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William F. Dwyer
STATE TREASURER



THE STATE OF NEW HAMPSHIRE
STATE TREASURY
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October 11, 2017

His Excellency, Christopher T. Sununu
And Honorable Council
State House
Concord, NH 03301

REQUESTED ACTION

To authorize the State Treasurer, as Trustee of the New Hampshire Higher Education Savings Plan Trust (the "Trust"), to enter into a 5-year contract extension period with Fidelity Brokerage Services, FMR LLC, and FMR Co. (collectively, the "Program Administrator" or "Fidelity") relating to the administration of the New Hampshire College Tuition Savings Plan (the "Savings Plan"), effective October 31, 2017 and covering the period ending December 31, 2023, subject to approval of the Governor and Executive Council and pursuant to:

Section 7.3 of the Restated Management and Administrative Services Agreement (the "MASA") dated January 14, 1998 between the State Treasurer, as Trustee, and the Program Administrator, as amended.

There is no financial impact to the State. All compensation paid to the Program Administrator and all administrative costs incurred by the Trust are funded by an administrative assessment collected directly from the investment portfolios of participants in the Savings Plan.

EXPLANATION

Statutory Background – The New Hampshire College Tuition Savings Plan was established in 1997 pursuant to RSA 195-H, which authorized the creation of a State-sponsored college tuition savings plan qualified under Section 529 of the Internal Revenue Code (the "Program"). The Program currently consists of two savings plans: 1) the UNIQUE College Investing Plan ("UNIQUE") – a retail plan offered directly to the public by Fidelity representatives; and 2) the Fidelity Advisor 529 Plan ("FA 529") – available only through third-party investment advisors (not affiliated with Fidelity Investments) that do not offer a 529 plan of their own.

RSA 195-H also created the 13-member New Hampshire College Tuition Savings Plan Advisory Commission (the "Advisory Commission") and authorized the creation of the New Hampshire

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Higher Education Savings Plan Trust (the “Trust”), established in 1998, in order to carry out and promote the State’s purposes for the Program, with the State Treasurer serving as Trustee.

The Trust currently encompasses over 860,000 participant accounts with nearly \$16.4 billion in participant-invested assets under management, making the State’s Program the fourth-largest 529 plan in the nation.

RSA 6:38 established the non-lapsing New Hampshire Excellence in Higher Education Endowment Trust Fund (the “Fund”) to provide postsecondary education scholarships for financially-qualified New Hampshire residents attending participating New Hampshire colleges. The Fund has distributed over \$111 million in scholarship aid since inception. The Fund also provides reimbursement to the State for administrative costs incurred on behalf of the Trust, the State Treasury, and the Advisory Commission.

Fund revenues are derived from the State’s portion of a monthly administrative fee or assessment applied to the market value of each participant account and shared between the Trust and Fidelity.

Fidelity Service Contracts – In 1998, the State Treasurer, as Trustee, with the advice and consent of the Advisory Commission and the approval of the Governor and Executive Council, contracted with Fidelity to provide investment, management, and administrative services as a result of a rigorous Request for Proposal process. The two resulting service contracts (the Investment Management Agreement and the Management & Administrative Services Agreement) were scheduled to expire in 2013, however a 5-year option was exercised in 2009 following Governor and Executive Council approval. As a result, the contract with Fidelity will remain in effect through December 31, 2018. In addition to New Hampshire, Fidelity currently manages the state-sponsored plans of Arizona, Delaware, and Massachusetts. Contractually, however, the New Hampshire UNIQUE Program is Fidelity’s national brand when marketing and promoting college savings plans.

Amendments to these agreements have been made from time to time in order to remain compliant with Section 529 of the federal tax code and federal investment disclosure regulations and requirements. Additional amendments have strengthened the competitiveness of the Savings Plan in the national marketplace by adding investment options, enhancing technology and services, and reducing participant barriers such as account maintenance costs and contribution minimums, in order to promote savings, particularly among middle and lower income families.

Requested Action – The State Treasurer, as directed by the Advisory Commission, requests approval to enter into a 5-year contract term with the Program Administrator, effective January 1, 2019 through December 31, 2023, for the following reasons:

His Excellency, Governor Christopher T. Sununu

And the Honorable Council

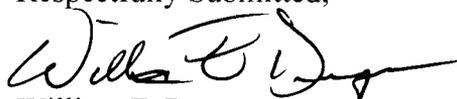
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1. Pursuant to Administrative Rule Csp 304.03 and as described in the draft minutes of the Advisory Commission special meeting held September 21, 2017 (second attachment), the Advisory Commission voted unanimously to authorize a 5-year contract renewal with the Program Administrator.
2. From its inception in 1998, the Savings Plan, one of the first launched in the US, has experienced tremendous growth and success, with the number of participant accounts now approaching 900,000 and over \$16 billion of assets under management, making the Savings Plan the fourth largest in the US. New Hampshire residents constitute only 3% of participants in the Savings Plan, evidence of the Savings Plan's success nationally.
3. As a result of New Hampshire's revenue-sharing agreement with the Program Administrator, over \$111 million in scholarship and restricted endowment funding has been distributed on behalf of New Hampshire students attending colleges and universities throughout the State.
4. Section 7.6 of the MASA (third attachment) prescribes the terms and conditions under which the Program Administrator, following the expiration or termination of the MASA, could solicit participants in the Savings Plan for the purpose of persuading them to transfer their accounts to a different qualified college savings plan, presumably one administered by the Program Administrator. As reflected in the attached draft meeting minutes, members of the Advisory Commission recognize that the robust performance and overwhelming success of the Savings Plan has engendered the loyalty of its participants to the Program Administrator rather than to the State of New Hampshire as program sponsor.
5. Executive Council approval is sought this far in advance of the expiration of the current contract on December 31, 2018 because: a) if the Executive Council were to deny this request it would take approximately 6-8 months to competitively procure a new program administrator, and; b) Section 7.4(c) of the MASA requires the State and Fidelity to agree to enter into a 5-year contract renewal at least 6 months prior to the expiration of the contract in effect (June 30, 2018).

In closing, while the Savings Plan could be characterized as being bound by its own success, the Advisory Commission recognizes the many stakeholders who have been well-served by that success, it values highly the efficient and rewarding collaboration between the State and Fidelity, and it has directed the State Treasurer, as Savings Plan Trustee, to seek Executive Council approval of a new 5-year contract term.

Respectfully Submitted,



William F. Dwyer

State Treasurer

His Excellency, Governor Christopher T. Sununu

And the Honorable Council

October 11, 2017

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Attachments:

- Section 7.3 of the MASA, dated January 14, 1998
- Draft minutes of the special meeting of the Advisory Commission held September 21, 2017
- Section 7.6 of the MASA, dated January 14, 1998
- Executed Second Amendment to the Restated Management and Administrative Services Agreement between the State Treasurer, as Trustee, and Fidelity Brokerage Services LLC, FMR LLC, and FMR Co., Inc., d/b/a Fidelity FMR Co (collectively referred to as "Fidelity"), as amended.
- Certificates of Good Standing
- Certificates of Authority
- Certificates of General Liability and Workers' Compensation Insurance

to impact the Plan. Without limiting the generality of the foregoing, each party agrees to furnish the other with such financial, operational and other information, on a timely basis, as may be reasonably requested by the other.

VII. TERM OF AGREEMENT; TERMINATION; EFFECT OF TERMINATION

7.1 **Effective Date.** This Agreement shall take effect on the date of its execution or approval by the Governor and Executive Council of the State of New Hampshire, whichever is later (the "Effective Date").

7.2 **Term.** This Agreement shall remain in effect for a term ending on December 31 of the calendar year that includes the 15th anniversary of the Effective Date (the "Initial Term").

7.3 **Renewal.** This Agreement may be continued for additional five-year periods upon the mutual consent of the Trustee and Fidelity in a written instrument executed by the parties and approved by the Governor and Executive Council as may be required under then applicable state law.

7.4 **Termination.** This Agreement may be terminated at any time, whether before or after the conclusion of the Initial Term, by mutual consent of the Trustee and Fidelity in a written instrument executed by the parties. This Agreement may also be terminated subject to and in accordance with the following paragraphs of this Section 7.4.

(a) **Termination by the Trustee with Cause.** Subject to the provisions of this Section 7.4(a), this Agreement may be terminated at any time by the Trustee, whether before or after the conclusion of the Initial Term, upon the occurrence of any one of the following events: (i) provided that the Trust is not then in material breach of any representation, warranty, covenant or other agreement contained herein, if Fidelity shall have committed a material breach of any of its covenants or agreements set forth herein or in the investment management contract required by Section 1.2 hereof or shall have failed to perform the Services in accordance with the terms of the Agreement, which breach or failure is not cured within six months following written notice from the Trustee of such breach; (ii) if Fidelity has produced investment performance with respect to the assets of the Trust that is substantially below levels of investment performance with respect to assets of similar type and amount that are invested in investments similar to those authorized under the investment management guidelines established pursuant to the investment management contract required by Section 1.2 hereof and such substantial underperformance shall have continued for a period of 24 months; (iii) if, at any time after December 31, 1998, Fidelity has engaged in any activities which make the Trustee's continued involvement in the Plan economically unsound; or (iv) if subsequent legislation, whether state, federal or otherwise, makes the continued operation of the Plan uneconomic or not in the best interests of its contributors and/or beneficiaries. In addition to giving written notice of breach or failure pursuant to section 7.5(a)(i), the Trustee may suspend payments to be made to Fidelity under this Agreement and the investment management contract required by section 1.2 hereof, and if such breach or failure is not cured within six months following written notice from the Trustee of such breach, the Trustee may order that the portion of the payments which would otherwise accrue to Fidelity during the

DRAFT

New Hampshire College Tuition Savings Plan Advisory Commission
Minutes of the Meeting of September 21, 2107

The September 21, 2017 Special Meeting of the New Hampshire College Tuition Savings Plan Advisory Commission (“Advisory Commission”), held at the offices of the New Hampshire Higher Education Assistance Foundation in Concord, was called to order at 2:00 p.m. by Dr. Edward MacKay, Advisory Commission Chair.

Members present, constituting a quorum, were:

Edward MacKay (Chair)	Public Member, appointed by the Governor; Retired Chancellor, University System of New Hampshire
Tori Berube	Vice President, representing the NH Higher Education Assistance Foundation Organizations
Michael Cryans	Public Member, appointed by the Governor
Bill Dwyer	State Treasurer
Lou D’Allesandro	State Senator
Ross Gittell	Chancellor, Community College System of New Hampshire
David Mahoney	Representing the Higher Education Commission – Dept. of Education
Kenneth Weyler	State Representative

Members absent were:

Sr. Paula Buley	President, Rivier University, representing the New Hampshire College and University Council
Daniel Innis	State Senator
Sylvia Larsen	Representing the Governor; Retired State Senator
Todd Leach	Chancellor, University System of New Hampshire
Peter Leishman	State Representative

Also present at the meeting were Kyla Doyle, Ron Hazel, Andrew Dierdorf and Keith Bernhardt from Fidelity Investments (“Fidelity”) and Monica Mezzapelle from New Hampshire State Treasury.

Dr. MacKay began the meeting by welcoming all attendees and stating that the purpose of the meeting was to determine whether to pursue a 5-year renewal option of the existing agreement between the State of New Hampshire and Fidelity Investments, which has been the Program Administrator since 1998, or to re-bid program administration through a competitive procurement.

Prior to commencing with Fidelity’s presentation, Dr. MacKay asked Mr. Cryans to display the photograph he had brought to the meeting. Mr. Cryans indicated that the picture is from when Governor Jeanne Shaheen invited him and his family to celebrate the launch of the 529 program in New Hampshire. Mr. Cryans’ son was the first participant in the Plan and he is now a junior in college – the photograph memorializes what the 529 program is all about, providing an efficient

vehicle for moderate to low income individuals to save for college. The 529 program, along with the scholarship programs, have been true success stories for New Hampshire.

New Hampshire's 529 Programs – Achievements, Enhancements and Milestones

Ms. Doyle began the presentation highlighting the relationship between the State of New Hampshire and Fidelity for almost 20 years. New Hampshire and Fidelity have been pioneers in the 529 industry providing help to hundreds of thousands of families in reaching their higher education goals. When the program was first launched in 1998, 77 accounts were established and by the end of the year, there were \$34 million in assets. In 1999, first year of full operation, there were over 27,000 accounts and \$230 million in assets. In 2008, the year of the financial crisis, the program remained strong and accounts climbed to over 400,000 accounts and assets reached \$4.4 billion. Today, the program has over 850,000 accounts between the two programs, with \$16 billion in assets. Of those 850,000 accounts, 25,000 are held by New Hampshire residents, totaling close to \$530 million in assets. Ms. Doyle added, alluding to what Mr. Cryans mentioned earlier, that one of the biggest achievements of the Advisory Commission is the New Hampshire scholarships program – the Endowment Trust Fund has received over \$145 million in revenue-share, distributing \$111 million of that amount as scholarship funds to New Hampshire students.

Ms. Doyle went on to say that as a program manager, Fidelity's goal is to make continuous improvements and create positive experiences for participants. Ms. Doyle highlighted key enhancements: 1) *50 College Planning Specialists* located in Jacksonville, Florida and Salt Lake City, Utah, dedicated to answering college related calls; 2) *Education and Guidance* available on Fidelity's website, where families can learn about college savings and other related topics – there are podcasts, articles, videos, etc.; *Enhanced Planning Tools* – the most recent one is the College Savings Calculator; *Simplified Customer Experience* – access to accounts online or having electronic money movement, for example; *529 Electronic Gifting Service* – in 2014 the gifting platform was launched and since then, 24,000 gifts were brought in and those gifts totaled \$10 million; and the *529 College Rewards Visa Program* – since inception, over \$11 million has flowed into the New Hampshire program from that source.

Mr. Hazel covered other accomplishments and enhancements that have occurred over the years, highlighting a few key improvements:

- Launched Multi-firm portfolios, providing product choice for customers seeking strategies that include Fidelity and non-Fidelity managed funds.
- Glide path enhancements. Fidelity has made enhancements to the strategic allocation and glide path for the age-based portfolios, focused on improving outcomes for participants.
- Launched 529 Omnibus capabilities to facilitate the business conducted with financial advisors. Fidelity incurred a tremendous cost to implement the technology needed for the omnibus recordkeeping initiative (current relationship with Ameriprise).
- As a result of the market performance in 2008, Fidelity waived over \$5 million in fees from 2010 to 2017 to avoid expenses exceeding the yield on the money market portfolios.
- Other program improvements introduced over the years were:

- price reductions over time – index pricing reduced to 0.11% from 0.21%,
- launching 529 Bill Pay platform,
- developed Fidelity 529 gifting tool,
- added sales charge waiver to attract rollovers into the FA 529 Plan,
- created robust college savings tool in the Fidelity planning & guidance center,
- added conversion feature to FA 529 C units to benefit participants,
- eDelivery of Fact Kits & Annual Reports,
- offer online electronic distributions,
- added Mobile Check Deposit, etc.

Mr. Dierdorf spoke about investment performance and he mentioned that when he joined Fidelity in 2004, one of his first responsibilities was to help support the management of the 529 portfolios. Mr. Dierdorf and his team are proud of the investment performance over the years and he is also pleased to see that performance is being recognized in a number of ways, most recently by Morningstar awarding a medal rating of “Bronze” for the UNIQUE College Investing Plan. In addition to strong investment performance, Mr. Dierdorf mentioned the New Hampshire 529 programs have achieved strong returns relative to 529 industry peers. Furthermore, there have been improvements to the investment strategy over the years, including having a diversified set of funds for the products and adding Active Asset Allocation flexibility, which has delivered enhanced investment returns during the last few years.

Mr. Bernhardt concluded the presentation by emphasizing that there is a meaningful organizational commitment supporting the 529 products. Fidelity is one of the largest providers of financial services, managing more than \$2.2 trillion in assets: \$877 billion total equity assets, \$961 billion total fixed income assets \$690 billion total global asset allocation assets. Fidelity is one of the largest organizations serving the U.S. institutional marketplace, with more than \$576 billion in assets under management and more than 500 institutional and 50,000 financial advisor clients, supported by robust research and expertise to ensure customers and participants have the best experience possible. In summary, Fidelity Investments highly appreciates the partnership it has with the Advisory Commission and the State and looks forward to a continued partnership.

Following the presentation, in response to Mr. Cryans’ question, the Fidelity team shared three learnings from the experience as a program manager: 1) understanding the participant is an important element of building an age-based strategy, so the growth in the number of participants over time has provided valuable information that Fidelity considers as part of the investment process when constructing the portfolios; 2) the College Savings Indicator has been an important research tool to help communicate the value of saving for college and 529 plans in general; and 3) participants continue to evolve in their use of technology, with electronic disbursements being a prominent enhancement that customers have appreciated.

Mr. Dierdorf also explained that during the financial crisis, Fidelity maintained a disciplined strategy that served participants well during that time. Within the age-based portfolios, Fidelity has continued to emphasize portfolio diversification and has added asset classes and strategies to the portfolios over time to enhance diversification further. The inclusion of active allocation capabilities provide an additional level of flexibility to manage the strategies during periods of

market volatility that may occur in the future. In response to Senator D'Allesandro's question, Mr. Bernhardt spoke about contribution and distribution activity, which have both increased steadily for some time to about 20% of assets in the plan – emphasizing the goal and success of the 529 college savings program.

Review of Provisions of the Management and Administrative Services Agreement

Treasurer Dwyer directed Advisory Commission members to the materials provided which contained a few excerpts from the original Management and Administrative Services Agreement executed in 1998 by Fidelity Investments, the Advisory Commission, and the Plan Trustee at that time. As briefly reviewed during the non-public session held on August 21, 2017, the contract with Fidelity will expire on December 31, 2018 and the Advisory Commission needs to make a decision whether to exercise another 5-year renewal, as allowed in the agreement, or procure another Program Manager by issuing Requests for Proposals.

Treasurer Dwyer walked Advisory Commission members through the provisions he deemed most important, such as the requirement to notify Fidelity six months prior to the contract expiration date that the agreement will be renewed. If the agreement is not renewed, the six-month period would serve as a transition period if the Plan is to continue in operation after termination of the agreement under a different Program Administrator. Another key provision is the Solicitation of Accounts after Termination, which provides an opportunity for the Advisory Commission/Trustee to review the form of Solicitation Requests prior to Fidelity making direct solicitations of any participant or beneficiary of a 529 account requesting to transfer funds to a different 529 plan managed by Fidelity.

Discussion, Deliberation and Decision by Advisory Commission

Dr. MacKay commented the Commission should consider whether customers would remain loyal to Fidelity or to the State of New Hampshire if another provider were selected, and consider the potential effects on the assets under management of the New Hampshire 529 Plan. Mr. Mahoney suggested to approve the contract renewal subject to removal of the Solicitation of Accounts provision. Rep. Weyler mentioned, and other members agreed, that even if the Solicitation provision were not in the existing contract, loyal Fidelity customers could transfer their funds to another Fidelity 529 product. Dr. Gittell also commented that the Commission could take this opportunity to review the fee structure and negotiate a revenue-share that would be more advantageous for the scholarship program. Dr. MacKay reminded Commission members that fee negotiations could occur anytime if it would benefit participants, as has occurred during the life of the program. Members reevaluated the discussion and decided to focus strictly on the renewal of the contract.

Treasurer Dwyer lastly shared an observation regarding other states renewing contracts with their existing Program Managers: Alaska renewed with T. Rowe Price until 2045, Iowa exercised with

Ascensus a 5-year renewal until 2022, and Kansas implemented a 7-year extension until 2025. In recent years Rhode Island changed Plan Administrators due to poor performance.

After extensive discussion and deliberation by the Advisory Commission, Dr. MacKay requested a motion to recommend to the Governor and Executive Council a renewal agreement with Fidelity for another 5 years under the existing terms and conditions. Mr. Cryans moved, Rep. Weyler seconded. The motion carried unanimously.

Treasurer Dwyer informed the Commission that Treasury expects to bring the recommendation to the Governor and Executive Council to their meeting on October 25th. Commission members will be notified when the request is on the Governor and Executive Council agenda.

Hearing no additional new business. Dr. MacKay adjourned the meeting at 3:05 p.m.

Next meeting: The next regular meeting is scheduled for Monday, December 4, 2017. There will be no investment committee meeting.

(g) The amount of the payment due pursuant to section 7.5(d)(6) shall be reduced in an amount equal to the revenue received by Fidelity attributable to Trust assets invested in Fidelity-managed mutual funds during the third twelve-month period following the Termination Date.

(h) In addition to any reductions in the payments determined in accordance with sections 7.5(e), (f) and (g), the Trustee shall also be entitled to a further reduction of the payment due with respect to a given twelve-month period determined as follows:

- (1) Start with any amounts that are:
 - (i) transferred by Participants from the Trust to another savings-type plan (but not a pre-paid plan) qualified under section 529 of the Code, which plan's assets are managed exclusively by Fidelity at the time of such transfer, and
 - (ii) transferred during the period from the Termination Date to the date of determination of the possible reduction under this section 7.5(h).

This amount shall be referred to as the "Transferred Assets".

- (2) Subtract the Transferred Assets from the Fund Closing Assets. This reduced amount shall be treated as the "Fund Closing Assets" for purposes of the computations specified in section 7.5(d).

(i) The Trustee and Fidelity shall cooperate fully in making all efforts necessary to determine the amounts described in Subsections 7.5(e), (f), (g) and (h).

7.6 Solicitation of Accounts After Termination. If this Agreement is terminated in accordance with section 7.4 hereof, Fidelity agrees that prior to making any direct solicitation of any participant or beneficiary of a Trust account requesting such participant or beneficiary to transfer of such account to another plan qualified under section 529 of the Code (a "Solicitation Request"), Fidelity shall submit any proposed Solicitation Request to the Trustee for its review at least two weeks before such material's intended use. If the Trustee objects to the form of the proposed Solicitation Request in writing to Fidelity within five business days following submission of the proposed Solicitation Request, then Fidelity will not use such materials and Fidelity and the Trustee shall cooperate to develop a mutually acceptable format for the Solicitation Request. If the Trustee does not object to the form of the proposed Solicitation Request within five business days, then Fidelity may use such materials. If the parties are unable to agree on the format for a Solicitation Request, then Fidelity may use the proposed materials unless the Trustee shall have obtained an order from a court of competent jurisdiction prohibiting such use.

OCTOBER 31, 2017

SECOND AMENDMENT TO THE
RESTATED MANAGEMENT AND ADMINISTRATIVE SERVICES AGREEMENT

between

FIDELITY BROKERAGE SERVICES LLC, FMR LLC, AND FMR CO., INC. d/b/a FIDELITY
FMR CO.

and

TREASURER, STATE OF NEW HAMPSHIRE
AS TRUSTEE OF THE
NEW HAMPSHIRE HIGHER EDUCATION SAVINGS PLAN TRUST

WHEREAS, the parties desire to extend the term of the Restated Management and Administrative Services Agreement (the "Agreement") an additional five-year period upon the completion of the Initial Term on December 31, 2018.

WHEREAS, the parties now desire to amend the Agreement as provided for in Section 9.13 thereof;

NOW THEREFORE, in consideration of the above premises, the parties hereby amend the Agreement as follows:

I. Unless otherwise noted, defined terms used herein have the same meaning ascribed to them in the Agreement.

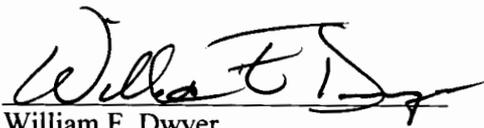
II. Section 7.2 shall be deleted and replaced with the following:

7.2 Term. This Restated Agreement shall remain in effect for a term ending on December 31, 2023.

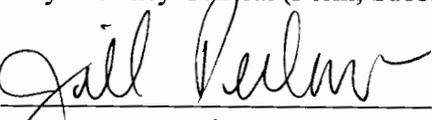
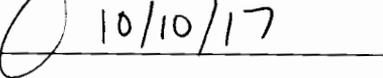
This Amendment is effective as of October 31, 2017.

IN WITNESS WHEREOF

TREASURER OF THE STATE OF NEW HAMPSHIRE
Acting as Trustee of the
NEW HAMPSHIRE HIGHER EDUCATION SAVINGS PLAN TRUST

By: 
William F. Dwyer
New Hampshire State Treasurer
As Trustee

Approved by Attorney General (Form, Substance, and Execution)

By:  _____, Assistant Attorney General
On:  _____

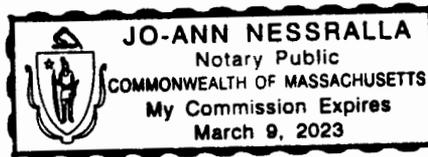
FIDELITY BROKERAGE SERVICES LLC

By: ECG
Eric C. Green
Assistant Treasurer

Acknowledgement: State of Massachusetts, County of Suffolk

On 10/3/2017, 2017, before the undersigned officer, personally appeared the person identified above, or satisfactorily proven to be the person whose name is signed above, and acknowledged that s/he executed this document in the capacity indicated above.

Signature of Notary Public: J. Nessler
(seal)



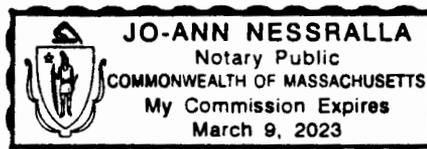
FMR LLC

By: ECG
Eric C. Green
Assistant Treasurer

Acknowledgement: State of Massachusetts, County of Suffolk

On 10/3/2017, 2017, before the undersigned officer, personally appeared the person identified above, or satisfactorily proven to be the person whose name is signed above, and acknowledged that s/he executed this document in the capacity indicated above.

Signature of Notary Public: J. Nessler
(seal)



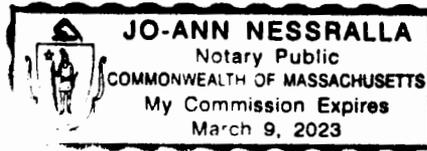
FMR CO., INC. d/b/a FIDELITY FMR CO.

By: ECG
Eric C. Green
Assistant Treasurer

Acknowledgement: State of Massachusetts, County of Suffolk

On 10/3/2017, 2017, before the undersigned officer, personally appeared the person identified above, or satisfactorily proven to be the person whose name is signed above, and acknowledged that s/he executed this document in the capacity indicated above.

Signature of Notary Public: J. Nessler
(seal)



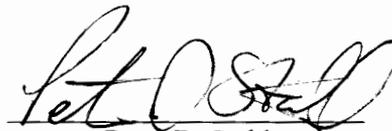
CERTIFICATE OF AUTHORITY
Fidelity Brokerage Services LLC
(the "Company")

In connection with the October 31, 2017 Amendment to the Restated Management and
Administrative Services Agreement
Among
Fidelity Brokerage Services LLC, FMR LLC, and FMR Co., Inc. d/b/a Fidelity FMR Co.
and
the Treasurer of the State of New Hampshire
(the "Amendment")

I, Peter D. Stahl, Assistant Secretary of Fidelity Brokerage Services LLC (the
"Company"), do hereby certify that Eric C. Green is the duly elected, appointed and qualified
Assistant Treasurer of the Company, is acting as such officer of the Company at the time of the
signing of the Amendment, is duly authorized to sign the Amendment on behalf of the Company,
and is empowered to bind the Company to the terms and conditions of the Amendment.

IN WITNESS WHEREOF, I have signed this Certificate as of the date indicated below.

Date: 10/3/2017


Peter D. Stahl
Assistant Secretary

CERTIFICATE OF AUTHORITY
FMR LLC
(the "Company")

In connection with the October 31, 2017 Amendment to the Restated Management and
Administrative Services Agreement
Among
Fidelity Brokerage Services LLC, FMR LLC, and FMR Co., Inc. d/b/a Fidelity FMR Co.
and
the Treasurer of the State of New Hampshire
(the "Amendment")

I, Peter D. Stahl, Secretary of FMR LLC (the "Company"), do hereby certify that Eric C. Green is the duly elected, appointed and qualified Assistant Treasurer of the Company, is acting as such officer of the Company at the time of the signing of the Amendment, is duly authorized to sign the Amendment on behalf of the Company, and is empowered to bind the Company to the terms and conditions of the Amendment.

IN WITNESS WHEREOF, I have signed this Certificate as of the date indicated below.

Date:

10/3/2017



Peter D. Stahl
Secretary

CERTIFICATE OF AUTHORITY
FMR Co., Inc. d/b/a Fidelity FMR Co.
(the "Company")

In connection with the October 31, 2017 Amendment to the Restated Management and
Administrative Services Agreement
Among
Fidelity Brokerage Services LLC, FMR LLC, and FMR Co., Inc. d/b/a Fidelity FMR Co.
and
the Treasurer of the State of New Hampshire
(the "Amendment")

I, Peter D. Stahl, Assistant Secretary of FMR Co., Inc. d/b/a Fidelity FMR Co. (the
"Company"), do hereby certify that Eric C. Green is the duly elected, appointed and qualified
Assistant Treasurer of the Company, is acting as such officer of the Company at the time of the
signing of the Amendment, is duly authorized to sign the Amendment on behalf of the Company,
and is empowered to bind the Company to the terms and conditions of the Amendment.

IN WITNESS WHEREOF, I have signed this Certificate as of the date indicated below.

Date: 10/3/2017


Peter D. Stahl
Assistant Secretary

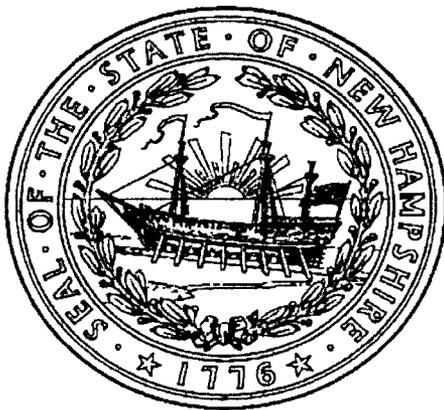
State of New Hampshire

Department of State

CERTIFICATE

I, William M. Gardner, Secretary of State of the State of New Hampshire, do hereby certify that FIDELITY BROKERAGE SERVICES LLC is a Delaware Limited Liability Company registered to transact business in New Hampshire on August 16, 2000. I further certify that all fees and documents required by the Secretary of State's office have been received and is in good standing as far as this office is concerned.

Business ID: 351997



IN TESTIMONY WHEREOF,
I hereto set my hand and cause to be affixed
the Seal of the State of New Hampshire,
this 3rd day of October A.D. 2017.

A handwritten signature in cursive script, appearing to read "William M. Gardner".

William M. Gardner
Secretary of State

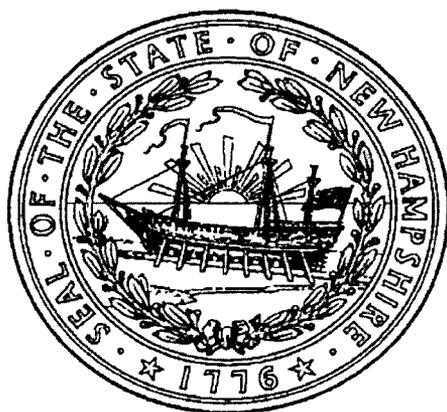
State of New Hampshire

Department of State

CERTIFICATE

I, William M. Gardner, Secretary of State of the State of New Hampshire, do hereby certify that FMR CO., INC. is a Massachusetts Profit Corporation registered to do business in New Hampshire as FIDELITY FMR CO. on November 10, 2015. I further certify that all fees and documents required by the Secretary of State's office have been received and is in good standing as far as this office is concerned.

Business ID: 734529



IN TESTIMONY WHEREOF,
I hereto set my hand and cause to be affixed
the Seal of the State of New Hampshire,
this 3rd day of October A.D. 2017.

A handwritten signature in black ink, appearing to read "William M. Gardner".

William M. Gardner
Secretary of State

State of New Hampshire

Department of State

CERTIFICATE

I, William M. Gardner, Secretary of State of the State of New Hampshire, do hereby certify that FMR LLC is a Delaware Limited Liability Company registered to transact business in New Hampshire on October 03, 2007. I further certify that all fees and documents required by the Secretary of State's office have been received and is in good standing as far as this office is concerned.

Business ID: 585214



IN TESTIMONY WHEREOF,

I hereto set my hand and cause to be affixed
the Seal of the State of New Hampshire,
this 3rd day of October A.D. 2017.

A handwritten signature in black ink, appearing to read "William M. Gardner".

William M. Gardner
Secretary of State



CERTIFICATE OF LIABILITY INSURANCE

1/1/2018

DATE (MM/DD/YYYY)

9/5/2017

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Lockton Companies 1185 Avenue of the Americas, Suite 2010 New York NY 10036 646-572-7300	CONTACT NAME: PHONE (A/C, No, Ext): _____ FAX (A/C, No): _____ E-MAIL ADDRESS: _____	
	INSURER(S) AFFORDING COVERAGE	
INSURED 1374622 FMR Co., Inc. d/b/a Fidelity FMR Co., Fidelity Brokerage Services LLC & FMR LLC 200 Seaport Blvd. Boston MA 02210	INSURER A : National Union Fire Ins Co Pitts. PA NAIC # 19445	
	INSURER B : New Hampshire Insurance Company 23841	
	INSURER C :	
	INSURER D :	
	INSURER E :	
	INSURER F :	

COVERAGES **CERTIFICATE NUMBER:** 14980143 **REVISION NUMBER:** XXXXXXXX

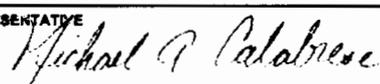
THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER: _____	N	N	2039206	1/1/2017	1/1/2018	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 1,000,000 MED EXP (Any one person) \$ XXXXXXXX PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000 \$
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY			NOT APPLICABLE			COMBINED SINGLE LIMIT (Ea accident) \$ XXXXXXXX BODILY INJURY (Per person) \$ XXXXXXXX BODILY INJURY (Per accident) \$ XXXXXXXX PROPERTY DAMAGE (Per accident) \$ XXXXXXXX \$ XXXXXXXX
	UMBRELLA LIAB <input type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED _____ RETENTION \$ _____			NOT APPLICABLE			EACH OCCURRENCE \$ XXXXXXXX AGGREGATE \$ XXXXXXXX \$ XXXXXXXX
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N	N/A	066830271 (MA, ND, OH) (WA, WI, WY)	1/1/2017	1/1/2018	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
THIS CERTIFICATE SUPERSEDES ALL PREVIOUSLY ISSUED CERTIFICATES FOR THIS HOLDER. APPLICABLE TO THE CARRIERS LISTED AND THE POLICY TERM(S) REFERENCED
Evidence of Insurance

CERTIFICATE HOLDER

CANCELLATION See Attachments

14980143 The State of New Hampshire William F. Dwyer, State Treasurer NH College Tuition Saving Plan Advisory Commission 25 Capital Street, Room 121 Concord NH 03301	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE 
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Full Listing of Workers Compensation Policies for FMR LLC:

<u>Policy #</u>	<u>Eff. Date</u>	<u>Exp. Date</u>	<u>Issuing Company</u>	<u>States</u>
066830269	01/01/2017	01/01/2018	New Hampshire Ins Co	ME
066830263	01/01/2017	01/01/2018	New Hampshire Ins Co	AL,AR,CO,CT,DC,DE,GA,HI,IA,I D,IN,KS,LA,MD,MI,MN,MO,MS, NE,NM,NV,NY,OK,RI,SC,TN,TX ,WV
066830268	01/01/2017	01/01/2018	New Hampshire Ins Co	CA
066830267	01/01/2017	01/01/2018	New Hampshire Ins Co	AZ,VA
066830265	01/01/2017	01/01/2018	New Hampshire Ins Co	IL,KY,NC,NH,UT
066830266	01/01/2017	01/01/2018	New Hampshire Ins Co	NJ,PA
066830264	01/01/2017	01/01/2018	New Hampshire Ins Co	FL
066830270	01/01/2017	01/01/2018	Ins Co State of Penn	OR

30 Day Notice of Cancellation Provision:

In the event of cancellation prior to the expiration date of any insurance policy issued to FMR LLC or any subsidiary or fund thereof for which an ACORD certificate of insurance has been issued by Lockton, Lockton shall mail 30 day written notice of such cancellation to any certificate holder on record with Lockton. In the event of cancellation due to non-payment of premium, a 10 day notice will be provided.