption"**):

(1) all or a substantial portion of the Project Facilities is damaged or destroyed by fire or other casualty, or title to, or the temporary use of, all or a substantial portion of the Project Facilities is condemned or taken for any public or quasi-public use by any authority exercising or threatening the exercise of the power of eminent domain or title thereto is found to be deficient, to such extent that in the determination of the University, (A) the Project Facilities cannot be reasonably restored or replaced to the condition thereof preceding such event, or (B) the University is thereby prevented from carrying on its normal operations of the Project Facilities, or (C) the cost of restoration or replacement thereof would exceed the Net Proceeds of any casualty insurance, title insurance, condemnation awards or sale under threat of condemnation with respect thereto; or

(2) as a result of any changes in the Constitution of the Commonwealth or the Constitution of the United States of America or of legislative or administrative action (whether state or federal) or by final direction, judgment or order of any court or administrative body (whether state or federal) entered after the contest thereof by the University in good faith, the Indenture or the Loan Agreement becomes void or unenforceable or impossible of performance.

Selection of Bonds to be Redeemed. No redemption of less than all of the Bonds of a series at the time outstanding shall be made unless the aggregate principal amount of Bonds of such series to be redeemed is equal to at least \$5,000 or any integral multiple of \$5,000. In the event of a redemption of less than all of the Bonds of a series or less than all of the Bonds of any maturity, except as otherwise specified in the Indenture, the selection of Bonds of such series to be redeemed shall be made in the order of maturity designated by the University, and within any maturity by lot, as selected by the Trustee. The method of selecting Bonds for redemption by lot shall be determined by the Trustee. If the Owner of any Bond shall fail to present such Bond to the Trustee for payment and exchange as aforesaid, said Bond nevertheless shall become due and payable on the redemption date to the extent of the principal amount called for redemption.

Notice and Effect of Call for Redemption. Official notice of any redemption shall be given by the Trustee on behalf of the Authority by mailing a copy of an official redemption notice by first-class mail at least 30 days and not more than 60 days prior to the redemption date to each Owner of the Bonds to be redeemed at the address shown on the Bond Register or at such other address as is furnished in writing by such Owner to the Trustee. Any notice of optional redemption or extraordinary optional redemption of Bonds may specify that the redemption is contingent upon the deposit of monies with the Trustee in an amount sufficient to pay the redemption price of all the Bonds or

portions of Bonds which are to be redeemed on that date. Official notice of redemption having been given as aforesaid, the Bonds or portions of Bonds so to be redeemed shall, on the redemption date, become due and payable at the redemption price therein specified, and from and after such date (unless the Authority shall default in the payment of the redemption price) such Bonds or portions of Bonds shall cease to bear interest.

A second notice of redemption shall be given within 60 days after the redemption date to the registered owners of redeemed Bonds, which have not been presented for payment within 30 days after the redemption date. In addition to the foregoing notices, further notice shall be given by the Trustee on behalf of the Authority at least 30 days before the redemption date by first-class mail, overnight delivery service or facsimile to all registered securities depositories then in the business of holding substantial amounts of obligations of types comprising the Bonds and to one or more national information services that disseminate notices of redemption of obligations such as the Bonds. Failure to give any notice to any registered owner, or any defect therein, shall not affect the validity of any proceedings for the redemption of any other Bonds. Any notice mailed shall be conclusively presumed to have been duly given and shall become effective upon mailing, whether or not any registered owner received the notice.

For so long as DTC is effecting book-entry transfers of the Bonds, the Trustee will provide the redemption notice described above to DTC. It is expected that DTC will, in turn, notify its participants, and that the participants, in turn, will notify or cause to be notified the Beneficial Owners of the Bonds to be redeemed. The Authority, the Trustee and the University will have no responsibility or liability in connection with any failure on the part of DTC or a participant, or failure on the part of a nominee of a Beneficial Owner of a Bond, to notify the Beneficial Owner of the Bond so affected, and such failure shall not affect the validity of the redemption of such Bond. See "DTC AND BOOK-ENTRY" below.

SECURITY FOR AND SOURCES OF PAYMENT OF THE BONDS

General

The Bonds are limited obligations of the Authority payable solely from and secured by a pledge of the revenues derived by the Authority from the University pursuant to the Loan Agreement and by other funds pledged under the Indenture as described herein. The Authority has no taxing power.

Pledge of Loan Agreement; Pledge of Tuition and Student Fees

The payment of the principal of, premium (if any) and interest on the Bonds is secured under the Indenture by a pledge to the Trustee, for the benefit of the owners of the Bonds, of the Trust Estate, which includes the following: (i) all right, title and interest of the Authority in and to the Loan Agreement and the amounts payable thereunder (excluding Unassigned Rights); (ii) all right, title and interest of the Authority in and to the Tuition and Student Fees pledged by the University pursuant to the Loan Agreement, on a parity with all other Revenue Secured Debt, (iii) all funds and accounts established by the Trustee under the Indenture other than amounts held by the Trustee in the Rebate Fund and other moneys expressly excluded pursuant to the Indenture, and (iv) all income and receipts on the funds (other than the Rebate Fund) held by the Trustee under the Indenture.

The obligation of the University to make the payments required by the Loan Agreement is a general and unconditional obligation of the University secured by the University's pledge, pursuant to the Loan Agreement, of its Tuition and Student Fees as described herein (the "**Pledge**"), equally and ratably with all other Revenue Secured Debt of the University (which Pledge is subject to release as described in the second succeeding paragraph below). See APPENDIX D -- Summary of the Indenture, Loan Agreement and Intercreditor Agreement.

"**Revenue Secured Debt**" includes the Bonds and any other Long-Term Debt of the University which is secured by a pledge of Tuition or Student Fees and is subject to the provisions of the Intercreditor Agreement. In addition to the Bonds, the University's Revenue Secured Debt as of the date of issuance and delivery of the Bonds will include the 1998 Bonds, the 2011A Bonds, the 2013A Bonds, the 2014A Bonds, the 2016 Bonds and the 2018 Bonds, all of which are equally and ratably secured by the University's pledge of its Tuition and Student Fees. For details

regarding the other outstanding Revenue Secured Debt of the University, see APPENDIX B – Audited Financial Statements of Duquesne University as of and for the Years Ended June 30, 2018 and 2017.¹

The Loan Agreement and the documents relating to the 2011A Bonds, the 2013A Bonds, the 2014A Bonds, the 2016 Bonds and the 2018 Bonds provide that the University's pledge of its Tuition and Student Fees securing the Bonds and the other outstanding Revenue Secured Debt may be released if one of the following conditions are satisfied: (a) no other Revenue Secured Debt remains outstanding, or (b) the owners of all other Revenue Secured Debt have agreed to release their security interest in Tuition and Student Fees upon substantially the same terms as are provided in the Loan Agreement and set forth in this paragraph, or (c) the owners of all other Revenue Secured Debt have delivered executed UCC-3 termination statements evidencing the release of their security interest in such collateral to the Trustee or another corporate fiduciary who agrees not to record the same until it has received termination statements from all such owners and from the Trustee. **Accordingly, the University expects that upon defeasance of the 1998 Bonds, which is expected to occur on March 1, 2020, the final maturity date of the 1998 Bonds, the condition described in clause (b) above will be met and the Pledge will be released.** See "SUMMARY OF THE LOAN AGREEMENT – Security" in APPENDIX D – Summary of the Indenture, Loan Agreement and Intercreditor Agreement.

Under the Loan Agreement, upon an Event of Default, as defined therein, the Trustee is entitled, among other things, to exercise its rights as a secured party by collecting and applying the Tuition and Student Fees subject to the provisions of the Intercreditor Agreement, as joined by the Trustee, which requires the Trustee to collect and apply the Tuition and Student Fees on a pro rata basis for the benefit of the holders of all outstanding Revenue Secured Debt, including the Bonds.

The existence of the University's Pledge of Tuition and Student Fees shall not prevent the expenditure, deposit or commingling of the Tuition and Student Fees by the University so long as all required payments under the Loan Agreement are made when due. In the event of the University's failure to make payments when due or if another Event of Default under the Loan Agreement shall have occurred and be continuing, the Trustee shall have and may exercise all of its statutory rights as a secured party, and the University covenants thereafter to pay directly to the Trustee, or permit the Trustee to collect for the equal and ratable benefit of the owners of the Bonds and the holders of the other Revenue Secured Debt as provided in the Loan Agreement and the Intercreditor Agreement, all Tuition and Student Fees to the extent necessary to cure the payment or other default. See "SUMMARY OF THE LOAN AGREEMENT – Remedies" in APPENDIX D – Summary of the Indenture, Loan Agreement and Intercreditor Agreement.

Enforceability of Pledge

The effectiveness of the Pledge of Tuition and Student Fees of the University is limited since a security interest in money generally cannot be perfected by the filing of financing statements under the Pennsylvania Uniform Commercial Code (the "*UCC*"). Rather, such a security interest may be perfected only by the secured party taking possession of the subject funds. The moneys constituting Tuition and Student Fees received by the University from time to time are not required to be transferred to or held by the Trustee, and may be spent by the University or commingled with its other funds. Under such circumstances, the Pledge in favor of the Trustee may not be a perfected security interest under the UCC.

To the extent that a security interest in the Tuition and Student Fees or the rights of the University thereto can be perfected by the filing of financing statements, such action will be taken. If the security interest granted to the Trustee in the Tuition and Student Fees is deemed not to be perfected, such security interest may not be enforceable against third parties unless and until the Tuition and Student Fees are actually transferred to the Trustee or unless an exception under the UCC applies.

¹ Note that the financial statements of the University included in APPENDIX B to this Official Statement include as "Debt and lease obligations" the Authority's University Revenue Bonds, Series of 2001 (Duquesne University) (the "*2001 Bonds*"). Note F to the financial statements lists the 2001 Bonds as being currently outstanding as of June 30, 2018 in the amount of \$1,020,000. The 2001 Bonds were advance refunded in 2004 with proceeds of the 2004B Bonds used to fund an escrow account sufficient to satisfy the University's obligations with respect to the 2001 Bonds. Pursuant to the documents delivered in connection with the issuance of the 2004B Bonds, the 2001 Bonds were legally defeased and no longer have a claim on the University's Tuition and Student Fees. The 2001 Bonds are secured by and payable solely from the escrow securities held in an irrevocable escrow account established in connection with the issuance of the 2004B Bonds. The 2004B Bonds were redeemed during the fiscal year ended June 30, 2008 and are no longer outstanding.

In addition, under the current law, the security interest granted to the Trustee in the Tuition and Student Fees may be further limited by the following: (1) statutory liens; (2) rights arising in favor of the United States of America or any agency thereof; (3) present or future prohibitions against assignment contained in any Pennsylvania or federal statutes or regulations; (4) constructive trusts, equitable liens or other rights impressed or conferred by any Pennsylvania or federal court in the exercise of its equitable jurisdiction; (5) federal bankruptcy laws or state laws dealing with fraudulent conveyances affecting assignments of revenues and assets; and (6) any defect in the filing of, or any failure to file, appropriate continuation statements pursuant to the UCC.

Covenants Regarding Mortgage Liens

The Bonds are not secured by a mortgage on any real property of the University. However, the University has entered into separate covenants, for the benefit of the holders of the Bonds and the holders of the University's other outstanding Revenue Secured Debt, that it will not grant a lien on any real properties comprising the University's main campus in downtown Pittsburgh, including properties which are contiguous with or in close proximity to the main campus and which are used for its educational mission, to secure any Long-Term Debt except for certain Permitted Encumbrances (as defined in APPENDIX D) or unless a lien of equal or superior rank and priority is granted in favor of the trustee for the applicable series of bonds for the benefit of the holders of such bonds. Currently no Long-Term Debt of the University is secured by any mortgage.

Rate Covenant

The University covenants in the Loan Agreement that it shall fix, charge and collect rates, fees and charges for services provided by the University which, together with other available moneys, will produce Net Revenues Available for Debt Service in an amount sufficient in the Fiscal Year ending June 30, 2019, and in each Fiscal Year thereafter, to provide funds for the following: (i) the payment of all payments required to be made by the University pursuant to the Loan Agreement and (ii) the payment by the University of debt service on all other Long-Term Debt (such covenant is referred to as the "*Rate Covenant*").

If the University's rates, fees and charges for services at the end of any Fiscal Year do not produce Net Revenues Available for Debt Service sufficient to provide funds for such payments pursuant to the Loan Agreement and for debt service on all other Long-Term Debt, but the University can demonstrate to the reasonable satisfaction of the Trustee that it has available moneys sufficient to make such payments, then the failure to comply with the Rate Covenant shall not be an Event of Default if the University (i) promptly retains a firm of accountants or business consultants selected by the University (the "*University Consultant*") to review the reasons for the failure to comply with the Rate Covenant and to make recommendations as to what measure(s) should be taken to comply with the Rate Covenant in the ensuing Fiscal Year and (ii) follows the recommendations of such University Consultant; provided that the exception set forth in this sentence shall not be available to the University if it fails to comply with the Rate Covenant at the end of the ensuing Fiscal Year.

The University also covenants and agrees in the Loan Agreement that it will not incur or assume any Long-Term Debt after the date thereof other than Long-Term Debt permitted under the Loan Agreement. See APPENDIX D - Summary of the Indenture, Loan Agreement and Intercreditor Agreement.

Limited Obligations

THE BONDS ARE LIMITED OBLIGATIONS OF THE AUTHORITY AND ARE PAYABLE SOLELY FROM AND SECURED SOLELY BY FUNDS HELD BY THE TRUSTEE PURSUANT TO THE INDENTURE AND MONEYS AND REVENUES PAYABLE UNDER THE LOAN AGREEMENT. THE BONDS AND THE INTEREST THEREON WILL NEVER CONSTITUTE AN INDEBTEDNESS OF THE AUTHORITY WITHIN THE MEANING OF ANY CONSTITUTIONAL PROVISION OR STATUTORY LIMITATION AND WILL NEVER CONSTITUTE OR GIVE RISE TO PECUNIARY LIABILITY OF THE AUTHORITY, NOR WILL ANY BOND OR INTEREST THEREON BE A CHARGE AGAINST THE GENERAL CREDIT OF THE AUTHORITY OR THE GENERAL CREDIT AND TAXING POWER OF THE COMMONWEALTH OR ANY POLITICAL SUBDIVISION THEREOF. NEITHER THE FAITH AND CREDIT NOR THE TAXING POWER OF THE COMMONWEALTH OR ANY POLITICAL SUBDIVISION THEREOF IS PLEDGED TO THE PAYMENT OF

THE PRINCIPAL OF, PREMIUM, IF ANY, ON OR INTEREST ON THE BONDS, OR OTHER COSTS INCIDENTAL THERETO. THE AUTHORITY HAS NO TAXING POWER.

No recourse shall be had for payment of the principal of or interest or premium, if any, on the Bonds, or for any claims based on the Bonds or the Indenture or any indenture supplemental thereto, against any member, officer of employee, past, present or future, of the Authority, or of any successor corporation, as such, either directly or through the Authority or any such successor corporation, whether by virtue of any constitutional provision, statute or rule of law, or by the enforcement of any assessment or penalty, or otherwise, all such liability of such members, officers or employees being released as a condition of and as consideration for the execution of the Indenture and the issuance of the Bonds.

PLAN OF FINANCE

Estimated Sources and Uses of Funds

The following table sets forth the estimated sources and uses of Bond proceeds.

Sources of Funds:	<u>2019A Bonds</u>	<u>2019B Bonds</u>	<u>Total</u>
Par Amount of the Bonds	\$18,690,000	\$10,000,000	\$28,690,000
Original Issue Premium	<u>2,595,927</u>	<u>0</u>	<u>2,595,927</u>
Total Sources of Funds	\$21,285,927	\$10,000,000	\$31,285,927

Uses of Funds:

Deposit to Project Fund	\$21,100,000	\$9,900,000	\$31,000,000
Costs of Issuance ¹	<u>185,927</u>	<u>100,000</u>	<u>285,927</u>
Total Uses of Funds	\$21,285,927	\$10,000,000	\$31,285,927

¹ Includes fees and expenses of the Authority, legal fees, underwriting compensation, financial advisory fees, rating agency fees, and other miscellaneous expenses.

Uses of Bond Proceeds

The proceeds of the sale of the Bonds will be loaned to the University to pay the costs of the Project, including all or a portion of the costs of (a) renovations to the A.J. Palumbo Center and other miscellaneous capital projects, and (b) issuance of the Bonds. Additional information with respect to the University is included in APPENDIX A – Description of Duquesne University of the Holy Spirit.

DTC AND BOOK-ENTRY

The Depository Trust Company ("**DTC**"), New York, New York, will act as securities depository for the Bonds. The Bonds of each series 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 Bond certificate will be issued for each maturity of the Bonds of a series, each in the aggregate principal amount of such maturity, and will be deposited with DTC.

DTC, the world's largest 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 2.2 million issues of U.S. and non-U.S. equity, 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 a wholly-owned subsidiary for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTC 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 a 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 and www.dtcc.com.

Purchases of Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the Bonds on DTC's records. The ownership interest of each actual purchaser of each Bond ("**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 Bonds 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 Bonds, except in the event that use of the book-entry system for the Bonds is discontinued.

To facilitate subsequent transfers, all Bonds 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 Bonds with DTC and their registration in the name of Cede & Co. or such other nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such Bonds 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. 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 Bonds may wish to take certain steps to augment transmission to them of notices of significant events with respect to the Bonds, such as redemptions, tenders, defaults, and proposed amendments to the security documents. For example, Beneficial Owners of Bonds may wish to ascertain that the nominee holding the Bonds 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 registrar and request that copies of the notices be provided directly to them.

Redemption notices shall be sent to DTC. If less than all of the Bonds of a series 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.

Neither DTC nor Cede & Co. (nor such other DTC nominee) will consent or vote with respect to the Bonds unless authorized by a Direct Participant in accordance with DTC's Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the Authority 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 the Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Redemption proceeds, distributions, and dividend payments on the Bonds 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 the Authority or the Trustee on the 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 nor its nominee, the Trustee, or the Authority, 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 the Authority or the Trustee, 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.

DTC may discontinue providing its services as securities depository with respect to the Bonds at any time by giving written notice to the Authority or the Trustee. Under such circumstances, in the event that a successor securities depository is not obtained, Bond certificates are required to be printed and delivered.

The Authority may discontinue use of the system of book-entry-only transfers through DTC (or a successor securities depository) upon written notice to the Trustee and DTC if the University advises the Authority that the University has determined that continuation of the system of book-entry transfers through DTC (or through a successor securities depository) is not in the best interests of the University. In that event, Bond certificates will be printed and delivered to DTC.

The information in this section concerning DTC and DTC's book-entry system has been obtained from sources that the Authority believes to be reliable, but is not guaranteed as to accuracy or completeness by, and is not to be construed as a representation by, the Authority, the Underwriter, the Trustee, or the University.

NEITHER THE AUTHORITY, THE TRUSTEE NOR THE UNIVERSITY WILL HAVE ANY RESPONSIBILITY OR OBLIGATION TO PARTICIPANTS, BENEFICIAL OWNERS OR OTHER NOMINEES OF SUCH BENEFICIAL OWNERS FOR: (1) SENDING TRANSACTION STATEMENTS; (2) MAINTAINING, SUPERVISING OR REVIEWING, OR THE ACCURACY OF, ANY RECORDS MAINTAINED BY DTC OR ANY PARTICIPANT OR OTHER NOMINEES OF SUCH BENEFICIAL OWNERS; (3) PAYMENT OR THE TIMELINESS OF PAYMENT BY DTC TO ANY PARTICIPANT, OR BY ANY PARTICIPANT OR OTHER NOMINEES OF BENEFICIAL OWNERS TO ANY BENEFICIAL OWNER, OF ANY AMOUNT DUE IN RESPECT OF THE PRINCIPAL OF OR REDEMPTION PREMIUM, IF ANY, OR INTEREST ON BOOK-ENTRY BONDS; (4) DELIVERY OR TIMELY DELIVERY BY DTC TO ANY PARTICIPANT, OR BY ANY PARTICIPANT OR OTHER NOMINEES OF BENEFICIAL OWNERS TO ANY BENEFICIAL OWNERS, OR ANY NOTICE (INCLUDING NOTICE OF REDEMPTION) OR OTHER COMMUNICATION WHICH IS REQUIRED OR PERMITTED UNDER THE TERMS OF THE INDENTURE TO BE GIVEN HOLDERS OR OWNERS OF BOOK-ENTRY BONDS; (5) THE SELECTION OF THE BENEFICIAL OWNERS TO RECEIVE PAYMENT IN THE EVENT OF ANY PARTIAL REDEMPTION OF BOOK-ENTRY BONDS; OR (6) ANY ACTION TAKEN BY DTC OR ITS NOMINEE AS THE REGISTERED OWNER OF BOOK-ENTRY BONDS.

BONDHOLDERS' RISKS

The payment of the principal of, premium (if any) on and interest on the Bonds to the registered owners thereof depends entirely upon the ability of the University to pay debt service thereon. Various factors could adversely affect the University's ability to pay the obligations under the Loan Agreement. The future financial condition of the University could be adversely affected by, among other things, economic conditions in the areas from which the University traditionally draws students, legislation, regulatory actions, increased competition from other educational institutions, changes in the demand for higher educational services, demographic changes and litigation. Some of such risk factors are described below.

The following is intended only as a summary of certain risk factors attendant to an investment in the Bonds and is not intended to be exhaustive. In order to identify risk factors and make informed investment decisions, potential investors should be thoroughly familiar with the entire Official Statement (including each of the Appendices hereto) in order to make a judgment as to whether the Bonds are an appropriate investment. Purchasers of the Bonds, particularly purchasers that are corporations (including S corporations and foreign corporations operating branches in the United States of America), property or casualty insurance companies, banks or other financial institutions, or certain recipients of Social Security benefits, are advised to consult their tax advisors as to the tax consequences of purchasing or holding the Bonds. See "TAX MATTERS" herein.

General. The Bonds are limited obligations of the Authority payable solely from the Trust Estate which includes payments made by the University under the Loan Agreement, the Authority's right, title and interest in the Tuition and Student Fees pledged by the University (on a parity with the holders of other Revenue Secured Debt and subject to release of the University's Pledge thereof as described herein) and certain funds held by the Trustee pursuant to the Indenture. No representation or assurance can be given that the University will generate sufficient revenues to meet its payment obligations under the Loan Agreement. The ability to generate such revenues could be affected adversely by future legislation, regulatory actions, economic conditions, increased competition, changes in the demand for services or other factors. Neither the Underwriter nor the Authority has made any independent investigation of the extent to which any such factors may have an adverse effect on the revenues of the University. In addition, the effectiveness of the Pledge of Tuition and Student Fees by the University may be limited since a security interest in money generally cannot be perfected by the filing of financing statements under the Pennsylvania UCC as described above under "SECURITY AND SOURCES OF PAYMENT FOR THE BONDS – Enforceability of Pledge".

Other Legislative and Regulatory Actions. The University and its operations are subject to regulation, certification and accreditation by various federal, state and local government agencies and by certain nongovernmental agencies. No assurance can be given as to the effect on future operations of existing laws, regulations and standards for certification or accreditation or of any future changes in such laws, regulations and standards.

Competition. The University could face additional competition in the future from other educational institutions that offer comparable services and programs to the population which the University presently serves. Such competition could include the establishment of new programs and the construction, renovation or expansion of competing educational institutions. No assurance can be given as to the effect on future operations of such competing services and programs.

Tax-Exempt/Non-Profit Status. In recent years, the activities of tax-exempt organizations have been subjected to increasing scrutiny by federal, state, and local legislative and administrative agencies (including the United States Congress, the Internal Revenue Service (the "**IRS**"), and local taxing authorities). Various proposals either have been considered previously or are presently being considered at the federal, state, and local level which could restrict the definition of tax-exempt status, impose new restrictions on the activities of tax-exempt organizations and/or tax or otherwise burden the activities of such organizations (including proposals to broaden or strengthen federal tax provisions respecting unrelated business income of such organizations). There can be no assurance that future changes in the laws, rules, regulations, interpretations and policies relating to the definition, activities and/or taxation of tax-exempt organizations will not have material adverse effects on the future operations of the University.

Compliance with current and future regulations and rulings of the IRS could adversely affect the ability of the University to charge and collect revenues, finance or incur indebtedness on a tax-exempt basis or otherwise generate revenues necessary to provide for payment of the Bonds. Although the University has covenanted to maintain its tax-exempt status, loss of tax-exempt status by the University would likely have a significant adverse effect on the University and could result in the inclusion of interest on the 2019A Bonds in gross income for federal income tax purposes retroactive to their date of issue or acceleration of the maturity of the 2019A Bonds.

Property Tax Assessments. In recent years, a number of local taxing authorities in Pennsylvania, including the County, local townships and school districts, have sought to subject the facilities of nonprofit universities and colleges to local real estate taxes, primarily by challenging the status of such universities and colleges as "purely public charities" as described in the Pennsylvania Constitution, notwithstanding the fact that facilities owned by Pennsylvania nonprofit universities and colleges historically have been viewed as exempt from such taxes. In response to the uncertainty resulting from divergent court decisions, in 1997 the Pennsylvania legislature enacted The Institutions of Purely Public Charity Act which, among other things, sets forth specific criteria to be met by an entity in order for such entity to be deemed an "institution of purely public charity". Such criteria are highly fact-specific and are to be used by the courts as guidance; therefore, there are no assurances that the University facilities will meet such criteria now or in the future. Notwithstanding passage of the Institutions of Purely Public Charity Act, the question whether an institution qualifies as a "purely public charity" remains a constitutional issue to be determined by the courts and it is not clear to what extent, if any, the courts will rely upon the Institutions of Purely Public Charity Act in making such determinations. The University has no reason to believe that the University

facilities that are currently tax-exempt will not retain their real estate tax exemption, but no assurance can be given that such real estate tax exemption will not be challenged in the future.

Covenant to Maintain Tax-Exempt Status of the 2019A Bonds. The tax-exempt status of interest on the 2019A Bonds is based on the continued compliance by the Authority and the University with certain covenants contained in the Indenture and the Loan Agreement. These covenants relate generally to restrictions on the use of the Project, arbitrage limitations, rebate of certain excess investment earnings to the federal government and restrictions on the amount of issuance costs financed with the proceeds of the 2019A Bonds. Failure to comply with such covenants could cause interest on the Bonds to become subject to federal income taxation retroactively to the date of issuance of the 2019A Bonds.

Certain Matters Relating to Enforceability of Obligations. The remedies available to Bondholders upon an Event of Default under the Indenture or the Loan Agreement are in many respects dependent upon judicial action which is subject to discretion or delay. Under existing law and judicial decisions, including specifically the United States Bankruptcy Code (the "***Bankruptcy Code***"), the remedies specified in the Indenture and the Loan Agreement may not be readily available or may be limited. A court may decide not to order specific performance.

The various legal opinions to be delivered concurrently with the original delivery of the Bonds will be qualified as to enforceability of the various legal instruments by, among other things, limitations imposed by bankruptcy, reorganization, insolvency or other similar laws or legal or equitable principles affecting creditors' rights.

There exists statutory authority in Pennsylvania for a court to dissolve a nonprofit corporation or undertake supervision of its affairs on various grounds, including a finding that such corporation is insolvent. Moreover, pursuant to the common law and statutory power to enforce charitable trusts and to see that charitable funds are applied to their intended uses, the Attorney General of the Commonwealth may commence legal proceedings to dissolve a nonprofit corporation acting contrary to its charitable purposes or to restrain actions inconsistent with the charitable use of such funds or which render such nonprofit corporation unable to discharge its charitable functions. In certain states, such actions may arise on a court's own motion or pursuant to a petition of the attorney general or such other persons who have interests different than those of the general public. The obligations of the University may be limited by such charitable trust laws.

Bankruptcy. The rights and remedies of the owners of the Bonds are subject to various provisions of the Bankruptcy Code. If the University were to file a petition for relief (or if a petition were to be filed against the University) under the Bankruptcy Code, the filing would operate as an automatic stay of the commencement or continuation of any judicial or other proceeding against the University and its property.

In a bankruptcy proceeding, the University could file a plan for the adjustment of its debts which modifies the rights of creditors generally or the rights of any class of creditors, secured or unsecured. The plan, when confirmed by the court, binds all creditors who had notice or knowledge of the plan and discharges all claims against the debtor provided for in the plan. No plan may be confirmed unless, among other conditions, the plan is in the best interest of creditors, is feasible, and has been accepted by each class of claims impaired thereunder.

Each class of claims has accepted the plan if at least two-thirds in dollar amount and more than one-half in number of the allowed claims of the class that are voted with respect to the plan are cast in its favor. Even if the plan is not so accepted, it may be confirmed if the court finds that the plan is fair and equitable with respect to each class of non-accepting creditors impaired thereunder and does not discriminate unfairly.

Cybersecurity Risk. In the course of its operations, the University collects and stores personally identifiable information, including, but not limited to, social security numbers, educational records and financial information. The University also develops, maintains and/or stores, as applicable, intellectual property such as research data.

Like all institutions of higher education, the University could be subject to cyber intrusion through hacking, malware and/or email scams. Cyber intrusion could lead to (i) data breaches requiring breach notification, (ii) denial of service (e.g., network, system, application or data), (iii) loss of intellectual property and data, (iv) harm to the University's brand or reputation, (v) life/health safety impacts and/or (vi) financial loss. The University takes steps to prevent, detect and respond to cyber intrusion. Further, the University maintains cyber insurance coverage to protect against data breaches and other cyber events. However, because the techniques used to obtain unauthorized

access, disable or degrade service, or sabotage systems change frequently, or may be disguised or difficult to detect, or may be designed to remain dormant until a triggering event occurs, the University may be unable to anticipate these techniques or implement adequate preventative measures. In addition, no assurance can be given that the insurance coverages maintained by the University would be sufficient to cover all losses and liability resulting from data breaches or other cyber events.

Changes in Tax Laws. Current and future presidential proposals or legislative proposals in the Congress and in the states, if enacted into law, clarifications of the Internal Revenue Code of 1986, as amended (the "*Code*") or court decisions may cause interest on the Bonds to be subject, directly or indirectly, to federal income taxation or to be subject to or not exempted from state income taxation, or otherwise prevent the holders of the Bonds from realizing the full current benefit of the tax status of such interest. For example, federal tax legislation was enacted on December 22, 2017 which reduced corporate tax rates, modified individual tax rates, eliminated many deductions, repealed the corporate alternative minimum tax (for taxable years beginning after December 31, 2017) and eliminated tax-exempt advance refunding bonds, among other things. Any such limitation on the use of tax-exempt bonds to finance educational facilities or on the use of tax-exempt bonds generally could reduce the ability of the University to finance its future capital needs or to achieve interest rate savings on new or existing debt in the future. The introduction or enactment of any such presidential or legislative proposals, clarifications of the Code or court decisions may also affect, perhaps significantly, 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 federal or state tax legislation, regulations or litigation, and regarding the impact of future legislation, regulations or litigation, as to which Co-Bond Counsel will express no opinion. See "TAX MATTERS."

Officials of the Internal Revenue Service (the "*IRS*") have maintained in recent years that more resources will be invested in audits of tax-exempt bonds in the charitable organization sector with specific review of private use. In addition, the IRS has sent several hundred post-issuance compliance questionnaires to nonprofit corporations that have borrowed on a tax-exempt basis regarding their post-issuance compliance with various requirements for maintaining the federal tax exemption of interest on their bonds. The questionnaire includes questions relating to the borrower's (i) record retention, which the IRS has particularly emphasized, (ii) qualified use of bond-financed property, (iii) arbitrage yield restriction and rebate requirements, (iv) debt management policies and (v) voluntary compliance and education.

Other Factors. Additional factors may affect future operations of the University to an extent that cannot be determined at this time. These factors include, among others, the following:

- (1) Loss of accreditation for the University or key academic programs, or changes in accreditation standards which could adversely affect the University's ability to maintain accreditation for itself or key academic programs.
- (2) Employee strikes and other adverse labor actions that could result in a substantial reduction in revenues without corresponding decreases in costs.
- (3) Litigation resulting in required payments by the University which exceed insurance coverages.
- (4) Increased costs and decreased availability of public liability insurance.
- (5) Changes in the demand for higher education in general or for programs offered by the University in particular.
- (6) Cost and availability of energy.
- (7) High interest rates, which could strain cash flow or prevent borrowing for needed capital expenditures.
- (8) An inability to retain students, resulting in enrollment losses and reduced revenues, which may be due to reduced financial aid available to students from the University or from Federal or state sources.

- (9) An increase in the costs of health care benefits, retirement plan, or other benefit packages offered by the University to its employees and retirees.
- (10) A significant decrease in the value of the University's investments caused by market or other external factors.
- (11) Withdrawal of any current exemptions from local real estate taxes, business privilege taxes and similar impositions.
- (12) Elimination of external funding for research.
- (13) Reduced future Borrower net tuition revenue as a result of a need to increase tuition discounting to attract students.
- (14) Changes in the management of the University, the strategic direction or mission of the University, or the investment policies or other finance decisions of the University.
- (15) Occurrences of natural disasters or acts of terrorism which could damage some or all of the University's facilities, interrupt utility service to some or all of its facilities, or otherwise impair the operation or ability to generate revenues of some or all of its facilities.
- (16) Increased competition from other institutions of higher learning which may offer similar academic programs or may recruit similar students, and that may result in reduced enrollments and reduced Borrower revenues.
- (17) Reduced ability to attract future capital campaign contributions, that may limit future projects and/or the ability to address deferred maintenance and/or reduced ability to attract future annual fund contributions that may negatively impact the ability to afford annual operating expenses and which may negatively affect operating performance.
- (18) Reduced availability of qualified faculty to teach the programs offered by the University or to secure adequate clinical assignments for health science related studies.
- (19) Legislation and regulation by governmental authorities, including developments affecting tax-exempt status of educational institutions like the University and changes in immigration laws limiting the University's ability to admit foreign students or hire foreign faculty and administrators.
- (20) Natural disasters or effects of any climate change which might damage the University's facilities, interrupt service to its facilities or otherwise impair the operation of the University's facilities.
- (21) Any failure to successfully implement future new programs, negatively affecting operating performance.

LEGAL MATTERS

Absence of Material Litigation

On the date of issuance of the Bonds, respective certificates will be delivered by the Authority and the University to the effect that there is no action, suit, proceeding, inquiry or investigation at law or in equity before or by any court, public board or body pending or, to the knowledge of the Authority or the University (as applicable), threatened wherein an unfavorable decision, ruling or finding would adversely affect (i) the corporate existence or the organization of the Authority or the University or the title or office of any official of the Authority or the University or any power of the Authority or the University, (ii) the validity of the proceedings for the adoption, the authorization, the execution, the delivery and the performance of the Bonds, (iii) the validity or the enforceability of the Bonds or (iv) the tax-exempt status of the Bonds.

Enforceability of Remedies

The remedies available to the owners of the Bonds upon an Event of Default under the Indenture are in many respects dependent upon judicial actions which are often subject to discretion and delay.

The enforceability of remedies or rights with respect to the Bonds may be limited by state and federal laws, rulings and decisions affecting remedies and by bankruptcy, insolvency or other laws affecting creditors' rights or remedies heretofore or hereafter enacted. Under existing law (particularly federal bankruptcy law), certain remedies specified by the Indenture may not be readily available or may be limited. See "BONDHOLDERS' RISKS".

TAX MATTERS

Pennsylvania Tax Exemption

In the opinion of Co-Bond Counsel, under existing law, the Bonds are exempt from personal property taxes in Pennsylvania and the interest on the Bonds is exempt from Pennsylvania personal income tax and corporate net income tax.

Federal Tax Exemption

As of the date of closing, Co-Bond Counsel will issue an opinion to the effect that under existing law, the interest on the 2019A Bonds (including any original issue discount properly allocable to the owner of a 2019A Bond) is excluded from gross income for federal income tax purposes. Furthermore, interest on the 2019A Bonds is not an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals and corporations. For the purpose of rendering the opinion set forth in this paragraph, Co-Bond Counsel has assumed compliance by the Authority and the University with requirements of the Internal Revenue Code of 1986, as amended (the "*Code*"), that must be met subsequent to the issuance of the 2019A Bonds in order that interest thereon be and remain excluded from gross income for federal income tax purposes. Failure to comply with such requirements could cause the interest on the 2019A Bonds to be included in gross income retroactive to the date of issuance of the 2019A Bonds.

Co-Bond Counsel will also issue an opinion to the effect that interest on the 2019B Bonds is **not** excluded from gross income for federal income tax purposes.

Co-Bond Counsel express no opinion regarding other federal tax consequences arising with respect to the Bonds.

Original Issue Premium

An amount equal to the excess of the purchase price of a 2019A Bond over its stated redemption price or principal due at maturity constitutes a premium on such 2019A Bond (an "*OIP Bonds*"). OIP Bonds refer specifically to those maturities of the 2019A Bonds which were sold at such a premium. A purchaser of an OIP Bond must amortize any premium over such OIP Bond's term using constant yield principles, based on the OIP Bond's yield to maturity. As premium is amortized, the purchaser's basis in such OIP Bond and the amount of tax-exempt interest received will be reduced by the amount of amortizable premium properly allocable to such purchaser. This will result in an increase in the gain (or decrease in the loss) to be recognized for federal income tax purposes on the sale or disposition of such OIP Bond prior to its maturity. Even though the purchaser's basis is reduced, no federal income tax deduction is allowed. Purchasers of any 2019A Bond at a premium, whether at the time of initial issuance or subsequent thereto, should consult their tax advisors with respect to the determination and treatment of premium for federal income tax purposes, and with respect to state and local tax consequences of owning such 2019A Bond.

Backup Withholding

Interest paid on tax-exempt bonds, such as the 2019A Bonds, is subject to information reporting to the Internal Revenue Service in a manner similar to interest paid on taxable obligations. This reporting requirement does not

affect the excludability of interest on the 2019A Bonds from gross income for federal income tax purposes. However, in conjunction with that information reporting requirement, the Code subjects certain non-corporate owners of the 2019A Bonds, under certain circumstances, to "backup withholding" at the fourth lowest rate applicable to unmarried individuals with respect to payments on the Bonds and proceeds from the sale of 2019A Bonds. Any amounts so withheld would be refunded or allowed as a credit against the federal income tax of such owner of the 2019A Bonds. This withholding generally applies if the owner of the 2019A Bonds (a) fails to furnish the paying agent (or other person who would otherwise be required to withhold tax from such payments) such owner's social security number or other taxpayer identification number ("**TIN**"), (b) furnishes the paying agent an incorrect TIN, (c) fails to properly report interest, dividends, or other "reportable payments" as defined in the Code, or (d) under certain circumstances, fails to provide the paying agent or such owner's securities broker with a certified statement, signed under penalty of perjury, that the TIN provided is correct and that such owner is not subject to backup withholding. Prospective purchasers of the 2019A Bonds may also wish to consult with their tax advisors with respect to the need to furnish certain taxpayer information in order to avoid backup withholding and the procedures for obtaining exemptions.

Other Tax Matters

Except as expressly stated above, Co-Bond Counsel will express no opinion regarding any other state or federal income tax consequence of acquiring, carrying, owning or disposing of the 2019A Bonds. Owners of the 2019A Bonds should consult their tax advisors regarding the applicability of any collateral tax consequences of owning the 2019A Bonds, which may include original issue discount, original issue premium, purchase at a market discount or premium, taxation upon sale, redemption or other disposition and various withholding requirements and which may apply to certain taxpayers, including, without limitation, financial institutions, property and casualty insurance companies, individual recipients of Social Security or Railroad Retirement benefits, certain S corporations with "excess net passive income, foreign corporations subject to the branch profits tax and taxpayers who may be deemed to have incurred or continued indebtedness to purchase or carry the 2019A Bonds.

APPROVAL OF LEGALITY

The Bonds are offered subject to prior sale when, as and if issued by the Authority and accepted by the Underwriter, subject to the approval of legality by Cohen & Grigsby, P.C., Pittsburgh, Pennsylvania and Turner Law, P.C., Philadelphia, Pennsylvania, Co-Bond Counsel. It is anticipated that the approving opinion will be in substantially the form attached hereto as APPENDIX C. Legal matters pertinent to the Authority will be passed upon by its counsel, Barley Snyder LLP, Lancaster, Pennsylvania. Certain legal matters will be passed upon for the University by Madelyn A. Reilly, Esquire, Vice President for Legal Affairs and General Counsel of the University, and by Eckert Seamans Cherin & Mellott, LLC, disclosure counsel to the University. Certain legal matters will be passed upon for the Underwriter by Dinsmore & Shohl LLP, Pittsburgh, Pennsylvania, counsel to the Underwriter.

FINANCIAL ADVISOR

George K. Baum & Company ("**GKB**") has served as financial advisor to the University with respect to the sale of the Bonds. GKB is not obligated to undertake, and has not undertaken, either to make an independent verification of or to assume responsibility for, the accuracy, completeness or fairness of the information contained in this Official Statement. The financial advisor assisted in matters relating to the planning, structuring and issuance of the Bonds and provided other financial advice.

THE TRUSTEE

The Bank of New York Mellon Trust Company, N.A., a national banking association organized under the laws of the United States, has been appointed to serve as Trustee. The Trustee is to carry out those duties assignable to it under the Indenture. Except for the contents of this section, the Trustee has not reviewed or participated in the preparation of this Official Statement and assumes no responsibility for the nature, contents, accuracy or

completeness of the information set forth in this Official Statement or for the recitals contained in the Indenture or the Bonds, or for the validity, sufficiency, or legal effect of any of such documents.

Furthermore, the Trustee has no oversight responsibility, and is not accountable, for the use or application of the proceeds of the Bonds by the Authority or the University. The Trustee 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, the technical or financial feasibility of the Project, or the investment quality of the Bonds, about all of which the Trustee expresses no opinion and expressly disclaims the expertise to evaluate.

CERTAIN RELATIONSHIPS

The law firms serving as Co-Bond Counsel, the law firm serving as Disclosure Counsel to the University, and the law firms representing the Authority and the Underwriter, respectively, from time to time represent each or some of the other parties involved in the issuance of the Bonds or their affiliates. A member of the University's Board of Directors is a member of Eckert Seamans Cherin & Mellott, LLC, Disclosure Counsel to the University.

CONTINUING DISCLOSURE

On the date of issuance and delivery of the Bonds, the University will enter into a continuing disclosure certificate with respect to the Bonds (the "**Disclosure Certificate**"), pursuant to the requirements of Rule 15c2-12 promulgated by the Securities and Exchange Commission, as amended (the "**Rule**"). The University and the Authority have determined that no financial or operating data concerning the Authority is material to an evaluation of the offering of the Bonds or to any decision to purchase, hold or sell the Bonds, and the Authority will not provide any such information. The University has undertaken all responsibilities for any continuing disclosure pursuant to the Rule as described below, and the Authority will have no obligation to the holders of the Bonds or any other person with respect to the Rule. The University will covenant in the Disclosure Certificate, for the benefit of the holders and beneficial owners of the Bonds, to furnish certain financial information and operating data relating to the University (the "**Annual Report**") by not later than 180 days after the end of each fiscal year of the University, commencing with the University's fiscal year ending June 30, 2019, and to provide notices of the occurrence of certain events enumerated in the Rule ("**Reportable Events**"). The specific nature of the information to be contained in the Annual Report, the information to be contained in notices of Reportable Events and the timing of filing notices of Reportable Events is summarized in APPENDIX E – Summary of Continuing Disclosure Certificate.

The University's covenants as set forth in the Disclosure Certificate are being made in order to assist the Underwriter in complying with its obligations under subsection (b)(5) of the Rule. The University's continuing disclosure undertakings with respect to the 1998 Bonds require the University to file its audited financial statements, annual financial information and operating data within 120 days after the end of each fiscal year. The University's other continuing disclosure undertakings require such financial statements and information to be filed within 180 days after fiscal year end. The University's operating data filings with respect to the 1998 Bonds omitted certain required operating data, which is not required to be filed under its other continuing disclosure undertakings, for the fiscal years ended June 30, 2015 through June 30, 2018, although such operating data for the 2015, 2016 and 2017 fiscal years was included in official statements filed with the MSRB for various bond issues on behalf of the University. In addition, the University did not timely file a notice of the partial defeasance of the 2011A Bonds, which occurred in 2016; however, it is noted that, pursuant to the escrow deposit agreement entered into for purposes of securing the 2011A Bonds upon their defeasance, the escrow agent was responsible for ensuring that such notice was filed with EMMA in a timely manner and failed to do so. The University has made corrective filings with EMMA relating to the above and filed a notice reporting the late filing of such operating data and notice of partial defeasance with EMMA.

UNDERWRITING

Pursuant to a bond purchase agreement among the Authority, the University and Wells Fargo Bank, National Association (the "**Underwriter**"), the Underwriter has agreed, subject to certain conditions, to purchase all but not less than all of the Bonds at a purchase price of \$31,200,565.04 (which reflects original issue premium of \$2,595,927.00 and underwriting discount of \$85,361.96). The initial public offering prices of the Bonds may be changed from time to time by the Underwriter. The Underwriter may also allow a concession from the public offering prices of the Bonds to certain dealers and others. The University has agreed to indemnify the Underwriter against certain liabilities arising under the securities laws with respect to this Official Statement and the offering of the Bonds.

The Underwriter and its affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, investment management, principal investment, hedging, financing and brokerage services. The Underwriter and/or certain of its affiliates have, from time to time, performed, and may in the future perform, various financial advisory and investment banking services for the Authority and/or the University, for which they received or will receive customary fees and expenses.

In the ordinary course of their various business activities, the Underwriter and its affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities, which may include credit default swaps) and financial instruments (including bank loans) 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 Authority and/or the University.

The Underwriter and its affiliates also may communicate independent investment recommendations, market color or trading ideas and/or publish or express independent research views in respect of such assets, securities or instruments and may at any time hold, or recommend to clients that they should acquire, long and/or short positions in such assets, securities and instruments.

The Underwriter has provided the following two paragraphs for inclusion in this Official Statement.

Wells Fargo Securities is the trade name for certain securities-related capital markets and investment banking services of Wells Fargo & Company and its subsidiaries, including Wells Fargo Bank, National Association, which conducts its municipal securities sales, trading and underwriting operations through the Wells Fargo Bank, NA Municipal Products Group, a separately identifiable department of Wells Fargo Bank, National Association, registered with the Securities and Exchange Commission as a municipal securities dealer pursuant to Section 15B(a) of the Securities Exchange Act of 1934.

Wells Fargo Bank, National Association, acting through its Municipal Products Group ("**WFBNA**"), the sole underwriter of the Bonds, has entered into an agreement (the "**WFA Distribution Agreement**") with its affiliate, Wells Fargo Clearing Services, LLC (which uses the trade name "Wells Fargo Advisors") ("**WFA**"), for the distribution of certain municipal securities offerings, including the Bonds. Pursuant to the WFA Distribution Agreement, WFBNA will share a portion of its underwriting or remarketing agent compensation, as applicable, with respect to the Bonds with WFA. WFBNA has also entered into an agreement (the "**WFSLLC Distribution Agreement**") with its affiliate Wells Fargo Securities, LLC ("**WFSLLC**"), for the distribution of municipal securities offerings, including the Bonds. Pursuant to the WFSLLC Distribution Agreement, WFBNA pays a portion of WFSLLC's expenses based on its municipal securities transactions. WFBNA, WFSLLC, and WFA are each wholly-owned subsidiaries of Wells Fargo & Company.

RATINGS

S&P Global Ratings, a business unit of Standard & Poor's Financial Services LLC ("**S&P**"), and Moody's Investors Service, Inc. ("**Moody's**") have assigned the ratings of "A" (stable outlook) and "A2" (stable outlook), respectively, to the Bonds based upon the University's creditworthiness. Such ratings reflect only the views of each respective rating agency and any explanation as to the significance of the ratings should be obtained from the respective rating agency. The above ratings are not recommendations to buy, sell, or hold the Bonds, and such ratings may be subject to revision or withdrawal at any time by the respective rating agency. Any downward revision or withdrawal of such ratings may have an adverse effect on the market price or the marketability of the Bonds.

MISCELLANEOUS

Independent Auditors

The financial statements of Duquesne University of the Holy Spirit as of and for the years ending June 30, 2018 and 2017, included in APPENDIX B of this Official Statement, have been audited by Grant Thornton, LLP, independent certified public accountants.

Additional Information

All quotations from, and summaries and explanations of, the Indenture, the Loan Agreement, the Intercreditor Agreement, the Continuing Disclosure Certificate and other documents referred to herein do not purport to be complete, and reference is made to said documents for full and complete statements of their provisions. All references herein to the Bonds are qualified by the definitive forms thereof and the information with respect thereto contained in the Indenture, the Loan Agreement, the Intercreditor Agreement and the Continuing Disclosure Certificate. The agreements of the Authority with the holders of the Bonds are fully set forth in the Indenture and the Loan Agreement, and neither any advertisement of the Bonds nor this Official Statement is to be construed as constituting an agreement with the purchasers or owners of the Bonds. The Appendices attached hereto are a part of this Official Statement. All forecasts, estimates and other statements in this Official Statement involving matters of opinion, whether or not so expressly stated, are intended as such and not as representations of fact.

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The Authority has consented to the distribution of this Official Statement insofar as it relates to the Authority and the transactions to which the Authority is a party. The Authority, however, neither has nor will assume responsibility as to the accuracy and completeness of the information in this Official Statement except that contained under the headings "THE AUTHORITY" and "LEGAL MATTERS — Absence of Material Litigation" (but solely as it relates to the Authority), and then only to the extent that such information relates to the Authority.

**PENNSYLVANIA HIGHER EDUCATIONAL
FACILITIES AUTHORITY**

By: /s/ Beverly M. Nawa
Acting Executive Director

Approved:

DUQUESNE UNIVERSITY OF THE HOLY SPIRIT

By: /s/ Matthew J. Frist
Vice President for Finance and Business

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APPENDIX A

DESCRIPTION OF DUQUESNE UNIVERSITY OF THE HOLY SPIRIT

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APPENDIX A

DUQUESNE UNIVERSITY OF THE HOLY SPIRIT

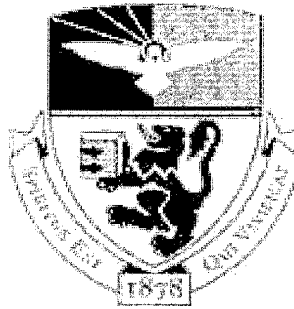


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DUQUESNE UNIVERSITY OF THE HOLY SPIRIT

Introduction

Duquesne University of the Holy Spirit (the "University" or "Duquesne" or "Duquesne University") is a private, nonprofit corporation organized under the laws of the Commonwealth of Pennsylvania. The University was founded by the Holy Ghost Fathers and first opened its doors as the Pittsburgh Catholic College of the Holy Ghost in October 1878 with an enrollment of 40 students and a faculty of seven. By 1911, the University was the first Catholic institution in Pennsylvania to achieve university status, at which time the name Duquesne University of the Holy Ghost was adopted in honor of the 18th Century Governor General of French Canada, the Marquis de Duquesne, who first brought Catholic services to Pittsburgh while the city was under French dominion. In 2002, the University changed its name to Duquesne University of the Holy Spirit.

In 1950, after a period of rapidly increasing enrollment following World War II, the University implemented a planned physical expansion and modernization. A more recent modernization program has been implemented over the past fifteen years. Currently, Duquesne University is an educational institution which has quadrupled from its early 12.5 acres to its present 48 acre campus site.

Accreditation

The University is accredited by the Commission on Higher Education, Middle States Association of Colleges and Schools, and the State Board of Education of the Pennsylvania Department of Education. In addition, each of the University's schools and departments holds appropriate regional and national accreditation for its programs and each is a member of its respective professional and educational association. The University recently underwent its decennial Middle States review for the 2017-2018 period and its accreditation was reaffirmed in June of 2018.

Governance

The governing structure of the University consists of the Membership of the Corporation (the “Membership”), the Board of Directors (the “Board”) and the Officers of the University. The Membership (consisting solely of representatives of the Holy Spirit Congregation which incorporated the University) determines its purpose, promulgates its bylaws, and ultimately has the power to dissolve the corporate status of the University. The Membership appoints the Board to oversee the business affairs of the University, subject to certain “reserved powers” of the Membership as set forth in the bylaws, which include the following, among others: (a) to determine or change the mission, the philosophy, objectives, or purpose of the University; (b) to elect and to remove, with or without cause, any individual to or from the Board of the University; (c) to amend, alter, modify, or repeal the Articles of Incorporation or the Bylaws; (d) to approve the sale, purchase or encumbrance of real property in excess of five hundred thousand dollars (\$500,000); (e) to approve any merger, consolidation or acquisition or creation of a subsidiary organization with respect to the Corporation; (f) to liquidate and dissolve the Corporation and to determine the distribution of its net assets upon dissolution in conformity with the Articles of Incorporation, the Code, and State Law; (g) to approve any new indebtedness incurred by the Corporation in excess of one million dollars (\$1,000,000); (h) to issue to the Board, from time to time, a statement of policy concerning the philosophy and mission of the University; (i) to request information from and to receive an annual report from the Board containing audited financial statements of the University and a report demonstrating how the University has satisfied the goals of the Members as set forth in the statement of policy; (j) to ratify and confirm the election and appointment of the Officers of the Board, the University Chaplain, and the University Chancellor (the “President”) and approve any written employment contract between any of the aforesaid Officers and the Corporation; and (k) to approve legal action in the name of or on behalf of the University other than routine legal actions such as collection of outstanding accounts receivables, etc.

The University is governed by the Board, which has full power and authority to manage the business and affairs of the University and its employees, except for the “reserved powers” of the Membership. The charter and bylaws of the University require a Board of not fewer than fifteen members. Individuals are elected by the affirmative vote of the Membership to serve for a term specified by the Membership at its annual meeting and the members of the Board are eligible for re-election. Members of the Board serve without pay or other compensation. The Executive Committee of the Board consists of the Chairman and Vice Chairs of the Board, the Chairmen and Vice Chairs of the various standing committees, the Chairman, Vice Chair and Secretary of the Corporation and the President of the University.

The Board elects its Chairman, Vice Chairman, Secretary and such other officers as it may from time to time require to perform such functions as the Board shall designate. The Board also elects the President and Vice Presidents of the University. Further, the Board establishes the educational philosophy and objectives of the University, approves the annual budget submitted by the President, and directs the uses and investments of all funds of the University or its property. There are three (3) regular meetings of the Board each year, which are held during the months of October, February and May, at a time and place set by the Chairman of the Board. The majority vote of those present is sufficient for any decision except as specifically provided in the charter and bylaws of the University. The Executive Committee exercises the power of the Board in the interim between Board meetings and all actions are reported to the Board at its next meeting.

Membership of the Corporation 2018-19:

Very Rev. Jeffrey T. Duaine, C.S.Sp.	Chair of the Corporation Provincial of the USA Province of the Congregation of the Holy Spirit Bethel Park, PA
Rev. William Christy, C.S.Sp.	Vice Chair of the Corporation Duquesne University Pittsburgh, PA
Rev. John A. Sawicki, C.S.Sp.	Secretary of the Corporation Duquesne University Pittsburgh, PA
Rev. Michael Onwuemeli, C.S.Sp.	Member of the Corporation Holy Spirit Parish Helmet, CA
Rev. Francis Tandoh, C.S.Sp.	Member of the Corporation St. Benedict the Moor Rectory Dayton, OH
Rev. Martin Vu, C.S.Sp.	Member of the Corporation Our Lady Queen of Peace Arlington, VA
Rev. Daniel Walsh, C.S.Sp.	Member of the Corporation St. Stephen Church Pittsburgh, PA

Officers of the Board of Directors 2018-19:

John R. McGinley, Jr.	Chair of the Board of Directors (2017 - 2020) Eckert Seamans Cherin & Mellott, LLC Pittsburgh, PA
Samuel A. Costanzo	Vice Chair of the Board of Directors (2016-2019) Founder & Chief Executive Director, The Academy Pittsburgh, PA
Diane S. Hupp	Vice Chair of the Board of Directors (2018-2021) Children's Hospital of Pittsburgh UPMC Pittsburgh, PA
Madelyn A. Reilly, Esquire	Secretary of the Board of Directors, (Ex-Officio) Vice President for Legal Affairs and General Counsel University Secretary, Duquesne University Pittsburgh, PA

Members of the Board of Directors 2018-19:

Arnold E. Burchianti II	Term Member of the Board of Directors (2016-2019) CEO, Graham Healthcare Group Mars, PA
Sr. Margaret Carney, OSF	Term Member of the Board of Directors (2017-2020) Olean, NY
Steven N. Costabile	Term Member of the Board of Directors (2017-2020) PineBridge Global Investments Franklin Lakes, NJ
Matthew V. Costello	Term Member of the Board of Directors (2018-2021) Apple, Malibu, CA
Frank J. Coyne	Term Member of the Board of Directors (2019-2022) Sparta, NJ
David D'Eramo	Term Member of the Board of Directors (2018-2021) Founding Partner, Szyjka and D'Eramo South Boston, MA
Rodney W. Fink	Term Member of the Board of Directors (2017-2020) Perlow Investment Corp. Pittsburgh, PA
Gregory J. Geruson	Term Member of the Board of Directors (2016-2019) Holy Ghost Preparatory School Bensalem, PA
Charlotte S. Jefferies	Term Member of the Board of Directors (2017-2020) Pittsburgh, PA
Charles A. Kennedy	Term Member of the Board of Directors (2017-2020) Chief Investment Officer, Carnegie Mellon University Pittsburgh, PA
Scott M. Lammie	Term Member of the Board of Directors (2017-2020) CFO and Senior Vice President of Insurance Services Division and Director, UPMC Health Plan Pittsburgh, PA
Robert I. Mallot	Term Member of the Board of Directors (2018-2021) Retired, Presto, PA
Christopher S. McMahon	Term Member of the Board of Directors (2017-2020) McMahon Financial Advisors, LLC Pittsburgh, PA
Joseph E. Rockey	Term Member of the Board of Directors (2018-2021) Chief Risk Officer, PNC Financial Services Group, Inc. Pittsburgh, PA
Catharine M. Ryan	Term Member of the Board of Directors (2017-2020) Pittsburgh, PA

Gretchen G. Smarto	Term Member of the Board of Directors (2017-2020) CFO, FedEx Ground Wexford, PA
Brian L. Sullivan	Term Member of the Board of Directors (2017-2020) Regional Director, Putnam Investments Pittsburgh, PA
Thomas A. Tribone	Term Member of the Board of Directors (2017-2020) President and CEO, Guggenheim Global Infrastructure Company, Ltd. Arlington, VA
Rev. Daniel Walsh, C.S.Sp.	Term Member of the Board of Directors (2016-2019) Duquesne University Pittsburgh, PA

Ex-Officio Members of the Board of Directors 2018-19:

Very Rev. Lawrence A. DiNardo, V.G., M.Ch.A., J.C.L.	Vicar General/General Secretary Diocese of Pittsburgh Pastoral Center Pastor Holy Wisdom Parish Pittsburgh, PA
Very Rev. Jeffrey T. Duaine, C.S.Sp.	Chair of the Corporation Provincial of the USA Province of the Congregation of the Holy Spirit
Rev. Raymond French, C.S.Sp.	Vice President for Mission & Identity Duquesne University Pittsburgh, PA
Kenneth G. Gormley	President Duquesne University Pittsburgh, PA
Ann K. Hohn	Make-A-Wish Pittsburgh PA
Rev. William Christy, C.S.Sp.	Vice Chair of the Corporation Duquesne University Pittsburgh, PA
Rev. John Sawicki, C.S.Sp.	Secretary and Treasurer of the Corporation Duquesne University Pittsburgh, PA

Emeriti Members of the Board of Directors 2018-19:

Honorable Cynthia A. Baldwin	Pittsburgh, PA
John J. Connelly	Pittsburgh, PA
Thomas R. Donahue	CFO and Vice President Federated Investors, Inc. Pittsburgh, PA
Robert Z. Gussin	Amagansett, NY
Joseph C. Guyaux	Former President and CEO PNC Mortgage Pittsburgh, PA
Marie Millie Jones, Esquire	JonesPassodelis Pittsburgh, PA
Samuel P. Kamin	Goldberg, Kamin & Garvin Pittsburgh, PA
William J. Lyons	Bridgeville, PA
P. David Pappert	Bethesda, MD
John G. Rangos, Sr.	John G. Rangos Sr. Charitable Foundation Pittsburgh, PA
Arthur J. Rooney, II	President, Pittsburgh Steelers Sports, Inc. Pittsburgh, PA
John A. Staley, IV	President, Staley Capital Advisers, Inc. Pittsburgh, PA
Sister Linda Yankoski, CSFN	President, Holy Family Institute, Pittsburgh, PA
Patricia D. Yoder	Southampton, NY

Senior Leadership

The University is administered on a day-to-day basis by the President and seven senior officers. These officers include the Provost and Vice President (“VP”) for Academic Affairs, the Vice President for Enrollment Management, the Vice President for Mission and Identity, the Vice President for Finance and Business, the Vice President for Student Life, the Vice President for University Advancement, and the Vice President for Legal Affairs. The President is appointed by and serves under the direction of the Board of Directors. The seven officers are appointed by and serve under the direction of the President with the approval of the Board. In addition to the officers of the University, there are other senior staff members including the VP for Information Technology and CIO, and the VP for Community Engagement.

The following table outlines the senior administrators of the University as of October 1, 2018, the position held by each, and the years of service to the University.

Name	Position	Held Since	Years of Service to the University
Kenneth G. Gormley	President	2016	24
Paul-James Cukanna	VP for Enrollment Management	2016	21
David Dausey	Provost & VP for Academic Affairs	2018	0
Rev. Raymond French, C.S.Sp.	VP for Mission and Identity	2013	25
Matthew J. Frist	VP for Finance and Business	2016	20
Douglas K. Frizzell	VP for Student Life	2015	3
John P. Plante	VP for University Advancement	2007	11
Madelyn A. Reilly	VP for Legal Affairs, General Counsel and Secretary of the Board	2015	9
Charles Bartel	VP for Information Technology and Chief Information Officer	2018	4
William Generett, Jr.	VP for Community Engagement	2017	1

Kenneth G. Gormley, J.D., President. President Gormley is a former dean and professor at Duquesne University School of Law and began his appointment on July 1, 2016 as the 13th President of Duquesne University. He earned his B.A. from the University of Pittsburgh in 1977, summa cum laude, and was elected to Phi Beta Kappa. Gormley received his J.D. from Harvard Law School in 1980. Following graduation from law school, Mr. Gormley served as senior law clerk to Honorable Donald E. Ziegler in the U.S. District Court in Pittsburgh. He then taught at the University Of Pittsburgh School Of Law, serving as the founding director of the Mellon Writing Program. Thereafter, he practiced law at the firm of Mansmann, Cindrich & Titus. He also served as a special clerk to Justice Ralph J. Cappy of the Pennsylvania Supreme Court (1990-91), and as executive director of the Pennsylvania Reapportionment Commission (1991-92). In 1994, Mr. Gormley joined the faculty at Duquesne University School of Law as associate professor, and was promoted to full professor in 1997. He was appointed interim dean of Duquesne School of Law in 2008 and was named the 11th Dean of the Law School in 2010. As dean of the law school, Mr. Gormley completed the largest fundraising campaign in the history of the school as part of its Centennial Campaign. A renowned author, Mr. Gormley is the editor of *The Pennsylvania Constitution: A Treatise on Rights and Liberties* (Bisel 2004 and Supp. 2015). He

authored *Archibald Cox: Conscience of a Nation* (Perseus Books 1997), which was awarded the 1999 Bruce K. Gould Book Award for an outstanding publication relating to the law. Mr. Gormley also published *The Death of American Virtue: Clinton vs. Starr* (Crown 2010), a New York Times bestseller that received the American Bar Association's prestigious Silver Gavel Award (Honorable Mention) as well as critical acclaim in the New York Times Book Review (Editor's Choice), Washington Post Book World, and other publications. Mr. Gormley has appeared on NBC's *Today Show*, *The Charlie Rose Show*, *Hardball with Chris Matthews*, NPR's *Fresh Air*, and hundreds of television and radio shows in the United States and worldwide. Mr. Gormley has testified in the U. S. Senate three times, as well as in the Pennsylvania Senate.

Paul-James Cukanna, Vice President for Enrollment Management. Mr. Cukanna was named the University's first Vice President for Enrollment Management effective November 1, 2016. As the chief enrollment officer of Duquesne University, he oversees enrollment planning, projections and strategy implementation and provides executive leadership to the Enrollment Management Group, which includes the areas of Undergraduate Admissions, Graduate Admissions, Financial Aid, University Registrar, Enrollment Research and Systems, Marketing and Communication, and Retention and Advisement. Mr. Cukanna first joined Duquesne as director of institutional research in 1997. He was named executive director of domestic and international admission in 2001 and associate vice president for admissions in 2004. He began serving as the associate provost for enrollment management in 2008. Prior to Duquesne, he spent eighteen years working in enrollment services at the University of Pittsburgh and Carnegie Mellon University. Mr. Cukanna holds a B.S. in life science from Indiana University of Pennsylvania and masters' degrees in public policy and industrial administration from Carnegie Mellon University and liberal arts from Duquesne University. He was the 2002 recipient of the President's Distinguished Staff Award for his exceptional dedication and service to the Duquesne University community.

David Dausey, Ph.D., Provost and Vice President for Academic Affairs-Elect. Dr. Dausey was named Provost and Vice President for Academic Affairs effective July 1, 2018. A seasoned administrator, Dr. Dausey joined Mercyhurst, a Catholic university, in 2011 as director of the Institute for Public Health. He became dean of Mercyhurst's School of Health Professions and Public Health in 2013 before taking on the provost's role in 2015. Prior to his work at Mercyhurst, Dr. Dausey was the senior director of health programs and initiatives at Carnegie Mellon University's Heinz College and a distinguished professor of health policy and management at Carnegie Mellon University. Dr. Dausey also worked at the RAND Corporation's Global Health Division. Dr. Dausey received a bachelor's degree in psychology from Mercyhurst University and his master's degree in epidemiology and public health from the Yale School of Public Health. He received his doctoral degree in epidemiology and public health from the Yale Graduate School of Arts and Sciences and completed post-graduate training in higher education management and leadership at Harvard University.

Rev. Raymond French, C.S.Sp., Vice President for Mission and Identity. Rev. French was named Vice President for Mission and Identity effective July 1, 2013. The division includes the Center for Catholic Intellectual Tradition, the Center for Spiritan Studies and Spiritan Campus Ministry. Rev. French previously served as university chaplain and director of Spiritan Campus Ministry at Duquesne since 2000. Under Rev. French's direction, Spiritan Campus Ministry expanded its ministry programs, strategically enhancing outreach across campus, the nation and

the world. He and the campus ministry staff have helped to create a vibrant Catholic liturgical life on Duquesne's campus and have built an atmosphere of genuine welcome to all, regardless of faith. A dedicated member of the University community since 1993, Rev. French came to Duquesne to study formative spirituality. While earning his master's degree, he worked part-time as a campus minister. After graduating, Rev. French became a full-time campus minister and assistant University Chaplain. Prior to coming to Duquesne, Rev. French did missionary work in Tanzania for three years and worked in the United Kingdom in its Housing Department specializing in the care of the homeless.

Matthew J. Frist, Ed.D. Vice President for Finance and Business. Dr. Frist was appointed Vice President for Finance and Business effective February 13, 2016. In this role, Dr. Frist is responsible for providing executive leadership and strategic guidance to a division comprised of auxiliary services, computing and technology services, facilities management, finance and business, human resources and treasury. Since joining the University in 1998, Dr. Frist has served in various roles for the division, most recently as the associate vice president for finance and business. In addition, Dr. Frist has been a member of numerous University committees that address benefits, bond compliance, budget, and retirement issues at Duquesne. He also assists in staffing the Audit and Finance and Investment Committees for Duquesne's Board of Directors. Dr. Frist is a financial peer reviewer for the Middle States Commission on Higher Education. He has also held leadership positions with the Eastern Association of College and University Business Officers. He holds a bachelor's degree from Gannon University, a master's from Duquesne University and an Ed.D. in Higher Education Management from the University of Pittsburgh. Dr. Frist also completed the Management Development Program at the Harvard Institutes for Higher Education and was named a 2018 CFO of the Year by the Pittsburgh Business Times.

Douglas K. Frizzell, Ph.D., Vice President for Student Life. Dr. Frizzell began serving as Vice President for Student Life on July 1, 2015. Prior to joining Duquesne, Dr. Frizzell served as vice president for student affairs at Mount St. Joseph University in Cincinnati, Ohio. As Vice President for Student Life at Duquesne, Dr. Frizzell provides leadership for a variety of student support services including residence life, student activities, recreation, multicultural affairs, Greek life, health services, counseling services, special services, public safety, career services, commuter affairs and student conduct. His accomplishments include oversight for institution-wide mission-related initiatives and the University's Center for Ethical Leadership; the creation of a director of diversity and inclusion position to address the needs of underrepresented individuals; the development of Greek life on campus; and the creation of a mission orientation program for all new faculty and staff. Prior to joining Mount St. Joseph in June 2000, Dr. Frizzell served as vice president for student affairs at Newberry College in Newberry, South Carolina. Previously, he served as dean of students and associate dean for student life at the University of Findlay in Ohio. Dr. Frizzell has held leadership positions in the Greater Cincinnati Consortium of Colleges and Universities, and the Ohio Association of Student Personnel Administrators. He earned his bachelor's degree in business administration from West Liberty University in W.Va., and his master's degree in college student personnel and his Ph.D. in higher education administration from Bowling Green State University in Ohio.

John P. Plante, Vice President for University Advancement. Mr. Plante joined Duquesne in January 2007 to oversee all University fund raising, including capital campaigns, foundation and

corporate relations, and planned giving, as well as alumni relations, public affairs and government relations. Advancing Our Legacy, the comprehensive campaign for Duquesne University, surpassed its goal of \$150 million one year early in December 2011. Prior to his appointment at Duquesne, he was vice president for development and alumni relations at Washington & Jefferson College since 2003. He oversaw the completion of a comprehensive campaign that raised \$105 million through June 2006, substantially growing the College's development program. Previously, he held positions as vice president for institutional advancement at the College of Mount St. Joseph, Cincinnati; director of advanced giving and director of development and college relations at the University of Cincinnati Foundation; and vice president of development and finance for Lasallian Schools of Southern California in Pasadena. His corporate experience includes serving as controller for SoPac Development Corp. in Pasadena and accounting manager for TRW Space & Defense Systems in Redondo Beach, Calif. Mr. Plante was appointed to the board of trustees at Alderson-Broaddus College in 2011, serving as a member of the executive, finance (chair) and investment committees. He is an active member of the Council for the Advancement & Support of Education and has served on the boards of numerous nonprofit organizations. These organizations include Hamilton County ARC, Boy Scouts of America, Mt. Lebanon Athletic Association, Boys & Girls Club of Southern California, Cathedral College Preparatory High School and Barnhart Academy. He earned a bachelor's degree in accounting from California State University at Los Angeles, and received a master's degree in philanthropy and development from St. Mary's University in Minnesota.

Madelyn A. Reilly, Vice President for Legal Affairs, General Counsel and Secretary of Board. A Duquesne School of Law alumna, Ms. Reilly was named Vice President for Legal Affairs, General Counsel and Secretary of Board effective July 1, 2015. Ms. Reilly previously served as director of risk management at the University since January 2009 and was appointed associate general counsel in October of that year. During her tenure, Ms. Reilly has provided counsel in various aspects of legal affairs including contracts, litigation, regulatory compliance, protection of minors, emergency planning, and policy development and implementation. Prior to her work at Duquesne, Ms. Reilly served for more than 15 years in the PPG Industries law department as assistant general counsel of compliance and enterprise risk as well as senior counsel of environment, health and safety. In addition, Ms. Reilly held positions as corporate counsel for compliance and risk management at InterTech Security LLC and part-time executive director of Duquesne's Institute of Professional Environmental Practice. Ms. Reilly is a member of the National Association of University and College Attorneys as well as the University Risk Management and Insurance Association. She also serves as chair of the risk management committee for Holy Ghost Preparatory School in Philadelphia and secretary and chair of the governance committee for the Oakland Catholic High School Board of Trustees. Ms. Reilly holds a master's degree in education from West Virginia University and a bachelor's degree in biology from Indiana University of Pennsylvania.

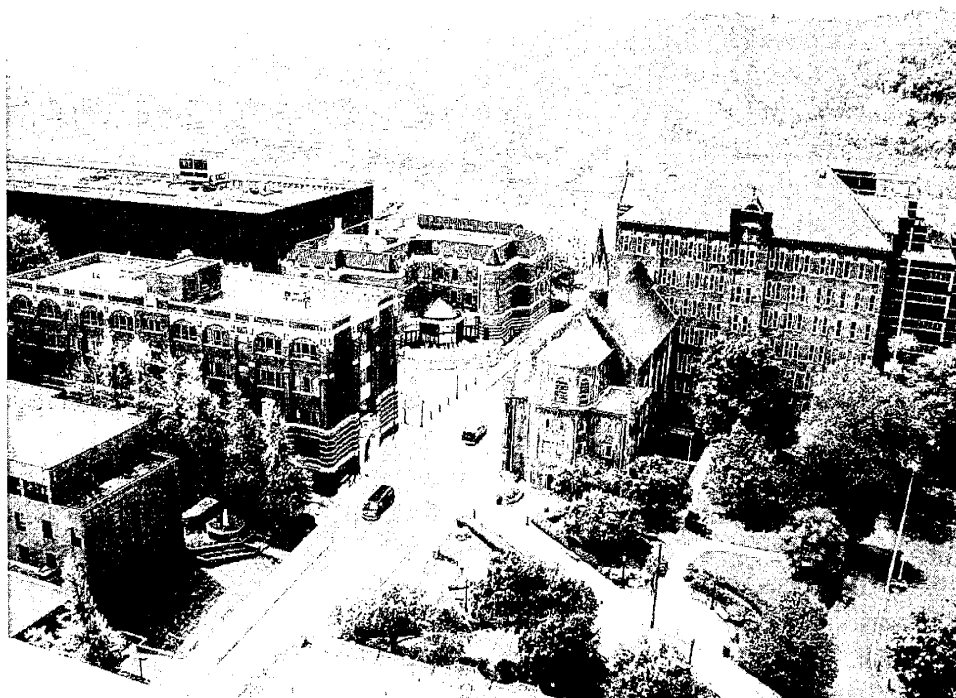
Charles Bartel, Vice President for Information Technology and Chief Information Officer.

Mr. Bartel was named Duquesne University's first Vice President for Information Technology and Chief Information Officer effective July 1, 2018. He previously served as assistant vice president and chief information officer at the University since 2014. Mr. Bartel is responsible for the overall management of and strategic planning for University IT services, including administrative computing, centralized infrastructure and technology support such as enterprise reporting, telecommunications and information security. Prior to joining Duquesne in 2014, Mr. Bartel held several positions at Carnegie Mellon University, most recently as director of global IT services. Mr. Bartel is a member of the Center for Higher Education Chief Information Officer Studies Advisory Board, Censeo Higher Ed CIO Exchange, Greater Pittsburgh CIO Group, Premier CIO Forum Advisory Council and EDUCAUSE Center for Applied Research Communications, Infrastructure and Applications Working Group. Mr. Bartel holds a bachelor's degree in electrical engineering technology from Thomas A. Edison State University and a master's degree in public management from Carnegie Mellon University. He was named the CIO of the Year for Education in 2017 by the Pittsburgh Technology Council and the Greater Pittsburgh CIO Group.

William Generett, Jr., Vice President for Community Engagement. Mr. Generett was appointed Vice President for Community Engagement on September 1, 2017. In this newly created role, Mr. Generett provides leadership in support of Duquesne University's mission of service and its commitment to the city of Pittsburgh, Western Pennsylvania and the surrounding region. Mr. Generett facilitates and develops relationships with community organizations, local governments and civic organizations, strengthening the University's partnerships with its neighbors. He also works to advance community-engaged research, teaching and scholarship in conjunction with the University's Center for Community-Engaged Teaching and Research as well as to coordinate and support co-curricular engagement. He most recently served as president and chief executive officer of Urban Innovation21, a unique public-private partnership started in 2007 by Duquesne, the Hill House Economic Development Corporation and UPMC Health Plan. Prior to that, Mr. Generett was executive director of the Hill House Economic Development Corporation. Mr. Generett is a fellow of the Business Alliance for Local Living Economies, and he served as a member of the National Advisory Council on Innovation and Entrepreneurship, which advises the Department of Commerce on issues related to accelerating innovation, expanding entrepreneurship and developing a globally competitive workforce. A Pittsburgh native, Mr. Generett earned his J.D. from Emory University School of Law and is a Phi Beta Kappa, magna cum laude graduate of Morehouse College. In 2016, he was awarded an honorary doctorate by Carlow University.

Location & Facilities

Located adjacent to the downtown area of the City of Pittsburgh, Pennsylvania, the University's hilltop ("bluff") campus is close in proximity to the City's business and cultural center. The campus has been expanded from the bluff to properties located along Chatham Square and Fifth Avenue, becoming an even more integral part of downtown Pittsburgh.



Forty-eight buildings and other structures are presently in use on the University's 48-acre main-campus. These include academic and classroom buildings, a library, six living/learning centers, a student union center, a convocation center with a 4,406 seat arena, which is home to the University's NCAA Division I basketball teams, a 10,500 square foot black-box style theatre and a multi-purpose facility which devotes 80,000 square feet to recreation facilities including basketball and racquetball courts, exercise and dance studios and a wellness center. The multi-purpose facility also houses The Red Ring Restaurant, a Barnes & Noble Bookstore and Café and a ballroom which can accommodate 400 people for a banquet and 700 for a lecture.

The Project

The proceeds of the Bonds will be used to partially finance renovations to the University's athletic facility, currently known as the A.J. Palumbo Center. In addition to Bond proceeds, other funding sources for the project include gifts, grants and corporate sponsorships. Set to break ground in March 2019, the modernized and re-imagined facility will be renamed UPMC Cooper Fieldhouse in honor of men's basketball legend and NBA trailblazer Chuck Cooper, who captained Duquesne University's men's basketball team before going on to become the first African-American to be drafted into the NBA in 1950.

The Project will house a new game-day layout. Additionally, the renovation will add significant square footage to the building site and will positively impact every aspect of the student-athlete experience. Beyond Duquesne Athletics, the facility will serve as a center for community and campus engagement, events and activities.

Specific details of the upgrades include:

- Modernized external façade that provides a more impactful look and engages the building as a major thoroughfare within the city.
- Modernized facilities to place Duquesne Athletics on par with its conference peers.
- Addition of new club and suite levels, upgraded concessions, fan corners and a concourse hall of fame.

A portion of the Bond proceeds may also be used to fund miscellaneous other capital projects, capitalized interest, and issuance costs.

Academic Programs

Undergraduate

The McAnulty College and Graduate School of Liberal Arts (1878) offers the Bachelor of Arts degree with the following concentrations: classical civilization, classical Latin, communication and rhetorical studies, computer science, corporate communication, digital media arts, economics, English, history, integrated marketing communication, international relations, international security studies, multiplatform journalism, liberal arts, mathematics, modern languages, philosophy, political science, psychology, public relations and advertising, rhetoric, sociology, Spanish, sports information and media, theatre arts, theology, women's and gender studies, and professional communication. A Bachelor of Science degree is offered in computer science, mathematics, behavioral science, computer systems technology, humane leadership, and organizational leadership. A new Bachelor of Arts degree in cybersecurity will be offered beginning in 2019. The McAnulty College also offers a joint pre-osteopathic medicine program in conjunction with the Lake Erie College of Osteopathic Medicine and a joint 3-year Bachelor / 3-year Juris Doctor ("JD") program with the Law School.

The Bayer School of Natural and Environmental Sciences (1994) was created as a result of the division of the Departments of Biological Sciences, Chemistry and Biochemistry, and Physics from the former College of Liberal Arts and Sciences. The School offers the Bachelor of Science degree in each of these disciplines as well as in environmental chemistry and environmental science. The School also offers a Bachelor of Arts degree in biochemistry and physics. A 5-year entry-level Forensic Science and Law program, which leads to the Master of Science degree, is offered in cooperation with the Law School. The Bayer School also offers a degree in binary engineering in cooperation with Case Western Reserve University and the University of Pittsburgh.

The A. J. Palumbo School of Business Administration (1913) offers the Bachelor of Science degree in Business Administration with concentrations in accounting, economics, entrepreneurship, finance, information systems management, international business, legal studies, management, marketing, sports marketing, supply chain management and health care supply chain management in partnership with the Mylan School of Pharmacy and the John G. Rangos, Sr. School of Health Sciences. There are also joint programs such as a 3-year Bachelor / 3-year JD program with the Law School, a business certificate program with the College of Liberal Arts and the School of Education, and a health management systems program with the School of Health Sciences.

The Mary Pappert School of Music (1926) offers programs leading to the Bachelor of Music in performance and music technology, Bachelor of Music with Elective Studies in Business, Bachelor of Arts in Music and the Bachelor of Science in music education and music therapy.

The Mylan School of Pharmacy (1925) offers an entry-level Clinical Pharmacy Doctorate program granting a Doctor of Pharmacy degree. The program is configured in a two-year pre-professional and four-year professional curricular format. The Mylan School also offers a Bachelor of Science degree in health care supply chain management in partnership with the A. J. Palumbo School of Business Administration and School of Health Sciences.

The School of Education (1929) offers the Bachelor of Science in Education degree in the following areas: early level program (PreK-4), education non-certification, middle level program (4-8), and secondary education (7-12) in English, Latin, mathematics or social studies.

The School of Nursing (1937) offers the Bachelor of Science in Nursing degree. The school also offers a dual degree with Biomedical Engineering, a one-year Bachelor of Science in Nursing second degree, and a Registered Nurse – Bachelor of Science in Nursing degree.

The John G. Rangos, Sr. School of Health Sciences (1991) offers a Baccalaureate degree in athletic training and health management systems. The School also offers entry-level Masters programs in physical therapy, physician assistant studies, occupational therapy and speech/language pathology.

In the fall of 2014, Duquesne University began offering a Bachelor of Science degree in Biomedical Engineering.

Graduate

The Duquesne University Law School (1911) offers a three-year full-time day program, a four year part-time day program and part-time evening program leading to the Juris Doctor degree. The Law School also offers a 3 year Bachelor / 3 year JD program in cooperation with the College of Liberal Arts and the School of Business Administration. This program offers qualified students the opportunity to receive both their bachelor's degree and law degree in six years. The Law School also offers joint graduate degree programs in cooperation with the School of Business, Natural and Environmental Sciences, Liberal Arts and the Pittsburgh Theological Seminary. In addition, a Masters of Laws ("LLM") is offered to foreign lawyers who have already completed their legal studies in another country.

The McAnulty College and Graduate School of Liberal Arts (1913) offers advanced degree programs in several areas. The Master of Arts is offered in communication, corporate communication, English, healthcare ethics, history, pastoral ministry, philosophy, public history, religious education, rhetoric and philosophy of communication and theology. The Master of Science is offered in computational mathematics, media arts and technology, and leadership. The Doctor of Philosophy is offered in English, philosophy, clinical psychology, healthcare ethics, rhetoric and theology. The Doctor of healthcare ethics is also offered.

The Bayer Graduate School of Natural and Environmental Sciences (1994) offers advanced degrees in several disciplines. The Doctor of Philosophy is offered in chemistry and biology. The Master of Science degree is offered in biology, biotechnology, chemistry, environmental science and management and forensic science and law.

The Mylan Graduate School of Pharmaceutical Sciences (1991) offers the Doctor of Philosophy and Master of Science degrees in medicinal chemistry, pharmacology, and pharmaceuticals. The Mylan School also offers a joint MBA/MS in industrial pharmacy in cooperation with the John F. Donahue Graduate School of Business Administration. In addition, the School offers a Post-Baccalaureate weekend doctor of pharmacy program. The School also offers a Master of Science degree in pharmacy administration.

The Mary Pappert Graduate School of Music (1928) offers a Master of Music degree with a wide range of options for graduate study including: music education, music technology, performance, and sacred music.

The Graduate School of Education (1930) offers graduate study leading to the Master of Science of Education degree with concentrations in child psychology, clinical mental health counseling, educational studies, English as a second language (“ESL”), higher education administration, instructional technology, leading teacher program in grades PreK-4, marriage and family counseling, reading & literacy education, education administration K-12, school counseling, school counseling for certified teachers, school supervision, secondary education in English, mathematics, world languages, or social studies, secondary education (7-12) in biology, chemistry or physics and special education (PreK-8) – cognitive, behavior, physical/health disabilities, special education (7-12) – cognitive, behavior, physical/health disabilities, applied behavior analysis. The Graduate School of Education also offers an Education Doctoral degree with concentrations in educational leadership and instructional technology, Doctor of Philosophy degrees in school psychology, special education, and counselor education and supervision and a Doctor of Psychology degree in school psychology.

The John F. Donahue Graduate School of Business Administration (1965) offers six graduate degree programs, the Master of Business Administration (“MBA”), the Master of Business Administration in Sustainability, the Master of Science in Information Systems Management, the Master of Science in Accountancy, the Master of Science in Management and the Master of Science in Sports Business. The Master of Science in Supply Chain Management recently launched in Fall 2018.

The Graduate School of Nursing (1937) offers a Master of Science in nursing with specialization in Family Nurse Practitioner, Forensic Nursing, or Nursing Education and Faculty

Role. The Graduate School of Nursing also offers Doctor of nursing practice, Doctor of Philosophy in nursing and nursing ethics and a Doctor of nursing to Doctor of Philosophy (DNP to PhD).

The John G. Rangos, Sr. Graduate School of Health Sciences (1991) offers a Master of Science and Doctor of Philosophy in rehabilitation sciences. The Rangos Graduate School offers a Doctor of physical therapy, occupational therapy, and also Master of Science degrees in health management systems, occupational therapy, physician assistant studies and speech language pathology. In Fall 2018, Duquesne began to offer a Master of Science in Biomedical Engineering.

Operating Statistics

Student Enrollment

The following table presents the University's total fall semester enrollment for each of the last five years by headcount and full-time equivalent (FTE) students.

	Fall 2018	Fall 2017	Fall 2016	Fall 2015	Fall 2014
Headcount Enrollment					
Undergraduate	6,008	5,937	6,035	5,959	5,993
Graduate	2,817	2,838	2,893	3,032	3,215
Law	436	404	392	403	431
Other, High School & Non-IPEDS	83	77	83	112	118
Total Headcount	9,344	9,256	9,403	9,506	9,757
FTE Enrollment					
Undergraduate	5,940	5,869	5,918	5,799	5,826
Graduate	2,608	2,589	2,564	2,653	2,827
Law	436	404	392	403	431
Other	21	20	21	21	14
Total FTE Enrollment	9,005	8,882	8,895	8,876	9,098

Student Enrollment by School

The following table presents the University's total fall semester enrollment (both full-time and part-time) for each of the last five years by school/academic discipline.

	Fall 2018	Fall 2017	Fall 2016	Fall 2015	Fall 2014
Liberal Arts	1,903	1,963	2,078	2,169	2,330
Business	1,690	1,687	1,717	1,689	1,751
Education	953	940	938	978	1,017
Health Sciences	974	1,010	1,000	999	997
Law	436	404	392	403	431
Music	297	295	327	322	317
Natural & Env Sciences	687	639	652	633	661
Nursing	1,177	1,054	1,009	1,003	924
Pharmacy	1,018	1,085	1,137	1,154	1,187
Biomedical Engineering	126	102	70	44	24
All Other	83	77	83	112	118
Total	9,344	9,256	9,403	9,506	9,757

Top Geographical Markets

The following table depicts the University's top 15 geographical markets for first-time full and part-time traditional freshman students.

	Fall 2018	Fall 2017	Fall 2016	Fall 2015	Fall 2014
Pennsylvania	71.8%	67.8%	68.0%	70.8%	70.0%
New York	7.1%	8.2%	7.3%	6.5%	6.0%
Ohio	5.1%	5.0%	5.7%	5.3%	7.0%
Maryland	3.2%	3.8%	3.9%	3.1%	4.0%
New Jersey	3.0%	3.5%	4.4%	3.8%	3.6%
California	1.3%	1.6%	2.1%	2.6%	2.5%
Connecticut	1.2%	1.8%	1.3%	0.8%	1.0%
Delaware	0.9%	0.5%	0.6%	0.6%	0.3%
Florida	0.8%	0.6%	0.5%	0.5%	0.4%
Foreign Countries	0.6%	1.1%	0.6%	0.9%	0.5%
Massachusetts	0.6%	1.0%	0.7%	0.7%	0.7%
Michigan	0.5%	0.8%	0.6%	0.6%	0.4%
Puerto Rico	0.5%	0.6%	0.7%	0.3%	0.4%
Virginia	0.5%	0.5%	0.5%	0.1%	0.3%
All Other Markets	2.9%	3.2%	3.1%	3.4%	2.9%
	100%	100%	100%	100%	100%

Note: Figures may not add due to rounding.

Undergraduate Demand

The following table depicts applications, acceptances and matriculations for full-time and part-time, traditional and non-traditional freshman, transfer and second bachelor degree students for each of the last five years.

	Fall 2018	Fall 2017	Fall 2016	Fall 2015	Fall 2014
Freshman					
Completed Applications	7,505	7,338	7,660	7,360	6,539
Acceptances	5,392	5,262	5,664	5,568	4,779
Matriculations	1,512	1,563	1,557	1,440	1,348
Acceptance Rate	72%	72%	74%	76%	73%
Matriculation Rate	28%	30%	27%	26%	28%
Transfers & 2nd Bachelor Degree					
Completed Applications	800	838	825	803	789
Acceptances	685	704	700	635	635
Matriculations	323	357	366	320	347
Acceptance Rate	86%	84%	85%	79%	80%
Matriculation Rate	47%	51%	52%	50%	55%
Total					
Completed Applications	8,305	8,176	8,485	8,163	7,328
Acceptances	6,077	5,966	6,364	6,203	5,414
Matriculations	1,835	1,920	1,923	1,760	1,695
Acceptance Rate	73%	73%	75%	76%	74%
Matriculation Rate	30%	32%	30%	28%	31%

Graduate Demand

The following table depicts applications, acceptances and matriculations for full-time and part-time graduate and law students for each of the last five years.

	Fall 2018	Fall 2017	Fall 2016	Fall 2015	Fall 2014
Graduate					
Completed Applications	2,026	1,853	2,051	2,131	2,148
Acceptances	1,308	1,173	1,209	1,197	1,221
Matriculations	715	706	659	655	736
Acceptance Rate	65%	63%	59%	56%	57%
Matriculation Rate	55%	60%	55%	55%	60%
Law					
Completed Applications	755	796	809	707	547
Acceptances	472	490	491	456	314
Matriculations	168	149	123	128	124
Acceptance Rate	63%	62%	61%	64%	57%
Matriculation Rate	36%	30%	25%	28%	39%
Total					
Completed Applications	2,781	2,649	2,860	2,838	2,695
Acceptances	1,780	1,663	1,700	1,653	1,535
Matriculations	883	855	782	783	860
Acceptance Rate	64%	63%	59%	58%	57%
Matriculation Rate	50%	51%	46%	47%	56%

Academic Quality

An indication of academic quality of the students at the University (enrolled full-time freshmen and first-year law students in the fall semester) is shown in the following table for the last five years.

	Fall 2018	Fall 2017	Fall 2016	Fall 2015	Fall 2014
Undergraduate					
Average Freshman SAT score (Math)	601	597	574	565	573
Average Freshman SAT score (Verbal)	613	609	570	565	564
Average SAT score (Combined)	1,214	1,206	1,144	1,130	1,137
National Average SAT score (Combined)	1,068	1,071	1,002	1,006	1,010
Positive Variance	146	135	142	124	127
Freshmen in Top 20% of High School Class ¹	49%	45%	48%	45%	48%
6-Yr Completion Rate	80%	79%	74%	78%	77%
Graduate					
Median 1st-Year LSAT Score ¹	152	152	152	152	152

Notes: Fall 2017 SAT scores are from the re-designed test, and SAT scores may not total due to rounding

¹ Top 20% is of the high schools who report a rank.

Student Housing

The University owned and operated six student housing facilities on its main campus in Pittsburgh, Pennsylvania as of Fall 2018. In addition, the University provided affiliate housing through a third party, as more fully described under “Asset Monetization-Brottier Hall” on page A-37. Housing accommodations ranged from traditional single and double rooms with common bathrooms to apartment-style housing. The table below depicts total beds available and occupied by year for the period indicated.

	Fall 2018	Fall 2017	Fall 2016	Fall 2015	Fall 2014
Capacity¹	3,779	3,748	3,748	3,769	3,787
Freshman	1,434	1,489	1,474	1,345	1,282
Sophomore	1,287	1,297	1,168	1,065	1,281
Junior	647	521	490	620	659
Senior	418	312	407	436	452
Graduate	104	165	211	147	148
Beds Occupied	3,890	3,784	3,750	3,613	3,822
Occupancy Rate²	104%	101%	100%	96%	101%

¹ Includes Affiliate Housing

² May exceed capacity as a result of using student lounges and tripling occupancy in some rooms

Student Fees

The following table shows undergraduate, graduate, and law tuition and fees, as well as room and board charges for each of the last five academic years.

Academic Year	2018-19	2017-18	2016-17	2015-16	2014-15
Undergraduate					
Tuition	\$38,178	\$36,394	\$35,062	\$33,778	\$30,070
University Fee	0	0	0	0	2,566
Total	\$38,178	\$36,394	\$35,062	\$33,778	\$32,636
Graduate					
Tuition	\$38,520	\$37,770	\$37,020	\$35,670	\$31,470
University Fee	0	0	0	0	3,000
Total	\$38,520	\$37,770	\$37,020	\$35,670	\$34,470
Law (Day)					
Tuition	\$44,032	\$41,974	\$40,438	\$38,958	\$37,640
Fee	912	870	838	808	780
Total	\$44,944	\$42,844	\$41,276	\$39,766	\$38,420
Law (Evening)					
Tuition	\$33,838	\$32,256	\$31,076	\$29,938	\$28,926
Fee	912	870	838	808	780
Total	\$34,750	\$33,126	\$31,914	\$30,746	\$29,706
Room & Board	\$12,586	\$12,114	\$11,760	\$11,418	\$11,084

Note: Room charges are based on a double occupancy room; Board charges are based on a 275 meals per semester plan with a \$100 declining balance; Graduate fees are based on 30 semester hours per year. Beginning in 2015-16, undergraduate and graduate University fees were rolled into tuition.

Comparative Tuition Pricing

The University competes with many other public and private colleges and universities for qualified students. The following tables list top national and regional Catholic institutions as well as the University's top competitors (for undergraduate full-time traditional students, based on application overlap) and their academic year 2018-19 tuition.

National Catholic Benchmark		Regional Catholic Benchmark		Key Competition Benchmark	
Boston College	\$55,464	Providence College	\$50,390	Drexel University	\$53,279
Georgetown University	54,104	Loyola University (MD)	49,085	University of Dayton	42,900
University of Notre Dame	53,391	Fairfield University	48,350	Saint Joseph's University	44,794
Villanova University	53,308	Saint Joseph's University	44,794	Xavier University	38,530
Fordham University	52,687	University of Scranton	44,532	Duquesne University	38,178
University of San Diego	49,358	Manhattan College	43,480	Saint Vincent College	35,874
University of San Francisco	48,066	Mount St. Mary's University	41,350	Gannon University	32,136
Catholic Univ. of America	45,804	Duquesne University	38,178	Robert Morris University	30,300
Loyola University (Chicago)	44,048	Le Moyne College	34,625	University of Pittsburgh ¹	19,080
Saint Louis University	43,884	St. Bonaventure University	34,301	Pennsylvania State University ¹	18,436
University of Dayton	42,900	Canisius College	28,488	Temple University ¹	16,970
University of St. Thomas (MN)	42,736			University of Delaware ¹	13,680
Seton Hall University (NJ)	42,470			Indiana University of Pennsylvania ¹	12,979
Marquette University	41,870			Ohio State University ¹	10,726
Saint John's University (NY)	41,760			Slippery Rock University ¹	10,517
DePaul University	39,975			Kent State University	10,012
Duquesne University	38,178			West Virginia University ¹	8,856

¹Public School, in-State Tuition and Fee pricing.

Comparative Room and Board Pricing

The following tables list top national and regional Catholic institutions as well as the University's top competitors (for undergraduate full-time traditional students, based on application overlap) and their academic year 2018-19 room and board pricing.

National Catholic Benchmark		Regional Catholic Benchmark		Key Competition Benchmark	
Fordham University	\$17,969	Manhattan College	\$16,200	Saint Joseph's University	\$14,840
Saint John's University (NY)	17,280	University of Scranton	15,182	Drexel University	14,079
Georgetown University	16,509	Saint Joseph's University	14,840	University of Dayton	13,580
Seton Hall University (NJ)	15,800	Fairfield University	14,710	University of Delaware ¹	12,862
University of Notre Dame	15,410	Providence College	14,700	Xavier University	12,780
University of San Francisco	14,830	Loyola University (MD)	14,480	Gannon University	12,650
Catholic Univ. of America	14,650	Le Moyne College	13,780	Indiana University of Pennsylvania ¹	12,592
Loyola University (Chicago)	14,480	Mount St. Mary's University	13,075	Duquesne University	12,586
Boston College	14,478	St. Bonaventure University	13,055	Ohio State University ¹	12,434
DePaul University	14,235	Duquesne University	12,586	Temple University ¹	11,916
Villanova University	14,020	Canisius College	11,300	Pennsylvania State University ¹	11,570
University of Dayton	13,580			Saint Vincent College	11,470
University of San Diego	12,980			Robert Morris University	11,400
Marquette University	12,720			Kent State University	11,362
Duquesne University	12,586			University of Pittsburgh ¹	11,050
Saint Louis University	12,290			West Virginia University ¹	10,918
University of St. Thomas (MN)	10,412			Slippery Rock University ¹	10,312

¹Public School, in-State Tuition and Fee pricing.

Student Financial Aid

During the 2017-18 academic year, 96% of undergraduate students received financial aid. Sources of financial aid include University, State and Federal grants and loans, and work-study programs. In 2017-18, total scholarships and loans (undergraduate and graduate students) provided were \$285,452,997, approximately 1.8% of which was from State programs, 47.9% from Federal programs and 48.6% from University funds, including gifts, scholarships, income on endowed scholarships and unrestricted funds. The 1.7% balance came from numerous other unrestricted funds and governmental sources, including other states and private sources.

Tuition Discounting

The following table provides freshman and total tuition discount rates. Freshman tuition discount is calculated at the start of the fall term of enrollment, whereas the total tuition discount is measured at the end of the fiscal year for all class levels.

Fiscal Year Ended June 30	2018	2017	2016	2015	2014
Freshman Tuition Discount	41.7%	40.2%	44.5%	42.8%	43.4%
Total Tuition Discount	35.1%	34.5%	34.1%	32.8%	32.2%

Accounting Matters

The University's financial statements have been prepared on the accrual basis of accounting in conformity with accounting principles generally accepted in the United States of America (GAAP). Net assets, revenues, expenses, gains, and losses are classified based on the existence or absence of donor-imposed stipulations. Accordingly, net assets of the University and changes therein are classified and reported as follows:

Unrestricted Net Assets — Net assets that are not subject to donor-imposed stipulations.

Temporarily Restricted Net Assets — Net assets subject to donor-imposed stipulations that may or will be met either by actions of the University and/or the passage of time.

Permanently Restricted Net Assets — Net assets subject to donor-imposed stipulations or by law that they be maintained permanently by the University. Generally, the donors of these assets permit the University to use all or part of the income earned on related investments for general or specific purposes.

Statement of Financial Position

The table below reflects the statement of financial position as presented in the University's audited financial statements for the period indicated (reported in thousands).

Fiscal Year Ended June 30	2018	2017	2016	2015	2014
Total assets	\$745,632	\$682,527	\$ 661,687	\$ 675,352	\$ 681,046
less total liabilities	(249,231)	(228,565)	(244,687)	(240,081)	(245,531)
Total net assets	\$496,401	\$453,962	\$417,000	\$435,271	\$435,515

Net Assets

The University's investments and other assets, net of its liabilities, are recorded as the University's net assets in its financial statements. By the nature of restrictions placed by donors, certain net assets are available to be expended by the University, while others are not. The following table reflects the University's total net assets and expendable net assets for the time period indicated (reported in thousands):

Fiscal Year Ended June 30	2018	2017	2016	2015	2014
Total net assets	\$496,401	\$453,962	\$417,000	\$435,271	\$435,515
less permanently restricted net assets	(114,982)	(107,577)	(101,819)	(97,310)	(91,339)
less net investment in plant ⁽¹⁾	(128,664)	(154,009)	(150,908)	(153,773)	(141,279)
Expendable Net Assets	\$252,755	\$192,376	\$164,273	\$184,188	\$202,897

¹*Net Investment in Plant*: Net Property, Plant and Equipment, plus Assets in Escrow Related to Debt Service, plus Assets Held by Trustee for Construction, plus Deferred Financing Costs, less Debt and Lease Obligations.

Investments

In accordance with guidance on accounting for certain investments held by not-for-profit organizations, investments are recorded at fair value.

In determining fair value, the University uses various approaches. The Accounting Standards Codification on fair value measurements establishes a hierarchy for inputs used in measuring fair value that maximizes the use of observable inputs and minimizes the use of unobservable inputs by requiring that the most observable inputs be used when available. Observable inputs are inputs that market participants would use in pricing the asset based on market data obtained from sources independent of the organization. Unobservable inputs are inputs that would reflect an organization's assumptions about the assumptions market participants would use in pricing the asset developed based on the best information available in the circumstances. The hierarchy is broken down into three levels based on the observability of inputs as follows:

Level 1 — Valuations based on quoted market prices in active markets for identical assets that the organization has the ability to access. As valuations are based on quoted market prices that are readily available in an active market, valuation of these products does not entail a significant degree of judgment.

Level 2 — Valuations based on one or more quoted prices in markets that are not active or for which all significant inputs are observable, either directly or indirectly.

Level 3 — Valuations based on inputs that are unobservable and significant to the overall fair value measurement.

See Note B in the audited financial statements for a complete description of the University's Investments and valuation techniques.

The fair value of the University's investments as of June 30 for the time period indicated is summarized in the table below (reported in thousands).

Fiscal Year Ended June 30	2018	2017	2016	2015	2014
Level 1 - Quoted Prices in Active Markets					
Equity securities - all cap	\$1,939	\$1,633	\$11,913	\$13,675	\$15,959
Exchange-traded note	0	0	7,501	9,338	8,239
Mutual funds:					
Money market	34,018	11,247	10,244	2,996	11,345
Large cap	66,927	68,546	38,900	40,663	55,894
Mid cap	0	0	17,227	22,488	34,833
Small cap	11,523	10,020	14,963	16,078	26,136
Global and international	23,550	22,142	73,393	80,053	59,597
Fixed income and bond	0	19,992	26,033	27,508	24,231
Real Estate	0	0	11,932	9,731	7,959
Long - short	0	0	1,258	1,255	1,241
Other	6,547	4,155	2,612	2,100	1,901
Receivable for investments redeemed	0	0	0	0	0
Payables for securities purchased not received	0	0	0	0	14,200
	<u>\$144,504</u>	<u>\$137,735</u>	<u>\$215,976</u>	<u>\$225,885</u>	<u>\$261,535</u>
Level 2 - Significant Observable Inputs					
Debt securities issued by U.S. Treasury and other U.S. agencies	\$12,018	\$6,071	\$2,498	\$772	\$1,819
Debt issued by foreign governments	14	14	21	23	24
Corporate debt securities	8,947	8,376	6,852	7,220	7,216
Asset-backed securities	272	315	1,762	2,280	1,449
Real estate high-income fund	0	0	9,255	9,068	8,625
	<u>\$21,251</u>	<u>\$14,776</u>	<u>\$20,388</u>	<u>\$19,363</u>	<u>\$19,133</u>
Level 3 - Significant Unobservable Inputs					
Hedge funds:					
Absolute return	\$0	\$0	\$14,670	\$16,098	\$4,420
Deflation Hedging	14	704			
Directional	0	0	0	0	491
Diversifiers	68,272	35,758	2,470	8,412	5,090
Emerging Markets	18,218	11,292			
Global equity	32,750	15,824	0	0	0
High Yield - Fixed Income	0	13,915	12,636	13,365	0
International equity	59,054	50,515	0	0	0
Managed Futures	0	0	9,936	10,314	4,052
Multi-Strategy		6,720	8,803	9,370	4,188
Private Debt - Mezzanine	0	0	1,882	808	0
Private Real Assets	967	0			
U.S. equity ex small-cap	29,935	25,909	0	0	0
Private equity:					
Distressed	0	0	1,068	1,417	2,065
Diversified	10,120	7,196	4,405	4,749	4,604
Venture capital	133	167	243	216	203
	<u>\$219,463</u>	<u>\$168,000</u>	<u>\$56,113</u>	<u>\$64,749</u>	<u>\$25,113</u>
Total investments	<u>\$385,218</u>	<u>\$320,511</u>	<u>\$292,477</u>	<u>\$309,997</u>	<u>\$305,781</u>

Endowment

As of June 30, 2018, the University's endowment fund was valued at \$308.2 million (including outstanding pledge receivables of approximately \$2.5 million). The investments as of that time were managed by 46 separate fund managers. Duquesne maintains a total investment return spending policy, which was 4.5% for the year ended June 30, 2018 and 5.0% for the year ended June 30, 2017. The University has adopted PA Trust Law Act 141 which requires a release of between 2% and 7%. Separating spending policy from investment policy permits asset allocation decisions to be made independently of the need for current income. The University's investment policy has a primary objective to achieve annualized total return, through appreciation and income, equal or greater than the rate of inflation plus any spending and administrative expenses. This allows the University to maintain purchasing power of the investment pool. The assets are managed in a manner that will meet the primary investment objective, while attempting to limit volatility in the portfolio's market value, thereby limiting volatility in the year-to-year spending. The policy allows for a range of asset classes, including global equity and debt securities, real assets and alternative investments. Changes in the value of the endowment and quasi endowment are included in the non-operating section of the statements of activities along with the changes in the value of annuities and permanently restricted loan funds. See Note C in the audited financial statements for more detail.

Net Property, Plant, & Equipment

The following table indicates the land, buildings and equipment assets of the University less accumulated depreciation for the last five years ending June 30, 2018 (reported in thousands):

Net Property, Plant & Equipment

<u>June 30</u>	<u>Amount</u>
2014	\$302,501
2015	\$311,045
2016	\$311,009
2017	\$306,728
2018	\$283,238

The decline in net property, plant and equipment in 2018 includes the conveyance of one of the University's student housing properties to a private developer. See page A-38 under "Asset Monetization – Brottier Hall" for more information about the transaction.

Unrestricted Statement of Activities

The table below reflects unrestricted operating and non-operating revenues and expenses as presented in the University's audited financial statements for the period indicated (reported in thousands). Unrestricted operating revenues have exceeded operating expenses in each of the last five fiscal years. The University has achieved these positive operating results primarily by managing expenses and increasing net tuition and fee revenue per full-time equivalent student.

Fiscal Year Ended June 30	2018	2017	2016	2015	2014
Unrestricted Operating Revenues	\$295,052	\$286,111	\$283,988	\$281,823	\$277,718
<i>less</i> Operating Expenses	(283,203)	(278,415)	(272,933)	(270,840)	(261,883)
Excess Operating Revenues Over Expenses	\$11,849	\$7,696	\$11,055	\$10,983	\$15,835
Net Non-Operating Revenue & Expenses ¹	7,166	10,320	(24,385)	(13,830)	18,841
Change in Unrestricted Net Assets	\$19,015	\$18,016	\$(13,330)	\$(2,847)	\$34,676

¹Net Non-Operating Revenues and Expenses deficit in 2015 and 2016 are due to market losses, one-time costs related to a voluntary retirement program and a loss on the defeasance of debt.

Interested parties should read the University's audited financial statements for the years ended June 30, 2018 and 2017 in their entirety for more complete information regarding the University's results of operations.

Net Tuition & Fee Revenue per FTE Students

The University is dependent on net tuition and fee revenue to support its operations, representing approximately 72 percent of total unrestricted operating revenue in the fiscal year ended June 30, 2018. The following table reflects the University's net tuition and fees per full-time equivalent (FTE) students for the time period indicated (reported in thousands):

Fiscal Year Ended June 30	2018	2017	2016	2015	2014
Gross Tuition & Fees	\$327,799	\$316,834	\$305,924	\$301,162	\$292,799
<i>less</i> institutional financial aid	(114,901)	(109,424)	(104,458)	(98,246)	(94,401)
Net Tuition & Fees	\$212,897	\$207,410	\$201,466	\$202,916	\$198,398
<i>divided by</i> Fall FTE students	9,005	8,882	8,895	8,876	9,098
Net Tuition & Fees per FTE	\$23.6	\$23.4	\$22.6	\$22.9	\$21.8

Fundraising

University Advancement works to enhance Duquesne's image, raise funds for new and ongoing initiatives, and build relationships with alumni and friends. University Advancement seeks to develop and enhance a sustainable and growing program of external support for the University.

The following table reflects the University's total gifts and pledges for the time period indicated as reported in the University's audited financial statements (reported in thousands):

Fiscal Year Ended June 30	2018	2017	2016	2015	2014
Unrestricted	\$2,170	\$238	\$1,647	\$610	\$1,438
Temporarily Restricted	14,986	7,810	5,651	5,010	4,350
Permanently Restricted	7,354	5,765	4,524	6,710	8,615
Total	\$24,510	\$13,813	\$11,822	\$12,330	\$14,403

Employee Profile

As of Fall 2018, the University had a full-time faculty of 498, of whom 53% had tenure. The University employed 466 part-time faculty members and 414 graduate assistants. The average age of the full-time faculty was 51 years.

As of Fall 2018, the University had approximately 2,648 employees consisting of 1,570 full-time and 1,078 part-time employees.

Faculty Information

Academic Year	Full-Time Instructional Faculty	Full-Time Tenured Faculty	Adjunct Faculty	Total Faculty
2017-2018	505	367	485	990
2016-2017	502	372	472	974
2015-2016	493	369	490	983
2014-2015	497	388	512	1,009
2013-2014	481	384	512	993

Labor Relations

The University has a stable working relationship with the labor unions, which represent approximately 211 of its employees. The labor unions recognized by the University include the following:

1. Service Employees International Union – Local 32BJ (formerly Local 3 & 585) – representing the housekeeping, parking, grounds, receiving and mailing services personnel. Expiration of this contract is October 14, 2020.
2. International Union of Operating Engineers – Local 95 – representing the general mechanics and energy center operators. Expiration of this contract is June 30, 2023.
3. General Teamsters, Chauffeurs, and Helpers – Local 249 – representing the campus police and security guard personnel. Expiration of this contract is October 15, 2022.
4. Security, Police and Fire Professionals of America – Local 502 – representing the communication clerks. Expiration of this contract is June 30, 2022.

On May 14, 2012, the United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union (USW), filed a petition with the National Labor Relations Board (NLRB) seeking to represent approximately 130 non-tenure track adjunct faculty in the McAnulty College and Graduate School of Liberal Arts at Duquesne University.

Duquesne has asserted its First Amendment right to religious exemption from the jurisdiction and authority of the National Labor Relations Board (NLRB) to impose a union of adjunct faculty on the University. The University's position is that the NLRB cannot exercise jurisdiction over Duquesne because the University is a "church-operated school" as defined by the Supreme Court in *NLRB v. Catholic Bishop of Chicago*, 440 U.S. 490 (1979). The NLRB exercised jurisdiction while acknowledging the University's right to appeal such exercise. As a result, the University has appealed the decision of the NLRB on this issue of jurisdiction. A union cannot be certified until the appeal process has been completed, the timing of which cannot be predicted.

Legal Matters

The University is a defendant in certain legal proceedings arising out of normal conduct of its business. In the opinion of management, based upon discussion with the counsel, the ultimate outcome of these matters is not expected to have a material adverse effect on the financial position or activities of the University.

Under the terms of federal grants, periodic audits are required and certain costs may be questioned as not being appropriate expenditures under the terms of the grants. Such audits could lead to reimbursement to the grantor agencies. The University's management believes disallowances, if any, will not have a material effect on the University's financial position.

Pension Program

The University participates in single-employer contributory retirement plans, which provide for the purchase of annuities and various mutual funds for academic, administrative, salaried, and other hourly employees. The employee is responsible for a 5% pretax contribution, while the University contributes 8% on behalf of the employee. The University also participates in a multiemployer noncontributory retirement plan for certain union employees, which is funded at the rate of 87 cents per hour worked up to a maximum of 40 hours per week. The University annually funds the retirement costs under both plans, which amounted to \$8.4 million and \$8.1 million for the years ended June 30, 2018 and 2017, respectively.

The University provides certain health care benefits to certain retired employees. These postretirement benefits are unfunded and generally based on employees' years of service and compensation levels. The University is required to make an accrual of the expected costs of these benefits over the period in which the employees render the service. The University has recorded a liability for accumulated postretirement benefits on its statements of financial position of \$8.0 million and \$8.3 million for the years ended June 30, 2018 and 2017, respectively.

The accumulated postretirement benefit obligation recognized as of June 30, 2018 and 2017, was actuarially determined using a method that applied specific interest rates to future cash flows when discounting the obligation to its present value. The interest rate associated with future cash flows and used to discount the accumulated postretirement benefit obligation to present value was 4.10% at June 30, 2018 and 3.70% at June 30, 2017. The assumed medical cost trend rate was 6% at June 30, 2018 and 7% at June 30, 2017, grading down to an ultimate rate of 4.5% in 2025. A one-percentage-point increase in the assumed medical cost trend rates for each future year increases annual postretirement benefit expense by \$500 and the accumulated postretirement benefit obligation by \$16,000. A one-percentage-point decrease in the assumed medical cost trend rates for each future year decreases annual postretirement benefit expense by \$500 and the accumulated postretirement benefit obligation by \$16,000. See Note G in the audited financial statements for further information on this subject.

Existing Debt & Lease Obligations

The following table depicts the University's outstanding long-term debt and capital lease obligations for the last five years ended June 30, 2018 (reported in thousands):

Fiscal Year Ended June 30	2018	2017	2016	2015	2014
Gross debt and capital lease obligations	\$152,534	\$142,170	\$149,645	\$156,372	\$165,212
<i>plus</i> net unaccrued bond premium and deferred costs	14,775	15,010	16,740	7,269	3,517
<i>less</i> assets in escrow related to debt service	(2,752)	(3,731)	(4,724)	(5,562)	(6,411)
Net debt and capital lease obligations	\$164,557	\$153,449	\$161,661	\$158,079	\$162,318

See Note F in the audited financial statements for a complete description of the University's existing long-term debt.

Debt Service Coverage Ratio

The University's unrestricted net revenues available for debt service (reported in thousands) and debt service coverage ratio are depicted in the table below.

Fiscal Year Ended June 30	2018	2017	2016	2015	2014
Excess Unrestricted Operating Revenues	\$11,849	\$7,696	\$11,055	\$10,983	\$15,835
<i>plus</i> Interest Expense	3,935	5,709	6,321	7,533	7,609
<i>plus</i> Depreciation Expense	23,423	23,699	22,421	21,937	20,711
Net Revenues Available for Debt Service	\$39,207	\$37,104	\$39,979	\$40,453	\$44,155
Total Debt Service ¹	\$12,983	\$13,106	\$12,973	\$14,603	\$14,353
Debt Service Coverage Ratio	3.0	2.8	3.1	2.8	3.1

¹Total Debt Service includes both bond indebtedness and capital lease obligations, excluding any principal and interest payments paid from escrow.

Annual Debt Service Requirements on Tax-Exempt Bonds

The table below presents the University's annual debt service requirements on outstanding bonds (reported in thousands).

Year	Series 1998	Series 2011	Series 2013	Series 2014	Series 2016	Series 2018	Total Debt Service
2019	\$849	\$1,214	\$3,514	\$3,279	\$3,915	\$668	\$13,439
2020	1,319	1,651	2,617	3,281	3,904	888	13,659
2021	0	3,247	2,619	3,283	3,628	888	13,666
2022	0	3,081	2,619	4,546	2,599	888	13,733
2023	0	3,077	2,615	4,551	2,604	888	13,734
2024	0	0	2,612	4,547	5,689	888	13,736
2025	0	0	2,621	4,540	5,688	888	13,736
2026	0	0	2,620	2,419	7,814	888	13,740
2027	0	0	2,617	1,932	8,346	888	13,783
2028	0	0	2,616	1,924	8,350	888	13,778
2029	0	0	2,615	1,934	8,435	888	13,872
2030	0	0	2,616	1,930	8,429	888	13,863
2031	0	0	2,615	1,932	8,341	888	13,776
2032	0	0	2,615	1,931	2,289	5,098	11,934
2033	0	0	2,612	991	4,087	4,248	11,937
2034	0	0	1,454	0	0	10,479	11,933
	\$2,168	\$12,269	\$41,597	\$43,019	\$84,118	\$31,149	\$214,319

Note: Debt service requirements on tax-exempt bonds exclude the Series A of 2001 Bonds as principal and interest payments are paid from assets in escrow. Totals may not add due to rounding.

Future Financing

The University may incur additional debt in the coming 3-5 years for the following purposes, among others: (a) strategic real estate acquisitions – the University continues to monitor real estate at its campus's edge and debt may be incurred if an appropriate opportunity arises; (b) strategic business opportunities - the University may incur debt to finance certain other projects that may create budgetary savings or that have a related revenue stream that can either cover or subsidize all or some portion of the allocable debt service; (c) bridge financing- the University may issue debt to fund a capital project in advance of receiving related corporate sponsorships, gift and pledge payments that may be expected over long periods of time. Such intentions could change based on any number of variables.

Asset Monetization

The University is currently exploring the potential sale of its co-generation facility. Duquesne's utility system was originally constructed in 1967 and was converted in 1997 to a co-generation facility that powers, heats and cools the University's campus. In the event the University determines that such action is in its financial interests, it will proceed with the sale. Two notable transactions where the University has previously monetized what it deemed to be non-core assets include:

WDUQ Radio Station

WDUQ was Pittsburgh's first public radio station, providing more than sixty years of service to the community. WDUQ began broadcasting on December 15, 1949 as a student laboratory on the University's campus, exposing students to new technology and giving local audiences access to cultural programs and information. As each decade passed, WDUQ evolved, as did the public radio sector. Over the years, WDUQ progressed into a station that was virtually independent of Duquesne University. Management recognized the timing and opportunity to reallocate assets. The University desired and selected an acquirer with an established track record of independent radio station operation as well as a commitment to include Duquesne University student engagement through internships and employment. In September of 2011, the University's radio station was acquired by a local joint venture involving an independent public radio station and a non-profit entity that helps communities to build public media services.

Proceeds of the transaction were invested in the endowment to support initiatives including programs, stipends and scholarships.

Brottier Hall

Brottier Hall is a 314 unit, approximately 660 bed student apartment building which was built in 1968 by a private developer adjacent to the campus. The private developer operated Brottier Hall until 2004 when the University purchased it. The University sold Brottier Hall in May, 2018 to an entity affiliated with an owner of many student housing facilities across the country (the "Developer"). The University and the Developer have entered into a long-term cooperation and services agreement (the "Cooperation Agreement") which specifies certain responsibilities and obligations by both parties including major renovations to the property.

The renovations, intended to modernize the 50-year old Brottier Hall, are expected to be completed in four summers beginning in 2018. When completed, Brottier Hall will offer a variety of enhanced amenities including an entirely new entry lounge and an outdoor terrace. Apartments are planned to be upgraded including new flooring and finishes; bathroom plumbing and electrical fixtures; vanities and tubs; kitchen cabinets, counter tops and appliances. Windows and plumbing stacks will be replaced throughout the building along with the electrical switchgear.

The Cooperation Agreement provides for upper class undergraduate, graduate and law students of the University to have first priority to live in the building and the University to continue to provide resident services, programming and student oversight, in addition to managing room selection and assignment. The University provides no guarantee of occupancy under the terms of the Agreement.

The net proceeds from the sale, after paying related debt, were applied to other capital expenditures and added to the University's long term investment portfolio and its endowment. The University believes that foregone future housing revenues resulting from the sale of Brottier Hall will be generally offset by the related sale proceeds, as well as by the University no longer being responsible for related repairs and replacement costs, which will be the responsibility of the Developer.

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APPENDIX B

**AUDITED FINANCIAL STATEMENTS OF DUQUESNE UNIVERSITY OF THE HOLY SPIRIT AS OF
AND FOR THE YEARS ENDED JUNE 30, 2018 AND 2017**

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Financial Statements and Report of Independent
Certified Public Accountants

Duquesne University of the Holy Spirit

June 30, 2018 and 2017

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Report of Independent Certified Public Accountants

To the Board of Directors of
Duquesne University of the Holy Spirit:

Report on the financial statements

We have audited the accompanying financial statements of Duquesne University of the Holy Spirit (the “University”), which comprise the statements of financial position as of June 30, 2018 and 2017, and the related statements of activities and cash flows for the years then ended, and the related notes to the financial statements.

Management’s responsibility for the financial statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; 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.

Auditor’s responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits 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 auditor’s 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 University’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 University’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 opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Duquesne University of the Holy Spirit as of June 30, 2018 and 2017, and the changes in its net assets and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Grant Thornton LLP

Philadelphia, Pennsylvania

October 9, 2018

Statements of Financial Position

June 30, 2018 and 2017

(in thousands)

	2018	2017
Assets		
Cash and cash equivalents	\$ 22,897	\$ 16,192
Accounts receivable - net	9,332	8,452
Pledges receivable - net	14,978	7,548
Deferred charges and other assets	5,839	5,887
Loans receivable - net	12,221	13,478
Investments	385,218	320,511
Property, plant, and equipment - net	283,238	306,728
Assets in escrow related to debt service and construction	11,909	3,731
Total assets	\$ 745,632	\$ 682,527
Liabilities and Net Assets		
Liabilities		
Accounts payable and accrued expenses	\$ 28,857	\$ 25,640
Annuities payable	326	349
Deferred revenues and deposits	23,908	14,050
Accumulated postretirement benefits	7,970	8,341
Agency funds	1,033	932
Debt and lease obligations	167,309	157,180
Liabilities associated with investments	3,850	5,132
Conditional asset retirement obligations	3,373	4,489
Federal loan funds	12,605	12,452
Total liabilities	249,231	228,565
Net Assets		
Unrestricted net assets	303,432	284,417
Temporarily restricted net assets	77,987	61,968
Permanently restricted net assets	114,982	107,577
Total net assets	496,401	453,962
Total liabilities and net assets	\$ 745,632	\$ 682,527

The accompanying notes are an integral part of these financial statements.

Statement of Activities

Year ended June 30, 2018

(in thousands)

	Unrestricted	Temporarily Restricted	Permanently Restricted	Total
Operating revenues				
Tuition and fees - net of financial aid of \$114,901	\$ 212,897	\$ -	\$ -	\$ 212,897
Auxiliary enterprises - net of financial aid of \$11,590	38,391	-	-	38,391
Grants and contracts	3,224	9,336	-	12,560
Gifts and pledges	2,157	14,862	-	17,019
Endowment earnings distributed for operations	4,542	5,935	-	10,477
Working capital earnings distributed for operations	1,729	-	-	1,729
Investment income	691	25	-	716
Gain from the sale of property, plant, and equipment	5,602	-	-	5,602
Other	5,005	-	-	5,005
Net assets released from restrictions	20,814	(20,814)	-	-
Total operating revenues	295,052	9,344	-	304,396
Operating expenses				
Instructional	119,525	-	-	119,525
Institutional support	52,140	-	-	52,140
Auxiliary enterprises	40,411	-	-	40,411
Academic support	39,935	-	-	39,935
Student services	17,151	-	-	17,151
Public service	5,686	-	-	5,686
Research	8,355	-	-	8,355
Total operating expenses	283,203	-	-	283,203
Excess of operating revenues over operating expenses	11,849	9,344	-	21,193
Nonoperating revenues and expenses				
Gifts and pledges	13	124	7,354	7,491
Return on investments	13,424	12,436	79	25,939
Endowment earnings distributed for operations	(4,542)	(5,935)	-	(10,477)
Working capital earnings distributed for operations	(1,729)	-	-	(1,729)
Net assets released from restrictions	-	50	(50)	-
Other	-	-	22	22
Net nonoperating revenues and expenses	7,166	6,675	7,405	21,246
Change in net assets	19,015	16,019	7,405	42,439
Net assets - beginning of year	284,417	61,968	107,577	453,962
Net assets - end of year	\$ 303,432	\$ 77,987	\$ 114,982	\$ 496,401

The accompanying notes are an integral part of this financial statement.

Statement of Activities

Year ended June 30, 2017

(in thousands)

	Unrestricted	Temporarily Restricted	Permanently Restricted	Total
Operating revenues				
Tuition and fees - net of financial aid of \$109,424	\$ 207,410	\$ -	\$ -	\$ 207,410
Auxiliary enterprises - net of financial aid of \$5,988	42,263	-	-	42,263
Grants and contracts	3,264	8,536	-	11,800
Gifts and pledges	174	6,935	-	7,109
Endowment earnings distributed for operations	5,225	6,013	-	11,238
Working capital earnings distributed for operations	1,870	-	-	1,870
Investment income	387	-	-	387
Other	5,383	-	-	5,383
Net assets released from restrictions	20,135	(20,135)	-	-
Total operating revenues	286,111	1,349	-	287,460
Operating expenses				
Instructional	118,428	-	-	118,428
Institutional support	48,377	-	-	48,377
Auxiliary enterprises	39,415	-	-	39,415
Academic support	40,619	-	-	40,619
Student services	16,786	-	-	16,786
Public service	5,956	-	-	5,956
Research	8,834	-	-	8,834
Total operating expenses	278,415	-	-	278,415
Excess of operating revenues over operating expenses	7,696	1,349	-	9,045
Nonoperating revenues and expenses				
Gifts and pledges	64	875	5,765	6,704
Return on investments	18,413	16,827	127	35,367
Endowment earnings distributed for operations	(5,225)	(6,013)	-	(11,238)
Working capital earnings distributed for operations	(1,870)	-	-	(1,870)
Costs associated with separation agreements	(1,062)	-	-	(1,062)
Net assets released from restrictions	-	150	(150)	-
Other	-	-	16	16
Net nonoperating revenues and expenses	10,320	11,839	5,758	27,917
Change in net assets	18,016	13,188	5,758	36,962
Net assets - beginning of year	266,401	48,780	101,819	417,000
Net assets - end of year	\$ 284,417	\$ 61,968	\$ 107,577	\$ 453,962

The accompanying notes are an integral part of this financial statement.

Statements of Cash Flows

Years ended June 30, 2018 and 2017

(in thousands)

	2018	2017
Cash flows from operating activities		
Change in net assets	\$ 42,439	\$ 36,962
Adjustments to reconcile change in net assets to net cash provided by operating activities:		
Depreciation and amortization	20,651	22,375
Realized and unrealized gains on investments	(24,107)	(31,880)
Gifts restricted for long-term purposes	(17,070)	(10,720)
Provision for doubtful accounts	710	398
Gain on disposal of property, plant, and equipment	(5,638)	(20)
Changes in operating assets and liabilities:		
(Increase) decrease in receivables	(366)	191
Decrease (increase) in deferred charges and other assets	48	(1,159)
Increase (decrease) in accounts payable and accrued liabilities	3,014	(3,931)
Increase in annuities payable	61	37
Increase in deferred revenues and deposits	9,858	643
Increase in agency funds	101	201
Increase (decrease) in conditional asset retirement obligations	45	(509)
Net cash provided by operating activities	29,746	12,588
Cash flows from investing activities		
Purchases of investments	(112,967)	(196,021)
Proceeds from the sale/redemption of investments	72,367	199,867
Change in liability associated with investments	(1,282)	(1,123)
Deposits with trustee for construction	(20,032)	-
Withdrawals from trustee for construction	10,874	-
Deposits of funds held in escrow related to debt service	(142)	(556)
Withdrawals of funds held in escrow related to debt service	1,122	1,549
Receipt of federal loan funds	741	432
Payments of federal loan funds and annuities payable	(672)	(583)
Proceeds from the sale of property	24,939	-
Expenditures for land, buildings, and equipment	(20,126)	(21,108)
Net cash used in investing activities	(45,178)	(17,543)
Cash flows from financing activities:		
Proceeds from the issuance of new debt	20,032	-
Repayments of long-term borrowings	(7,568)	(7,475)
Collection of gifts restricted for long-term purposes	9,673	9,685
Net cash provided by financing activities	22,137	2,210
Increase (decrease) in cash and cash equivalents	6,705	(2,745)
Cash and cash equivalents - beginning of year	16,192	18,937
Cash and cash equivalents - end of year	\$ 22,897	\$ 16,192
Supplemental disclosures		
In-kind gifts consisting of contributed services	\$ 593	\$ 658
Interest paid	\$ 6,537	\$ 6,711
Capital lease obligations incurred	\$ 173	\$ -
Accounts payable related to construction in process	\$ 2,077	\$ 2,246

The accompanying notes are an integral part of these financial statements.

Notes to Financial Statements

June 30, 2018 and 2017

NOTE A - SIGNIFICANT ACCOUNTING POLICIES

1. Organization

Duquesne University of the Holy Spirit (the “University”) is a private, Catholic university, organized as a tax-exempt, nonprofit corporation. The University’s principal sources of revenue include student tuition and fees, auxiliary revenues, grants, and gifts.

2. Basis of Presentation

The financial statements have been prepared on the accrual basis of accounting in conformity with accounting principles generally accepted in the United States of America (“U.S. GAAP”). Net assets, revenues, expenses, gains, and losses are classified based on the existence or absence of donor-imposed stipulations. Accordingly, net assets of the University and changes therein are classified and reported as follows:

Unrestricted Net Assets - Net assets that are not subject to donor-imposed stipulations.

Temporarily Restricted Net Assets - Net assets subject to donor-imposed stipulations that may or will be met either by actions of the University and/or the passage of time.

Permanently Restricted Net Assets - Net assets subject to donor-imposed stipulations or by law that they be maintained permanently by the University. Generally, the donors of these assets permit the University to use all or part of the income earned on related investments for general or specific purposes.

3. Taxes

The University has been determined to be exempt from federal income taxes under Section 501(c)(3) of the Internal Revenue Code of 1986. As a result, no provision for taxes has been made in the accompanying financial statements.

The University adopted guidance for uncertainty in income taxes, which provides criteria for the recognition and measurement of uncertain tax positions. This guidance requires that an uncertain tax position should be recognized only if it is “more likely than not” that the position is sustainable based on its technical merits. Recognizable tax positions should then be measured to determine the amount of benefit recognized in the financial statements. The University files U.S. federal, state, and local income tax returns, and no returns are currently under examination. The University continues to evaluate its tax positions pursuant to the principles of such guidance and has determined that there is no material impact on the University’s financial statements.

4. Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ materially from those estimates.

5. Cash and Cash Equivalents

Cash and cash equivalents include all highly liquid investments with original maturities of less than three months. Cash equivalents are stated at cost, which approximates fair value.

(Continued)

Notes to Financial Statements - Continued

June 30, 2018 and 2017

NOTE A - SIGNIFICANT ACCOUNTING POLICIES - Continued

6. Concentration of Credit Risk

The University maintains cash and cash equivalent balances with banking institutions and brokerage companies. At June 30, 2018, the amounts on deposit at the banking institutions and the amounts on deposit at the brokerage companies exceeded the amounts that would be covered by the Federal Deposit Insurance Corporation ("FDIC") and the Securities Investor Protection Corporation ("SIPC"), respectively. In management's opinion, the amounts in excess of FDIC and SIPC limits do not pose significant risk to the University.

7. Risks and Uncertainties

Investment securities are exposed to various risks, such as interest rate, credit, and overall market volatility. Due to the level of risk associated with certain investment securities, it is reasonably possible that changes in risks and values of investment securities will occur in the near term and that such changes could materially affect the amounts reported in the statements of financial position.

8. Pledges Receivable

Pledges receivable from fund-raising campaigns are recorded by the University when the unconditional promise to give (pledge) is made and are recorded at fair value using a discount rate commensurate with the risks associated with the pledge.

The allowance for doubtful accounts on pledges receivable is based upon management's judgement, including such factors as prior collection history and type of receivable. The University writes off receivables when they become uncollectible, and payments subsequently received on such receivables are credited to the allowance for doubtful accounts.

9. Property, Plant, and Equipment

Property, plant, and equipment are stated at cost at the date of acquisition or fair value at the date of donation in the case of gifts. Depreciation is computed on a straight-line basis over the estimated useful lives of the assets. The following table shows the estimated useful lives of property, plant, and equipment:

Land improvements	10 years
Buildings	40 years
Building improvements	10 - 40 years
Furniture and equipment	5 - 10 years

The University reviews its property, plant, and equipment for impairment whenever events or changes in circumstances indicate that the carrying amount of these assets may not be recoverable. No impairment charges were recorded by the University in 2018 or 2017.

(Continued)

NOTE A - SIGNIFICANT ACCOUNTING POLICIES - Continued

10. Deferred Revenues and Deposits

Deferred revenues and deposits represent revenues currently received for programs or activities to be conducted primarily in the next fiscal year, such as summer and fall tuition and fees and room and board. Also included in deposits are commitment deposits received from certain vendors to be recognized as income over the lives of the related agreements. Also included in deferred revenue are funds received related to certain refundable grants. These amounts will be recognized as income as the funds are expended in accordance with the underlying terms of the grants.

11. Liabilities Associated with Investments

The University also invests capital on behalf of a religious entity that shares the University's Catholic ministry and educational missions. Accordingly, the University reports an equal asset and liability in the statements of financial position representing the fair value of investments managed on behalf of the entity.

12. Gifts and Grants

The University reports gifts and grants of cash and other assets as temporarily or permanently restricted support if they are received with donor stipulations that limit the use of the donated assets. When a donor restriction expires (i.e., when a stipulated time restriction ends or purpose restriction is accomplished), temporarily restricted net assets are reclassified to unrestricted net assets and reported in the statements of activities as net assets released from restrictions.

The University reports gifts of land, buildings, and equipment as unrestricted support, unless explicit donor stipulations specify how the donated assets must be used. Gifts of long-lived assets with explicit restrictions that specify how the assets are to be used and gifts of cash or other assets that must be used to acquire long-lived assets are reported as temporarily restricted support. Absent explicit donor stipulations about how long those long-lived assets must be maintained, the University reports expirations of donor restrictions when donated assets are placed in service or long-lived assets are constructed.

13. Investments and Investment Income

In accordance with guidance on accounting for certain investments held by not-for-profit organizations, investments are recorded at fair value.

Interest income, unrealized gains and losses on investments, and realized gains and losses from the sale of investments are accounted for in the statements of activities in the net asset classification that holds the investments, except for income and gains and losses derived from investments of endowment and funds functioning as endowment, which are accounted for in the net asset classification designated by the donor or by law.

(Continued)

Notes to Financial Statements - Continued

June 30, 2018 and 2017

NOTE A - SIGNIFICANT ACCOUNTING POLICIES - Continued

Investments in marketable securities, including mutual funds, are recorded at their fair values, which are based primarily on quoted market prices as of the last business day of the fiscal year. The University holds certain investments in other funds for which the underlying assets are investments in publicly traded securities for which fair values are readily determinable. The University also holds other investments without readily determinable fair values, such as hedge funds and private equity funds. Hedge funds are actively managed funds that tend to employ more aggressive investing strategies than traditional mutual funds. Most hedge funds are established as private limited partnerships whose offering memorandum allows the fund to take risks using speculative investment strategies, including short selling, options, and the use of leverage. Private equity funds have underlying assets that are nonmarketable equities or equity-like securities. Investments without readily determinable fair values are carried at fair value as of June 30, 2018 and 2017, based on estimates developed by the management of the investment entities investing the funds. These valuations include assumptions and methods that are reviewed by University management. The University believes that the carrying amount of its investments without a readily determinable fair value is a reasonable estimate of fair value as of June 30, 2018 and 2017. As the estimated value is subject to uncertainty, the reported value may differ from the value that would have been used had a ready market existed.

14. Federal Student Loan Program

The University administers and contributes a portion of the total funds available for various student loan programs, including Perkins, Nursing, Health Profession, and Nursing Faculty Loans. The loan programs are financed primarily by the U.S. government. Loans are made to qualified students and are reported as loans receivable - net in the statements of financial position. Upon termination of the programs, the amounts representing net government advances (federal loan funds), which are reflected as a liability of approximately \$12.6 million and \$12.5 million at June 30, 2018 and 2017, will be returned to the government.

15. Fair Value

The estimated fair value of all financial instruments has been determined using available market information and appropriate valuation methodologies. However, considerable judgment is required to interpret market data in developing fair value estimates. Accordingly, the estimates included herein are not necessarily indicative of amounts the University could realize in current market exchange. The use of different market assumptions and/or estimation methodologies may have a material effect on estimated fair value amounts. The fair value of annuities payable and long-term debt (excluding lease obligations) as of June 30, 2018 and 2017, was approximately \$0.3 million and \$167.5 million and \$0.4 million and \$159.2 million, respectively, and is classified as Level 2 in the fair value hierarchy. All other financial instruments, other than investments as discussed above, are recorded at historical cost, which approximates fair value.

16. Guarantees and Commitments

In the ordinary course of business, the University enters into contracts with third parties pursuant to which the third parties provide services on behalf of the University. In many of the contracts, the University agrees to indemnify the third-party service provider under certain circumstances. The terms of the indemnity vary from contract to contract, and the amount of the indemnification liability, if any, cannot be determined. The University also has minimum purchase requirements related to certain utility contracts that have been met annually through June 30, 2018. The University anticipates meeting these minimum purchase requirements in future years.

(Continued)

Notes to Financial Statements - Continued

June 30, 2018 and 2017

NOTE A - SIGNIFICANT ACCOUNTING POLICIES - Continued

Pursuant to its bylaws, the University provides indemnification to directors, officers, and, in some cases, employees and agents against certain liabilities incurred as a result of their service on behalf of or at the request of the University and also advance on behalf of covered individual costs incurred in defending against certain claims, if any, subject to written undertakings by each such individual to repay all amounts so advanced if it is ultimately determined that the individual is not entitled to indemnification.

17. Insurance Liabilities

The University is self-insured through an agreement with third-party providers to provide medical coverage for all full-time University employees. A liability for estimated incurred but unreported claims has been recorded at June 30, 2018 and 2017, based upon a third-party evaluation of claims and management's analysis of past claims history. The third-party evaluation of claims includes assumptions and methods that were reviewed by University management.

The University is also self-insured for certain other activities, principally workers' compensation. Liabilities have been established based on third-party estimates using the University's historical loss experience. The self-insurance accrual is subject to periodic adjustment by the University based on actual loss experience factors.

18. Nonoperating Activities

Nonoperating activities include gifts and pledges related to endowments and funds functioning as endowments, bequests, annuity and permanently restricted loan activity, and return on investments less amounts distributed. They also include nonrecurring items such as costs associated with separation agreements.

19. Reclassifications

Certain accounts in the prior year statement of financial position have been reclassified to conform to the current year presentation. These reclassifications had no impact on total assets, total liabilities or total net assets.

20. Recently Issued Accounting Pronouncements

Accounting Standards Update ("ASU") No. 2014-09, *Revenue (Topic 606): Revenue from Contracts with Customers*, outlines a single comprehensive model for entities to use in accounting for revenue arising from contracts, whether or not written, with customers and supersedes most current revenue recognition guidance, including industry-specific guidance. The core principle of ASU 2014-09 is that an entity should recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services by applying five steps listed in the guidance. ASU 2014-09 also requires disclosure of both quantitative and qualitative information that enables users of financial statements to understand the nature, amount, timing and uncertainty of revenue and cash flows arising from customers. The new guidance is effective for fiscal years beginning after December 15, 2017. Entities have the option of using either a full retrospective or a modified retrospective approach. Early adoption is permitted. The University has not yet determined the effect the adoption of ASU 2014-09 may have on the financial statements.

(Continued)

Notes to Financial Statements - Continued

June 30, 2018 and 2017

NOTE A - SIGNIFICANT ACCOUNTING POLICIES - Continued

ASU 2016-02, *Leases*, requires that most leased assets be recognized on the balance sheet as assets and liabilities for the rights and obligations created by these leases. ASU 2016-02 is effective for fiscal years beginning after December 15, 2018. Early application is permitted. An entity is required to apply the amendments in ASU 2016-02 under the modified retrospective transition approach. This approach includes a number of optional practical expedients, which are described in the final standard. Under these practical expedients, an organization will continue to account for leases that commence before the effective date in accordance with current U.S. GAAP, unless the lease is modified. However, lessees are required to recognize on the balance sheet leased assets and liabilities for operating leases at each reporting date. The University has not yet determined the effect the adoption of ASU 2016-02 may have on the financial statements.

ASU No. 2016-14, *Presentation of Financial Statements of Not-for-Profit Entities*, intends to make certain improvements to the current reporting requirements for not-for-profit entities including: (1) the presentation for two classes of net assets at the end of the period, rather than the currently required three classes, as well as the annual change in each of the two classes; (2) the removal of the requirement to present or disclose the indirect method (reconciliation) when using the direct method for the statement of cash flows; and (3) the requirement to provide various enhanced disclosures relating to various not-for-profit specific topics. The new standard is effective for annual financial statements beginning after December 15, 2017. The University is evaluating the pronouncement at this time.

ASU No. 2018-08, *Not-for-profit Entities: Clarifying the Scope and Accounting Guidance for Contributions Received and Contributions Made*, intends to clarify and improve the scope and accounting guidance for contributions received and contributions made. The amendment provides (1) a framework for determining whether a transaction should be accounted for as a contribution or as an exchange transaction, including how to evaluate whether a resource provider is receiving commensurate value in an exchange transaction, and (2) guidance to assist entities in determining whether a contribution is either conditional or unconditional. Guidance applies to both recipients and resource providers. For contributions received, the new standard is effective for annual financial statements beginning after June 15, 2018. For transactions in which the University serves as resource provider, the new standard is effective for annual financial statements beginning after December 15, 2018. The University has not determined the impact of the new standard at this time.

Notes to Financial Statements - Continued

June 30, 2018 and 2017

NOTE B - INVESTMENTS

A summary of the University's investments measured at fair value at June 30, 2018 and 2017, based on level within the fair value hierarchy, is as follows (in thousands):

	<u>2018</u>	<u>2017</u>
<u>Level 1 - Quoted Prices in Active Markets</u>		
Equity securities - all cap	\$ 1,939	\$ 1,633
Mutual funds:		
Money market	34,018	11,247
Large cap	66,927	68,546
Small cap	11,523	10,020
Global and international	23,550	22,142
Fixed income and bond	-	19,992
Other	<u>6,547</u>	<u>4,155</u>
	<u>144,504</u>	<u>137,735</u>
<u>Level 2 - Significant Observable Inputs</u>		
Debt securities issued by U.S. Treasury and other U.S. agencies	12,018	6,071
Debt issued by foreign governments	14	14
Corporate debt securities	8,947	8,376
Asset-backed securities	<u>272</u>	<u>315</u>
	<u>21,251</u>	<u>14,776</u>
 Total investments measured at fair value	 165,755	 152,511
Investments measured at net asset value	<u>219,463</u>	<u>168,000</u>
Total investment assets	<u>\$ 385,218</u>	<u>\$ 320,511</u>

Investments reflected in the statements of financial position as of June 30, 2018 and 2017, are summarized as follows (in thousands):

	<u>2018</u>	<u>2017</u>
Endowment and funds functioning as endowment	\$ 305,750	\$ 269,716
Long-term working capital	67,748	39,362
Investments managed for others	3,850	5,132
Annuities	4,186	3,840
Deferred compensation and other	<u>3,684</u>	<u>2,461</u>
Total	<u>\$ 385,218</u>	<u>\$ 320,511</u>

As of June 30, 2018 and 2017, there were no significant concentrations of investments as no individual investment exceeded 10% of total assets.

(Continued)

NOTE B - INVESTMENTS - Continued

In determining fair value, the University uses various approaches, including Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") 820, *Fair Value Measurements*, which establishes a hierarchy for inputs used in measuring fair value that maximizes the use of observable inputs and minimizes the use of unobservable inputs by requiring that the most observable inputs be used when available. Observable inputs are inputs that market participants would use in pricing an asset based on market data obtained from sources independent of the organization. Unobservable inputs reflect an organization's estimates about the assumptions market participants would use in pricing an asset and are developed based on the best information available in the circumstances. The hierarchy is broken down into three levels based on the observability of inputs as follows:

- Level 1 Valuations based on quoted market prices in active markets for identical assets that the organization has the ability to access. As valuations are based on quoted market prices that are readily available in an active market, valuations of these products do not entail a significant degree of judgment.
- Level 2 Valuations based on one or more quoted prices in markets that are not active or for which all significant inputs are observable, either directly or indirectly.
- Level 3 Valuations based on inputs that are unobservable and significant to the overall fair value measurement.

The University also reports under the FASB update for *Investments in Certain Entities that Calculate Net Asset Value (NAV) per Share (or its Equivalent)*, which permits, as a practical expedient, the University to measure the fair value of an investment that is within the scope of the update on the basis of the net asset value per share of the investment or its equivalent determined as of the University's fiscal year end. Under this approach, certain attributes for the investment, such as restrictions and transaction prices from principal-to-principal or brokered transactions, are not considered in measuring the fair value of an investment.

The availability of observable inputs can vary from instrument to instrument and is affected by a wide variety of factors, including, for example, the liquidity of markets and other characteristics particular to the transaction. To the extent that a valuation is based on models or inputs that are less observable in the market, the determination of fair value requires more judgment.

The University uses prices and inputs that are current as of the measurement date, which are obtained through multiple third-party custodians from independent pricing services.

Descriptions of the valuation techniques applied to the major categories of investments measured at fair value are outlined below.

The fair value of common, preferred, and foreign stocks and exchange-traded notes is valued using quoted market prices in active markets. Such actively traded securities are categorized in Level 1 of the fair value hierarchy.

Mutual funds are open-ended Securities and Exchange Commission ("SEC") registered funds with daily quoted market prices. The mutual funds allow investors to sell their interests to the fund at the published daily quoted market prices, with no restrictions on redemptions. These mutual funds are categorized in Level 1 of the fair value hierarchy.

(Continued)

Notes to Financial Statements - Continued

June 30, 2018 and 2017

NOTE B - INVESTMENTS - Continued

Government securities, government agency securities, corporate fixed-income securities, and asset-backed mortgage securities, including residential mortgage-backed securities and commercial mortgage-backed securities, are categorized in Level 2 of the fair value hierarchy as the fair value is based on multiple sources of information, which may include market data and/or quoted market prices from either markets that are not active or are for the same or similar assets in active markets.

Limited liability partnerships are partnerships created and administered by a general partner who invests either directly in a specified investment strategy or indirectly through other limited liability partnerships in so called "fund of funds." The underlying investments of these funds can be actively traded securities in the case of certain hedge fund strategies or illiquid and privately held equity investment, as in the case of private equity investments. The partnership documents outline the terms and conditions by which the general partner administers the partnership and its investments. Each limited partner owns a specified share of the partnership. These partnerships cannot be marketed to the public and are restricted, by regulation, to qualified investors. The underlying investments of these partnerships include many different types of investments, including interest rate swaps, commercial paper, foreign currency, private equity, short-term interest in common stock, and convertible bonds. The valuation of the partnership interest typically is performed at least quarterly by the general partner through unaudited statements and validated through annual audited financial statements. In certain partnerships, the readily available data on market values allows for monthly valuation of the partnership interest. As such, the fair value of these partnerships is measured using the net asset value as calculated by the custodian.

There has been no significant change in valuation techniques of investments during the year.

Interest, dividends, and realized and unrealized gains - net, are included as a component of both operating and nonoperating items.

Investment income at June 30, 2018 and 2017, exclusive of earnings on idle receipts, escrow funds, and other deposits with trustees, consisted of the following (in thousands):

	<u>2018</u>	<u>2017</u>
Interest and dividends	\$ 1,856	\$ 3,487
Realized gains on marketable securities - net	3,803	17,593
Unrealized gains on marketable securities - net	<u>20,304</u>	<u>14,287</u>
Total	<u>\$ 25,963</u>	<u>\$ 35,367</u>

(Continued)

Notes to Financial Statements - Continued

June 30, 2018 and 2017

NOTE B - INVESTMENTS - Continued

Description	Fair Value at June 30, 2018	Fair Value at June 30, 2017	Unfunded Commitment at June 30, 2018	Redemption Terms	Redemption Restrictions
Hedge funds:					
Deflation hedging	\$ 14	\$ 704	\$ -	Currently in process of redemption	None
Diversifiers - hedge funds	4,593	8,542	-	Biennial anniversary with 90-day notice	None
Diversifiers - hedge funds	5,925	5,668	-	Quarterly with 90-day notice	None
Diversifiers - hedge funds	5,542	3,662	-	Quarterly with 90-day written notice	Two-year lock-up
Diversifiers - hedge funds	5,562	4,314	-	Anniversary - annually with 60-day written notice	None
Diversifiers - hedge funds	5,382	4,274	-	Monthly with 3-day notice	None
Diversifiers - hedge funds	4,821	5,063	-	Anniversary - semi-annually with 60-day written notice	Two-year soft lock with a 5% redemption fee during lock-up
Diversifiers - hedge funds	4,655	4,235	-	Quarterly with 90-day written notice	One-year soft lock with a 6% redemption fee in the first year
Diversifiers - hedge funds	5,593	-	-	25% per calendar quarter with 90-day notice	13-month hard lock, 12-month soft lock with a 4% fee during the soft lock
Diversifiers - hedge funds	5,580	-	-	Annually with 90-day notice	None
Diversifiers - hedge funds	5,398	-	-	Quarterly with 45-day notice	12-month soft lock-up
Diversifiers - hedge funds	5,381	-	-	Monthly with 5-business-day notice	None
Diversifiers - hedge funds	5,000	-	-	Every 36 months with 60-day notice	12-month soft lock-up
Diversifiers - hedge funds	4,840	-	-	Annually with 90-day notice	24-month hard lock-up
Emerging markets	12,218	11,292	-	Monthly with 10-day written notice	None
Emerging markets	6,000	-	-	Monthly with 30-day notice	None
Global equity	16,160	15,824	-	Monthly with 6-day notice	None
Global equity	16,590	-	-	Monthly with 60-day notice	10% redemption gate
High yield - fixed income	-	13,915	-	Quarterly with 120-day notice	None

(Continued)

Notes to Financial Statements - Continued

June 30, 2018 and 2017

NOTE B - INVESTMENTS - Continued

Description	Fair Value at June 30, 2018	Fair Value at June 30, 2017	Unfunded Commitment at June 30, 2018	Redemption Terms	Redemption Restrictions
International equity	\$ 20,934	\$ 16,285	\$ -	Semi-monthly with 20-day written notice	None
International equity	19,203	16,810	-	Monthly with 30-day written notice	None
International equity	18,917	17,420	-	Semi-monthly with 15-day notice	None
Multi-strategy	-	6,720	-	Quarterly with 60-day notice	25% quarterly with remainder on anniversary date
U.S. equity	29,935	25,909	-	Daily with 15-day notice	None
Private equity:					
Private equity	2,044	1,982	598	Ineligible	Seven years remaining of ten-year lock-up
Private equity	579	785	90	Ineligible	Termination approximately December 31, 2018
Private equity	3,276	3,673	300	Ineligible	Termination approximately first quarter of 2023
Private equity	2,085	756	6,108	Ineligible	Partnership life until January 2029, subject to 2 (1-year) extensions
Private equity	300	-	1,700	Ineligible	Partnership life until 2028, subject to 2 (1-year) extensions
Private equity	792	-	2,172	Ineligible	Partnership life until 2028, subject to 1-year extension
Private equity	1,044	-	3,952	Ineligible	Partnership life until 2028, subject to 15 (1-year) extensions
Private real assets	967	-	1,971	Ineligible	Partnership life until July 2025, subject to 2 (1-year) extensions
Venture capital	<u>133</u>	<u>167</u>	<u>-</u>	Ineligible	Partial withdrawals not permitted; termination approximately March 2019, unless partners vote to extend to 2023
Total	<u>\$ 219,463</u>	<u>\$ 168,000</u>	<u>\$ 16,891</u>		

Notes to Financial Statements - Continued

June 30, 2018 and 2017

NOTE C - ENDOWMENT AND FUNDS FUNCTIONING AS ENDOWMENT

Endowment and funds functioning as endowment related activity (including permanently restricted pledge amounts) during the years ended June 30, 2018 and 2017, are as follows (in thousands):

	2018			
	Unrestricted	Temporarily Restricted	Permanently Restricted	Total
Endowment net assets - beginning of year	\$ 117,995	\$ 48,713	\$ 106,131	\$ 272,839
Investment return:				
Investment income	653	815	29	1,497
Net realized and unrealized gains	9,180	11,621	50	20,851
Total investment return	9,833	12,436	79	22,348
Contributions	-	-	7,349	7,349
Appropriation of endowment assets for expenditure	(4,498)	(5,935)	-	(10,433)
Additional authorized amounts	16,106	-	-	16,106
Net assets released from restrictions	-	45	(45)	-
Change in endowment net assets	21,441	6,546	7,383	35,370
Endowment net assets - end of year	\$ 139,436	\$ 55,259	\$ 113,514	\$ 308,209
2017				
	Unrestricted	Temporarily Restricted	Permanently Restricted	Total
Endowment net assets - beginning of year	\$ 108,876	\$ 37,273	\$ 100,389	\$ 246,538
Investment return:				
Investment income	1,320	1,638	7	2,965
Net realized and unrealized gains	12,217	15,189	120	27,526
Total investment return	13,537	16,827	127	30,491
Contributions	-	476	5,765	6,241
Appropriation of endowment assets for expenditure	(5,225)	(6,013)	-	(11,238)
Additional authorized amounts	807	-	-	807
Net assets released from restrictions	-	150	(150)	-
Change in endowment net assets	9,119	11,440	5,742	26,301
Endowment net assets - end of year	\$ 117,995	\$ 48,713	\$ 106,131	\$ 272,839

(Continued)

Notes to Financial Statements - Continued

June 30, 2018 and 2017

NOTE C - ENDOWMENT AND FUNDS FUNCTIONING AS ENDOWMENT - Continued

The endowment and funds functioning as endowment net asset composition by type of fund at June 30, 2018 and 2017, is composed of the following (in thousands):

	2018			Total
	Unrestricted	Temporarily Restricted	Permanently Restricted	
Scholarship	\$ 39,726	\$ 26,773	\$ 56,389	\$ 122,888
Operational purposes	<u>99,710</u>	<u>28,486</u>	<u>56,866</u>	<u>185,062</u>
Total	<u>\$ 139,436</u>	<u>\$ 55,259</u>	<u>\$ 113,255</u>	<u>\$ 307,950</u>

	2017			Total
	Unrestricted	Temporarily Restricted	Permanently Restricted	
Scholarship	\$ 37,411	\$ 23,692	\$ 55,059	\$ 116,162
Operational purposes	<u>80,584</u>	<u>25,021</u>	<u>50,822</u>	<u>156,427</u>
Total	<u>\$ 117,995</u>	<u>\$ 48,713</u>	<u>\$ 105,881</u>	<u>\$ 272,589</u>

The University maintains a total return spending policy, which was 4.5% and 5.0% of the average fair market value of the previous sixteen quarters ending December 31, 2016 and 2015, for the years ended June 30, 2018 and 2017, respectively. The University has adopted PA Trust Law Act 141, which requires a release of between 2% and 7%. Separating spending policy from investment policy permits asset allocation decisions to be made independently of the need for current income. The University's investment policy has a primary objective to achieve annualized total return, through appreciation and income, equal to or greater than the rate of inflation plus any spending and administrative expenses. This allows the University to maintain purchasing power of the investment pool. The assets are managed in a manner that will meet the primary investment objective, while attempting to limit volatility in the portfolio's market value, thereby limiting volatility in the year-to-year spending. The policy allows for a range of asset classes, including global equity and debt securities, real assets and alternative investments. The University includes its interest in perpetual trusts in endowment and funds functioning as endowment. Changes in the value of the endowment and funds functioning as endowment are included in the nonoperating section of the statements of activities along with the changes in long-term working capital, value of annuities and permanently restricted loan funds.

The University is one of 15 designated institutions of higher learning and other charitable organizations named as beneficiaries of The Dietrich Foundation (the "Foundation") created by William S. Dietrich II pursuant to an Amended and Restated Declaration of Trust dated August 23, 2011. The Foundation came into existence as a Pennsylvania charitable trust on October 6, 2011 and was granted exemption from Federal income tax under Section 501(c)(3) of the Internal Revenue Code, specifically as a Type I charitable supporting organization under Section 509(a)(3). The Foundation's primary mission is to provide ongoing and increasing financial support to a number of educational institutions, largely in the greater Pittsburgh area, including the University. The Foundation is governed by a board of nine (9) trustees. Five (5) of the trustees are Educational Institutions Trustees.

(Continued)

Notes to Financial Statements - Continued

June 30, 2018 and 2017

NOTE C - ENDOWMENT AND FUNDS FUNCTIONING AS ENDOWMENT - Continued

The Foundation is expected to make annual distributions that will be allocated among the pre-specified supporting organizations, which are divided into two primary groups: (a) six (6) educational institutions, which collectively shall receive 90% of the annual distribution amount, and (b) nine (9) other charitable organizations or component funds of such charitable organizations, which collectively shall receive 10% of the annual distribution amount. The University is included in the 90% group. As of June 30, 2018, the University's distribution share was 2.5%.

The distributions to the University have been recorded as permanently restricted contributions revenue as received and held in a permanently restricted endowment fund designated by Dietrich Foundation Endowment Fund. The endowed fund will be managed in accordance with the University's generally applicable investment and disbursement policies in effect for its other permanently restricted endowments. Distributions made from the endowed fund will be used for the purpose authorized by the Foundation's trustees. Distributions of approximately \$597,000 and \$577,000 were received in fiscal years 2018 and 2017, respectively.

NOTE D - RECEIVABLES

Accounts receivable at June 30, 2018 and 2017, consist of the following (in thousands):

	2018	2017
Student accounts receivable - net of allowance for doubtful accounts of \$1,849 and \$1,755 in 2018 and 2017, respectively	\$ 6,387	\$ 5,590
Grants and contracts receivable	1,424	1,260
Other accounts receivable - net of allowance for doubtful accounts of \$2,170 and \$1,488 in 2018 and 2017, respectively	<u>1,521</u>	<u>1,602</u>
Net accounts receivable	<u>\$ 9,332</u>	<u>\$ 8,452</u>

After unsuccessful collection of past-due accounts by two collections agencies for a 33-month period, the University will write the balance off.

Pledges receivable at June 30, 2018 and 2017, are due as follows (in thousands):

	2018	2017
Less than one year	\$ 3,946	\$ 2,519
One to five years	6,889	4,589
More than five years	<u>7,556</u>	<u>1,513</u>
Total pledges receivable	18,391	8,621
Less present value adjustment	<u>(2,566)</u>	<u>(468)</u>
Present value of pledges receivable	15,825	8,153
Less allowance for doubtful pledges	<u>(847)</u>	<u>(605)</u>
Net pledges receivable	<u>\$ 14,978</u>	<u>\$ 7,548</u>

(Continued)

Notes to Financial Statements - Continued

June 30, 2018 and 2017

NOTE D - RECEIVABLES - Continued

Contributions receivable over more than one year are discounted using an appropriate discount rate ranging from 1.20% to 3.25% applicable to the year in which the pledge was received.

Fund-raising costs were \$5.2 million and \$4.2 million for the years ended June 30, 2018 and 2017, respectively.

Loans Receivable

The University makes uncollateralized loans to students based on financial need. Loans are funded through federal government loan programs or institutional resources. At June 30, 2018 and 2017, student loans represented 1.6% and 2.0% of total assets, respectively.

At June 30, 2018 and 2017, student loans consisted of the following (in thousands):

	<u>2018</u>	<u>2017</u>
Federal government programs	\$ 12,728	\$ 13,946
Institutional programs	<u>587</u>	<u>658</u>
	<u>13,315</u>	<u>14,604</u>
Less allowance for doubtful loans:		
Beginning of year	(1,126)	(1,062)
Decrease (increase)	<u>32</u>	<u>(64)</u>
End of year	<u>(1,094)</u>	<u>(1,126)</u>
Loans receivable - net	<u>\$ 12,221</u>	<u>\$ 13,478</u>

The University participates in the following federal revolving loan programs: Perkins, Nursing, Health Profession, and the Nurse Faculty Loan Programs. The availability of funds for loans under these programs is dependent on reimbursements to the pool from repayments on outstanding loans. Outstanding loans canceled under the programs result in a reduction of the funds available for loans and a decrease in the liability to the government.

The past-due principal amounts under the student loan programs at June 30, 2018 and 2017, are as follows (in thousands):

	<u>2018</u>	<u>2017</u>
1 - 60 days past due	\$ 251	\$ 57
60 - 90 days past due	136	2
90+ days past due	<u>1,617</u>	<u>1,199</u>
Total past due	<u>\$ 2,004</u>	<u>\$ 1,258</u>

Notes to Financial Statements - Continued

June 30, 2018 and 2017

NOTE E - PROPERTY, PLANT, AND EQUIPMENT

The University's investment in property, plant, and equipment at June 30, 2018 and 2017, consists of the following (in thousands):

	<u>2018</u>	<u>2017</u>
Land and land improvements	\$ 38,760	\$ 40,738
Building and building improvements	438,038	455,927
Furniture and equipment	84,266	81,999
Construction in progress	<u>7,412</u>	<u>6,303</u>
	568,476	584,967
Less accumulated depreciation	<u>(285,238)</u>	<u>(278,239)</u>
Property, plant, and equipment - net	<u>\$ 283,238</u>	<u>\$ 306,728</u>

Depreciation expense was \$23.2 million and \$23.3 million for the years ended June 30, 2018 and 2017, respectively.

In May of 2018, the University closed on the sale of Brottier Hall and entered into a strategic partnership with Radnor Property Group ("Radnor") and Harrison Street Real Estate Capital ("Harrison Street"), which will provide an enhanced, high-quality living experience for University students living in Brottier Hall. The sale of Brottier Hall resulted in the retirement of property, plant and equipment with a net book value of \$18.1 million, the settlement of an asset retirement obligation of \$1.2 million and the recognition of a gain on sale of \$5.6 million.

Substantially, all property, plant, and equipment are pledged under the University's debt agreements. The net book value of equipment under capital leases is \$0.2 million and \$0.1 million at June 30, 2018 and 2017, respectively.

The University leases automobiles and other equipment under noncancelable operating leases. Rental expense under such lease agreements was approximately \$0.4 million at both June 30, 2018 and 2017. Future minimum lease commitments for all noncancelable operating leases at June 30, 2018, are as follows (in thousands):

<u>Year ending June 30,</u>	
2019	\$ 383
2020	309
2021	<u>36</u>
Total	<u>\$ 728</u>

The University follows guidance on accounting for conditional asset retirement obligations, which states that a conditional asset retirement obligation must meet the definition of a liability, even though uncertainty may exist about the timing or method of settlement. Under the provisions of such guidance, the University is obligated to record a liability for conditional asset retirement obligations. The University performed an analysis of such obligations and determined that asbestos remediation costs represented the University's primary source of such liabilities. The University reviewed facilities on all campus locations and determined the timing, method, and cost of asbestos remediation using a variety of assumptions and estimates.

(Continued)

Notes to Financial Statements - Continued

June 30, 2018 and 2017

NOTE E - PROPERTY, PLANT, AND EQUIPMENT - Continued

The analysis included an estimated inflation factor and discount rate, which were used to determine the present value of the obligation. The reconciliation of the liability related to conditional asset retirement obligations at June 30, 2018 and 2017, is presented below (in thousands):

	<u>2018</u>	<u>2017</u>
Beginning liability balance	\$ 4,489	\$ 4,998
Liabilities settled	(230)	(592)
Accretion expense	281	312
Revisions in estimated cash flows	<u>(6)</u>	<u>(229)</u>
	45	(509)
Settlement of asset retirement obligation related to sale of property, plant and equipment	<u>(1,161)</u>	<u>-</u>
Ending liability balance	<u>\$ 3,373</u>	<u>\$ 4,489</u>

The discount rate used to determine the liability was 6.25% at both June 30, 2018 and 2017. The undiscounted liability, inclusive of inflation adjustments, was \$9.8 million and \$12.6 million at June 30, 2018 and 2017, respectively.

NOTE F - DEBT AND LEASE OBLIGATIONS

Long-term debt at June 30, 2018 and 2017, consists of the following bond issues and capitalized lease obligations (in thousands):

	<u>Rate</u>	<u>2018</u>	<u>2017</u>
University Revenue and Refunding Bonds:			
1998 Series Bonds due through 2020	4.25 - 5.50%	\$ 1,990	\$ 2,695
2001 Series A Bonds due through 2019	4.40 - 5.25	1,020	1,990
2008 Series Bonds due through 2033	4.00 - 5.00	-	1,275
2011 Series A Bonds due through 2031	3.00 - 5.50	10,410	11,070
2013 Series A Bonds due through 2034	2.50 - 5.00	30,680	32,815
2014 Series A Bonds due through 2033	2.00 - 5.00	32,425	34,110
2016 Series Bonds due through 2033	2.25 - 5.00	58,040	58,040
2018 Series Bonds due through 2034	5.00	<u>17,760</u>	<u>-</u>
		152,325	141,995
Capital lease obligations		<u>209</u>	<u>175</u>
Gross debt and capital lease obligations		152,534	142,170
Plus net unaccreted bond premium		15,600	15,740
Less deferred bond costs		<u>(825)</u>	<u>(730)</u>
Debt and capital lease obligations		167,309	157,180
Less debt service reserves and accounts		(1,728)	(1,728)
Less escrow deposits for 2001 Series A Bonds debt service		<u>(1,024)</u>	<u>(2,003)</u>
Net debt and capital lease obligations		<u>\$ 164,557</u>	<u>\$ 153,449</u>

(Continued)

Notes to Financial Statements - Continued

June 30, 2018 and 2017

NOTE F - DEBT AND LEASE OBLIGATIONS - Continued

Principal payments for the year ended June 30, 2018, are as follows (in thousands):

<u>Year ending June 30,</u>	
2019	\$ 7,866
2020	7,066
2021	7,403
2022	7,804
2023	8,180
Thereafter	<u>114,215</u>
Total	<u>\$ 152,534</u>

University Revenue and Refunding Bonds ("1998 Series") - In March 1998, the Allegheny County Higher Education Building Authority (the "Authority") issued \$18.6 million of revenue refunding bonds to provide for the advance refunding of the remaining principal amount outstanding of the University's Revenue Bonds 1991 Series B, 1991 Series C, and the 1992 Series and to provide for bond issuance costs. These bonds are insured by Ambac.

The bonds mature annually in principal amounts ranging from \$0.7 million to \$0.9 million beginning in fiscal year 1999 and ended in fiscal year 2011, with original payments of \$1.9 million, \$3.4 million, and \$3.3 million in fiscal 2013, 2016, and 2020, respectively. The fiscal 2013, 2016, and 2020 maturities are subject to mandatory debt service payments beginning in fiscal year 2012 and ending in fiscal year 2020 in amounts ranging from \$0.6 million to \$1.3 million.

Approximately \$0.4 million of costs related to the issuance of these bonds has been deferred and is being amortized over the life of the bonds. In addition, approximately \$0.3 million of the original issue premium is being accreted over the life of the bonds. All debt issuance costs are recorded in debt and lease obligations on the statement of financial position.

In connection with the issuance of these bonds, the University has agreed to certain covenants with which it must comply. The covenants provide that (1) the University cannot incur additional debt in excess of 2% of unrestricted gross revenues, unless the maximum annual debt service requirements on all outstanding long-term debt and the long-term debt to be incurred does not exceed 12% of the unrestricted gross revenues, and (2) the debt service coverage ratio on additional long-term debt is not less than 1.15 for the preceding fiscal year. Additionally, these bond covenants provide that the University cannot incur additional long-term debt in any amount, unless (1) the sum of the total debt service payments made during the preceding fiscal year and the maximum annual debt service requirements on the new long-term debt is less than 10% of the University's unrestricted operating revenues for the preceding fiscal year, and (2) the balance of the University's endowment is greater than 50% of all outstanding and proposed long-term debt.

University Revenue Bonds ("Series A of 2001") - In January 2001, the Authority issued \$12.1 million of revenue refunding bonds to provide for the current refunding of the remaining principal amount outstanding of the University's Revenue Bonds, 1991 Series A and provide for bond issuance costs. These bonds are insured by Ambac.

(Continued)

Notes to Financial Statements - Continued

June 30, 2018 and 2017

NOTE F - DEBT AND LEASE OBLIGATIONS - Continued

The bonds mature annually in principal amounts ranging from \$0.3 million to \$1.0 million beginning in fiscal year 2003 and ending in fiscal year 2019.

Approximately \$0.3 million of costs related to the issuance of these bonds has been deferred and is being amortized over the life of the bonds. In addition, approximately \$0.1 million of original issue discount is being amortized over the life of the bonds. All debt issuance costs are recorded in debt and lease obligations on the statement of financial position.

In March 2004, the Authority issued \$7.3 million of Taxable University Refunding Bonds to be used together with other funds of the University to provide for the advance refunding of the University Revenue Refunding Bonds Series A of 2001 (the "Refunded Bonds"). These bonds (2004) were redeemed in the fiscal year ended June 30, 2008. As of June 30, 2005, the covenants related to the Refunded Bonds are no longer applicable under the provisions of the prior indenture for the Refunded Bonds.

Under guidance for accounting for transfers and servicing of financial assets and extinguishments of liabilities, the funds held in escrow for the refunding of these Series A of 2001 bonds have been presented separately as an asset in the statements of financial position, rather than net against debt obligations. At June 30, 2018 and 2017, the amounts held in escrow were \$1.0 million and \$2.0 million, respectively.

University Revenue Bonds ("Series of 2008") - In June 2008, the Authority issued \$30.5 million of University Revenue Bonds to provide for a portion of (a) the costs of various capital projects in the University's capital budget for the fiscal years ended June 30, 2008 and 2009; (b) the refunding of the Authority's outstanding University Refunding Revenue Bonds, Series of 2003, University Revenue Bonds, Series C of 2005, and University Revenue Bonds, Series B of 2007; and (c) to provide for bond issuance costs.

These bonds mature annually in principal amounts ranging from \$1.1 million to \$4.1 million beginning in fiscal 2009 and ending in fiscal 2033.

Approximately \$0.1 million of costs related to the issuance of these bonds has been deferred and is being amortized over the life of the bonds. In addition, approximately \$0.2 million of original issue premium is being accreted over the life of the bonds. All debt issuance costs are recorded in debt and lease obligations on the statement of financial position.

In connection with the issuance of these bonds, the University has agreed to certain covenants with which it must comply. The covenants provide that the University cannot incur additional long-term debt in any amount, unless (1) debt service requirements on all long-term debt during the fiscal year, plus the maximum annual debt service requirements on the proposed additional long-term debt is less than 10% of the University's unrestricted operating revenues during the previous fiscal year, and (2) the University's expendable resources are greater than 50% of all outstanding and proposed long-term debt; however, that such test shall not be required to be met if the additional long-term debt is being incurred to refund existing long-term debt and the maximum annual debt service requirements on the proposed long-term debt are less than or equal to the maximum annual debt service requirements on the existing long-term debt. In May 2016, the outstanding bonds were partially defeased in connection with the Series of 2016 bonds described below.

The University Revenue Bonds Series of 2008 were retired on March 1, 2018.

(Continued)

NOTE F - DEBT AND LEASE OBLIGATIONS - Continued

University Revenue Bonds ("Series A of 2011") - In February 2011, the Authority issued \$53.5 million of revenue bonds to provide for a portion of (a) constructing, equipping, and furnishing an approximately 400-bed student housing facility on the University's main campus; (b) projects comprising the first phase of the University's 10-year housing renewal plan, including the renovation and improvement of the Duquesne Towers student housing facility; (c) miscellaneous capital expenditures now being incurred and expected to be incurred at the University's main campus over the next two years; (d) funding any interest during construction; and (e) to provide for bond issuance costs.

These bonds mature annually in principal amounts ranging from \$15,000 to \$14.5 million beginning in fiscal 2013 and ending in fiscal 2031.

Approximately \$0.2 million of costs related to the issuance of these bonds has been deferred and is being amortized over the life of the bonds. In addition, approximately \$0.5 million of original issue discount is being amortized over the life of the bonds. All debt issuance costs are recorded in debt and lease obligations on the statement of financial position.

These bonds carry substantially the same covenants as the Series of 2008 bonds. In May 2016, the outstanding bonds were partially defeased in connection with the Series of 2016 bonds described below.

University Revenue Bonds ("Series A of 2013") - In March 2013, the Authority issued \$39.4 million of revenue bonds to provide for a portion of (a) renovations to the University's Duquesne Towers, St. Ann's Hall, and Libermann Hall; (b) other miscellaneous capital expenditures from the University's capital program; (c) the advance refunding of the Authority's outstanding University Revenue Bonds Series A of 2004; and (d) to provide for bond issuance costs.

These bonds mature annually in principal ranging from \$0.6 million to \$2.5 million beginning in fiscal 2014 and ending in fiscal 2034.

Approximately \$0.2 million of costs related to the issuance of these bonds has been deferred and is being amortized over the life of the bonds. In addition, approximately \$3.5 million of original issue premium is being amortized over the life of the bonds. All debt issuance costs are recorded in debt and lease obligations on the statement of financial position.

These bonds carry substantially the same covenants as the Series of 2008 bonds.

University Revenue Bonds ("Series A of 2014") - In December 2014, the Authority issued \$39.2 million of revenue bonds to provide for a portion of (a) the advance refunding of the Authority's outstanding University Revenue Bonds Series A of 2005; (b) the advance refunding of the Authority's outstanding University Revenue Bonds Series B of 2005; (c) the advance refunding of the Authority's outstanding Revenue Bonds Series A of 2007; and (d) to provide for bond issuance costs.

These bonds mature annually in principal ranging from \$1.0 million to \$3.8 million beginning in fiscal 2015 and ending in fiscal 2033.

(Continued)

Notes to Financial Statements - Continued

June 30, 2018 and 2017

NOTE F - DEBT AND LEASE OBLIGATIONS - Continued

Approximately \$0.3 million of costs related to the issuance of these bonds has been deferred and is being amortized over the life of the bonds. In addition, approximately \$4.5 million of original issue premium is being amortized over the life of the bonds. All debt issuance costs are recorded in debt and lease obligations on the statement of financial position.

These bonds carry substantially the same covenants as the Series of 2008 bonds.

University Revenue Bonds ("Series of 2016") - In May 2016, the Authority issued \$58.0 million of revenue bonds to provide for a portion of (a) the advance refunding of the Authority's outstanding University Revenue Bonds Series of 2008; (b) the advance refunding of the Authority's outstanding University Revenue Bonds Series A of 2011; and (c) to provide for bond issuance costs.

These bonds mature annually in principal ranging from \$0.1 million to \$7.8 million beginning in fiscal 2019 and ending in fiscal 2033.

Approximately \$0.3 million of costs related to the issuance of these bonds has been deferred and is being amortized over the life of the bonds. In addition, approximately \$9.8 million of original issue premium is being amortized over the life of the bonds. All debt issuance costs are recorded in debt and lease obligations on the statement of financial position.

These bonds carry substantially the same covenants as the Series of 2008 bonds.

University Revenue Bonds ("Series of 2018") - In May 2018, the Authority issued \$17.8 million of revenue bonds to provide for a portion of (a) upgrades and replacements to various mechanical systems, including HVAC, elevators, electrical switchgear, pneumatic controls, fan coil units, fire protection and sprinkler systems in the Koren Building, Fisher Hall, School of Law, College Hall, Richard King Mellon Hall of Science, Rockwell Hall, Libermann Hall, Gumberg Library, Administration Building and St. Ann Hall; (b) renovations to Rockwell Hall, Assumption Hall, St. Ann Hall, Richard King Mellon Hall of Science office and the Des Places Living Learning Centers; (c) roof replacements to Duquesne Union and Trinity Hall; (d) other miscellaneous capital expenditures on the main campus of the University; (e) funding capital interest; (f) funding of any necessary reserves; and (g) to provide for bond issuance costs.

These bonds mature annually in principal ranging from \$3.6 million to \$10.0 million beginning in fiscal 2032 and ending in fiscal 2034.

Approximately \$0.2 million of costs related to the issuance of these bonds has been deferred and is being amortized over the life of the bonds. In addition, approximately \$2.5 million of original issue premium is being amortized over the life of the bonds. All debt issuance costs are recorded in debt and lease obligations on the statement of financial position.

In connection with the issuance of these bonds, the University has agreed to certain covenants with which it must comply. The covenants provide that the University cannot incur additional long-term debt in any amount, unless (1) debt service requirements on all long-term debt during the fiscal year, plus the maximum annual debt service requirements on the proposed additional long-term debt, is less than 12% of the University's unrestricted operating revenues during the previous fiscal year, and (2) the University's expendable resources are greater than 50% of all outstanding and proposed long-term debt; however, that such test shall not be required to be met if the additional long-term debt is being incurred to refund existing long-term debt.

Notes to Financial Statements - Continued

June 30, 2018 and 2017

NOTE G - RETIREMENT PLANS AND OTHER POSTRETIREMENT BENEFIT OBLIGATION

The University participates in single-employer contributory retirement plans, which provide for the purchase of annuities and various mutual funds for academic, administrative, salaried, and other hourly employees. The employee is responsible for a 5% pretax contribution, while the University contributes 8% on behalf of the employee. The University also participates in a multi-employer noncontributory retirement plan for certain union employees, which is funded at the rate of 87 cents per hour worked up to a maximum of 40 hours per week. The University annually funds the retirement costs under both plans, which amounted to \$8.4 million and \$8.1 million for the years ended June 30, 2018 and 2017, respectively.

The University provides certain health care benefits to certain retired employees. These postretirement benefits are unfunded and generally are based on employees' years of service and compensation levels. The University is required to make an accrual of the expected costs of these benefits over the period in which the employees render the service.

Net periodic benefit costs for the years ended June 30, 2018 and 2017, include the following components (in thousands):

	<u>2018</u>	<u>2017</u>
Service cost for fiscal year	\$ 198	\$ 209
Interest cost for fiscal year	297	288
Census and claims gain during fiscal year	(244)	(264)
Gain due to assumption changes	(474)	(424)
Change in liability due to plan experience	<u>160</u>	<u>156</u>
Net periodic costs	<u>\$ (63)</u>	<u>\$ (35)</u>
Actual postretirement benefit payments (funded on a pay-as-you-go basis)	<u>\$ 308</u>	<u>\$ 299</u>

Using a measurement date of June 30, the following assumptions at June 30, 2018 and 2017, were used to determine the periodic benefit costs:

	<u>2018</u>	<u>2017</u>
Discount rate	4.10%	3.70%
Health care trend rate (post-65)	6.00%	7.00%
Long-term trend rate	4.50%	4.50%
Terminal trend year	2025	2025

A one-percentage-point increase in the assumed medical cost trend rates for each future year increases annual postretirement benefit expense by \$500 and the accumulated postretirement benefit obligation by \$16,000. A one-percentage-point decrease in the assumed medical cost trend rates for each future year decreases annual postretirement benefit expense by \$500 and the accumulated postretirement benefit obligation by \$16,000.

(Continued)

Notes to Financial Statements - Continued

June 30, 2018 and 2017

NOTE G - RETIREMENT PLANS AND OTHER POSTRETIREMENT BENEFIT OBLIGATION - Continued

For the years ended June 30, 2018 and 2017, the following is a reconciliation of beginning and ending balances of the benefit obligation (in thousands):

	<u>2018</u>	<u>2017</u>
Accumulated postretirement benefit obligation - beginning of year	\$ 8,341	\$ 8,675
Service cost for fiscal year	198	209
Interest cost for fiscal year	297	288
Benefit payments for fiscal year	<u>(308)</u>	<u>(299)</u>
Expected accumulated postretirement benefit obligation - end of year	8,528	8,873
Census and claims gain during fiscal year	(244)	(264)
Gain due to assumption changes	(474)	(424)
Change in liability due to plan experience	<u>160</u>	<u>156</u>
Actual accumulated postretirement benefit obligation - end of year	\$ <u>7,970</u>	\$ <u>8,341</u>

Using a measurement date of June 30, the following assumptions at June 30, 2018 and 2017, were used to determine the end-of-year benefit obligation:

	<u>2018</u>	<u>2017</u>
Discount rate	4.10%	3.70%
Health care trend rate	6.00%	7.00%
Long-term trend rate	4.50%	4.50%
Terminal trend year	2025	2025

Expected benefits to be paid in future years are as follows (in thousands):

<u>Year ending June 30,</u>	
2019	\$ 512
2020	515
2021	482
2022	467
2023	471
2024 - 2027	<u>2,419</u>
Total	\$ <u>4,866</u>

Notes to Financial Statements - Continued

June 30, 2018 and 2017

NOTE H - UNRESTRICTED NET ASSETS

Unrestricted net assets at June 30, 2018 and 2017, consist of the following (in thousands):

	<u>2018</u>	<u>2017</u>
Board-designated funds (quasi-endowment)	\$ 139,526	\$ 118,043
Undesignated funds	<u>163,906</u>	<u>166,374</u>
Total unrestricted net assets	<u>\$ 303,432</u>	<u>\$ 284,417</u>

NOTE I - TEMPORARILY RESTRICTED NET ASSETS

Temporarily restricted net assets at June 30, 2018 and 2017, consist of the following (in thousands):

	<u>2018</u>	<u>2017</u>
Endowment gains	\$ <u>55,259</u>	\$ <u>48,713</u>
Restricted gifts and pledges:		
Operational purposes	11,026	8,579
Capital projects	10,660	3,824
Scholarships	<u>1,024</u>	<u>837</u>
Total restricted gifts and pledges	<u>22,710</u>	<u>13,240</u>
Restricted private grants and contracts	<u>18</u>	<u>15</u>
Total temporarily restricted net assets	<u>\$ 77,987</u>	<u>\$ 61,968</u>

Notes to Financial Statements - Continued

June 30, 2018 and 2017

NOTE J - PERMANENTLY RESTRICTED NET ASSETS

Permanently restricted net assets at June 30, 2018 and 2017, consist of the following (in thousands):

	<u>2018</u>	<u>2017</u>
Endowment and funds functioning as endowment	\$ 110,790	\$ 103,519
Pledges	<u>2,465</u>	<u>2,362</u>
	113,255	105,881
Annuity investments	<u>259</u>	<u>250</u>
	113,514	106,131
Loan funds	<u>1,468</u>	<u>1,446</u>
Total permanently restricted net assets	<u>\$ 114,982</u>	<u>\$ 107,577</u>

NOTE K - CONTINGENCIES

The University is a defendant in certain legal proceedings arising out of the normal conduct of its business. In the opinion of management, based upon discussion with counsel, the ultimate outcome of these matters will not have a material adverse effect on the financial position or activities of the University.

Under the terms of federal grants, periodic audits are required and certain costs may be questioned as not being appropriate expenditures under the terms of the grants. Such audits could lead to reimbursement to the grantor agencies. The University's management believes disallowances, if any, will not have a material effect on the University's financial position.

NOTE L - SUBSEQUENT EVENTS

The University has evaluated subsequent events through October 9, 2018, the date the financial statements were issued. The University is not aware of any subsequent events that require recognition or disclosure in the financial statements.

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APPENDIX C

FORM OF OPINION OF CO-BOND COUNSEL

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March __, 2019

RE: \$18,690,000 Pennsylvania Higher Educational Facilities Authority University Revenue Bonds, Series A of 2019 (Duquesne University); and

\$10,000,000 Pennsylvania Higher Educational Facilities Authority University Revenue Bonds, Series B of 2019 (Duquesne University) (Federally Taxable)

TO THE PURCHASERS OF THE ABOVE-REFERENCED BONDS

We have acted as co-bond counsel in connection with the issuance and sale by the Pennsylvania Higher Educational Facilities Authority (the "**Authority**") of \$18,690,000 principal amount of its University Revenue Bonds, Series A of 2019 (Duquesne University) (the "**2019A Bonds**") and of its \$10,000,000 principal amount of its University Revenue Bonds, Series B of 2019 (Duquesne University) (Federally Taxable) (the "**2019B Bonds**") and, together with the 2019A Bonds, the "**Bonds**"), pursuant to the Trust Indenture dated as of March 1, 2019 (the "**Indenture**") between the Authority and The Bank of New York Mellon Trust Company, N.A., as Trustee (the "**Trustee**").

We have examined (a) an executed copy of the Indenture, (b) an executed copy of the Loan Agreement dated as of March 1, 2019 (the "**Loan Agreement**") between the Authority and the Duquesne University of the Holy Spirit (the "**University**"), pursuant to which the University unconditionally agrees to pay the principal of, and interest on, the Bonds when and as the same shall become due, subject to the terms and conditions of the Loan Agreement and the Indenture, (c) the form of 2019A Bond, (d) the form of 2019B Bond and (e) such constitutional and statutory provisions and such other resolutions, certificates, instruments and documents as we have deemed necessary or appropriate in order to enable us to render an informed opinion as to matters set forth herein.

In rendering this opinion, we have assumed the genuineness of all signatures on all documents and certificates that we examined, the legal capacity and authority of all persons executing such documents, the authenticity of all documents submitted to us as originals and the conformity to originals of all documents submitted to us as copies and the authenticity of the originals of said copies. As to questions of fact material to our opinion, we have relied upon the representations of the Authority and the University contained in the Indenture and the Loan Agreement and in certified proceedings and other certifications of public officials and others furnished to us without undertaking to verify the same by independent investigation.

Based upon the foregoing, it is our opinion, under existing law and as of the date hereof, that:

1. The Authority is a body corporate and politic organized and existing under the Pennsylvania Higher Educational Facilities Authority Act, approved December 6, 1967, P.L. 678, No. 318, as amended (the "**Act**"), and has the power to enter into the transactions contemplated by the Indenture and the Loan Agreement and to carry out its obligations thereunder.

2. The Indenture and the Loan Agreement have been duly authorized, executed and delivered by the Authority and constitute the valid and binding obligations of the Authority enforceable against it in accordance with their respective terms.

TO THE PURCHASERS OF THE ABOVE-REFERENCED BONDS

March __, 2019

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3. The Bonds have been duly authorized, executed, issued and delivered by the Authority and constitute the valid and binding limited obligations of the Authority enforceable against it in accordance with their terms, payable from the sources provided therefor in the Indenture.

4. All right, title and interest of the Authority in and to the installment payments due under the Loan Agreement have been duly assigned to the Trustee (except for the fees and expenses payable to the Authority and the Authority's right to indemnification).

5. The Bonds are exempt from personal property taxes in Pennsylvania and the interest on the Bonds is exempt from Pennsylvania personal income tax and Pennsylvania corporate net income tax.

6. The interest on the 2019A Bonds is excluded from the gross income of the holders of the Bonds for federal income tax purposes and is not an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals and corporations. For the purpose of rendering the opinion set forth in this paragraph, we have assumed compliance by the Authority and the University with requirements of the Internal Revenue Code of 1986, as amended (the "*Code*"), that must be satisfied subsequent to the issuance of the 2019A Bonds in order that interest thereon be, or continue to be, excluded from gross income for federal income tax purposes. The Authority and the University have covenanted to comply with such requirements. Failure to comply with certain of such requirements may cause the interest on the 2019A Bonds to be included in gross income for federal income tax purposes retroactive to the date of issuance of the 2019A Bonds. We express no opinion regarding other federal tax consequences arising with respect to the 2019A Bonds.

It is to be understood that the rights of the owners of the Bonds and the enforceability of the Bonds, the Loan Agreement and the Indenture may be subject to bankruptcy, insolvency, reorganization, moratorium and other similar laws heretofore or hereafter enacted affecting creditors' rights generally to the extent constitutionally applicable and by the application of general equitable principles and the exercise of judicial discretion in appropriate cases (whether such enforcement is sought in proceedings in equity or at law).

The opinions set forth above are rendered on the basis of, and limited to, federal law and the laws of the Commonwealth of Pennsylvania as enacted and construed on the date hereof. We express no opinion herein as to any matter not set forth in the numbered paragraphs above. In particular, we assume no responsibility for, and express no opinion herein with respect to, the accuracy, adequacy or completeness of the Official Statement prepared in respect of the Bonds, including the appendices thereto, and we make no representation that we have independently verified any such information. A separate opinion, dated the date hereof, has been delivered to other parties with respect to certain aspects of the Official Statement.

We are members of the Bar of the Commonwealth of Pennsylvania and do not purport to be expert as to the laws of any jurisdiction other than Pennsylvania and the United States of America. The opinions expressed herein are therefore limited to the laws of Pennsylvania (excluding conflict of laws rules) and the United States of America, all as in effect on the date hereof, and no opinion is expressed with regard to the laws of any other jurisdiction.

TO THE PURCHASERS OF THE ABOVE-REFERENCED BONDS

March __, 2019

Page 3

The opinions set forth above are given solely for your benefit and may not be relied on by any other person or entity without our express prior written consent. The opinions set forth above are given solely as of the date hereof, and we do not undertake to update 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,

COHEN & GRIGSBY, P.C. TURNER LAW, P.C.

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APPENDIX D

SUMMARY OF THE INDENTURE, LOAN AGREEMENT AND INTERCREDITOR AGREEMENT

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SUMMARY OF THE INDENTURE, LOAN AGREEMENT AND INTERCREDITOR AGREEMENT

The following are summaries of certain provisions of the Loan Agreement, the Indenture and the Intercreditor Agreement. The summaries should not be regarded as full statements of the documents themselves or of the portions summarized. For complete statements of the provisions thereof, reference is made to the documents in their entireties, copies of which will be available for inspection at the designated corporate trust office of the Trustee.

DEFINITIONS OF CERTAIN TERMS

The following definitions apply to the summaries of the Indenture, the Loan Agreement and the Intercreditor Agreement, and to terms not otherwise defined in the Official Statement. Terms used but not defined herein may be found in the Official Statement, the Indenture, the Loan Agreement or the Intercreditor Agreement. All accounting terms and definitions shall be deemed to include any equivalent term or definition used by the University in the future if the University's accounting presentation changes materially in the future.

"2019A Bonds" means the Authority's University Revenue Bonds, Series A of 2019 (Duquesne University) issued in an aggregate principal amount of \$18,690,000 pursuant to this Indenture.

"2019B Bonds" means the Authority's University Revenue Bonds, Series B of 2019 (Duquesne University) (Federally Taxable) issued in an aggregate principal amount of \$10,000,000 pursuant to this Indenture.

"Act" means an Act of the General Assembly of the Commonwealth approved December 6, 1967, P.L. 678, No. 318, as amended, known as the Pennsylvania Higher Educational Facilities Authority Act, as amended and supplemented, and all acts supplemental thereto or amendatory thereof.

"Additional Payments" means those payments required to be made by the University pursuant to the Loan Agreement as described under the heading "SUMMARY OF THE LOAN AGREEMENT".

"Affiliate" means any Person directly or indirectly controlling, controlled by or under common control with the University. For purposes of this definition the term "control" shall mean the direct or indirect ability to determine the direction of management and policies through ownership, contract or otherwise.

"Authority" means the Pennsylvania Higher Educational Facilities Authority created by the Act, and its successors.

"Authority Board" shall mean at any given time the governing body of the Authority.

"Authority Fees" means the fees payable by the University to the Authority pursuant to the Loan Agreement.

"Authorized Denominations" means \$5,000 and any integral multiple thereof.

"Authorized Officer" means (a) with respect to the University, the President or any Vice President of the University, (b) with respect to the Authority, the President, Executive Director, Acting Executive Director, Secretary, Assistant Secretary or Treasurer of the Authority or (c) any other officer authorized in writing by the University or the Authority to perform the act in question.

"Bonds" means the 2019A Bonds and the 2019B Bonds.

"Bond Counsel" means any nationally recognized municipal bond counsel acceptable to the Authority and not unsatisfactory to the Trustee.

"Bond Documents" means the Indenture, the Bonds, the Loan Agreement, the Tax Agreement, the Purchase Contract, the Intercreditor Agreement and any and all future renewals and extensions or restatements of, or amendments or supplements to, any of the foregoing.

"Bond Fund" means the Fund by that name created by the Indenture.

"Bond Register" means the registration books of the Authority kept by the Trustee (in its capacity as Registrar) to evidence the registration and transfer of Bonds.

"Bondholder," "Holder," "Owner" or "Registered Owner" means the Person in whose name a Bond is registered on the Bond Register.

"Business Day" means a day which is not a Saturday, Sunday or legal holiday on which banking institutions in the Commonwealth, the State of New York or the state in which the Designated Office of the Trustee are authorized or required by law to close for a reason not related to financial condition.

"Capitalization" means the principal amount of all Long-Term Debt outstanding plus the unrestricted and temporarily restricted cash and investments of the University determined in accordance with GAAP.

"Certified Public Accountant" or "Accountant" means any firm of certified public accountants (not an individual) who shall be Independent, appointed by the University or the Authority, as the case may be, actively engaged in the business of public accounting, and duly certified as a certified public accountant under the laws of the Commonwealth.

"Clearing Fund" means the Fund by that name created by the Indenture.

"Closing Date" means the date of initial authentication and delivery of the Bonds.

"Code" means the Internal Revenue Code of 1986, as amended from time to time. Each reference to a section of the Code herein shall be deemed to include the United States Treasury Regulations, including temporary and proposed regulations relating to such section, which are applicable to the Bonds or the use of the proceeds thereof.

"Commitment Debt" means the obligation of the University to repay amounts disbursed pursuant to a Credit Facility to pay when due the University's obligations with respect to Indebtedness.

"Commonwealth" means the Commonwealth of Pennsylvania.

"Completion Debt" means Long-Term Debt incurred to finance costs associated with a capital project that was financed through the issuance of other Long-Term Debt.

"Credit Facility" means any letter of credit, line of credit, insurance policy, guaranty or other agreement constituting a credit enhancement or liquidity facility which is issued by a bank, trust company, savings and loan association or other institutional lender, insurance company, financial institution or surety company.

"Debt Service Requirements" means, with respect to any period, the amounts required in said period to pay, or to be set aside for the payment of, the principal of, or interest on, or scheduled sinking fund deposits with respect to, all outstanding Long-Term Debt of the University. For the purpose of calculating Debt Service Requirements, the following provisions shall apply:

- (a) For the purpose of ascertaining aggregate Debt Service Requirements, interest shall be computed to mandatory redemption dates to the extent that Long-Term Debt is required to be redeemed by mandatory redemption provisions, otherwise interest shall be computed to stated maturity dates.
- (b) For the purpose of computing Debt Service Requirements on any Long-Term Debt for the final twelve-month period prior to the final maturity date for such Long-Term Debt, the amount of such Debt Service Requirements shall be reduced by an amount equal to the amount (if any) then on deposit in the debt service reserve fund (if any) for such Long-Term Debt.

(c) To the extent any Long-Term Debt under consideration bears interest at a variable rate, the Debt Service Requirements for such Long-Term Debt shall be calculated assuming that such Long-Term Debt shall be payable in equal annual installments of principal and interest over a term equal to the lesser of twenty (20) years or the stated term of such Long-Term Debt and assuming an interest rate equal to the average rate during the twelve months immediately preceeding such calculation of the Securities Industry and Financial Markets Association Municipal Swap Index ("SIFMA") then in effect (or, if such index is no longer published, a comparable index selected by the University); provided, however, that for purposes of any rate covenant measuring actual debt service coverage during a period under consideration, Long-Term Debt bearing interest at a variable rate shall be deemed to bear interest at the actual average rate per annum applicable during such period.

(d) To the extent any Long-Term Debt under consideration provides that 25% or more of the principal thereof, after giving effect to mandatory prepayment or redemption, is due in a single year or may, at the option of the holder or registered owner thereof, be redeemed or repurchased at one time (and cannot be remarketed), the University shall have the option of (1) considering such Long-Term Debt to be payable on the specified due date or due dates thereof or (2) assuming that such Long-Term Debt shall be payable in equal annual installments of principal and interest over a term equal to the lesser of twenty (20) years or the stated term of such Long-Term Debt and at an interest rate equal to *The Bond Buyer 25 Year Revenue Bond Index* (or, if such index is no longer published, a comparable index selected by the University) or, in the case of Long-Term Debt bearing interest at a variable rate, at the interest rate established pursuant to the paragraph (c) above. The assumed term of the Long-Term Debt set forth in (2) above shall continue to be used during the year of mandatory prepayment or maturity if the Trustee is provided evidence to its reasonable satisfaction that sufficient funds will be available to pay the amount subject to mandatory prepayment or maturity when the same is due.

(e) To the extent any Long-Term Debt under consideration represents Commitment Debt, the amount of such Commitment Debt shall not be included so long as the Indebtedness underlying such Commitment Debt is included within Long-Term Debt.

(f) Long-Term Debt which is payable from funds available under an Escrow Deposit (other than amounts so payable solely by reason of the obligor's failure to make payments from other sources) or funded from the proceeds of such Long-Term Debt (i.e., accrued and capitalized interest) shall be excluded from the determination of Debt Service Requirements.

(g) Any amounts payable on Interim Debt shall be calculated assuming that such Interim Debt shall be payable in equal annual installments of principal and interest over a term equal to twenty-five (25) years and assuming an interest rate equal to the interest rate described in clause (c) above; provided that to the extent the outstanding amount of Interim Debt will exceed 30% of Unrestricted Operating Revenues of the University, Debt Service Requirements on such Interim Debt shall instead be calculated based on actual debt service on such Interim Debt (including, in the case of Interim Debt that is payable upon demand and is not subject to remarketing, tender of all such Interim Debt at the earliest possible time) unless the University provides (1) a Permanent Loan Commitment or Credit Facility to pay such Interim Debt at maturity or (2) a certificate from an investment banking firm or other financial institution not unsatisfactory to the Trustee stating that Long-Term Debt of a term at least equal to twenty-five (25) years could be incurred in lieu of such Interim Indebtedness based upon the then current financial condition of the University.

(h) The annual Debt Service Requirements on any Guaranty shall be deemed to be equal to (i) twenty-five percent (25%) of the highest annual principal and interest payments which would be payable on the Indebtedness being guaranteed if the debt so guaranteed has been issued by a Person which had revenue, less operating expenses, equal to at least 150% of the annual debt service of its long-term indebtedness in its most recent fiscal year or (ii) fifty percent (50%) of the highest annual principal and interest payments which would be payable on the Indebtedness being guaranteed (the "Guaranteed Debt") for the current or any succeeding Fiscal Year during the remaining term of such Indebtedness if such Indebtedness were Indebtedness of the University;

provided that if the University has made a payment on the Guaranteed Debt during the current Fiscal Year or either of the two immediately preceding Fiscal Years, the annual Debt Service Requirements on the Guaranty shall be deemed to be equal to 100% of the highest annual principal and interest payments which would be payable on the Guaranteed Debt for such Fiscal Year.

"Defaulted Interest" means interest on any Bond which is payable but not paid on the date due.

"Designated Office" means when used with respect to the Trustee, the designated corporate trust office of the Trustee or its Affiliate performing the specified functions.

"Escrow Deposit" means a segregated escrow fund or other similar fund, account or deposit in trust of cash in an amount (or Government Obligations the principal of and interest on which will be in an amount), and under terms, sufficient to pay all or a portion of the principal of, premium, if any and interest on specified Indebtedness as the same shall become due or payable upon redemption.

"Event of Default" means (a) with respect to the Indenture, any "Event of Default" as defined below under "SUMMARY OF THE INDENTURE – Events of Default", and (b) with respect to the Loan Agreement, any "Event of Default" as defined in below under "SUMMARY OF THE LOAN AGREEMENT – Events of Default".

"Expendable Resources" shall mean unrestricted and temporarily restricted net assets of the University, less Net Investment in Plant, determined in accordance with GAAP.

"Favorable Opinion of Bond Counsel" means an opinion of Bond Counsel, addressed to the Authority and the Trustee, to the effect that the action proposed to be taken is authorized or permitted by the Indenture and will not adversely affect the exclusion of interest on the Bonds from gross income for purposes of federal income taxation under Section 103 of the Code.

"Fiscal Year" means the fiscal year of the University, currently the 12-month period beginning on July 1 of each calendar year and ending on June 30 of the following calendar year.

"GAAP" means those accounting principles applicable in the preparation of financial statements of institutions of higher learning, as promulgated by the Financial Accounting Standards Board or such other body recognized as authoritative by the American Institute of Certified Public Accountants or any successor body.

"Government Obligations" means bonds, notes, certificates of indebtedness, treasury bills or other securities constituting direct obligations of, or obligations the principal of and interest on which are fully and unconditionally guaranteed as to full and timely payment by, the United States of America, including evidences of a direct ownership interest in future interest or principal payments on obligations issued or guaranteed by the United States of America, or securities which represent an undivided interest in such obligations, which obligations are rated in the highest rating category by each Rating Agency, and such obligations are held in a custody account by a custodian satisfactory to the Trustee.

"Guaranty" shall mean any obligation of the University guaranteeing in any manner any obligation of any other entity, which obligation would constitute Indebtedness under the definition set forth in the Loan Agreement.

"Indebtedness" means, without duplication,

- (a) all obligations for borrowed moneys;
- (b) all leases of real or personal property which are properly capitalized on the balance sheet of the University in accordance with GAAP; and
- (c) all Guaranties;

provided, however, that Indebtedness shall not include any Subordinated Debt or any Non-Recourse Debt.

"Indenture" shall mean the Trust Indenture dated as of March 1, 2019 between the Authority and the Trustee as originally executed and as amended or supplemented as therein provided.

"Intercreditor Agreement" the Intercreditor Agreement dated as of March 1, 1996, as amended, among the University, the trustees for holders of other Revenue Secured Debt issued on behalf of the University, and the Trustee.

"Interim Debt" means Indebtedness other than Short-Term Debt which matures within 60 months of the date of incurrence.

"Independent" means a Person who is not a member of the Authority Board or a trustee of the University, a corporate officer or employee of the Authority or a corporate officer or employee of the University or which is not a partnership, corporation or association having a partner, director, corporate officer, member or substantial stockholder who is a member of the Authority Board or a trustee of the University, a corporate officer or employee of the Authority or a corporate officer or employee of the University; provided, however, that the fact that such Person is retained regularly by or transacts business with the Authority or the University shall not make such Person an employee within the meaning of this definition.

"Interest Payment Date" means each March 1 and September 1 commencing September 1, 2019.

"Joinder" means the Joinder to Intercreditor Agreement dated as of March 1, 2019 executed by the Trustee, by which the Trustee shall agree to be bound by the terms of the Intercreditor Agreement.

"Joint Written Request" means a Written Request of the Authority and the University.

"Loan" shall mean the amount loaned by the Authority to the University to pay the costs of the Project, which amount consists of the gross proceeds of the Bonds.

"Loan Agreement" means the Loan and Security Agreement dated as of March 1, 2019 between the University and the Authority, as it may from time to time be supplemented or amended.

"Loan Payments" means the payments referred to in the Loan Agreement and described under the heading "SUMMARY OF THE LOAN AGREEMENT."

"Long-Term Debt" means all Indebtedness (including Interim Debt) which, at the time of incurrence or issuance, has a final maturity or term of 365 days or more or which is renewable at the option of the obligor thereof for a term greater than one year from the date of original incurrence or issuance; provided that Long-Term Debt shall not include Short-Term Debt, Subordinated Debt or Non-Recourse Debt.

"Maximum Annual Debt Service Requirements" shall mean the highest amount required to pay Debt Service Requirements on all outstanding Long-Term Debt of the University during any twelve month period.

"Moody's" means Moody's Investors Service, a corporation organized and existing under the laws of the State of Delaware, its successors and assigns, and, if such corporation shall be dissolved or liquidated or shall no longer perform the functions of a securities rating agency, for the purpose of the definition of Permitted Investments only, "Moody's" shall be deemed to refer to any other nationally recognized securities rating agency designated by the University with written notice to the Authority and the Trustee.

"Net Investment in Plant" shall mean property, plant and equipment of the University, net of accumulated depreciation, determined in accordance with GAAP, less the amount of all outstanding Long-Term Debt incurred with respect to property, plant and equipment.

"Net Revenues Available for Debt Service" shall mean, for any period, Unrestricted Operating Revenues of the University less Unrestricted Operating Expenses.

"Net Proceeds," means proceeds (net of all expenses, including all attorneys' fees and expenses incurred in the collection thereof) from insurance, condemnation awards (or other similar amounts) received as a result of any damage to, destruction or taking under the power of eminent domain of the Project Facilities.

"Non-Recourse Debt" means Indebtedness which is not a general obligation of the University and which is secured solely by property acquired or financed with the proceeds of such Indebtedness.

"Officer's Certificate" means a certificate signed by an Authorized Officer of the University or the Authority (as the case may be) or, in the case of a certificate delivered by any other Person, the chief executive officer, chief financial officer or any vice president of such other Person whose authority to execute such Certificate shall be evidenced to the satisfaction of the Trustee.

"Official Statement" means the Official Statement prepared in connection with the issuance and sale of the Bonds.

"Opinion of Bond Counsel" means a written opinion of Bond Counsel in form and substance acceptable to the Trustee.

"Opinion of Counsel" means a written opinion of counsel who is not unsatisfactory to the Trustee in form and substance acceptable to the Trustee.

"Original Purchaser" means Wells Fargo Bank, National Association, and any other purchasers listed as such in the Purchase Contract.

"Outstanding," "Bonds outstanding" or "outstanding Bonds" means, as of any given date, all Bonds which have been duly authenticated and delivered under the Indenture, except:

- (a) Bonds canceled after purchase in the open market or because of payment at maturity or redemption prior to maturity;

- (b) Bonds for the payment or redemption of which cash or Government Obligations shall have been theretofore deposited with the Trustee (whether upon or prior to the maturity or redemption date of any such Bonds) in accordance with the Indenture; provided that if such Bonds are to be redeemed prior to the maturity thereof, notice of such redemption shall have been given or arrangements satisfactory to the Trustee shall have been made therefor, or waiver of such notice satisfactory in form to the Trustee shall have been filed with the Trustee;

- (c) Bonds in lieu of which other Bonds have been authenticated under the Indenture; and

- (d) For the purpose of all consents, approvals, waivers and notices required to be obtained or given under the Indenture, Bonds held or owned by the University or any Affiliate of the University.

"Permanent Loan Commitment" means a binding loan commitment (a) which is issued in favor of a Person, and (b) pursuant to which a bank, trust company, savings and loan association or other financial institution having a combined net worth of at least \$10,000,000 agrees to make a loan constituting Long-Term Debt to the Person for the purpose of retiring any Outstanding Indebtedness of such Person.

"Permitted Defeasance Obligations" means any of the following:

- (a) Government Obligations; or

- (b) debt obligations issued by any of the following agencies which are backed by the full faith and credit of the United States of America: Federal Financing Bank; General Services Administration (participation certificates); Export-Import Bank of the United States (Eximbank – direct obligations or fully guaranteed certificates of beneficial ownership); Farmers Home Administration; U.S. Maritime Administration (Guaranteed Title XI financing); and U.S. Department of Housing and Urban Development (Project Notes, Local

Authority Bonds, New Communities Debentures—U.S. government guaranteed debentures, or U.S. Public Housing Notes and Bonds—U.S. government guaranteed public housing notes and bonds).

"Permitted Encumbrances" shall have the meaning set forth below under "SUMMARY OF THE LOAN AGREEMENT – Permitted Encumbrances."

"Permitted Investments" means, if and to the extent the same are at the time legal for investment of funds held under the Indenture:

(a) Government Obligations.

(b) Bonds, debentures, notes or other evidence of indebtedness issued or guaranteed by any of the following federal agencies, provided that such obligations are backed by the full faith and credit of the United States of America (principal-only or interest-only ("stripped") securities are only permitted if they have been stripped by the agency itself):

- 1) U.S. Export-Import Bank (Eximbank) (direct obligations or fully guaranteed certificates of beneficial ownership)
- 2) Farmers Home Administration (FmHA) (certificates of beneficial ownership)
- 3) Federal Financing Bank
- 4) Federal Housing Administration Debentures (FHA)
- 5) General Services Administration (participation certificates)
- 6) Government National Mortgage Association (GNMA or "Ginnie Mae") (GNMA - guaranteed mortgage-backed bonds; GNMA - guaranteed pass-through obligations)
- 7) U.S. Maritime Administration (guaranteed Title XI financing)
- 8) U.S. Department of Housing and Urban Development (HUD) (Project Notes; Local Authority Bonds; New Communities Debentures - U.S. government guaranteed debentures; U.S. Public Housing Notes and Bonds - U.S. government guaranteed public housing notes and bonds)

(c) Bonds, debentures, notes or other evidence of indebtedness issued or guaranteed by any of the following non-full faith and credit U.S. government agencies (stripped securities are only permitted if they have been stripped by the agency itself):

- 1) Federal Home Loan Bank System (senior debt obligations)
- 2) Federal Home Loan Mortgage Corporation (FHLMC or "Freddie Mac") (participation certificates; senior debt obligations)
- 3) Federal National Mortgage Association (FNMA or "Fannie Mae") (mortgage-backed securities and senior debt obligations)
- 4) Resolution Funding Corp. (REFCORP) obligations
- 5) Farm Credit System (consolidated systemwide bonds and notes)

(d) Money market funds registered under the federal Investment Company Act of 1940, as amended, whose shares are registered under the federal Securities Act of 1933, as amended, and having a rating by S&P of "AAAm-G"; "AAA-m"; or "AA-m" and, if rated by Moody's, of "Aaa", "Aa1" or "Aa2", or the analogous ratings then used by S&P and Moody's, at the time of purchase, including, without limitation, any such fund for which the Trustee or an Affiliate of the Trustee serves as investment manager, administrator, shareholder servicing agent, and/or custodian or subcustodian, notwithstanding that (1) the Trustee or an Affiliate of the Trustee receives fees from such funds for services rendered, (2) the Trustee charges and collects fees for services rendered pursuant to this Indenture, which fees are separate from the fees received from such funds, and (3) services performed for such funds and pursuant to this Indenture may at times duplicate those provided to such funds by the Trustee or its Affiliates.

(e) Certificates of deposit that are (1) issued by a Qualified Financial Institution or (2) issued by a commercial bank, savings and loan association or mutual savings bank and secured at all times by collateral described in paragraph (a) and/or (b) above, provided that the collateral is held by a third party and the Bondholders have a perfected first priority security interest in the collateral.

(f) Certificates of deposit, including those placed by a third party pursuant to an agreement between the Trustee and the University, savings accounts, deposit accounts, money market deposits, demand deposits, including interest bearing money market accounts, time deposits, trust funds, trust accounts, overnight bank deposits, interest-bearing deposits, and bankers' acceptances of depository institutions, including the Trustee and any of its Affiliates, which are fully insured by the Federal Deposit Insurance Corporation, including the Deposit Insurance Fund.

(g) Investment agreements, including guaranteed investment contracts (GICs), forward purchase agreements and reserve fund put agreements, provided that either (1) the provider is a Qualified Financial Institution or (2) the investment is collateralized by securities that are rated, or guaranteed, at the time of the initial investment, by an entity whose unsecured long-term debt obligations are rated, by Moody's or S&P in one of the two highest rating categories assigned by such agencies.

(h) Commercial paper rated, at the time of purchase, "Prime - 1" or better by Moody's and "A-1" or better by S&P.

(i) Bonds or notes issued by any state or municipality which are rated, at the time of purchase, by Moody's and S&P in one of the two highest rating categories assigned by such agencies.

(j) Federal funds or bankers acceptances with a maximum term of one year of any bank which has an unsecured, uninsured and unguaranteed obligation rating, at the time of purchase, of "Prime - 1" or "A3" or better by Moody's and "A-1" or "A" or better by S&P.

(k) Repurchase agreements meeting the following criteria:

Repurchase agreements ("repos") provide for the transfer of securities from a dealer bank or securities firm (seller/borrower) to a municipal entity (buyer/lender), and the transfer of cash from a municipal entity to the dealer bank or securities firm with an agreement that the dealer bank or securities firm will repay the cash plus a yield to the municipal entity in exchange for the securities at a specified date.

- (1) Repos must be between the municipal entity and a dealer bank or securities firm
 - A) Primary dealers on the Federal Reserve reporting dealer list which are rated, at the time of purchase, "A" or better by S&P and Moody's, or
 - B) Banks rated, at the time of purchase, "A" or above by S&P and Moody's.
- (2) The written repo contract must include the following:
 - A) Securities which are acceptable for transfer are:
 - (i) Government Obligations, or
 - (ii) Securities described in paragraph (b) above
 - B) The term of the repo may not exceed 30 days
 - C) The collateral must be delivered to the Trustee or third party acting as agent for the Trustee before or simultaneously with payment (perfection by possession of certificated securities).
 - D) Valuation of Collateral:
 - (i) The securities must be valued weekly, marked-to-market at current market price plus accrued interest
 - (ii) The value of collateral must be equal to 104% of the amount of cash transferred by the Trustee to the dealer bank or security firm under the repo plus accrued interest. If the value of securities held as collateral

declines below 104% of the value of the cash transferred by municipality, then additional cash and/or acceptable securities must be transferred.

(3) Legal opinion which must be delivered to the municipal entity:

A) Repo meets guidelines under state law for legal investment of public funds.

"Person" means any natural person, firm, joint venture, association, partnership, business, trust, corporation, public body, agency or political subdivision thereof or any other similar entity.

"Project" means a project consisting of financing a portion of the costs of (a) upgrades and replacements to various mechanical systems, including HVAC, elevators, electrical switchgear, pneumatic controls, fan coil units, fire protection and sprinkler systems in the Koren Building, Fisher Hall, School of Law, College Hall, Richard King Mellon Hall of Science, Rockwell Hall, Libermann Hall, Gumberg Library, Administration Building and St. Ann Hall; (b) renovations to Rockwell Hall, Assumption Hall, St. Ann Hall, Richard King Mellon Hall of Science office and the Des Places Living Learning Centers; (c) roof replacements to Duquesne Union and Trinity Hall; (d) certain capital improvements to Duquesne Towers; (e) other miscellaneous capital expenditures on the main campus of the University; (f) funding of capitalized interest; (g) funding of any necessary reserves and (h) issuance of the Bonds, including, but not limited to, the costs of providing credit and/or liquidity enhancement for the Bonds.

"Project Facilities" means those facilities of the University located on the University's main campus and financed with proceeds of the Bonds.

"Purchase Contract" means the Purchase Contract among the Authority, the University and the Original Purchaser with respect to the Bonds.

"Qualified Financial Institution" means a bank, trust company, national banking association, insurance company or other financial services company or entity and whose unsecured short-term debt obligations are rated in either of the two highest categories (or, for purposes of clauses (e) and (g) of the definition of Qualified Investments, any of the three highest rating categories) by Moody's or S&P.

"Rating Agency" shall mean each nationally recognized securities rating agency then maintaining a rating on the Bonds at the request of the University, and initially means S&P and Moody's.

"Rebate Fund" means the fund by that name created by the Indenture.

"Record Date" means the fifteenth day of the calendar month immediately preceding the month in which each Interest Payment Date occurs (whether or not a Business Day).

"Refunding Debt" means Indebtedness issued for the purpose of refunding other Long-Term Debt.

"Revenue Secured Debt" shall mean the Bonds and any other Long-Term Debt of the University which is secured by a pledge of Tuition or Student Fees and is subject to the provisions of the Intercreditor Agreement.

"S&P" means S&P Global Ratings, a business unit of Standard & Poor's Financial Services LLC, a limited liability company organized and existing under the laws of the State of New York, its successors and its assigns, and, if such corporation shall be dissolved or liquidated or shall no longer perform the functions of a securities rating agency, for the purpose of the definition of Permitted Investments only, "S&P" shall be deemed to refer to any other nationally recognized securities rating agency designated by the University, with written notice to the Authority and the Trustee.

"Student Fees" shall mean the revenues of the University derived from student fees and the proceeds thereof.

"Subordinated Debt" means Indebtedness which at all times shall be wholly subordinate and junior in right of payment to any and all Indebtedness of the University under the Loan Agreement or with respect to the Bonds and all other Long-Term Debt.

"Special Record Date" means the date fixed by the Trustee pursuant to the Indenture for the payment of Defaulted Interest.

"Supplemental Indenture" means any indenture supplemental or amendatory to the Indenture entered into by the Authority and the Trustee pursuant to the provisions described under the heading "SUMMARY OF THE INDENTURE."

"Supplemental Agreement" means any agreement supplemental or amendatory to the Loan Agreement entered into by the Authority and the University pursuant to the provisions described under the heading "SUMMARY OF THE INDENTURE ."

"Tax Agreement" means the Tax Regulatory and No Arbitrage Certificate, executed and delivered by the Authority and the University, containing representations and covenants regarding the preservation of the tax-exempt status of the interest on the Bonds, the investment of proceeds of the Bonds, and the calculation and payment of rebate amounts under Section 148(f) of the Code.

"Trust Estate" means:

- (a) All right, title and interest of the Authority in and to the Loan Payments and the Loan Agreement (excluding Unassigned Rights);
- (b) All right, title and interest of the Authority in and to the Tuition and Student Fees pledged by the University pursuant to the Loan Agreement, on a parity with all other Revenue Secured Debt;
- (c) All funds and accounts established by the Trustee under the Indenture other than amounts held by the Trustee in the Rebate Fund and other moneys expressly excluded pursuant to the Indenture;
- (d) All income and receipts on the funds (other than the Rebate Fund) held by the Trustee under the Indenture; and
- (e) Any and all other property of every kind and nature from time to time hereafter, by delivery or by writing of any kind, conveyed, pledged, assigned or transferred as and for additional security under the Indenture by the Authority, the University or by anyone on their behalf to the Trustee, including without limitation funds of the University held by the Trustee in any of the funds established under the Indenture as security for the Bonds.

"Trustee" means The Bank of New York Mellon Trust Company, N.A., a national banking association organized and existing under the laws of the United States of America and its successor and any entity resulting from or surviving any consolidation or merger to which it or its successors may be a party and any successor trustee at the time serving as successor trustee under the Indenture.

"Tuition" shall mean the revenues of the University derived from tuition and the proceeds thereof.

"Unassigned Rights" means the fees and expenses payable to the Authority, the Authority's right to indemnification under the Loan Agreement, the reimbursement of advances pursuant to the Loan Agreement and the Authority's right to execute and deliver supplements and amendments to the Loan Agreement.

"University" means Duquesne University of the Holy Spirit, a Pennsylvania nonprofit corporation, and its successors and assigns and any surviving, resulting or transferee corporation.

"Unrestricted Operating Expenses" shall mean such expenses and other costs incurred by the University that would properly be recorded as deductions from Unrestricted Net Assets during the period being measured, exclusive of depreciation, amortization, other non-cash expenses and interest on Long-Term Debt and extraordinary items.

"Unrestricted Operating Revenues" shall mean all unrestricted receipts, revenues, income and other moneys of the University which, upon receipt by the University, are or are to be recorded as additions to Unrestricted Net Assets during the period being measured in accordance with GAAP and which are available for payment of debt service on the Bonds, plus any increase or minus any decrease in "unrestricted non-operating revenues" as it appears in the University's most recent audited financial statements.

"Unrestricted Net Assets" shall mean the assets of the University not restricted as to use in accordance with GAAP applicable to the University's financial statements.

"Written Request" means a request in writing signed by an Authorized Officer of the Authority or the University (as the case may be).

"1998 Trustee" shall mean The Bank of New York Mellon Trust Company, N.A. (successor trustee to Mellon Bank, N.A.), as trustee for the Allegheny County Higher Education Building Authority University Revenue

"2011 Trustee" shall mean The Bank of New York Mellon Trust Company, N.A., as trustee for the Allegheny County Higher Education Building Authority University Revenue Bonds, Series A of 2011 (Duquesne University).

"2013 Trustee" shall mean The Bank of New York Mellon Trust Company, N.A., as trustee for the Allegheny County Higher Education Building Authority University Revenue Bonds, Series A of 2013 (Duquesne University).

"2014 Trustee" shall mean The Bank of New York Mellon Trust Company, N.A., as trustee for the Allegheny County Higher Education Building Authority University Revenue Bonds, Series A of 2014 (Duquesne University).

"2016 Trustee" shall mean The Bank of New York Mellon Trust Company, N.A., as trustee for the Allegheny County Higher Education Building Authority University Revenue Refunding Bonds, Series of 2016 (Duquesne University).

"2018 Trustee" shall mean The Bank of New York Mellon Trust Company, N.A., as trustee for the Allegheny County Higher Education Building Authority University Revenue Bonds, Series of 2018 (Duquesne University).

SUMMARY OF THE LOAN AGREEMENT

The Loan Agreement provides for, among other things, the loan of the proceeds of the Bonds by the Authority to the University.

The Project

The University shall use the proceeds of the Loan to undertake the Project.

Loan of Bond Proceeds

The Authority will, concurrently with the issuance of the Bonds, loan to the University the gross proceeds from the sale of the Bonds (the "Bond Proceeds") to finance costs of the Project. The Bond Proceeds will be deposited with the Trustee to be expended and deposited in accordance with the Indenture. If the Bond Proceeds are not sufficient to pay the costs of the Project, the University will pay those costs in excess of the Bond Proceeds.

Security

The Loan is a general obligation of the University secured by a pledge of the Tuition and Student Fees. The University grants to the Authority pursuant to the Loan Agreement a lien on and security interest in all of its Tuition and Student Fees to secure the Bonds (the "Pledge"), equally and ratably with all other Revenue Secured

Debt of the University; provided, however, such Pledge shall be released by the Trustee without further direction at such time as:

- (a) no other Revenue Secured Debt remains outstanding, or
- (b) the owners of all other Revenue Secured Debt have agreed to release their security interest in Tuition and Student Fees upon substantially the same terms as are provided in the Loan Agreement, or
- (c) the owners of all other Revenue Secured Debt have delivered executed UCC-3 termination statements evidencing the release of their security interest in such collateral to the Trustee or another corporate fiduciary who agrees not to record the same until it has received termination statements from all such owners and from the Trustee.

Upon such release, the University agrees not to grant a similar pledge in the future without granting the same Pledge to the parties who previously have released the Pledge.

Time and Manner of Repayment

The University agrees in the Loan Agreement to pay to the Trustee for the account of the Authority:

- (a) Interest. On or prior to each Interest Payment Date, an amount which, together with other available amounts on deposit in the Bond Fund, is sufficient to pay the interest on the Bonds to be paid on such Interest Payment Date;
- (b) Principal. On or prior to March 1, 2020 and each March 1 on which the principal of any Bonds shall become due, whether by reason of maturity, an amount for deposit in the Bond Fund equal to the principal of the Bonds becoming due on such March 1; provided that if the University exercises its right to redeem Bonds under any provision of the Indenture or if any Bonds are required to be redeemed (other than pursuant to mandatory sinking fund redemption provisions) under any provision of the Indenture, the amount required to redeem such Bonds shall be due on or before the applicable redemption date.
- (c) Trustee's Fee. While the Bonds remain Outstanding, the reasonable compensation and expenses of the Trustee under the Indenture shall be paid directly to the Trustee by the University upon the receipt by the University of a bill for such services from the Trustee.
- (d) Authority's Fees. The University will pay the Authority Fees when due as set forth in the Loan Agreement. The University will also pay any other administrative expenses incurred in connection with the financing of the Project, and any such additional fees and expenses (including reasonable attorney's fees and expenses) incurred by the Authority or the Trustee in connection with inquiring into, or enforcing, the performance of the University's obligations under the Loan Agreement or the Indenture, within thirty days of receipt of a statement from the Authority or the Trustee requesting payment of such amounts. The University will also pay all costs and expenses (including reasonable attorney's fees and expenses) incurred by the Authority in connection with the Bonds in the preparation of any responses, reproduction of any documentation or participation in any inquiries, investigations or audits from any Person with which the Authority is required by law to comply, including without limitation, the Internal Revenue Service, the Securities and Exchange Commission or other governmental agencies.
- (e) Rebate Fund. The University will pay to the Trustee all rebate payments required under Section 148(f) of the Code and the Indenture.
- (f) Additional Payments. The University shall pay when due all additional amounts required to be paid by it under the Indenture or the Loan Agreement (together, "Additional Payments"), including without limitation costs and expenses incurred in connection with the arbitrage rebate provisions of the Indenture.

Rate Covenant

The University covenants in the Loan Agreement that it shall fix, charge and collect rates, fees and charges for services provided by the University which, together with other available moneys, will produce Net Revenues Available for Debt Service in an amount sufficient in the Fiscal Year ending June 30, 2020, and in each Fiscal Year thereafter, to provide funds for the following:

- (i) the payment of all payments required to be made by the University pursuant to the Loan Agreement;
- (ii) the payment by the University of debt service on all other Long-Term Debt; and

If the University's rates, fees and charges for services at the end of any Fiscal Year do not produce Net Revenues Available for Debt Service sufficient to provide funds for such payments pursuant to the Loan Agreement and of debt service on all other Long-Term Debt, but the University can demonstrate to the satisfaction of the Trustee that it has available moneys sufficient to make such payments, then the failure to comply with such rate covenant shall not be an Event of Default if the University (i) promptly retains a firm of accountants or business consultants selected by the University (the "University Consultant") to review the reasons for the failure to comply with such covenant and to make recommendations within 60 days of the retention of the University Consultant as to what measure(s) should be taken to comply with such covenant in the ensuing Fiscal Year and (ii) the University provides a summary to the Trustee of such recommendations which will be implemented by the University; provided that the exception set forth in this sentence shall not be available to the University if it fails to comply with such rate covenant at the end of the ensuing Fiscal Year.

Assignment to Trustee

All of the Authority's right, title and interest in the Loan Agreement (except Unassigned Rights) are being assigned and pledged to the Trustee as security for the Bonds. The University has consented to such assignment and acknowledges that the Bonds are being issued in reliance by the Trustee upon the assignment of the Authority's rights under the Loan Agreement and such other instruments. The University agrees in the Loan Agreement that it shall perform all obligations and pay all amounts due from the Authority under the Bonds and the Indenture so that at all times there shall be no default thereunder.

Permitted Encumbrances

The University agrees in the Loan Agreement not to create or suffer to be created or exist upon any real properties comprising the University's main campus in downtown Pittsburgh, including properties which are contiguous with or in close proximity to the main campus and which are used for its educational mission, any mortgage or other lien, security interest or other similar right or interest, servitude, easement, right-of-way, license, encumbrance, irregularity or defect in title, cloud on title, restriction, reservation or covenant running with the land, other than Permitted Encumbrances. For purposes of the Loan Agreement, "Permitted Encumbrances" shall include the following:

- (a) liens arising by reason of good faith deposits with the University in connection with tenders, leases of real estate, bids or contracts (other than contracts for the payment of money), deposits by the University to secure public or statutory obligations, or to secure or in lieu of, surety, stay or appeal bonds, and deposits as security for the payment of taxes or assessments or other similar charges;
- (b) any lien arising by reason of deposits with, or the giving of any form of security to, any governmental agency or any body created or approved by law or governmental regulation for any purpose at any time as required by law or governmental regulation as a condition to the transaction of any business or the exercise of any privilege or license, or to enable the University to maintain self-insurance or to participate in any funds established to cover any insurance risks or in connection with worker's compensation, unemployment insurance, old age pensions or other social

security, or to share in the privileges or benefits required for institutions participating in such arrangements;

- (c) any judgment lien against the University so long as (1) the finality of such judgment is being contested in good faith and execution thereon is stayed, or (2) in the absence of such a contest and stay, neither the pledge and security interest of the Indenture or this Agreement nor any property of the University will be materially impaired or subject to material loss or forfeiture;
- (d) rights reserved to or vested in any municipality or public authority by the terms of any right, power, franchise, grant, license, permit or provision of law, affecting any property, to (1) terminate such right, power, franchise, grant, license or permit, provided that the exercise of such right would not materially impair the use of such property for its intended purpose or materially and adversely affect the value thereof, or (2) purchase, condemn, appropriate or recapture, or designate a purchaser of such property;
- (e) any liens on any property for taxes, assessments, levies, fees, water and sewer rents, and other governmental and similar charges and any liens of mechanics, material men and laborers for work or services performed or materials furnished in connection with such property (1) which are not due and payable or are not delinquent, (2) the amount or validity of which are being contested in good faith and on which execution is stayed or (3) the existence of which will not materially impair the pledge and security interest of the Indenture or this Agreement, or subject any property of the University to material loss or forfeiture;
- (f) any lease which, in the judgment of the University, (1) is reasonably necessary or appropriate for or incidental to the proper and economical operation of such property, taking into account the nature and terms of the lease and the nature and purposes of the property subject thereto, (2) is not necessary for the operations of the University, or (3) represents a lease of space for retail purposes which is reasonably necessary or appropriate for or incidental to the operation of such property in light of the location of the property and the benefit to the neighborhood in which such property is located;
- (g) easements, rights-of-way, restrictions and other minor defects, encumbrances, and irregularities in the title to any property which do not materially impair the use of such property for its intended purpose or materially and adversely affect the value thereof;
- (h) rights reserved to or vested in any municipality or public authority to control or regulate any property or to use such property in any manner, which rights do not materially impair the use of such property for its intended purposes or materially and adversely affect the value thereof;
- (i) any lien or security interest which is existing on the date of the Loan Agreement or which is existing when the University acquires the property subject to such lien or security interest;
- (j) any additional lien, mortgage, or security interest hereafter granted to secure the Bonds or other Long-Term Debt, including but not limited to a lien on or security interest in Tuition or Student Fees;
- (k) any lien or security interest which will not, in the opinion of counsel to the University, materially adversely affect the normal operations of the University;
- (l) any lien on property received by the University as a gift, grant or bequest, such lien being due to restrictions imposed by the donor, grantor, or testator of such gift, grant or bequest; and
- (m) any liens on property permitted by the provisions of the Loan Agreement described below under "Security for Indebtedness."

Permitted Indebtedness

The University covenants in the Loan Agreement that it shall not incur any Long-Term Debt other than under the terms hereinafter set forth below.

(a) Long-Term Debt. The University may not incur any additional Long-Term Debt unless the University shall deliver to the Trustee an Officer's Certificate demonstrating and concluding that:

- (1) The Maximum Annual Debt Service Requirements on all Long-Term Debt during the Fiscal Year of the University immediately prior to the date of the Officer's Certificate, assuming that the proposed additional Long-Term Debt had been outstanding during such Fiscal Year, is less than twelve percent (12%) of the University's Unrestricted Operating Revenues during the previous Fiscal Year; and
- (2) the University's Expendable Resources are greater than fifty percent (50%) of all outstanding and proposed Long-Term Debt;

provided, however, that such tests shall not be required to be met if the additional Long-Term Debt is being incurred to refund existing Long-Term Debt.

(b) Non-Recourse Debt. The University shall be permitted to incur Non-Recourse Debt without limitation as to principal amount and shall not be required to comply with the requirements of clause (a) above in connection with such incurrence.

(c) Subordinated Debt. The University shall be permitted to incur Subordinated Debt without limitation as to principal amount and shall not be required to comply with the requirements of clause (a) above in connection with such incurrence; provided, however, that the instruments evidencing such Subordinated Debt shall provide that:

- (1) No payment on account of principal of and premium, if any, or interest on such Subordinated Debt shall be made in any year, nor shall any property or assets be applied to the purchase or other acquisition or retirement of such Subordinated Debt, unless full payment of amounts then due and payable in such year for principal of and premium, if any, and interest on all other Long-Term Debt incurred or issued under the Loan Agreement or the Indenture ("Superior Debt") has been made or duly provided for in accordance with the terms of such Superior Debt. Notwithstanding the foregoing, no payment on account of principal of and premium, if any, or interest on such Subordinated Debt shall be made, nor shall property or assets be applied to the purchase or other acquisition or retirement of such Subordinated Debt if, at the time of such payment or application or immediately after giving effect thereto, (A) there shall exist a default in the payment of principal of, and premium, if any or interest on any Superior Debt or (B) there shall have occurred an event of default with respect to any Superior Debt, as defined therein or in the instrument under which the same is outstanding, permitting the holders thereof to accelerate the maturity thereof and such event of default shall not have been cured or waived or shall not have ceased to exist; and
- (2) Upon (A) any acceleration of maturity of the principal amount due on such Subordinated Debt or (B) any payment or distribution of any kind or character, whether in cash, property or securities, or upon any dissolution or winding-up or total or partial liquidation, reorganization or arrangement of the University, whether voluntary or involuntary or in bankruptcy, insolvency, receivership or other proceedings, all principal of, premium, if any, and interest due or to become due upon all Superior Debt shall first be paid in full, or payment thereof provided for in accordance with the terms of such Superior Debt, before any payment is made on account of the Subordinated Debt.

Security for Indebtedness

The University covenants in the Loan Agreement that Indebtedness which is incurred pursuant thereto may be secured only by such liens, security interests or other similar rights and interests (hereinafter collectively referred to as "liens") as are permitted below:

(a) No lien may be granted to secure any Long-Term Debt unless a lien of equal or superior rank and priority is granted in favor of the Trustee for the benefit of the Holders of all Bonds issued and Outstanding under the Indenture. Long-Term Debt which also constitutes Revenue Secured Debt may be secured as provided above in this clause (a) and may also be secured by a pledge, lien on and security interest in Tuition and Student Fees on a parity with other Revenue Secured Debt; provided, however, that no Long-Term Debt shall be secured by a pledge, lien on or security interest in Tuition and Student Fees unless the Person to whom such pledge, lien or security interest is given shall join in and become bound by the Intercreditor Agreement.

(b) Non-Recourse Debt may be secured by liens on: (1) any real property, fixtures and tangible personal property (and the proceeds thereof) acquired with the proceeds of the Non-Recourse Debt and any improvements to such property; (2) revenues derived from the ownership or operation of the property described in clause (1) above; and (3) gifts, grants, bequests, donations, other similar contributions (or pledges thereof) expressly restricted by the donor to such use, and the income from the foregoing. At the time any such lien is to be granted, the University shall deliver to the Trustee a certificate of an Authorized Officer of the University demonstrating and concluding that the lien is being granted in accordance with the foregoing.

Sale, Lease or Other Disposition of Assets

The University covenants in the Loan Agreement that it will not in any twelve (12) month period sell, lease or otherwise dispose of assets, the book value (as that term is used under GAAP) of which would cause the aggregate book value of the University's assets transferred during such period pursuant to this Section to exceed ten percent (10%) of the fair market value of its assets, except in the ordinary course of business, and except for transfers of assets:

(a) To any Person if prior to the sale, lease or other disposition there is delivered to the Trustee a certificate of an Authorized Officer of the University stating that, in the judgment of the signer, such assets have, or within the next succeeding twenty-four (24) calendar months are reasonably expected to, become inadequate, obsolete, worn out, unsuitable, unprofitable, undesirable or unnecessary and the sale, lease, removal or other disposition thereof will not impair the structural soundness, efficiency or economic value of the remaining assets; or

(b) To any Person provided that prior to the sale, lease or other disposition there is delivered to the Trustee a certificate of an Authorized Officer of the University to the effect that immediately following the disposition of such assets the total outstanding Long-Term Debt of the University does not exceed sixty-six and two-thirds percent (66-2/3%) of the total net assets of the University as reported in the University's most recent audited financial statements; or

(c) To any Person in an arm's length sale transaction.

Certain Warranties, Representations and Covenants of the University

The University makes various representations and covenants in the Loan Agreement, including the following:

Maintenance. The University agrees to maintain the Project Facilities in good condition, reasonable wear and tear excepted. The Authority shall have no obligation and makes no warranties respecting the condition or operation of the Project Facilities.

Compliance with Laws. The Project Facilities shall be used in compliance with all material laws, ordinances and regulations, including, without limitation, all building, zoning and environmental laws, ordinances and regulations of any duly constituted authority which hereafter in any manner may affect the Project Facilities or the use thereof. The University shall have the right in good faith to contest or appeal from such laws, ordinances and regulations, and the Authority agrees that it will not unreasonably withhold consent to having the proceedings brought in the Authority's name if and to the extent deemed necessary by the University to give the University standing or authority to prosecute any such contest or appeal, but all costs, fees and expenses incurred in connection with such proceedings shall be borne by the University. The University agrees that it shall not discriminate or permit any discrimination in the use of the Project Facilities against any person on the grounds of race, color, religion or national origin, or otherwise, in any manner prohibited by the laws of the United States or the Commonwealth.

Taxes, Assessments, Other Governmental Charges. The University agrees to pay and discharge all taxes, assessments and governmental charges or levies imposed upon it or on its income or properties prior to the date on which penalties attach thereto, and all lawful claims which, if unpaid, might become a lien or charge upon any material portion of its properties, provided that the University shall not be required to pay any such tax, assessment, charge, levy or claim, the payment of which is being contested in good faith and by proper proceedings.

Insurance Coverage. The University covenants to maintain, or cause to be maintained, insurance covering such risks and in such amounts as is customarily carried by similar institutions and which liability policies shall name the Authority and the Trustee as additional insureds. The University shall provide (a) the Authority and the Trustee, on an annual basis, with a certificate of an Authorized Officer of the University certifying that the insurance required by the preceding sentence is in force and (b) the Authority, on an annual basis, with certificates of insurance or other evidence reasonably satisfactory to the Authority that the Authority has been named on all such insurance policies as an additional insured as its interests shall appear as required by the preceding sentence. In the event that property and liability insurance is not commercially available at a reasonable cost or has otherwise been provided, the University may accept such substituted coverage, including coverage from a captive insurance company or consortium, as may be recommended by an independent insurance coverage consultant; provided, however, that no Event of Default shall occur under the Loan Agreement if such substitute coverage is unavailable and the University makes a continued good faith effort to secure appropriate and customary insurance coverage or substitute coverage, including self-insurance.

Application of Insurance Proceeds and of Condemnation Proceeds. The proceeds of all public liability insurance shall be applied to the payment of any judgment, settlement or liability incurred for risks covered by such insurance. In case the whole or any part of the Project Facilities is damaged or destroyed by any cause whatsoever or taken pursuant to condemnation proceedings or in lieu thereof, the provisions of Section 7.01 of the Loan Agreement shall apply.

Advances by Authority or Trustee. In the event the University fails to take out or maintain the insurance coverage required by the Loan Agreement, fails to pay the taxes and other charges required to be paid under the Loan Agreement at or prior to the time they are required to be paid, or fails to perform any other obligation under the Loan Agreement, the Authority or the Trustee may (but shall not be obligated to) take out the required policies of insurance and pay the premiums on the same, pay such taxes or other charges and pay such other amounts as are necessary to perform the University's obligations. All amounts so advanced by the Authority or the Trustee shall become an additional obligation of the University to the Authority or to the Trustee, as the case may be, which amounts, together with interest thereon at an annual rate equal to the prime rate of interest charged by the Trustee's banking Affiliate plus 2% ("Prime Rate"). Any remedy vested pursuant to the Loan Agreement in the Authority or the Trustee for the collection of installment payments under the Loan Agreement also shall be available to the Authority and the Trustee for the collection of all such amounts so advanced.

Damage, Destruction and Condemnation of Project Facilities

Damage to or destruction of all or any portion of the Project Facilities by fire or any other cause or taking of all or a portion of the Project Facilities by condemnation shall not terminate this Agreement or cause any abatement of or reduction in the payments to be made by the University hereunder, or otherwise alter the respective obligations of the Authority or the University as set forth in the Loan Agreement, except that, to the extent the proceeds of insurance or condemnation are applied by the Trustee to the redemption or purchase of the Bonds, the obligation of the University hereunder shall be reduced accordingly. The University covenants to give written notice of any event described in the Loan Agreement to the Trustee and to the Authority within five (5) days after the occurrence thereof.

Tax-Exempt Bond Covenants

The University covenants in the Loan Agreement that it will comply with the provisions of the Tax Agreement in order to preserve the tax-exempt status of the interest on the Bonds.

Events of Default

The occurrence of any of the following shall constitute an Event of Default under the Loan Agreement:

- (a) Failure by the University to make any payments described in clauses (a) or (b) described under the heading "Installment Payments" when due; or
- (b) Failure by the University to make any payment under the Loan Agreement or in the performance of or compliance with any of the provisions, warranties, covenants, agreements, terms or conditions contained in the Loan, other than those specified in (a) above, which continues for sixty (60) days following written notice thereof to the University from the Authority or the Trustee, except in the case of a default other than the payment of money which cannot be cured within such sixty (60) days, in which case the period shall be extended for such period as is reasonable to cure the same with due diligence, provided the University commences within sixty (60) days and proceeds diligently to cure the same; or
- (c) If the University shall make an assignment of substantially all of its assets for the benefit of creditors or is adjudicated a bankrupt or shall file a bill in equity or otherwise initiate proceedings for the appointment of a receiver of its assets, or shall file a case under the Federal Bankruptcy Code to be declared a bankrupt or for reorganization or otherwise initiate any proceedings in any court for a composition with its creditors or for relief in any manner from the payment of its debts when due under any state or federal laws; or if any proceedings in bankruptcy or for the appointment of a receiver shall be instituted against the University under any state or federal law and shall not be dismissed within sixty (60) days; or
- (d) the occurrence of an Event of Default under any of the Bond Documents.

Unless and until the Authority or the Trustee shall have exercised any remedies upon an Event of Default, the University (or any other Person on behalf of the University) may at any time (1) pay all accrued unpaid payments then due and owing on the outstanding balance of the Loan and all other sums which the University is obligated to pay under the Loan Agreement; and (2) cure all other existing defaults under the Loan Agreement, and in every such case, such payment and cure shall be deemed to constitute a waiver of the default and its consequences as though the default had not occurred.

Remedies

Upon the occurrence of an Event of Default:

- (a) The Trustee may declare the entire outstanding balance of the Loan and any other sums which the University is obligated to pay to the Authority under the Loan Agreement immediately due and payable.

(b) The Trustee, after ten (10) days' written notice to the University, may perform for the account of the University any covenant of the University under the Loan Agreement in the performance of which an Event of Default has accrued. The University shall pay to the Trustee upon demand any amount paid by it in the performance of such covenant and any amounts which the Trustee shall have paid by reason of failure of the University to comply with any covenant or provision of the Loan Agreement, including reasonable counsel fees and expenses incurred in connection with prosecution or defense of any proceedings instituted by reason of default of the University, together with interest at a rate equal to the Prime Rate, from the date of payment until repayment by the University.

(c) The Trustee may, in addition to or in lieu of the foregoing, pursue any remedy now or hereafter available at law or in equity for enforcement of this Agreement or the collection of all sums due under the Loan Agreement.

(d) The Trustee may (subject to the provisions of the Intercreditor Agreement) exercise all rights of a secured party under the Pennsylvania Uniform Commercial Code to enforce its security interest in the Tuition and Student Fees and exercise all remedies available thereunder with respect to the Tuition and Student Fees.

Amendments

The Loan Agreement may not be amended except in accordance with the provisions of the Indenture described below under the heading "SUMMARY OF THE INDENTURE – Supplements and Amendments." The University shall reimburse the Authority for all costs and expenses paid or incurred by the Authority in connection with any amendments or modifications of the Loan Agreement or to the Indenture and any document, instrument or agreement related thereto, and the discussion, negotiation, preparation, approval, execution and delivery of any and all documents necessary or desirable to effect such amendments or modifications.

SUMMARY OF THE INDENTURE

The Bonds are being issued under and subject to the provisions of the Indenture, to which reference must be made for complete details of the terms of the Bonds and the Indenture.

Establishment of Funds

The Indenture provides for the establishment with the Trustee of trust funds including a Clearing Fund, a Bond Fund and a Rebate Fund.

Clearing Fund. Moneys on deposit in the Clearing Fund shall be disbursed upon receipt of the Joint Written Request to be delivered at closing (subsequent to the Closing Date, such transfers shall be made upon receipt of the Written Requests of the University) for the purpose of making the transfers and payments required under the Indenture and for the payment of costs of issuance certified in such Written Requests. The Trustee shall be entitled to rely conclusively upon each such Written Request.

Upon the earlier of such time as the Trustee is furnished with a Written Request of the University stating that all such fees and expenses have been paid and October 1, 2019, the Trustee shall transfer any moneys remaining in the account in the Clearing Fund for such Bonds to the Bond Fund.

Project Fund. Moneys on deposit in the Project Fund shall be held in trust by the Trustee until withdrawn and disbursed to pay the costs of the Project or to be transferred to the Bond Fund as provided in the Indenture.

Bond Fund. The Trustee shall deposit to the credit of the Bond Fund all installment payments payable on account of the Bonds pursuant to the Loan Agreement, Net Proceeds received by the Trustee pursuant to the Indenture for the purpose of redeeming Bonds, and any other amounts required or permitted to be deposited therein pursuant to the provisions of the Indenture. Pursuant to the assignment and pledge of payments under the Loan Agreement set forth in the granting clauses contained in the Indenture, the University is directed pursuant to the Indenture to make payments under the Loan Agreement directly to the Trustee when and as the same become due

and payable under the terms of the Loan Agreement. Moneys so deposited to the Bond Fund shall be applied as follows:

(a) to the payment of interest, when due, on all Outstanding Bonds, including any accrued interest due in connection with redemptions of Bonds;

(b) to the payment, when due, of the principal of Bonds then payable at maturity or on a date fixed for redemption (but only upon surrender of such Bonds), subject to reduction by the principal amount of Bonds of the same maturity purchased by the University and surrendered to the Trustee for cancellation or purchased for cancellation by the Trustee pursuant to subsection (c) below or the Extraordinary Redemption provisions of the Indenture; and

(c) to the extent that the same have not otherwise been paid or provided for, the Authority Fees and expenses and the Trustee's fees and expenses in respect of the Bonds shall be payable from the Bond Fund at the Written Request of the University.

Rebate Fund. Upon the Written Request of the University, the Trustee shall create and establish the Rebate Fund. Deposits shall be made to the Rebate Fund in accordance with, and moneys and investments in the Rebate Fund shall be applied as set forth in a Written Request of the University prepared in accordance with the Tax Agreement. The Tax Agreement may be superseded or amended by a new Tax Agreement delivered by the University and accompanied by an Opinion of Bond Counsel addressed to the Trustee to the effect that the use of such new Tax Agreement will not cause the interest on the Bonds to become includable in gross income of the recipient thereof. The Rebate Fund, and the moneys and investments therein, shall not secure the Bonds.

Investment of Funds

Subject to the limitations provided in the Indenture, upon Written Request of the University filed with the Trustee, moneys on deposit in the Bond Fund, the Clearing Fund and the Rebate Fund shall be invested in Permitted Investments; provided, however, that moneys held in the Bond Fund to be applied to pay the redemption price of Bonds called for redemption shall only be invested in Government Obligations with a term not exceeding the date or dates that moneys therefrom are anticipated to be required. Such investments shall be made so as to mature on or prior to the date or dates that moneys therefrom are reasonably anticipated to be required. As and when any amounts invested pursuant to the Indenture may be needed for disbursements from any Fund, the Trustee shall cause a sufficient amount of such investments to be sold or otherwise converted into cash to the credit of such Fund. The Trustee, as authorized in the Indenture, may trade with itself in the purchase and sale of securities for such investment; provided, however, that in no case shall any investment be otherwise than in accordance with the investment limitations contained in the Indenture. The Trustee shall not be liable or responsible for any loss resulting from any such investments. Gains from investments shall be credited to and held in and losses shall be charged to the Fund from which the investment is made.

The interest, income and gains received in respect of any Permitted Investments shall, with respect to all Funds other than the Rebate Fund, be deposited to the credit of the Bond Fund. The interest, income and gains received in respect of Permitted Investments in the Rebate Fund shall remain in the Rebate Fund.

The Trustee may reasonably rely on the University's investment direction given pursuant to the first paragraph of this section above concerning the suitability and legality of all directed investments. Although the University recognizes that it may obtain brokerage confirmations, or written statements containing comparable information, from the Trustee at no additional cost, the University agrees that brokerage confirmations are not required to be issued by the Trustee for each month in which a monthly statement of investments is provided to the University. No statement of investments needs to be provided to the University, however, for any fund or account for any month in which no investment activity occurred during such month in such fund or account.

Supplements and Amendments

Supplemental Indentures Not Requiring Consent of Bondholders. The Authority and the Trustee may from time to time, without the consent of or notice to any of the Bondholders, enter into one or more Supplemental Indentures, for any one or more of the following purposes:

- (a) to cure any ambiguity or formal defect or omission in the Indenture;
- (b) to grant to or confer upon the Trustee for the benefit of the Bondholders any additional rights, remedies, powers or authority that may lawfully be granted to or conferred upon the Bondholders and the Trustee, or either of them;
- (c) to assign and pledge under or subject to the Indenture additional revenues, properties or collateral;
- (d) to evidence the appointment of a separate Trustee or the succession of a new Trustee under the Indenture;
- (e) to permit the qualification of the Indenture under the Trust Indenture Act of 1939, as then amended, or any similar federal statute hereafter in effect or to permit the qualification of the Bonds for sale under the securities laws of any state of the United States;
- (f) to effect changes to obtain or maintain a rating on the Bonds or permitted in connection with obtaining an upgrade in the rating on the Bonds to a higher rating category or subcategory;
- (g) to permit continued compliance with the Tax Agreement;
- (h) to provide for uncertificated Bonds and a book-entry only system of registration for the Bonds;
- (i) to provide for the refunding or advance refunding of any Bonds, including the right to establish and administer an escrow fund and to take related action in connection therewith; and
- (j) to make any change that does not materially adversely affect the rights of any Bondholder or the Trustee.

Before the Authority and the Trustee shall enter into any Supplemental Indenture pursuant to the Indenture, there shall have been delivered to the Authority and the Trustee a Favorable Opinion of Bond Counsel, which opinion also shall state that the proposed Supplemental Indenture is permitted under the Indenture.

Supplemental Indentures Requiring Consent of Bondholders. In addition to Supplemental Indentures covered by the preceding paragraph and subject to the terms and provisions contained in this paragraph, and not otherwise, the Owners of not less than a majority in aggregate principal amount of the Bonds which are Outstanding under the Indenture at the time of the execution of such Supplemental Indenture shall have the right, from time to time, anything contained in the Indenture to the contrary notwithstanding, to consent to and approve the execution by the Authority and the Trustee of such Supplemental Indenture as shall be deemed necessary and desirable by the Authority for the purpose of modifying, altering, amending, adding to or rescinding, in any particular, any of the terms or provisions contained in the Indenture or in any Supplemental Indenture; provided, however, that nothing in this paragraph contained or in the preceding paragraph shall permit, or be construed as permitting, a Supplemental Indenture to effect: (i) an extension of the maturity or reduction in the principal amount of, or reduction in the rate or extension of the time of paying interest on, or reduction of any premium payable on the redemption of, any Bonds, without the consent of the Owners of such Bonds; (ii) the creation of any lien prior to or on a parity with the lien of the Indenture on the Trust Estate described in the Granting Clauses of the Indenture or the deprivation of any Bondholders of the lien created by the Indenture on such Trust Estate (except as otherwise permitted by the terms of the Indenture or the Loan Agreement), without the consent of the Owners of all the Bonds at the time Outstanding; (iii) a reduction in the aforesaid aggregate principal amount of Bonds the Owners of which are required to consent to any such Supplemental Indenture, without the consent of the Owners of all the Bonds at the time outstanding which would be affected by the action to be taken; or (iv) a modification of the rights, duties or immunities of the Trustee, without the written consent of the Trustee.

If at any time the Authority shall request the Trustee to enter into any such Supplemental Indenture for any of the purposes of the preceding paragraph, the Trustee shall, upon being satisfactorily indemnified with respect to expenses, cause notice of the proposed execution of such Supplemental Indenture to be mailed by first-class mail

postage prepaid to the registered Owners of the Bonds at their addresses as the same shall appear on the Bond Register. Such notice shall briefly set forth the nature of the proposed Supplemental Indenture and shall state that copies thereof are on file at the Designated Office of the Trustee for inspection by all Bondholders. The Trustee shall not, however, be subject to any liability to any Bondholder by reason of its failure to mail such notice, and any such failure shall not affect the validity of such Supplemental Indenture when consented to and approved as provided in the preceding paragraph. If the Owners of the requisite principal amount of Bonds which are outstanding under the Indenture at the time of the execution of any such Supplemental Indenture shall have consented to and approved the execution thereof as in the Indenture provided, no Owner of any Bond shall have any right to object to any of the terms and provisions contained therein, or the operation thereof, or in any manner to question the propriety of the execution thereof, or to enjoin or restrain the Trustee or the Authority from executing the same or from taking any action pursuant to the provisions thereof. Upon the execution of any such Supplemental Indenture as permitted and provided in the preceding paragraph, the Indenture shall be and be deemed to be modified and amended in accordance therewith.

Consent of University. So long as the University is not in default under the Loan Agreement, a Supplemental Indenture under the Indenture shall not become effective unless and until the University shall have consented in writing to the execution and delivery of such Supplemental Indenture. In this regard, the Trustee shall cause notice of the proposed execution and delivery of any such Supplemental Indenture to which the University has not already consented, together with a copy of the proposed Supplemental Indenture and a written consent form to be signed by the University, to be mailed by certified or registered mail or by a recognized overnight delivery service to the University at least 30 days prior to the proposed date of execution and delivery of any such Supplemental Indenture.

Supplemental Agreements Not Requiring Consent of Bondholders. The Authority, the University and the Trustee may, without the consent of or notice to the Owners of the Bonds, consent to any amendment, change or modification of the Loan Agreement as may be required:

- (a) by the provisions of the Indenture or the Loan Agreement,
- (b) for the purpose of curing any ambiguity or formal defect or omission,
- (c) for the purpose of permitting continued compliance with the Tax Agreement,
- (d) to effect changes to obtain or maintain a rating on any Bonds or permitted in connection with obtaining an upgrade in the rating on any Bonds to a higher rating category or subcategory, or
- (e) to make any change that does not materially adversely affect the rights of any Bondholder, the Authority or the Trustee;

provided, however, that without the consent of each Bondholder affected or the Trustee, as applicable, no Supplemental Agreement may result in anything described in clauses (i) through (iv) above under "Supplemental Indentures Requiring Consent of Bondholders" without the consent of each Bondholder affected or the Trustee, as applicable.

Supplemental Agreements Requiring Consent of Bondholders. Except for Supplemental Agreements not requiring consent of Bondholders as set forth in the preceding paragraph, neither the Authority nor the Trustee shall consent to any other Supplemental Agreement without the written approval or consent, given and procured as provided below, of the Owners of not less than a majority in aggregate principal amount of the Bonds which are Outstanding under the Indenture at the time of execution of any such amendment, change or modification. If at any time the Authority and the University shall request the consent of the Trustee to any such proposed Supplemental Agreement, the Trustee shall, upon being satisfactorily indemnified with respect to expenses, cause notice of such proposed Supplemental Agreement to be mailed in the same manner as provided in the Indenture with respect to Supplemental Indentures. Such notice shall briefly set forth the nature of the proposed amendment, change or modification and shall state that copies of the instrument embodying the same are on file at the Designated Office of the Trustee for inspection by all Bondholders. The Trustee shall not, however, be subject to any liability to any Bondholder by reason of its failure to mail such notice, and any such failure shall not affect the validity of such amendment, change or modification when consented to and approved as provided in this paragraph. If the Owners

of not less than a majority in aggregate principal amount of the Bonds outstanding under the Indenture at the time of the execution of any such Supplemental Agreement shall have consented to and approved the execution thereof as in the Indenture provided, no Owner of any Bond shall have any right to object to any of the terms and provisions contained therein, or the operation thereof, or in any manner to question the propriety of the execution thereof, or to enjoin or restrain the Trustee or the Authority from executing the same or from taking any action pursuant to the provisions thereof. The foregoing notwithstanding, without the consent of each Bondholder affected or the Trustee, as applicable, no Supplemental Agreement may result in anything described in clauses (i) through (iv) above under "Supplemental Indentures Requiring Consent of Bondholders."

Before the Authority shall enter into, and the Trustee shall consent to, any Supplemental Agreement pursuant to the Indenture, there shall have been delivered to the Authority and the Trustee a Favorable Opinion of Bond Counsel, which opinion also shall state that the proposed Supplemental Agreement is permitted under the Indenture.

Events of Default

If any one or more of the following events occur, it is hereby defined as and declared to be and to constitute an "Event of Default" under the Indenture:

(a) default in the due and punctual payment of any interest on any Bond when the same becomes due and payable; or

(b) default in the due and punctual payment of the principal of or redemption premium, if any, on any Bond when the same becomes due and payable, whether at the stated maturity or accelerated maturity thereof, or upon proceedings for redemption thereof; or

(c) the Authority shall for any reason be rendered incapable of fulfilling its obligations under the Indenture, or the Authority shall default in the due and punctual performance of any other of the covenants, conditions, agreements and provisions contained in the Bonds or in the Indenture or any Supplemental Indenture on the part of the Authority to be performed, and such incapacity or default shall continue for 60 days after written notice specifying such default and requiring the same to be remedied shall have been given to the Authority and the University by the Trustee (which notice may be given by the Trustee in its discretion and shall be given at the written request the Owners of not less than 10% in aggregate principal amount of the Bonds then Outstanding); provided that, if any such default shall be correctable but is such that it cannot be corrected within such period, it shall not constitute an Event of Default if corrective action is instituted by the Authority or the University within such period and diligently pursued until the default is corrected; or

(d) any Event of Default as specified in the Loan Agreement has occurred and is continuing and has not been waived.

With regard to any alleged default concerning which notice is given to the University under the preceding paragraph, the Authority hereby grants the University full authority for account of the Authority to perform any covenant or obligation, the nonperformance of which is alleged in said notice to constitute a default, in the name and stead of the Authority, with full power to do any and all things and acts to the same extent that the Authority could do and perform any such things and acts in order to remedy such default. Upon the occurrence of an Event of Default for which the Trustee has received notice pursuant to the Indenture or pursuant to the Indenture the Trustee is required to take notice, the Trustee shall, within 30 days give written notice thereof by first class mail to all Bondholders.

Remedies

If an Event of Default shall have occurred and be continuing, the Trustee may, and if requested in writing by the Owners of not less than 25% in principal amount of the Bonds Outstanding shall, by notice in writing delivered to the Authority and the University, declare the principal of all Bonds then Outstanding and the interest accrued thereon immediately due and payable, and such principal and interest shall thereupon become and be immediately due and payable; provided that if at any time after the principal of the Bonds then Outstanding shall

have so become due and payable, and before the entry of final judgment or decree in any suit, action or proceeding instituted on account of such acceleration or before the completion of the enforcement of any other remedy under the Indenture, all arrears of interest, with interest (to the extent permitted by law) at the rate borne by the Bonds on overdue installments of interest in respect to which such default shall have occurred, and all arrears of payments of principal when due, as the case may be, and all outstanding fees and expenses of the Trustee and all fees and expenses of the Trustee in connection with such default shall have been paid or provided for, then the acceleration of the Bonds then Outstanding and the consequences of such acceleration shall be annulled or rescinded, but no such annulment or rescission shall extend to or affect any subsequent acceleration of the Bonds then Outstanding, or impair any right consequent thereon.

Appointment of Receivers in Event of Default

If an Event of Default shall have occurred and be continuing, and upon the filing of a suit or other commencement of judicial proceedings to enforce the rights of the Trustee and of the Bondholders under the Indenture, the Trustee shall be entitled, as a matter of right, to the appointment of a receiver or receivers of the Trust Estate and of the Loan Payments, pending such proceedings, with such powers as the court making such appointment shall confer.

Exercise of Remedies by the Trustee

(a) Upon the occurrence of an Event of Default, the Trustee may pursue any available remedy at law or equity by suit, action, mandamus or other proceeding (including any rights of a secured party under the Pennsylvania Uniform Commercial Code) to enforce the payment of the principal of, redemption premium, if any, and interest on the Bonds then Outstanding, to realize on or to foreclose any of its interests or liens under the Indenture or under any other of the Bond Documents, to exercise any rights or remedies available to the Trustee, to enforce and compel the performance of the duties and obligations of the Authority as in the Indenture set forth and to enforce or preserve any other rights or interests of the Trustee under the Indenture with respect to any portion of the Trust Estate or otherwise existing at law or in equity.

(b) If an Event of Default shall have occurred and be continuing, and if requested in writing so to do by the Owners of not less than 25% in aggregate principal amount of Bonds then Outstanding and if indemnified as provided in the Indenture, the Trustee shall be obligated to exercise such one or more of the rights and powers conferred by the Indenture as the Trustee, being advised by counsel, shall deem most expedient in the interests of the Bondholders.

(c) All rights of action under the Indenture or under any of the Bonds may be enforced by the Trustee without the possession of any of the Bonds or the production thereof in any trial or other proceeding relating thereto, and any such suit or proceeding instituted by the Trustee shall be brought in its name as Trustee without the necessity of joining as plaintiffs or defendants any Owners of the Bonds, and any recovery of judgment shall, subject to the provisions described under the heading "Application of Moneys" below, be for the equal benefit of all the Owners of the Outstanding Bonds.

Limitation on Exercise of Remedies by Bondholders

No Owner of any Bond shall have any right to institute any suit, action or proceeding in equity or at law for the enforcement of the Indenture or for the execution of any trust under the Indenture or for the appointment of a receiver or any other remedy under the Indenture, unless (a) a default has occurred of which the Trustee has been notified as provided in the Indenture or of which by said section the Trustee is deemed to have notice, (b) such default shall have become an Event of Default, (c) the Owners of not less than 25% in aggregate principal amount of Bonds then Outstanding shall have made written request to the Trustee, shall have offered it reasonable opportunity either to proceed to exercise the powers granted under the Indenture or to institute such action, suit or proceeding in its own name, and shall have offered to the Trustee indemnity as provided in the Indenture, and (d) the Trustee shall thereafter fail or refuse to exercise the powers granted in the Indenture or to institute such action, suit or proceeding in its own name; and such notification, request and offer of indemnity are thereby declared in every case, at the option of the Trustee, to be conditions precedent to the execution of the powers and trusts of the Indenture, and to any action or cause of action for the enforcement of the Indenture, or for the appointment of a receiver or for any other remedy under the Indenture, it being understood and intended that no one or more Owners of the Bonds shall

have the right in any manner whatsoever to affect, disturb or prejudice the Indenture by its, his or their action or to enforce any right under the Indenture except in the manner in the Indenture provided, and that all proceedings at law or in equity shall be instituted, had and maintained in the manner in the Indenture provided, and for the equal benefit of the Owners of all Bonds then Outstanding. Nothing in the Indenture contained shall, however, affect or impair the right of any Bondholder to payment of the principal of and interest on any Bond at and after the maturity thereof or the obligation of the Authority to pay, solely from the Trust Estate, the principal of, redemption premium, if any, and interest on each of the Bonds to their respective Owners at the time, place, from the source and in the manner expressed in the Indenture and in the Bonds or affect or interfere with the right of any Owner to institute suit for the enforcement of any such payment.

Right of Bondholders to Direct Proceedings

Except as provided in the preceding paragraph, the Owners of a majority in aggregate principal amount of Bonds then Outstanding shall have the right, at any time, by an instrument or instruments in writing executed and delivered to the Trustee, to direct the time, method and place of conducting all proceedings to be taken in connection with the enforcement of the terms and conditions of the Indenture, or for the appointment of a receiver, custodian or any other proceedings under the Indenture, provided that such direction shall not be otherwise than in accordance with the provisions of law and of the Indenture and provided, further, that the Trustee shall have the right to decline to follow any such direction if the Trustee in good faith shall determine that the proceedings so directed would involve it in personal liability for which it has not been indemnified.

Application of Moneys

Any moneys held or received by the Trustee (after the deductions for payment of costs and expenses of proceedings resulting in the collection of such moneys) together with any other sums then held by the Trustee as part of the Trust Estate (other than the Rebate Fund), shall be applied in the following order, at the date or dates fixed by the Trustee and, in case of the distribution of such money on account of principal or premium, if any, or interest, upon presentation of the Bonds and the notation thereon of the payment if only partially paid and upon surrender thereof if fully paid:

(a) First: To the payment of all amounts due the Trustee under the Indenture provisions relating to compensation, reimbursement and indemnification;

(b) Second: To the payment of the whole amount then due and unpaid upon the Outstanding Bonds for principal and premium, if any, and interest, in respect of which or for the benefit of which such money has been collected, with interest (to the extent that such interest has been collected by the Trustee or a sum sufficient therefor has been so collected and payment thereof is legally enforceable at the respective rate or rates prescribed therefor in the Bonds) on overdue principal and premium, if any, and on overdue installments of interest; and in case such proceeds shall be insufficient to pay in full the whole amount so due and unpaid upon such Bonds, then to the payment of such principal, premium, if any, and interest, without any preference or priority, ratably according to the aggregate amount so due;

(c) Third: To the payment of any amount due to the Authority under the Indenture or the Loan Agreement; and

(d) Fourth: To the payment of the remainder, if any, to the University or to whosoever may be lawfully entitled to receive the same or as a court of competent jurisdiction may direct.

Whenever moneys are to be applied pursuant to the above, such moneys shall be applied at such times and from time to time as the Trustee shall determine, having due regard to the amount of such moneys available and which may become available for such application in the future. Whenever the Trustee shall apply such moneys, it shall fix the date (which shall be an Interest Payment Date unless it shall deem another date more suitable) upon which such application is to be made and upon such date interest on the amounts of principal to be paid on such dates shall cease to accrue. The Trustee shall give such notice as it may deem appropriate of the deposit with it of any such moneys and of the fixing of any such date and shall not be required to make payment to the Owner of any unpaid Bond until such Bond shall be presented to the Trustee for appropriate endorsement or for cancellation if fully paid.

Whenever all of the Bonds and interest thereon have been paid pursuant to the above, and all fees, expenses and charges of the Trustee and the Authority, including attorneys' fees and expenses, have been paid, and all amounts owing to the United States Government under Section 148 of the Code have been paid, any balance remaining in the Bond Fund shall be paid to the University.

Resignation and Removal of Trustee

(a) The Trustee may resign at any time by giving written notice thereof to the Authority, the University and each Owner of Bonds Outstanding as their names and addresses appear in the Bond Register maintained by the Trustee. If an instrument of acceptance by a successor Trustee shall not have been delivered to the Trustee within 30 days after the giving of such notice of resignation, the resigning Trustee may, at the expense of the University, petition any court of competent jurisdiction for the appointment of a successor Trustee.

(b) The Trustee may be removed at any time by an instrument or concurrent instruments in writing delivered to the Authority and the Trustee signed by the Owners of a majority in principal amount of the Outstanding Bonds. In addition, the Authority at the written direction of the University (so long as the University is not in default under the Indenture and no condition exists that, with the giving of notice or the passage of time, or both, would constitute a default or an Event of Default) may remove the Trustee at any time for any reason. The Authority, the University or any Bondholder may at any time petition any court of competent jurisdiction for the removal for cause of the Trustee.

(c) If at any time:

- (1) the Trustee shall cease to be eligible under the Indenture and shall fail to resign after written request therefor by the Authority, the University or by any such Bondholder, or
- (2) the Trustee shall become incapable of acting or shall be adjudged a bankrupt or insolvent or a receiver of the Trustee or of its property shall be appointed or any public officer shall take charge or control of the Trustee or of its property or affairs for the purpose of rehabilitation, conservation or liquidation,

then, in any such case, (x) the Authority may remove the Trustee, or (y) the University or any Bondholder may petition any court of competent jurisdiction for the removal of the Trustee and the appointment of a successor Trustee; provided, however, that if a successor Trustee has not been appointed within 30 days after the Trustee's removal, the Trustee may, at the University's expense, petition any court of competent jurisdiction for the appointment of a successor Trustee.

(d) The successor Trustee shall give notice of such resignation or such removal of the Trustee and such appointment of a successor Trustee by mailing written notice of such event by first-class mail, postage prepaid, to the registered Owners of Bonds as their names and addresses appear in the Bond Register maintained by the Trustee. Each notice shall include the name of the successor Trustee and the address of its principal corporate trust office.

(e) No resignation or removal of the Trustee and no appointment of a successor Trustee pursuant to the above shall become effective until the acceptance of appointment by the successor Trustee.

Defeasance

If the Authority shall pay or provide for the payment of the entire indebtedness on all Bonds outstanding (including, for the purpose under the Indenture, any Bonds held by the University or an Affiliate thereof) in any one or more of the following ways:

- (a) by paying or causing to be paid the principal of (including redemption premium, if any) and interest on all Bonds outstanding, as and when the same become due and payable;
- (b) by delivering to the Trustee, for cancellation by it, all Bonds outstanding; or

(c) by depositing with the Trustee, in trust, (1) cash or Permitted Defeasance Obligations which are not callable or subject to prepayment prior to the date the moneys therefrom are anticipated to be required in such amount as will, together with the income or interest to accrue thereon, without consideration of any reinvestment thereof, and with any uninvested cash, be fully sufficient to pay or redeem (when redeemable) and discharge the indebtedness on all Bonds at or before their respective maturity dates; and (2) in the case of Bonds which do not mature or will not be redeemed within 90 days of the deposit referred to in (1) above and as to which there has not been deposited cash or Permitted Defeasance Obligations in an amount which, without regard for earnings or income thereon, is fully sufficient to pay or redeem (when redeemable) and discharge the indebtedness on all such Bonds at or before their respective maturity dates, a verification report of an independent certified public accounting firm which provides arbitrage and/or verification services or a firm which is recognized for providing arbitrage and/or verification services as to the adequacy of the trust funds to fully pay the Bonds deemed to be paid. If a forward supply contract is employed in connection with a refunding of Bonds, (i) the verification report described in clause (2) above shall expressly state that the adequacy of the escrow to accomplish the refunding relies solely on the initial escrowed investments and the maturing principal thereof and interest income thereon and does not assume performance under or compliance with the forward supply contract, and (ii) the applicable escrow agreement shall provide that in the event of any discrepancy or difference between the terms of the forward supply contract and the escrow agreement (or the Indenture, if no separate escrow agreement is executed in connection with such refunding), the terms of the escrow agreement or the Indenture, as applicable, shall be controlling;

and if the Authority shall pay or cause to be paid all other sums payable under the Indenture by the Authority, then and in that case the Indenture and the estate and rights granted under the Indenture shall cease, determine and become null and void, and thereupon the Trustee shall, upon Written Request of the University, and upon receipt by the Trustee of an Officer's Certificate and an opinion of Independent Counsel, each stating that in the opinion of the signers all conditions precedent to the satisfaction and discharge of the Indenture have been complied with, forthwith execute proper instruments acknowledging satisfaction of and discharging the Indenture and the lien of the Indenture. In such event, the Trustee shall assign, transfer and turn over to the University the Trust Estate under the Indenture, including, without limitation, any surplus in the Bond Fund and any balance remaining in any other fund created under the Indenture (other than the Rebate Fund, said Permitted Defeasance Obligations or other moneys deposited in trust as above provided). The satisfaction and discharge of the Indenture shall be without prejudice to the rights of the Trustee to charge and be reimbursed by the Authority and the University for any expenditures which it may thereafter incur in connection herewith. Notwithstanding the foregoing, to the extent there are rebate obligations outstanding to the U.S. Treasury with respect to the Bonds, the lien of the Indenture shall not be deemed discharged until the University shall have agreed in writing to satisfy such rebate obligations in full.

The Authority or the University may at any time surrender to the Trustee for cancellation by it any Bonds previously authenticated and delivered, which the Authority or the University may have acquired in any manner whatsoever, and such Bonds, upon such surrender and cancellation, shall be deemed to be paid and retired.

Liability of Authority Not Discharged

Upon the deposit with the Trustee, in trust, at or before maturity, of moneys or Permitted Defeasance Obligations in the necessary amount to pay or redeem all outstanding Bonds (whether upon or prior to maturity or the redemption date of such Bonds) and compliance with the other payment requirements described above under "Defeasance," provided that if such Bonds are to be redeemed prior to the maturity thereof, notice of such redemption shall have been given as in the Indenture provided, or provisions satisfactory to the Trustee shall have been made for the giving of such notice, and subject to the provisions of the Indenture, the Indenture may be discharged in accordance with the provisions of the Indenture but the liability of the Authority in respect of such Bonds shall continue, but the Owners thereof shall thereafter be entitled to payment only out of the moneys or the Permitted Defeasance Obligations deposited with the Trustee as aforesaid.

Provision for Payment of a Portion of Bonds

If the Authority shall pay or provide for the payment of the entire indebtedness on any portion of the Bonds, in one or more of the following ways:

(a) by paying or causing to be paid the principal of (including premium, if any) and interest on such portion of the Bonds as and when the same shall become due and payable;

(b) by depositing with the Trustee, in trust, (1) cash or Permitted Defeasance Obligations which are not callable or subject to prepayment prior to the date the moneys therefrom are anticipated to be required in such amount as will, together with the income or interest to accrue thereon, without consideration of any reinvestment thereof, and with any uninvested cash, be fully sufficient to pay or redeem (when redeemable) and discharge such portion of Bonds at or before their respective maturity dates; and (2) in the case of Bonds which do not mature or will not be redeemed within 90 days of the deposit referred to in clause (1) above and as to which there has not been deposited cash or Permitted Defeasance Obligations in an amount which, without regard for earnings or income thereon, is fully sufficient to pay or redeem (when redeemable) and discharge the indebtedness on such portion of Bonds at or before their respective maturity dates, a verification report of a nationally recognized independent certified public accounting firm as to the adequacy of the trust funds to fully pay such portion of Bonds to be paid. If a forward supply contract is employed in connection with a refunding of Bonds, (A) the verification report described in clause (2) above shall expressly state that the adequacy of the escrow to accomplish the refunding relies solely on the initial escrowed investments and the maturing principal thereof and interest income thereon and does not assume performance under or compliance with the forward supply contract, and (B) the applicable escrow agreement shall provide that in the event of any discrepancy or difference between the terms of the forward supply contract and the escrow agreement (or this Indenture, if no separate escrow agreement is executed in connection with such refunding), the terms of the escrow agreement or this Indenture, as applicable, shall be controlling; or

(c) by delivering to the Trustee, for cancellation by it, all Bonds outstanding or any such portion thereof.

and if the Authority shall also pay or cause to be paid all other sums payable under the Indenture by the Authority with respect to such portion of the Bonds, and, if such portion of the Bonds are to be redeemed prior to the maturity thereof, notice of such redemption shall have been given as in the Indenture provided or provisions satisfactory to the Trustee shall have been made for the giving of such notice, such portion shall cease to be entitled to any lien, benefit or security under the Indenture. The liability of the Authority in respect of such Bonds or such portion thereof shall continue but the Owners thereof shall thereafter be entitled to payment (to the exclusion of all other Bondholders) only out of the moneys or Permitted Defeasance Obligations deposited with the Trustee as aforesaid.

THE INTERCREDITOR AGREEMENT

The 1998 Trustee, the 2011 Trustee, the 2013 Trustee, the 2014 Trustee, the 2016 Trustee, the 2018 Trustee and the University are parties to an Intercreditor Agreement dated as of March 1, 1996 (the "Intercreditor Agreement"). On the date of issuance and delivery of the Bonds, the Trustee will execute and deliver a joinder agreement by which the Trustee will become bound by the terms of the Intercreditor Agreement. The purpose of the Intercreditor Agreement is to provide that each party (a "Secured Party") to which the University has granted, or may in the future grant, a security interest in Tuition and Student Fees (the "Collateral") holds an equal and ratable interest in that Collateral. The Intercreditor Agreement provides that upon the occurrence of an event of default under any document which grants a security interest in the Collateral, any such Secured Party may take possession of the Collateral.

Any Secured Party who takes possession of the Collateral must so notify the other Secured Parties and also advise the other Secured Parties of the amount of Revenue Secured Debt held by the Secured Party giving the notice and secured by that Collateral.

Each Secured Party receiving a notice referred to in the preceding paragraph must promptly notify each other Secured Party of the amount of Revenue Secured Debt then owing to such Secured Party.

The Secured Party taking possession of the Collateral shall promptly (but not less frequently than monthly) distribute, after deducting reasonable collection and enforcement expenses, to the other Secured Parties their pro-

rata share of the Collateral according to the respective amounts of the Revenue Secured Debt then owing to those Secured Parties.

If any Secured Party receives any Collateral in greater portion than such Secured Party's pro-rata share, then that Secured Party shall so notify the other Secured Parties and an equitable adjustment shall be made so that, in effect, all such excess amounts will be shared ratably among all of the Secured Parties.

Any Secured Party taking possession of the Collateral shall act as agent and bailee of each of the other Secured Parties for their ratable benefit and security and shall be entitled to indemnity from each of the other Secured Parties ratably, for all reasonable costs and expenses and liabilities incurred, except for those resulting from gross negligence or willful misconduct.

The Secured Parties agree to cooperate with each other in the exercise of rights and remedies to realize on the Collateral to the extent necessary or appropriate to ensure that the benefits and proceeds of the Collateral are shared ratably among the Secured Parties, and no Secured Party exercising any rights or remedies to realize on any Collateral shall in so doing seek or claim any priority or preference over any other Secured Party.

If the security interest of any Secured Party in the Collateral is not perfected or is avoidable for any reason, then as between the Secured Parties, the arrangements provided for in the Intercreditor Agreement shall be ineffective with respect to the Collateral which is the subject of the unperfected or avoidable lien or security interest.

The priorities and agreements set forth in the Intercreditor Agreement shall survive the filing of any petition in bankruptcy or insolvency by or against the University under the federal Bankruptcy Code.

Each Secured Party waives any right to require any other Secured Party to marshal any security or collateral, except as required by the Intercreditor Agreement, or otherwise to compel any other Secured Party to seek recourse or satisfaction of any Revenue Secured Debt owed to it from one source before seeking recourse or satisfaction from another source.

Each holder of any Revenue Secured Debt of the University must join in the Intercreditor Agreement and become a party to the Intercreditor Agreement. The University agrees that it will not grant a security interest in Tuition and Student Fees unless the grantee of such security interest becomes a Secured Party under the Intercreditor Agreement.

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APPENDIX E

SUMMARY OF CONTINUING DISCLOSURE CERTIFICATE

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SUMMARY OF CONTINUING DISCLOSURE CERTIFICATE

Definitions

The following capitalized terms have the following meanings for purposes of the Disclosure Certificate:

"Annual Financial Information" shall mean the financial information or operating data with respect to the University for a particular Fiscal Year, substantially similar to the information set forth in APPENDIX A to this Official Statement, to the extent not included in the audited financial statements (including the notes thereto) of the University, under the following headings: Employee Profile; Operating Statistics; Student Fees; Student Financial Aid; and Accounting Matters.

"Annual Report" means an annual report containing the information described below under "Provision of Annual Report".

"Business Day" shall mean any day other than a Saturday or Sunday, a legal holiday or a day on which banking institutions in the Commonwealth are required or authorized by law or executive order to close or a day on which the Trustee is closed.

"Dissemination Agent" means the party (if any) appointed by the University pursuant to the provisions of the Disclosure Certificate to perform the duties described in the Disclosure Certificate to ensure compliance with the provisions of the Rule. Initially, the University shall perform all obligations under the Disclosure Certificate itself and no third party will be appointed by the University as Dissemination Agent.

"EMMA" or the "EMMA System" means the Electronic Municipal Market Access system of the MSRB (or any successor electronic filing system established in accordance with the Rule for the submission of information required to be filed under the Rule).

"Exchange Act" means the Securities Exchange Act of 1934, as amended.

"Financial Obligation" means a (i) debt obligation; (ii) derivative instrument entered into in connection with, or pledged as security or source of payment for, an existing or planned debt obligation; or (iii) guarantee of (i) or (ii). The term Financial Obligation shall not include municipal securities as to which a final official statement has been provided to the MSRB consistent with the Rule.

"Fiscal Year" shall mean any period of twelve consecutive months adopted by the University as its fiscal year for financial reporting purposes, and initially means the period beginning on July 1 of each calendar year and ending on June 30 of the next calendar year.

"MSRB" shall mean the Municipal Securities Rulemaking Board or its lawful successors.

"Participating Underwriter" shall mean the original Underwriter of the Bonds.

"Registered Owner" or "Registered Owners" shall mean the person or persons in whose name a Bond is registered on the books of the Trustee for that purpose in accordance with the Indenture and the Bonds. For so long as the Bonds shall be registered in the name of DTC or its nominee, the term "Registered Owners" shall also mean and include, for purposes of the Disclosure Certificate, the owners of book entry credits evidencing beneficial ownership interests in the Bonds.

"Reportable Event" shall mean any of the events listed below under "Reportable Events".

"Rule" shall mean Rule 15c2-12 promulgated by the SEC under the Exchange Act, as such Rule may be amended from time to time.

"SEC" means the United States Securities and Exchange Commission.

Provision of Annual Report

The University agrees in the Disclosure Certificate, in accordance with the provisions of the Rule, to provide to the MSRB, by electronic transmissions through EMMA, within 180 days of the end of each University Fiscal Year commencing with the Fiscal Year ending June 30, 2019, an Annual Report for such Fiscal Year which contains the following:

- (a) The audited annual financial statements of the University prepared on the basis of generally accepted accounting principles and audited by an independent certified public accountant.
- (b) An update of the Annual Financial Information.

In the event the University's audited annual financial statements for any University Fiscal Year are not available within 180 days after the end of such Fiscal Year, the University shall provide to the MSRB, by electronic transmissions through EMMA, the University's unaudited annual financial statements for such Fiscal Year as part of the Annual Report, and thereafter shall provide the audited annual financial statements when and if the same become available.

The University further agrees to provide to the MSRB, by electronic transmissions through EMMA, notice of a failure to provide any Annual Report or any portion thereof in accordance with the foregoing provisions within ten (10) Business Days after the occurrence of such failure.

The University may submit the items listed above as a single document or as a series of separate documents comprising a package. The University may provide the items listed above by specific cross-reference to other documents which have been submitted to the MSRB via the EMMA System or filed with the SEC. The University may, at its option, satisfy this obligation by providing an official statement for one or more series of bonds issued on behalf of the University after the date hereof or by specific reference, in accordance with the Rule, to one or more official statements previously provided to and available from the MSRB.

Reportable Events

The University shall provide to the MSRB, by electronic transmissions through EMMA, notice of the occurrence of any of the following events with respect to the Bonds (each a "Reportable Event") within ten (10) Business Days after the occurrence thereof (provided that the term "material" with regard to an event or occurrence means that the University has determined that such event or occurrence is material within the meaning of the Rule):

- (1) Principal and interest payment delinquencies;
- (2) Non-payment related defaults, if material;
- (3) Unscheduled draws on debt service reserves reflecting financial difficulties;
- (4) Unscheduled draws on credit enhancements, if any, reflecting financial difficulties;
- (5) Substitution of credit or liquidity providers, if any, or their failure to perform;
- (6) Adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the Bonds, or other material events affecting the tax-exempt status of the Bonds;
- (7) Modification to the rights of the holders of the Bonds, if material;
- (8) Bond calls, 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 (provided that such event shall be considered to occur at the time set forth in subparagraph (b)(5)(i)(C)(12) of the Rule);

(13) If material, the consummation of a merger, consolidation, or acquisition involving 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 relating to any such actions other than pursuant to its terms;

(14) Appointment of a successor or additional trustee or the change of name of a trustee, if material;

(15) Incurrence of a Financial Obligation of the University, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a financial obligation of the University, any of which affect holders of the Bonds, if material; and

(16) Default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a Financial Obligation of the University, any of which reflect financial difficulties.

The University also agrees that it shall provide in a timely manner to the MSRB, by electronic transmissions through EMMA, notice of any failure by the University to provide any required notice of a Reportable Event on or before the dates specified therein.

Amendment

The Disclosure Certificate may be amended by the University so long as such amendment does not contravene the Rule as applicable to the Bonds. In addition, the University may amend the Disclosure Certificate, and any provision thereof may be waived, if

(a) such amendment or waiver is 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 the obligor on the Bonds, or type of business conducted;

(b) the amendment or waiver either (i) is approved by the Bondholders in the same manner as provided in the Indenture for amendments to the Indenture with the consent of Bondholders or (ii) does not, in the opinion of the Trustee or nationally recognized bond counsel, materially impair the interests of the Bondholders; and

(c) such amendment or waiver is supported by an opinion of counsel expert in federal securities laws to the effect that such amendment or waiver would not, in and of itself, cause the undertakings in the Disclosure Certificate to violate the Rule if such amendment or waiver had been effective on the date of the Disclosure Certificate but taking into account any subsequent change in or official interpretation of the Rule, as well as any change in circumstances.

If any of the provisions relating to the Annual Report that must be provided to the MSRB in accordance with the Rule is amended or waived, the first Annual Report reflecting such amendment or waiver shall include an explanation, in narrative form, of the reasons for the amendment or waiver and the impact of the change in the type of operating data or financial information being provided.

If the provisions of the Disclosure Certificate specifying the accounting principles to be followed in preparing the University's financial statements are amended or waived, the Annual Report for the Fiscal Year in which the change is made shall present a comparison between the financial statements or information prepared on the basis of the new accounting principles and those prepared on the basis of the former accounting principles. The comparison must include a qualitative discussion of the differences in the accounting principles and the impact of the change in the accounting principles on the presentation of the financial information, in order to provide information to the Bondholders to enable them to evaluate the ability of the University to meet its obligations. To the extent reasonably feasible, the comparison must be quantitative. The University shall file a notice of the change in the accounting principles with the MSRB, by electronic transmissions through EMMA, on or before the effective date of any such amendment or waiver.

Other Information

Nothing in the Disclosure Certificate shall preclude the University from disseminating any other information with respect to the University or the Bonds, using the means of communication provided in the Disclosure Certificate or otherwise, in addition to the notices of Reportable Events specifically provided for therein, nor shall the University be relieved of complying with any applicable law relating to the availability and inspection of public records. Any election by the University to furnish any information not specifically provided for therein in any notice given pursuant to the Disclosure Certificate or by the means of communication provided for therein shall not be deemed to be an additional contractual undertaking and the University shall have no obligation to update or furnish such information in any subsequent notice or by the same means of communication.

Default

In the event that the University fails to comply with any provision of the Disclosure Certificate, the Dissemination Agent (if a third party dissemination agent has been appointed by the University), the Trustee or any Registered Owner of the Bonds shall have the right, by mandamus, suit, action or proceeding at law or in equity, to compel the University to perform each and every term, provision and covenant contained in the Disclosure Certificate. The Trustee shall be under no obligation to take any action in respect of any default thereunder unless it has received the direction in writing to do so by the Registered Owners of at least 25% of the outstanding principal amount of the Bonds and if, in the Trustee's opinion, such action may tend to involve expense or liability, unless it is also furnished with indemnity and security for expenses satisfactory to it.

A default under the Disclosure Certificate shall not be or be deemed to be a default under the Bonds, the Indenture or the Loan Agreement and the sole remedy in the event of a failure of the University to comply with the provisions thereof shall be the action to compel performance as described in the immediately preceding paragraph.

Termination of Disclosure Obligations

The University's obligations under the Disclosure Certificate shall terminate, *inter alia*, upon the legal defeasance, prior redemption, payment or provision for payment in full of the Bonds.

Dissemination Agent

The Disclosure Certificate permits, but does not require, the University to appoint a third party (which may be the Trustee) to serve as Dissemination Agent. During any period in which a third party Dissemination Agent has been appointed, the University shall be obligated to file with the Dissemination Agent all Annual Reports, notices of Reportable Events and other notices required by the Disclosure Certificate in sufficient time to enable the Dissemination Agent to file each such Annual Report or notice with the MSRB via EMMA on or before the date such Annual Report or notice is required to be filed pursuant to the Disclosure Certificate.



