

WA529 Committee Meeting

Wednesday, November 13, 2019

John A. Cherberg Building, Capitol Campus
Senate Hearing Room 1
Olympia, WA 98504
2:00 p.m. – 4:00 p.m.

AGENDA

Call to Order: Welcome & Member Introductions

- Approval of the September 11, 2019 Minutes ACTION
- Approval of the 2020 WA529 Committee Meeting Calendar ACTION
- Program Updates INFORMATION
Luke Minor, WA529 Director
Doug Magnolia, CEO, Sundry Administration
- GET Investment Update INFORMATION
Chris Phillips, Institutional Relations Director, WSIB
- GET Asset Allocation Study INFORMATION
Ryan Lobdell, Meketa Group
- DreamAhead Investment Review INFORMATION
Matt Forester, Director, Lockwood Advisors
- 2019 GET Actuarial Valuation Report INFORMATION
Matt Smith, State Actuary, Office of the State Actuary
Sarah Baker, Actuarial Analyst, Office of the State Actuary
Marc Webster, WSAC Director of External Affairs
- WA529 Marketing/Business Development Update INFORMATION
Rodger O'Connor, WA529 Associate Director for Mktg. & Comm.
- Public Comment
- Adjournment

Next Regularly Scheduled Meeting:
TBD
(Pending Committee Approval of 2020 Meeting Calendar)

WA529 Committee Meeting Minutes
September 11, 2019
John A. Cherberg Building, Capitol Campus
Senate Hearing Room 1

WSAC Staff in Attendance:

Lucas Minor, Director of College Savings Plans
Christina Crawford, GET Administrative Assistant
Daniel Payne, Communications Specialist
Jackie Ferrado, Community & Employer Relations Manager
Betsy Hagen, Associate Director for GET Operations

Guests in Attendance:

Matt Smith, Office of the State Actuary
Chris Phillips, Washington State Investment Board
Rick Brady, Office of the Attorney General
Doug Magnolia, BNY Mellon
Ryan Lobdell, Principal/Meketa Inv. Group
Graham Dyer, Office of the State Actuary
Michele Alishahi, SCS
Breann Boggs, Office of Financial Management
Michael Bennion, public citizen

WELCOME

Don Bennett, Deputy Director of WSAC and proxy for Mike Meotti, Chair of the WA529 Committee, called the meeting to order at 2:04 p.m. The other WA529 Committee members in attendance were Brenda Snyder, proxy for Treasurer Duane Davidson and Director of the Office of Financial Management (OFM), David Schumacher.

APPROVAL OF THE MAY 15, 2019 MINUTES

Motion to approve the minutes by Brenda Snyder. Three Ayes by Bennett, Schumacher and Snyder.
Motion carries and minutes approved as presented.

PROGRAM UPDATES

Luke Minor, WA529 Director, provided a GET program update. The 2018-19 GET enrollment period saw 4,000 new enrollments, 640,000 units sold and \$75.5 million in contributions. This is a moderate decrease from last year, but it is important to consider aggregated enrollments and contributions between GET and DreamAhead. Minor reviewed a two-year comparison of GET distribution activity. Last year saw more distributions going to in-state schools compared to the prior year. Staff will provide an update on Fall 2019 distribution activity at the November Committee Meeting. GET has approximately 67,000 remaining accounts with 10.3 million unredeemed units and an average account balance of 144 units.

Doug Magnolia with Sunday Administration, provided a DreamAhead update. At end of the Second Quarter there were \$847,220,534 in assets under management. The quarter saw 524 new accounts opened, 25 accounts closed, \$5,291,464 in contributions, and \$13,611,646 in distributions. Magnolia gave an overview of program operations and new platform updates including a large database migration, planned ethical hacks to test for security vulnerabilities, and enhanced reporting tools. He also provided detail on a new call center platform targeted to launch in mid-November to increase efficiency, get customers quicker answers, and improve the customer experience.

Rodger O'Connor, Associate Director for WA529 Marketing & Communications, gave an overview of current marketing efforts. Staff have been evaluating the marketing strategy, media mix, messaging and partnerships for the GET and DreamAhead programs. Merlino Media Group was selected as the new media buyer this summer via a competitive RFP process. A full launch of the fall advertising campaign is expected in late October with a greater focus on digital and social media channels compared to prior years. WA529 is building new financial literacy partnerships with several organizations.

FISCAL YEAR 2020 BUDGETS

Minor presented a Fiscal Year 2019 budget recap and the planned Fiscal Year 2020 budgets. The Committee approved \$5.87 Million for the GET Program and \$984,000 for the DreamAhead Plan for FY19. The actual expenditures for GET came in at \$5.39 Million and \$823,000 for DreamAhead. The primary reasons for the variance were salary savings and lower than anticipated costs. The proposed budget for FY20 is \$5.5 Million for the GET Program and \$992,000 for DreamAhead. Minor reminded the Committee that DreamAhead is currently operating in a deficit, as allowed by statute, and that the program is on track to discharge the deficit in the allotted timeframe. Snyder moved to approve the fiscal year 2020 budgets, seconded by Schumacher. Three Ayes from Snyder, Schumacher and Bennett. Motion carries.

GET INVESTMENT AND ASSET ALLOCATION UPDATE

Chris Phillips, Washington State Investment Board (WSIB), provided a Second Quarter 2019 GET Investment Report. As of June 30, 2019, the GET fund's market value of assets was \$1.36 Billion, including \$783 Million in Equity, \$533 Million in Fixed Income and \$39 Million in Cash. There was an increase of \$32.2 Million in the second quarter. Overall returns were 3.2% in the second quarter and 5.3% for the one-year period ending June 30, 2019.

Ryan Lobdell with the Meketa Investment Group gave an overview of the upcoming Asset Allocation study for GET, which will be conducted over the coming months. At the November 13 meeting, he will have recommendations for the Committee. Bennett asked Lobdell where they were in the process based on the new environment that GET is facing. Lobdell clarified that they are in preliminary conversations with OSA and WSIB staff and are working on a model. Bennett also asked Phillips for clarification on the process for approving any updates to the asset allocation. Phillips confirmed that while the WSIB board provides final approval, they would bring any recommendations to the WA529 Committee first.

DREAMAHEAD INVESTMENT REVIEWS

Matt Forester, Director, Lockwood Advisors, provided the Second Quarter 2019 DreamAhead Investment Review. His commentary on capital markets highlighted that equity markets recovered from fourth quarter swoon, official US GDP forecasts are still expecting growth, and we are in a recession watch. All of DreamAhead's Static and Year of Enrollment portfolios have met (or slightly underperformed) their benchmarks in the second quarter of 2019 and year to date 2019 through June 30, 2019. No remedial action is necessary and there are no funds on the watch list. All funds have performed as expected.

2019-20 GET UNIT PRICE SETTING

Minor clarified for the record that that while staff intended to hold a Committee Retreat over the summer, the retreat was not held. WA529 staff worked closely Actuary staff through various GET program aspects, including the unit price components with a focus on the expense component.

State Actuary, Matt Smith, reported that as of June 30, 2019 GET's funded status was 132% with a \$350 million reserve. The best estimate 2019-20 GET unit price range is \$112 to \$131 for the next enrollment period, with a best estimate unit price of \$121. The 15% reserve policy in unit price remains adequate for the scenarios that were analyzed. Based on new capital market assumptions from the WSIB, the assumed rate of investment return was lowered from 5.65% to 5.25%. Based on the recently enacted state operating budget for 2019-21, the tuition growth assumptions were updated to reflect the current tuition policy.

Smith reviewed the new method for calculating estimated administrative costs and the expense component. Past Actuarial Valuation Reports (GAVRs) have included the present value of program expenses under a "termination basis," which reflects ten years of program expenses only. The new method includes the present value under a "closed basis," which estimates program expenses for currently unredeemed units until the last unit is paid out. The new method increases the present value of program expenses by about \$13 million and lowers GET's funded status by 1.5% from last year's GAVR. The new expense component model is calculated by dividing the present value of program expense by all outstanding units, producing a \$2.78 expense component for the coming year.

Schumacher commented that he is looking forward to getting back to a more steady path with less on-going adjustments and suggested the Committee accept the Actuary's assumptions. Bennett noted that the new expense component calculation produces a smaller dollar amount than the previous calculation.

Schumacher motioned to make the GET Program unit purchase price for the 2019-20 enrollment period be set at \$121 per unit effective immediately and through the end of the state fiscal year of 2020; seconded by Snyder. Three ayes from Schumacher, Snyder and Bennett. Motion carries.

GET CUSTOM MONTHLY PLAN DISCUSSION

Minor reviewed proposed updates to the Custom Monthly Plan structure, which was discussed in depth by WA529 and Actuary staff over the summer. GET includes a finance charge for custom monthly plans, as the program does not have funds up front to invest. Staff propose lowering the finance charge from 7.5% to 5.5% and eliminating the payment processing fee for new custom monthly contract accounts going forward. Factors include the recent lowering of the expected rate of investment return to 5.25%.

Snyder asked how staff can educate customers with existing contracts and provide tools so that they can make the best decision for their accounts. Minor noted different options currently available to customers and stated that GET will ensure these options are clear in communications to customers. Minor and Bennett discussed that the finance charge will be evaluated every 5-6 years as part of the Actuary's experience study going forward.

Snyder moved to set the finance charge rate to 5.5% and eliminate the payment processing fee on all new custom monthly contracts opened on or after November 1, 2019. Motion was seconded by Schumacher, three ayes from Snyder, Schumacher and Bennett. Motion carries.

PROGRAM DETAILS BOOKLET UPDATES- GET AND DREAMAHEAD

Minor presented the updated GET and DreamAhead Program Details Booklets for the Committee's consideration and approval. Major changes to the GET booklet included increases to unit maximums and updates to the prices and fees section and custom monthly plan components.

Schumacher moved to authorize WA529 Staff to make changes to the GET Program Details booklet as presented on tab 6 of the meeting materials and summarized on slides 60 & 61 of the presentation document by no later than the programs November 1, 2019 enrollment opening. In addition, he moved to authorize staff to make updates to the DreamAhead Program Details booklet as presented on tab 7 and summarized on slides 62-64 of the presentation document by no later than September 30, 2019. Motion was seconded by Snyder, three ayes from Schumacher, Snyder and Bennett. Motion carried, and the GET and DreamAhead Program Details Booklet updates were approved as presented.

PUBLIC COMMENT

Michael Bennion, public citizen, signed up for public comment but was not present. He provided a written submission for the Committee's consideration. Bennett asked that Mr. Bennion's submission be received into the record (see Appendix A attached to these minutes).

EXECUTIVE SESSION

No further actions were decided on.

ADJOURNMENT

Snyder motioned to adjourn meeting, seconded by Schumacher. Motion carried. Meeting adjourned at 4:34 p.m.

WA529 Committee Meeting Minutes
September 11, 2019
Appendix A - Written Public Comment Submission

Public Comment:

If the GET FY 2019 budget was \$5.87m and actual expenditures were \$5.39m, how much in administrative fee revenue was collected in FY 2019 and if there is a discrepancy, how will GET handle a deficit? And, if using fund balance, what is the current administrative fee balance?

Thank you,
Michael Bennion

2020 Proposed WA529 Committee Meeting Schedule

Background

As outlined in RCW 28B.95.030, WAC 14-104-010, the GET Committee shall hold regular meetings as needed. Additional special meetings may be scheduled if needed. The following is the proposed meeting schedule for the 2019 calendar year.

DATE	TIME	PLACE
Tuesday, January 7, 2020	2:00 p.m. – 4:00 p.m.	John A. Cherberg Building, Capitol Campus Senate Hearing Room 3
Wednesday, May 6, 2020	2:00 p.m. – 4:00 p.m.	John A. Cherberg Building, Capitol Campus Senate Hearing Room 2
Wednesday, September 9, 2020	2:00 p.m. – 4:00 p.m.	John A. Cherberg Building, Capitol Campus Senate Hearing Room 3
Thursday, November 12, 2020	2:00 p.m. – 4:00 p.m.	John A. Cherberg Building, Capitol Campus Senate Hearing Room 3



Welcome

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Approve Meeting Minutes

September 11, 2019



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Meeting Calendar

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Review and Approve 2020 Committee Meeting Dates (Quarterly meetings)

- January 7
- May 6
- September 9
- November 12



Notes: All meetings scheduled for 2-4pm on the Capitol Campus in Olympia, WA. Special meetings may be added as necessary.

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Program Updates

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Lucas Minor
WA529 Director

Doug Magnolia
Sumday Administration CEO



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GET Program Updates

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2019-20 GET Enrollment Period

- Details

- Enrollment dates: **11/01/2019 – 05/31/2020**
- Unit purchase price: **\$121**

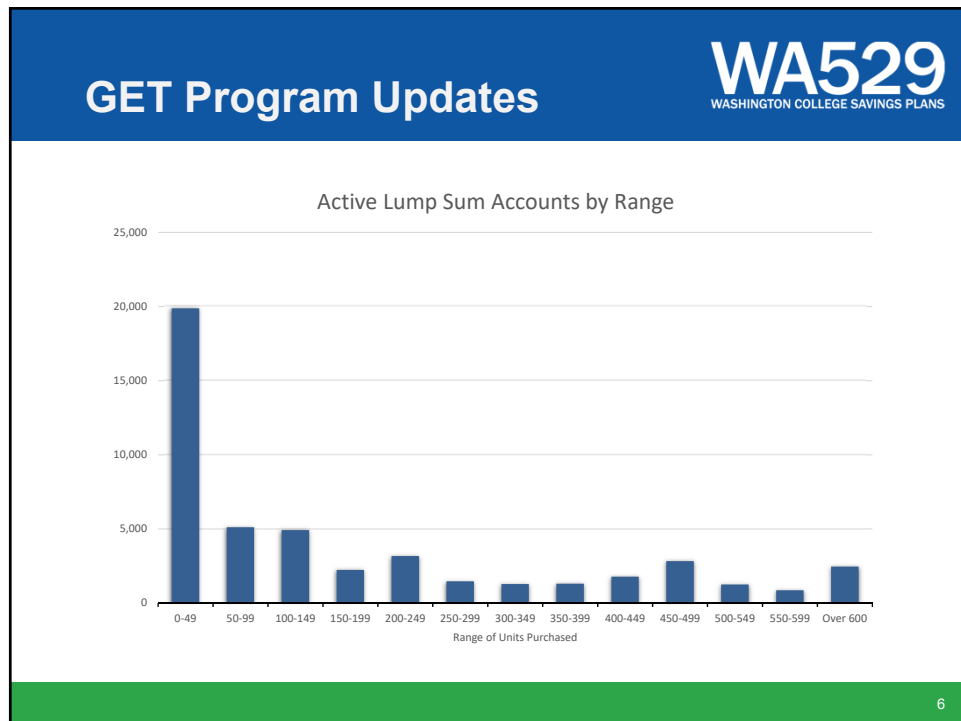
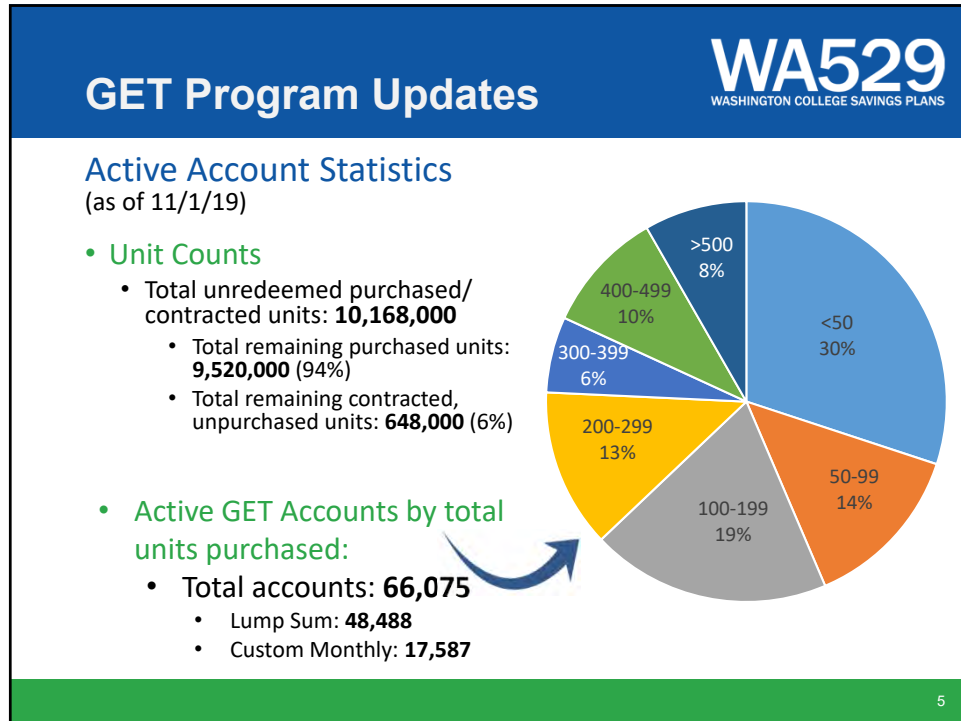


- Account statistics

- Total Accounts: **66,121**
 - Lump Sum: **48,502** (73%)
 - Custom Monthly: **17,619** (27%)

- Update on new enrollments (as of 11/12/19)

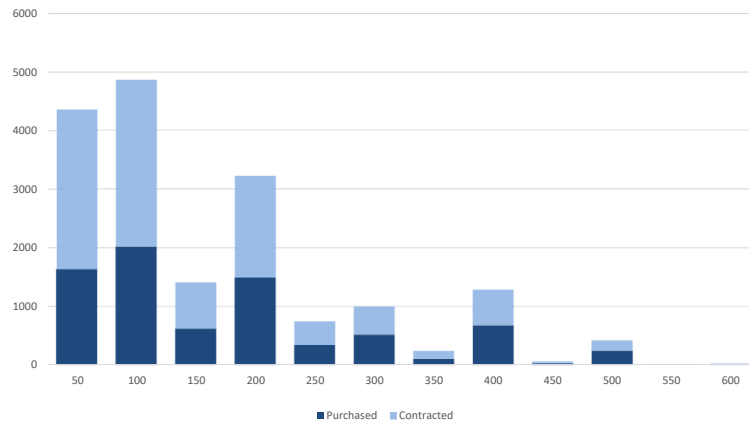
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GET Program Updates

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Active Custom Monthly Accounts by Unit Increments



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GET Program Updates

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GET Contributions and Distributions (as of October 24, 2019)

Money Received by Payment Method

	Q4 2018	Q1 2019	Q2 2019	Q3 2019	FY20 To-Date
Total dollars received	\$15.4M	\$15.8M	\$32.4M	\$8.5M	\$11M
Electronic payments	\$11.1M	\$11.3M	\$25M	\$5.9M	\$7.9M
Paper checks	\$3.4M	\$3.6M	\$6.5M	\$1.7M	\$2.1M
Gift payments	\$496K	\$483K	\$496K	\$485K	\$538K
Payroll deduction	\$363K	\$349K	\$352K	\$344K	\$416K

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GET Program Updates

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GET Contributions and Distributions

(as of October 24, 2019)

Money Sent by Distribution Method

	Q4 2018	Q1 2019	Q2 2019	Q3 2019	FY20 To-Date
Total Distributed	\$11.9M	\$16.5M	\$8.5M	\$21M	\$26.3M
Payments to Schools	\$7.8M	\$10.9M	\$5M	\$13.7M	\$17.7M
Reimbursements	\$4.1M	\$5.6M	\$3.5M	\$7.2M	\$8.6M
Students Using Units	3,158	4,111	2,555	4,183	5,225

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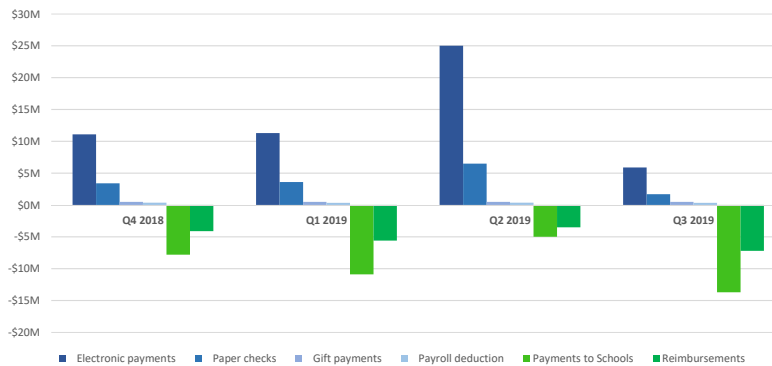
GET Program Updates

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GET Contributions and Distributions

(as of October 24, 2019)

Money In / Out By Quarter



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GET Program Updates

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GET Distributions for Current College Students

(for payment of higher education expenses – as of November 1, 2019)

- **2019-20 academic year to-date:**
 - Total dollars distributed: **\$24.6 Million**
 - Total sent directly to schools: **\$16.8 Million**
 - Total sent to account owners/students: **\$7.8 Million**
 - Total students using units: **4,976**
- **Since program inception:**
 - Total dollars distributed: **\$1.2 Billion**
 - Total students who have used units: **56,025**



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GET Program Updates

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2019-20 Academic Year GET Distributions so far

(As of 11/1/19)

Direct Payments to Schools



\$3.3 M
840 Students



\$2.7 M
470 Students



\$1.5 M
412 Students

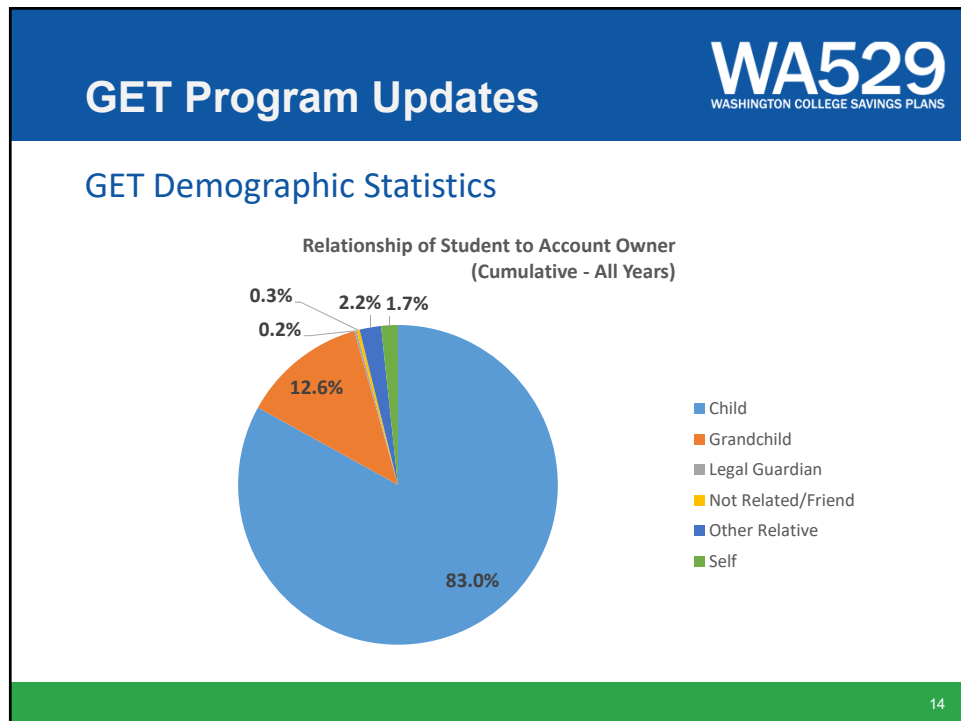
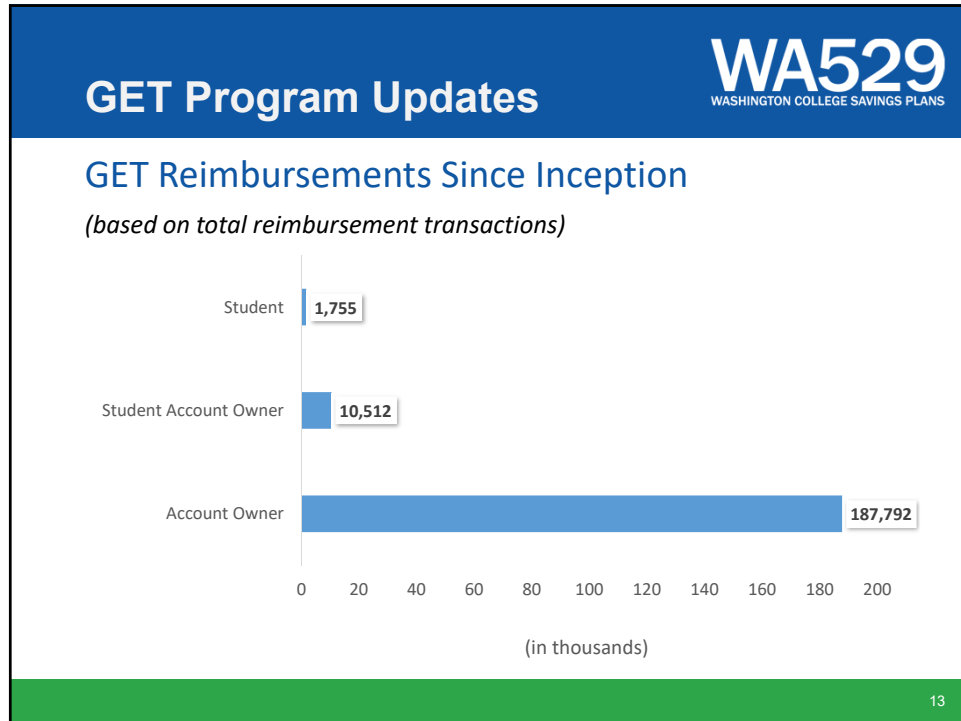


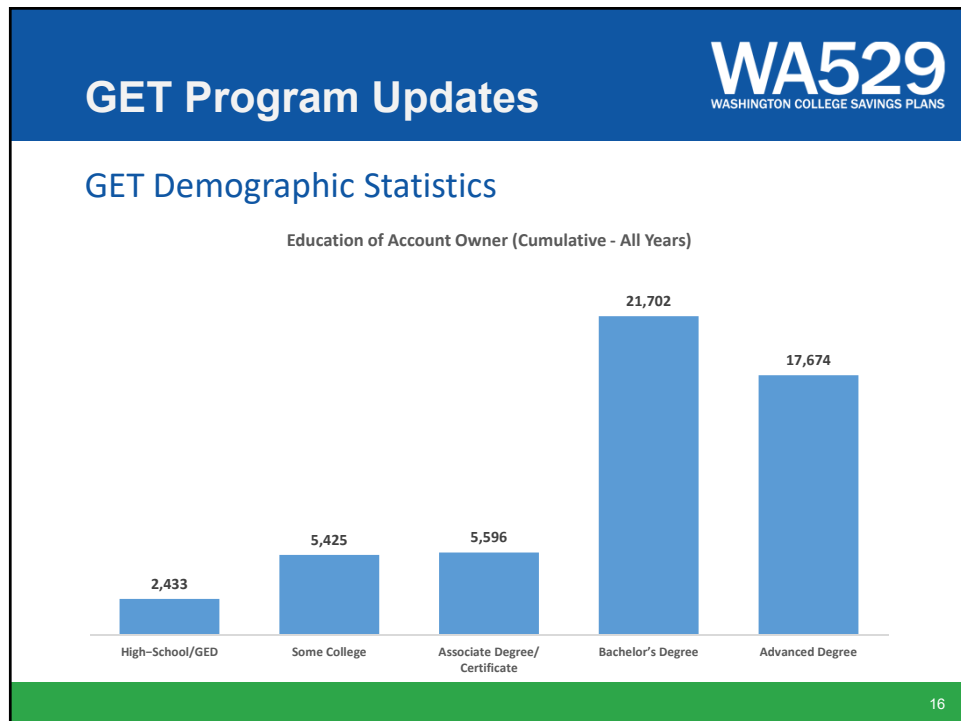
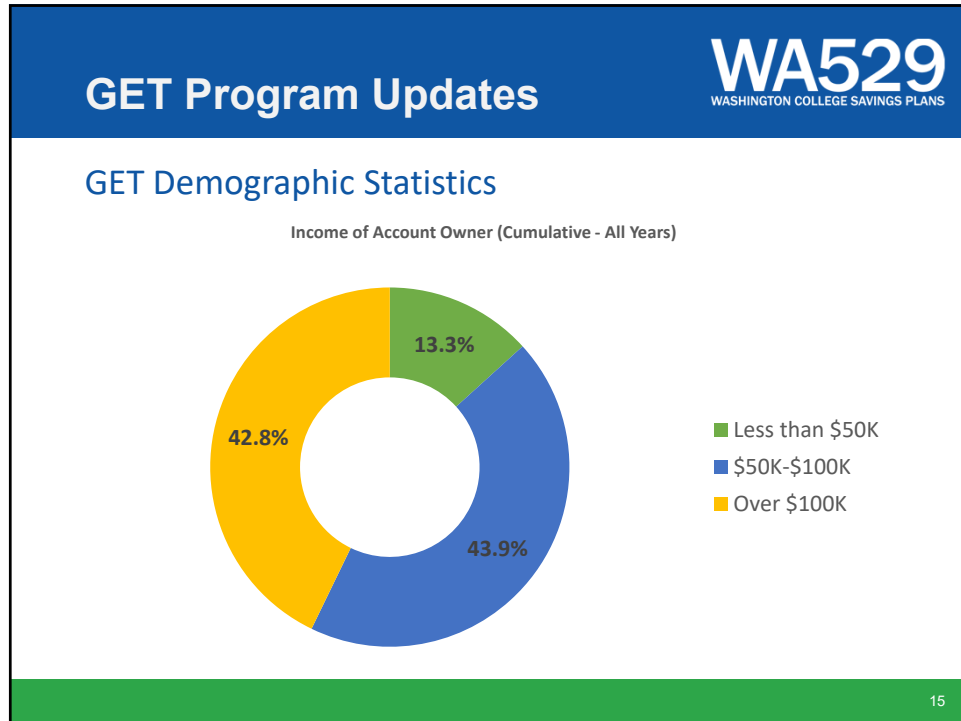
\$744 K
189 Students

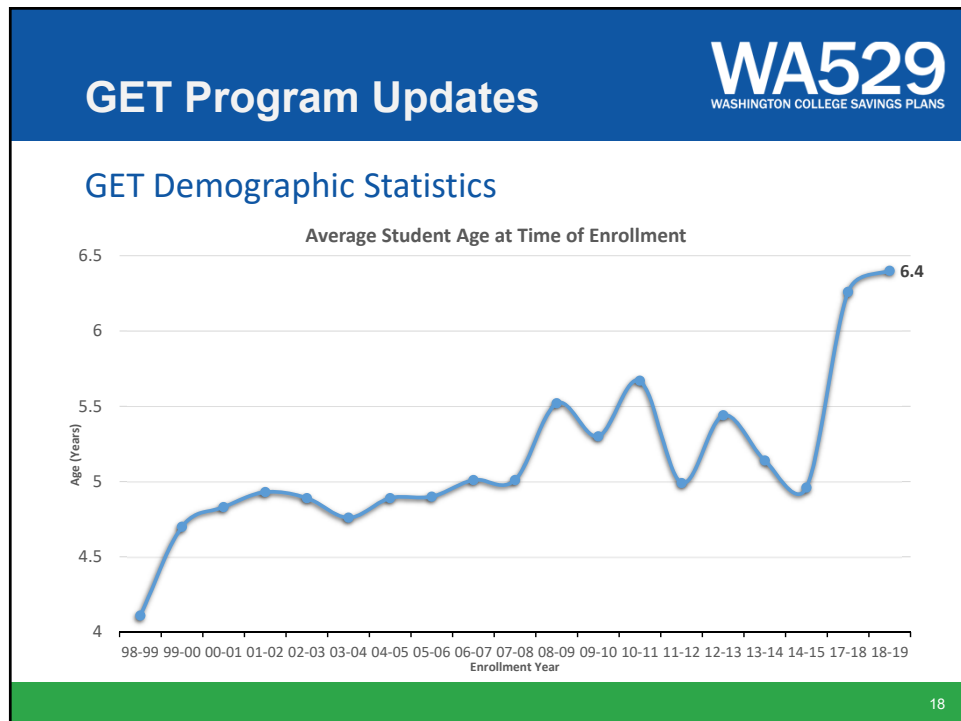
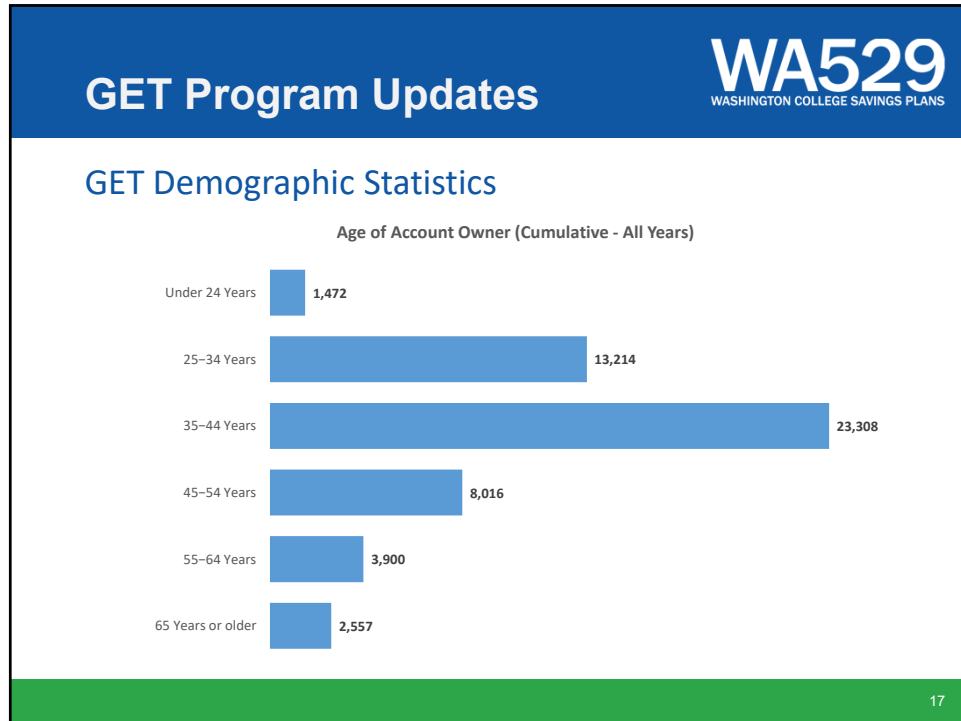


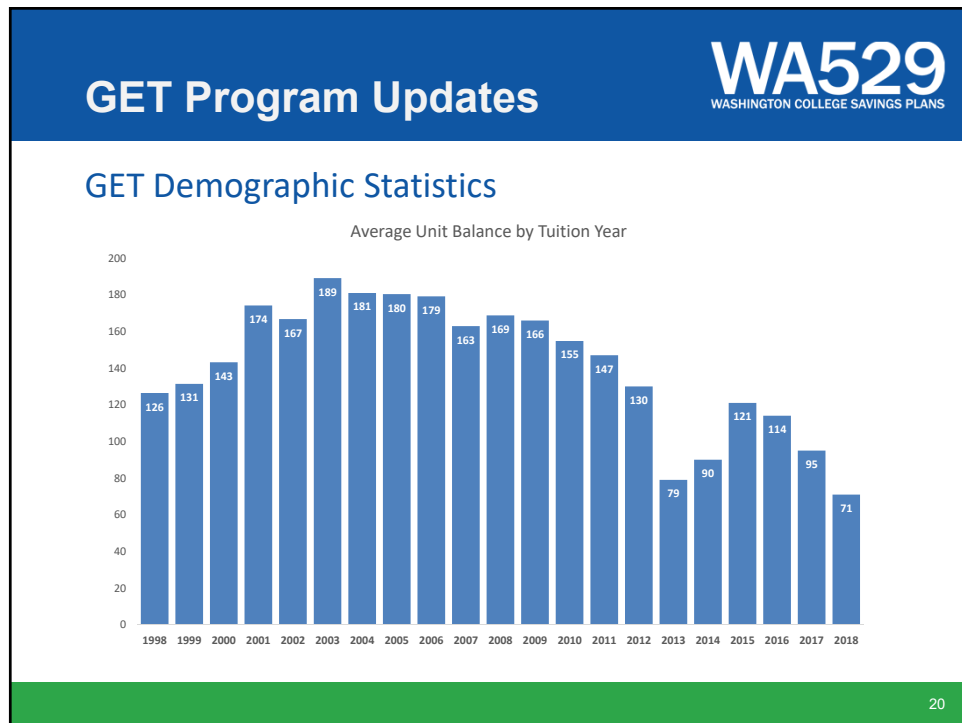
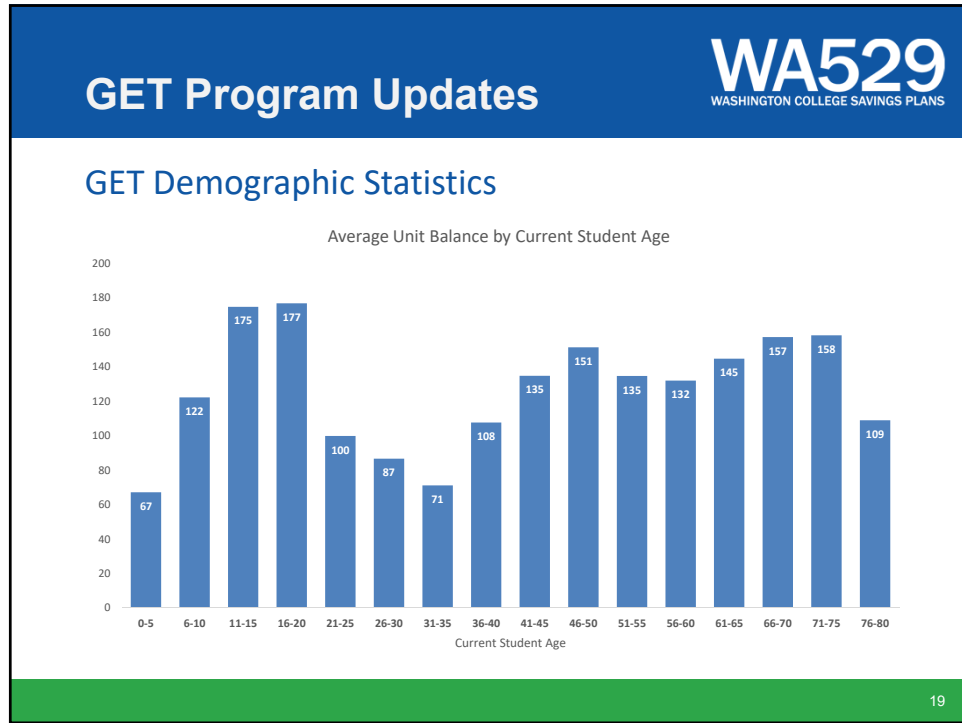
\$367 K
117 Students

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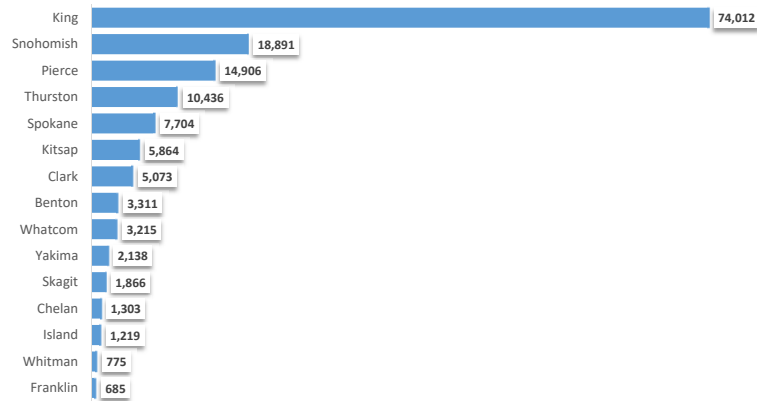


GET Program Updates

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GET Enrollments by County

Cumulative – all years



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GET Program Updates

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GET Unique Account Owners by State

(Top ten as of 11/1/19)

Washington	40,374
California	551
Oregon	371
Arizona	243
Texas	216
Idaho	160
Florida	131
Virginia	111
Colorado	93
Hawaii	83

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GET Program Updates

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GET Contact Center Statistics

	1st Quarter 2019	2nd Quarter 2019	3rd Quarter 2019
Calls Offered	4215	3831	3569
Calls Answered	4082	3810	3494
Average Answer Speed	0:59	0:37	0:41
Average Talk Time	5:21	5:34	5:15

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DreamAhead Program Update

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Doug Magnolia
CEO, Sunday Administration



[See "DreamAhead Third Quarter Committee Report"](#)

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Upcoming Legislative Reports

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WA529 Rollover Activity

- Due Date not specified
- Summary on slide 29

DreamAhead Fees

- Due by December 1
- Summary on slide 30

DreamAhead Policy Goals

- Due prior to the start of the 2020 Legislative Session
- To be reviewed at the January Committee meeting

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FY2019 Rollover Report

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- RCW 28B.95.045 requires the Committee to report out annually on rollover activity in and out of DreamAhead.
- See DRAFT Rollover Report handout in meeting materials.

GET and DreamAhead Rollovers – State Fiscal Year 2019

Rollover Type	Number of Accounts
Incoming Rollovers From Out-of-State Plans	
Rollovers into GET	91
Rollovers into DreamAhead	44
Outgoing Rollovers to Out-of-State Plans	
Rollovers from GET	578
Rollovers from DreamAhead	13
Rollovers between GET and DreamAhead	
Rollovers from GET to DreamAhead	26,464
Rollovers from DreamAhead to GET	2

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DreamAhead Fee Report

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- RCW 28B.95.087(3) limits annual fees to participants for any investment option to 50 basis points (0.5%).
- As of September 24, 2019, total annual asset-based fees vary from 0.255% to 0.400%, depending upon the Portfolio(s) a participant chooses.
 - These lower fees reflect savings passed along to customers last year due to share class upgrades within the underlying mutual funds.
- See DRAFT Program Fee Report in meeting materials.

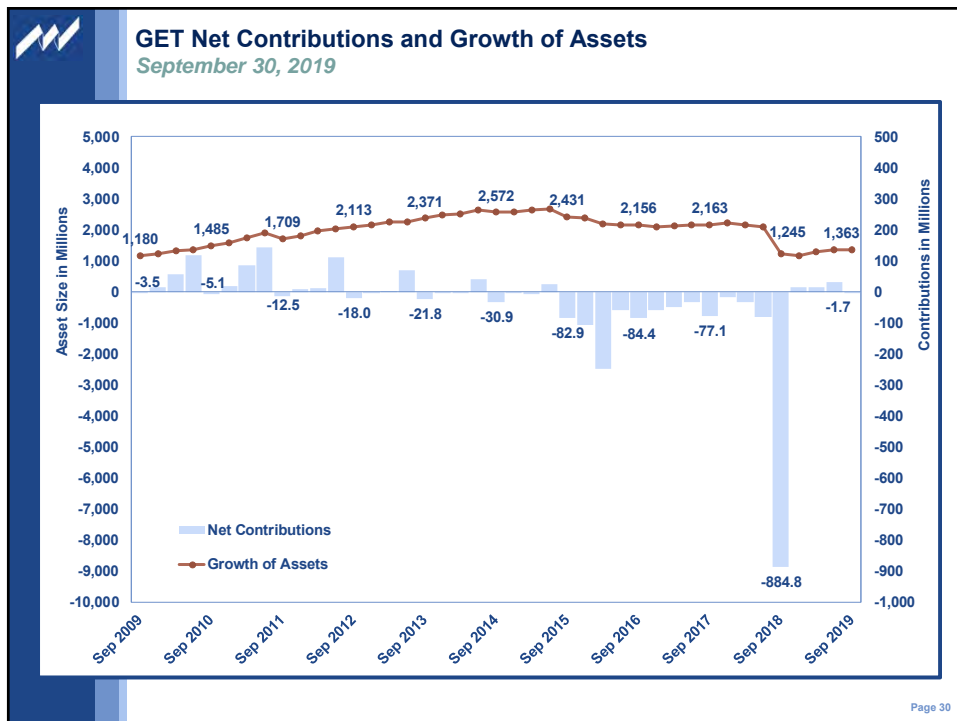
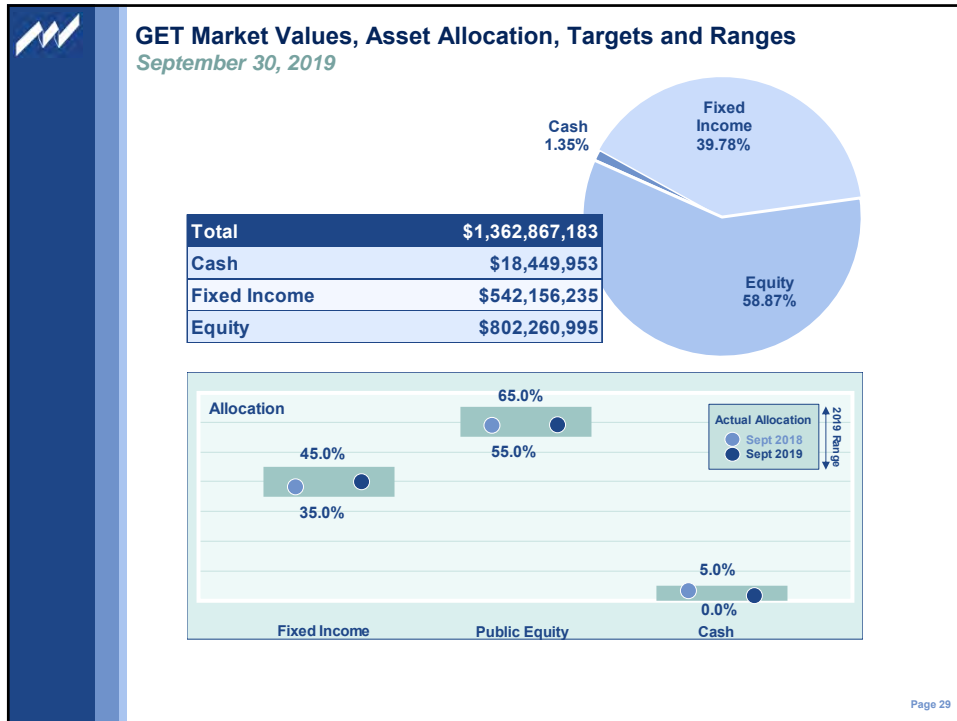
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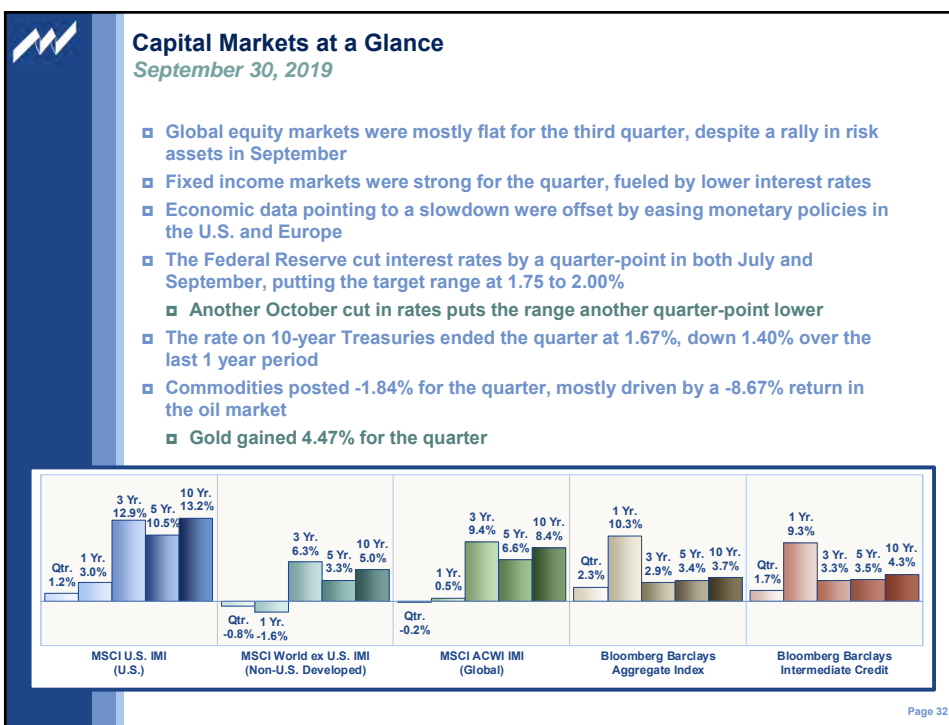
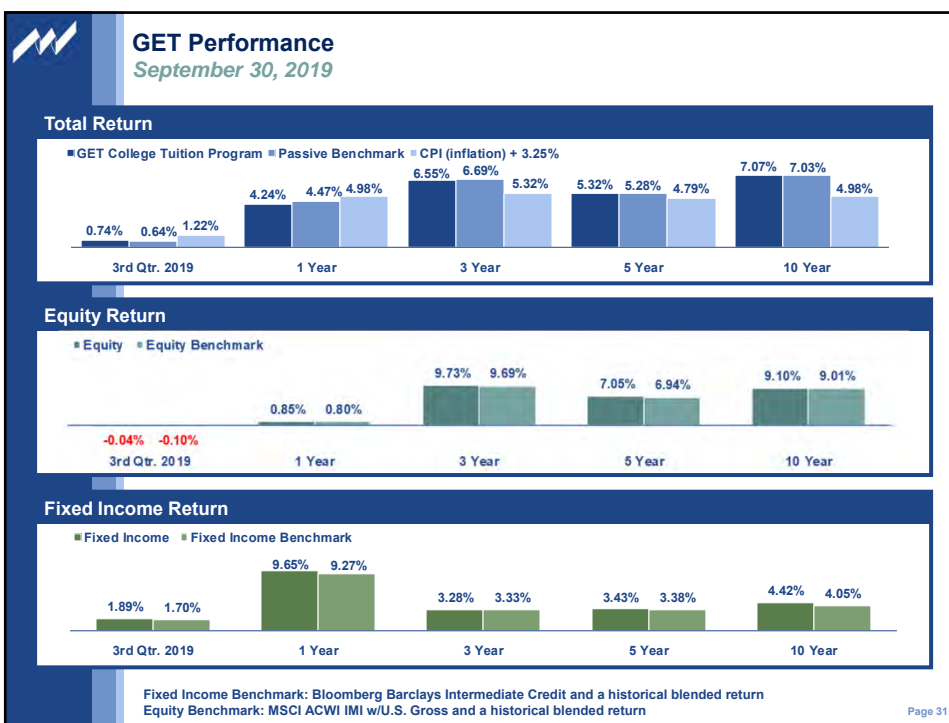
 Washington State
Investment Board

GET Investment Report November 13, 2019



Chris Phillips
Institutional Relations Director








Contact Information

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 Olympia, WA 98504-0916

Phone Number:
 (360) 956-4600

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GET Asset Allocation Study

WA529

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Ryan Lobdell
 Meketa Investment Group



GUARANTEED EDUCATION TUITION

[See "GET 2019 Asset Allocation Discussion"](#)

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DreamAhead Investment Update

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Matt Forester

Director, Lockwood Advisors



See "Investment Advisory Report / Third Quarter 2019"

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2019 GET Actuarial Valuation Report Overview

$$\int \frac{x^2 \sqrt{x^2 \pm a^2}}{x^3} dx = \frac{1}{6} (2x^2 \pm a^2) \sqrt{x^2 \pm a^2} - \frac{a^2}{8} \ln|x + \sqrt{x^2 \pm a^2}| + C$$

$$\int \frac{x^2 \sqrt{x^2 \pm a^2}}{x^2} dx = \frac{1}{2} \sqrt{x^2 \pm a^2} + \frac{a^2}{2} \ln|x + \sqrt{x^2 \pm a^2}| + C$$

$$\int \frac{x^2 \sqrt{x^2 \pm a^2}}{x} dx = \frac{1}{2} \sqrt{x^2 \pm a^2} + \frac{a^2}{2} \ln|x + \sqrt{x^2 \pm a^2}| + C$$


$$\int \frac{dx}{\sqrt{x^2 \pm a^2}} = \ln|x + \sqrt{x^2 \pm a^2}| + C$$

$$\int \frac{dx}{(x^2 \pm a^2)^{3/2}} = \frac{x}{a^2 \sqrt{x^2 \pm a^2}} + \frac{1}{a^2} \ln|x + \sqrt{x^2 \pm a^2}| + C$$

Matthew M. Smith, FCA, EA, MAAA
State Actuary

Sarah Baker
Actuarial Analyst

Presentation to: WA529 Committee



Office of the State Actuary
"Supporting financial security for generations."

November 13, 2019

Funded Status Summary

Funded Status Summary		
(Dollars in Millions)	2019	2018
Present Value of Future Obligations	\$1,108	\$1,710
Present Value of Fund	\$1,456	\$2,227
Funded Status	131.3%	130.2%
Reserve/(Deficit)	\$347	\$517

- June 30, 2019, actuarial valuation results compare to roll-forward results of 132% and \$350 million for the funded status and reserve respectively
- Program funded status of 125.9% at June 30, 2019, after reflecting [ESB 6087](#) and before assumption and method changes from this valuation
- Please see the *June 30, 2019, GET Actuarial Valuation Report* for all supporting information

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Summary Comments On 2019 Results

Significant factors for this year's valuation include the following:

- Lower than expected investment returns for plan year (decrease to funded status)
- Higher than expected distributions for the plan year (decrease to funded status)
 - Due to refunds under the program's temporary special refund rules
 - Transfers to DreamAhead under ESB 6087
- Lower than expected tuition growth for the plan year (increase to funded status)
- Reduction to assumed rates of investment return and tuition growth (net increase to funded status)
- See gain/loss analysis in full report for further details

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Summary Of Contract Data And Key Assumptions

Contract Data Summary		
	2019	2018
Number of Current Contracts	67,215	96,611
Number of Units Outstanding	10,418,088	16,310,453

- Lowered assumed rate of investment return from 5.65% to 5.25% based on new capital market assumptions from WSIB
- Tuition growth assumptions updated to reflect adopted tuition growth rates for 2019-21 academic school years; OSA best estimate thereafter

Key Assumptions	
Annual Investment Return	5.25%*
Annual Tuition Growth**	
2019-20	2.3%
2020-21	2.2%
2021-29	5.5%
2029-31+	5.0%

*Target asset allocation: 60% global equities; 40% fixed income.

**Academic school year.

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Office of the State Actuary

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Funded Status Details

Funded Status	
Obligations (Dollars in Millions)	
a) Present Value of Unit Redemptions	\$1,081
b) Present Value of Administrative Expenses	\$27
c) Present Value of Obligations (a+b)	\$1,108
Fund Value	
d) Assets	\$1,355
e) Present Value of Monthly Contract Receivables	\$101
f) Present Value of Fund (d+e)	\$1,456
Calculation of Funded Status	
g) Present Value of Fund (f)	\$1,456
h) Present Value of Obligations (c)	\$1,108
i) Ratio of Fund Value to Obligations (g/h)	131.3%
j) Reserve/(Deficit) (g-h)	\$347

- Fund Value includes the present value of monthly contract receivables
- Program Obligations include the present value of administrative expenses; administrative expenses provided by GET program staff

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Administrative Expenses

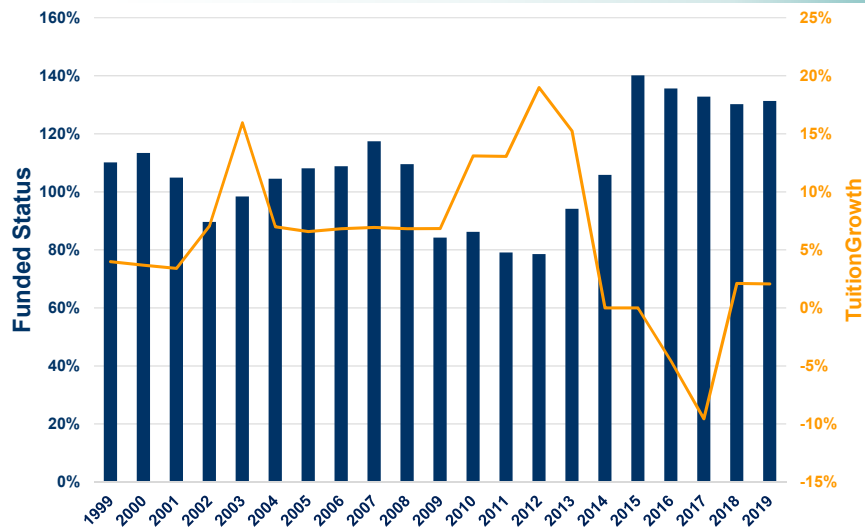
- Administrative expenses provided by GET now reflect the estimated cost to administer currently unredeemed units until all the units are redeemed; method change from last GAVR
- This new measure now used to determine the expense component in the unit price as well

Development of Expenses					
Fiscal Year	Administrative Expenses	PV of Expenses	Fiscal Year	Administrative Expenses	PV of Expenses
2020	\$3,612,908	\$3,521,647	2032	\$1,756,439	\$926,524
2021	3,191,755	2,955,945	2033	1,804,105	904,198
2022	2,477,583	2,180,083	2034	1,852,552	882,165
2023	2,026,173	1,693,944	2035	1,901,916	860,496
2024	1,552,983	1,233,580	2036	1,764,897	758,673
2025	1,599,701	1,207,306	2037	1,811,731	739,958
2026	1,561,652	1,119,800	2038	1,859,651	721,643
2027	1,612,793	1,098,785	2039	1,908,633	703,706
2028	1,662,629	1,076,236	2040	1,814,397	635,593
2029	1,616,141	993,961	2041	1,597,969	531,855
2030	1,662,707	971,591	2042	1,318,787	417,040
2031	\$1,709,379	\$949,039	2043	\$1,343,844	\$403,766
				PV of Expenses	\$27,487,534

Note: PV means Present Value.

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Funded Status And Tuition Growth History



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Sensitivity Of Results To Key Assumption Changes

Sensitivity of Results to Key Assumptions							
Closed Program*							
(Dollars in Millions)	+1% Tuition	Best Estimate	-1% Tuition	-2% Return	-1% Return	Best Estimate	+1% Return
Present Value of Fund	\$1,456	\$1,456	\$1,456	\$1,464	\$1,460	\$1,456	\$1,452
Present Value of Obligations	\$1,167	\$1,108	\$1,054	\$1,271	\$1,185	\$1,108	\$1,039
Reserve/(Deficit)	\$289	\$347	\$401	\$193	\$274	\$347	\$413
Funded Status (as of June 30)	125%	131%	138%	115%	123%	131%	140%

*Based on current contracts only, no future unit sales.

- Results sensitive to changes in assumed rates of tuition growth and investment return ("return")
- Table above illustrates how the results of our "best estimate" change when we vary the assumed rates of tuition growth and investment return

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Sensitivity Of Funded Status To Asset Valuation Method

- Funded status also sensitive to the asset valuation method
- Best estimate funded status based on the market value of assets
- This year we show the funded status under an actuarial (or smoothed) value for comparison

Sensitivity to Market Fund Value		
Closed Program*		
(Dollars in Millions)	Best Estimate	Actuarial Fund Value
PV of Fund	\$1,456	\$1,441
PV of Obligations	\$1,108	\$1,108
Reserve/(Deficit)	\$347	\$333
Funded Status	131%	130%

Note: PV means Present Value.

*Based on current contracts only, no future unit sales.

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Actuarial Value Of Assets

Calculation of Actuarial Fund Value			
<i>(Dollars in Millions)</i>			
a) Market Value at 6/30/2019			\$1,355
Deferred Gains and (Losses)			
Program Year Ending	Years Remaining	Total Deferral	Remaining Deferral
6/30/2019	7	(\$13)	(\$12)
6/30/2018	6	\$20	\$15
6/30/2017	5	\$99	\$62
6/30/2016	4	(\$150)	(\$75)
6/30/2015	3	(\$123)	(\$46)
6/30/2014	2	\$245	\$61
6/30/2013	1	\$70	\$9
b) Total Deferral			\$14
c) Market Value less Deferral 6/30/2019 (a - b)			\$1,340
d) 70% of Market Value of Assets			\$948
e) 130% of Market Value of Assets			\$1,761
f) Actuarial Value of Assets			\$1,340
g) PV of Receivables			\$101
h) Actuarial Fund Value (f + g)			\$1,441

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Questions?



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WA529 Marketing Update

WA529
WASHINGTON COLLEGE SAVINGS PLANS

Rodger O'Connor

WA529 Associate Director for Marketing & Communications

- New Data → Strategy Shift
- Fall Paid Media Campaign
- Employer Outreach

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WA529 Marketing Update

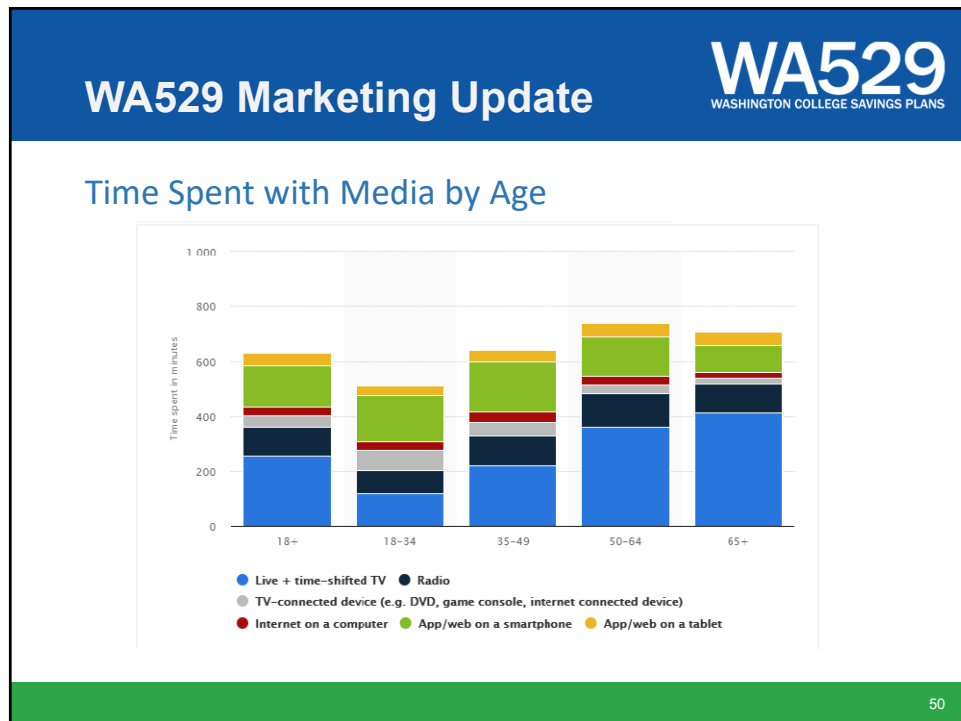
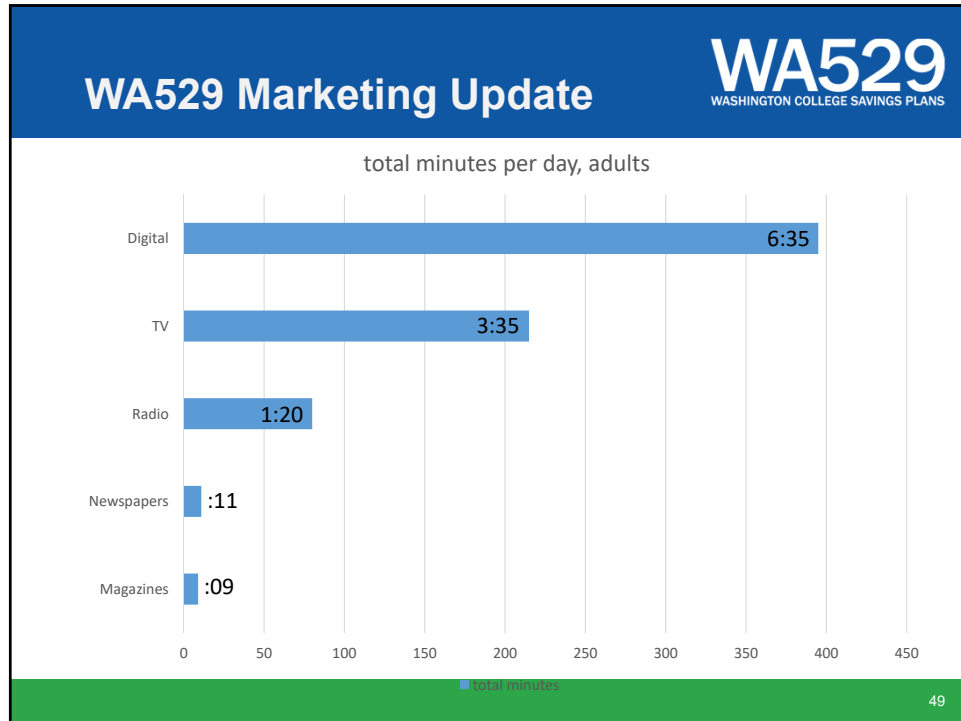
WA529
WASHINGTON COLLEGE SAVINGS PLANS

New Data: Time Spent with Media

For the first time, in 2019
Americans spend more
time on their mobile
device than watching
television.



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WA529 Marketing Update

WA529
WASHINGTON COLLEGE SAVINGS PLANS

Two Target Groups

- **Savers**
 - Parents
 - Adults 25-49
 - At least one child 12 or younger
- **Gifters**
 - Grandparents
 - Adults 50+
 - At least one grandchild 18 or younger

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WA529 Marketing Update

WA529
WASHINGTON COLLEGE SAVINGS PLANS

Paid Media Strategy

- **Broadcast TV & Radio**
 - Provides Reach, Awareness, Legitimacy



- **Increased Digital media**
 - Paid Social
 - Facebook, Twitter, Instagram
 - Paid Search
 - Display
 - Video

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WA529 Marketing Update

WA529
WASHINGTON COLLEGE SAVINGS PLANS

Opportunity Counties

- Snohomish
- Pierce
- Spokane
- Clark
- Yakima



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WA529 Marketing Update

WA529
WASHINGTON COLLEGE SAVINGS PLANS

Additional Channels

- Programmatic Audio



- Transit & Billboards



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WA529 Marketing Update

WA529
WASHINGTON COLLEGE SAVINGS PLANS

Fresh Campaign Creative

- Updated Music & Voice-over
- Logo presentation
 - GET brand equity



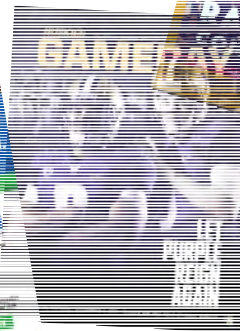
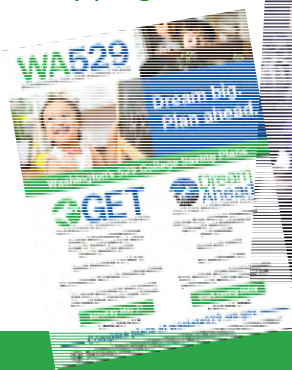
55

WA529 Marketing Update

WA529
WASHINGTON COLLEGE SAVINGS PLANS

Direct Print & Digital

- Parenting publications
- Sports game day programs
- PeachJar



56

WA529 Marketing Update

WA529
WASHINGTON COLLEGE SAVINGS PLANS

Community Outreach & Partnerships

(on-going)

- **Events**

- Community events
- School events
- Employee benefit fairs
- Conferences

- **Partnerships**

- Community organizations
- Financial literacy groups
- Employers
- Gift of College



57

Public Comment

WA529
WASHINGTON COLLEGE SAVINGS PLANS

Share Your Thoughts

- **Process**

- Sign-up sheet
- Three minutes per individual
- You can submit written comments
 - Send to GETInfo@wsac.wa.gov and include the subject line: "GET Committee Statement."



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Next Regular Meeting

WA529

WASHINGTON COLLEGE SAVINGS PLANS

Tentative

January 7, 2020, pending Committee approval of 2020 meeting calendar

59

Adjournment

WA529

WASHINGTON COLLEGE SAVINGS PLANS

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2019 Third Quarter Committee Report

November 13, 2019



Agenda

- Program Overview
- Program Updates
- Program Statistics & Analysis
- Gift of College
- Plaid 2.0
- Appendix

Overview for the Current Quarter

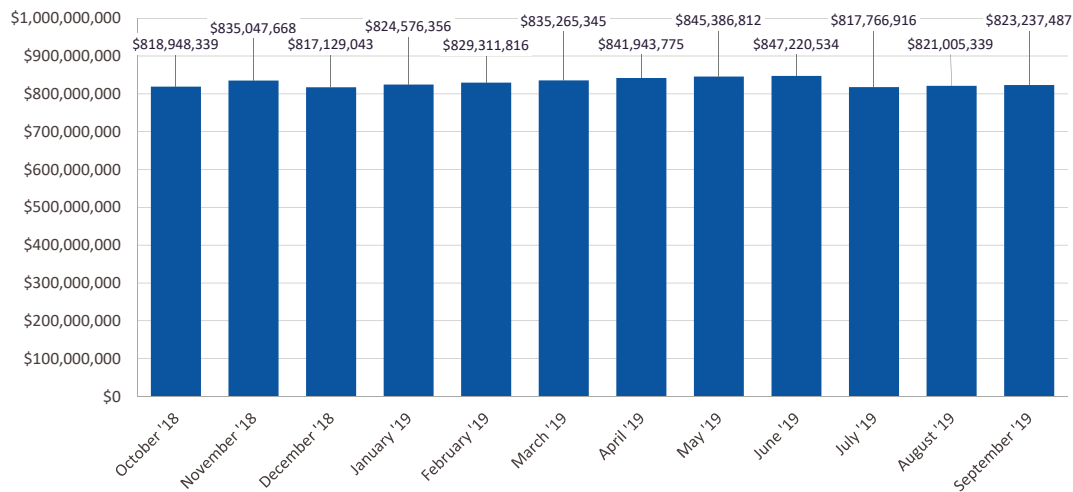
- \$823,237,487 in AUM ↑
- 26,214 Funded Accounts ↓
- 475 New Accounts ↓
- 276 Accounts Closed With Zero Dollar Balance ↑
- Market Performance of \$7,716,822 ↓
- Contributions of \$6,829,055 ↑
- Distributions of -\$38,528,921 ↑

3

Information Classification: Public

AUM Month by Month

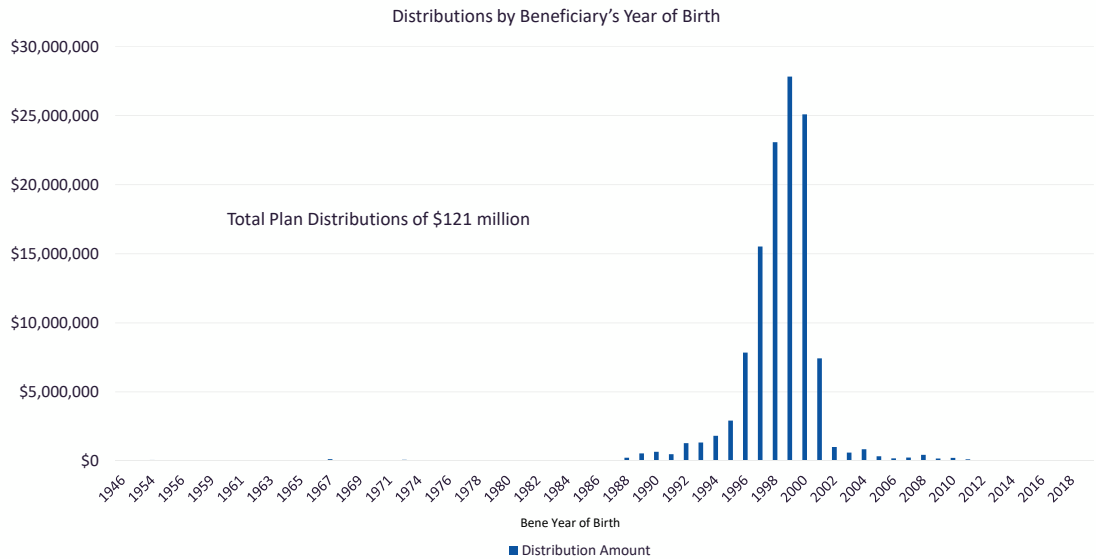
Relatively constant AUM given large value of plan distributions.



4

Information Classification: Public

Distributions by Age Since Plan Inception

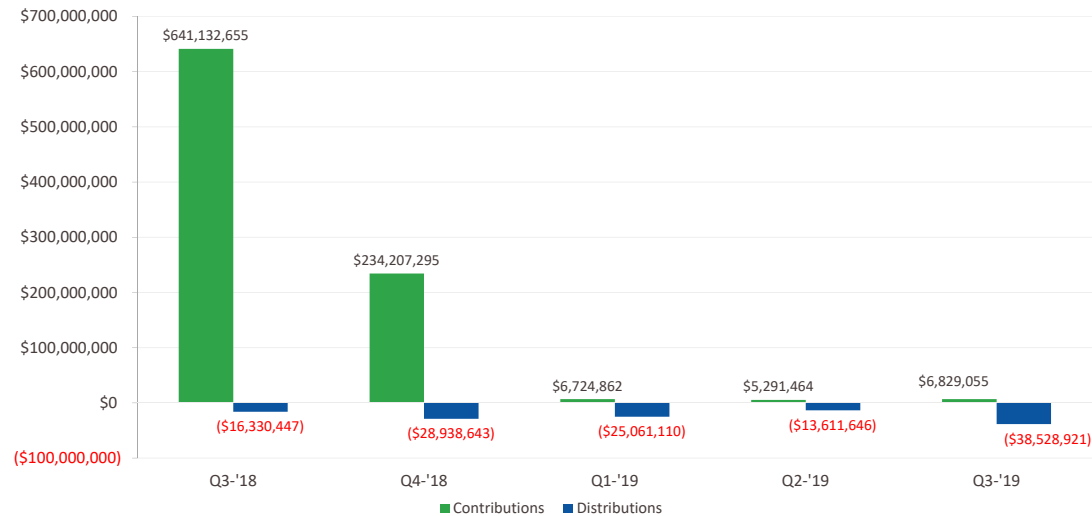


5

Information Classification: Public

Contributions & Distributions

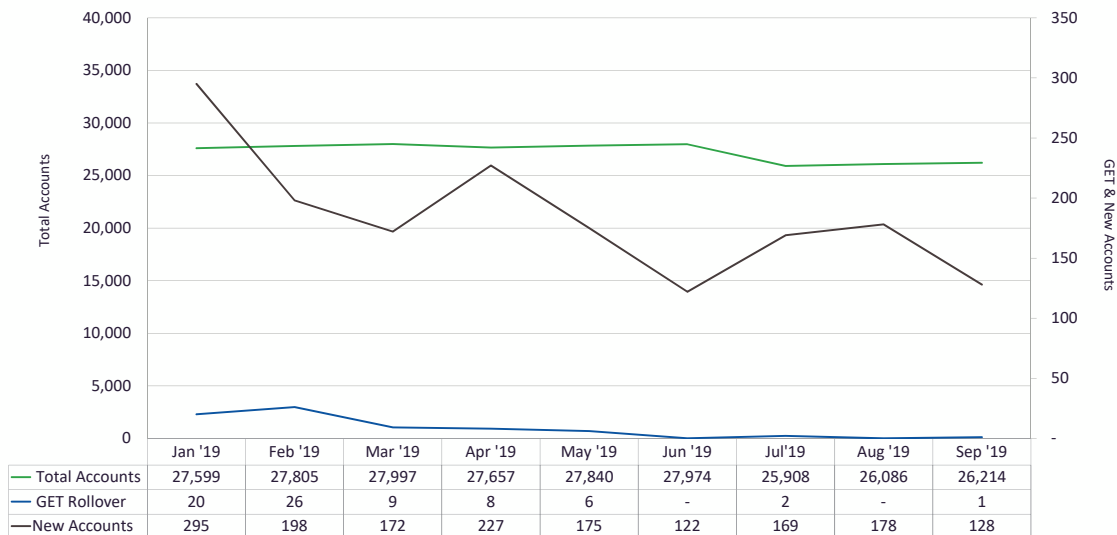
Contribution data is skewed due to GET rollover activity.



6

Information Classification: Public

Cumulative Account Growth

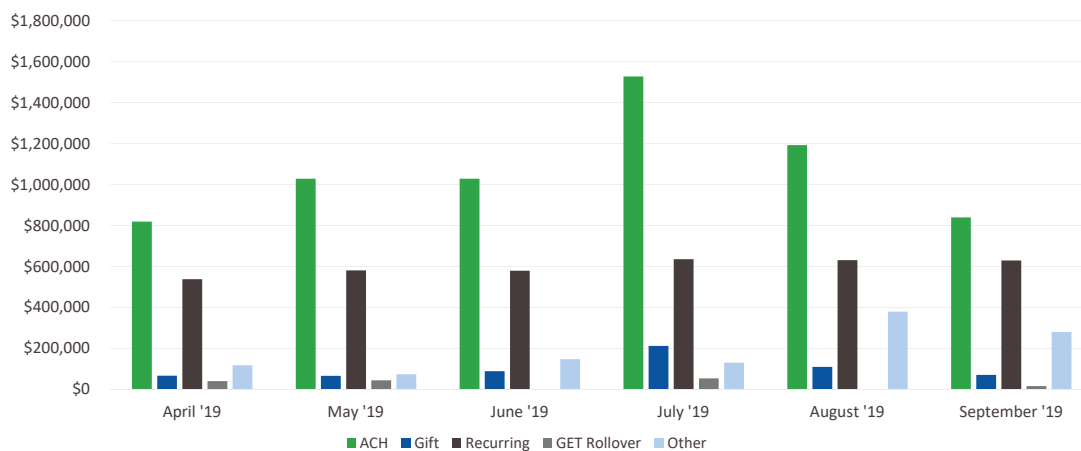


7

Information Classification: Public

Contributions by Source

All Contribution sources by month for Q3 2019. Potential opportunity to grow Recurring Contributions via employer outreach.



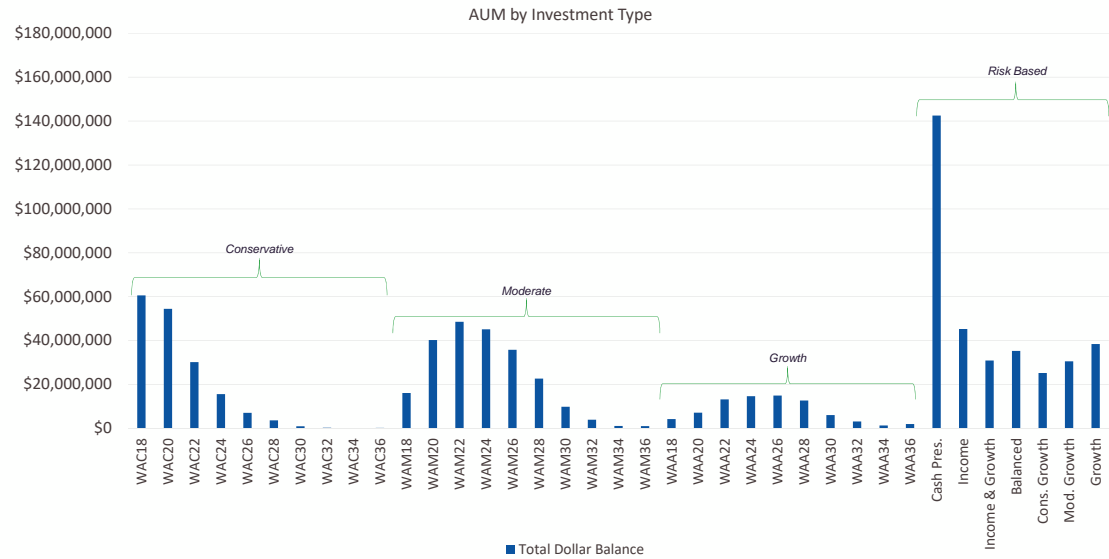
* Contribution sources are mutually exclusive

** Other* represents Checks, Non-GET Rollovers and Payroll Deductions

8

Information Classification: Public

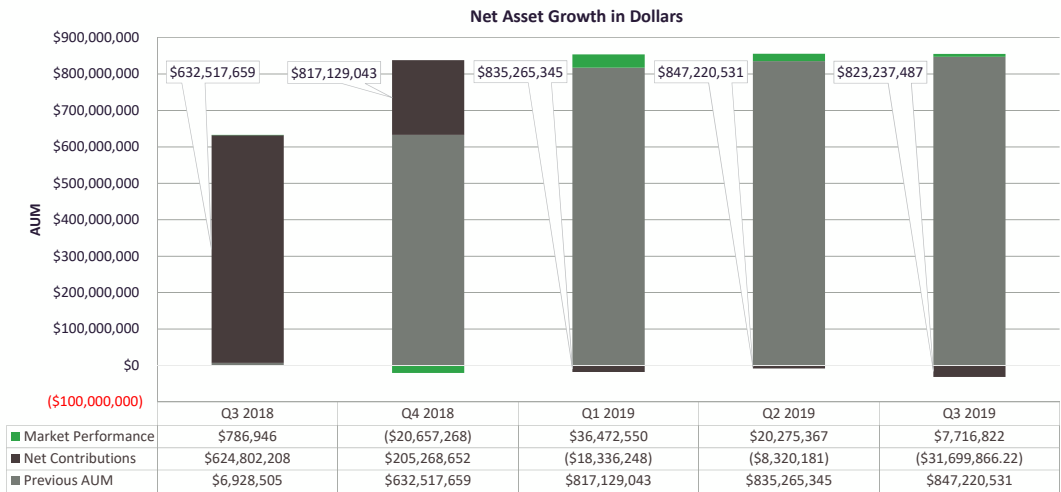
Investment Distribution



9 Information Classification: Public

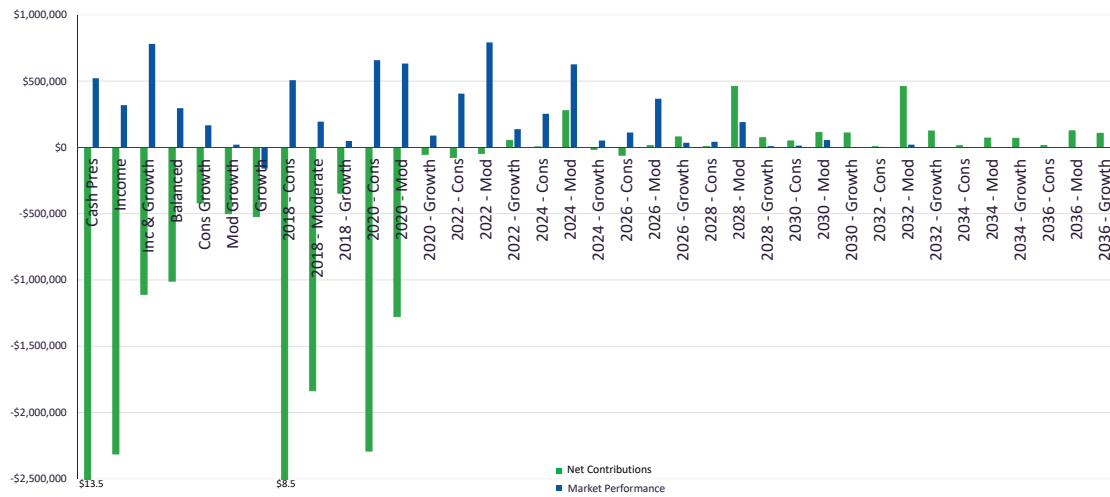
Net Asset Growth

Asset growth reflects both net contributions and market performance



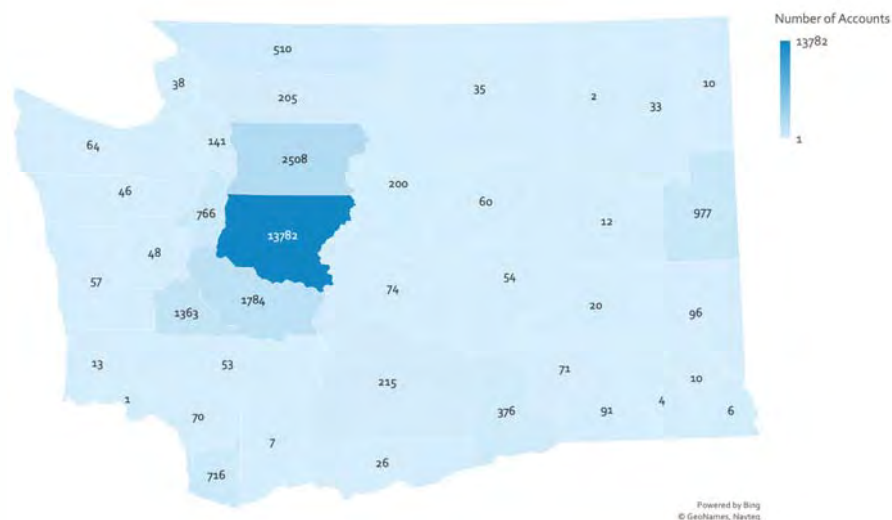
10 Information Classification: Public

Cash Flow by Investment Portfolio



11 Information Classification: Public

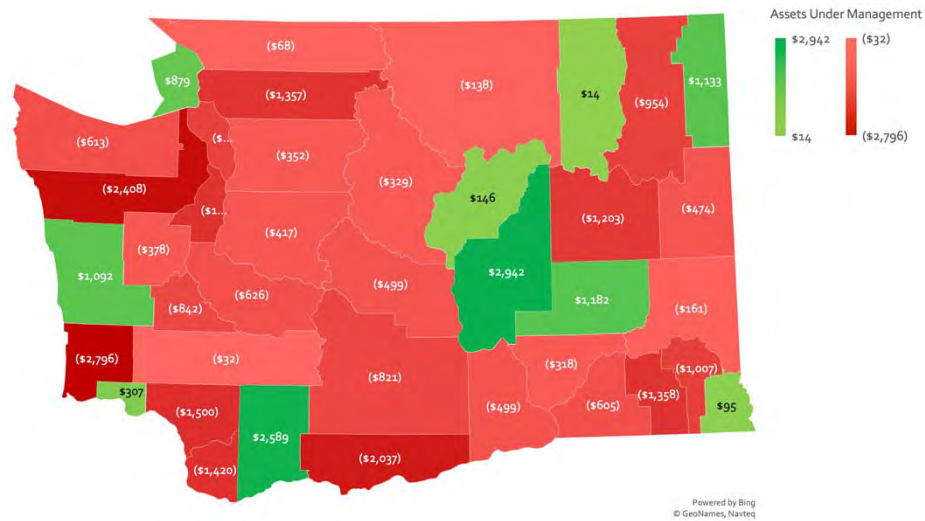
Number of Accounts by County



Powered by Bing
© GeoNames, Navteq

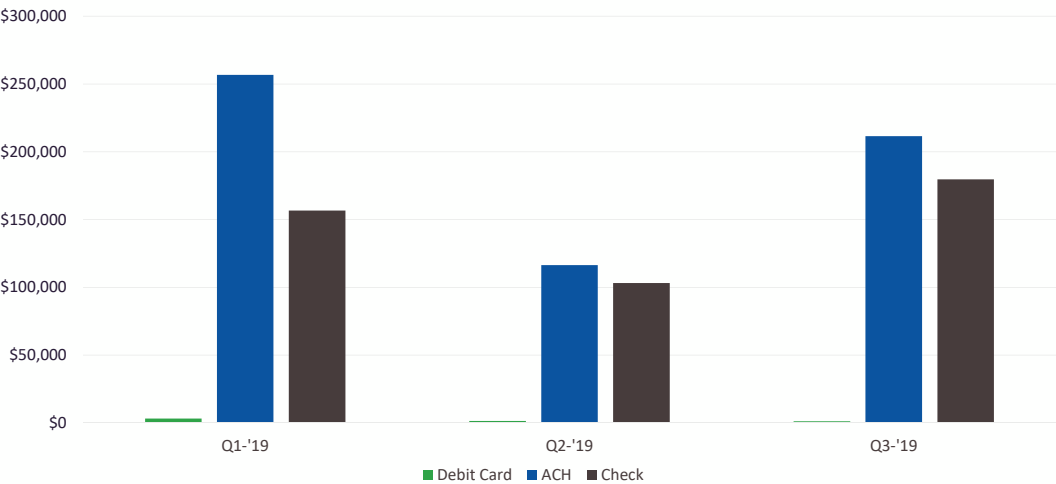
12 Information Classification: Public

Net Change in Average AUM by County



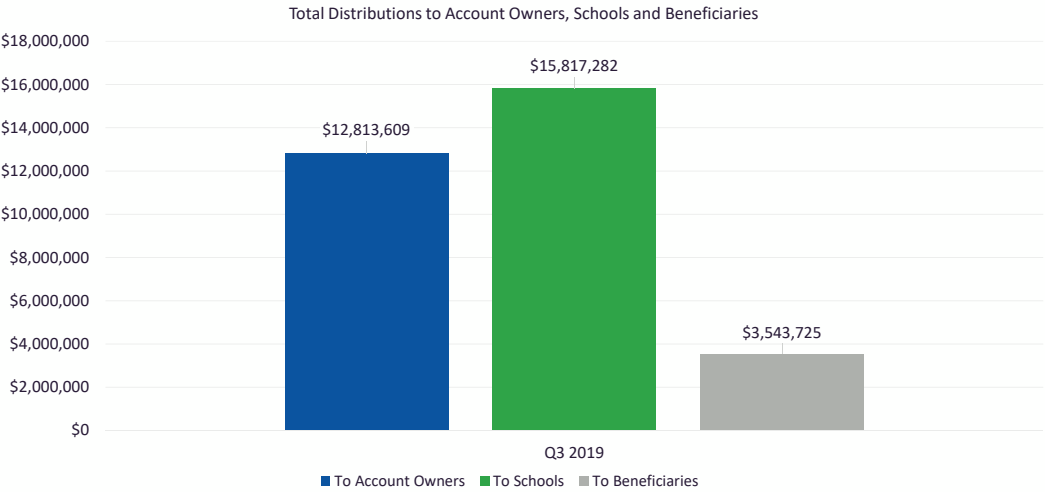
13 Information Classification: Public

Gifting Activity

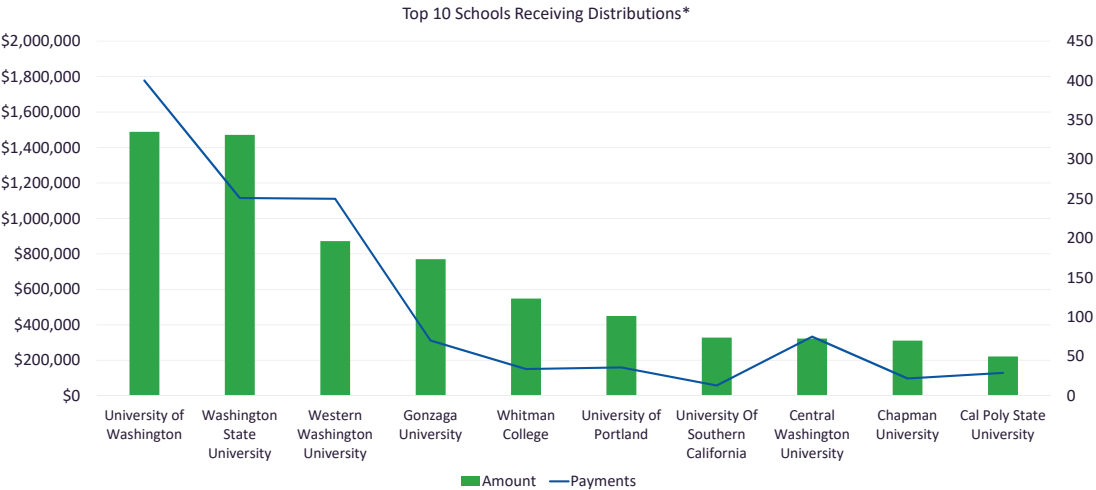


14 Information Classification: Public

Distributions by Recipient



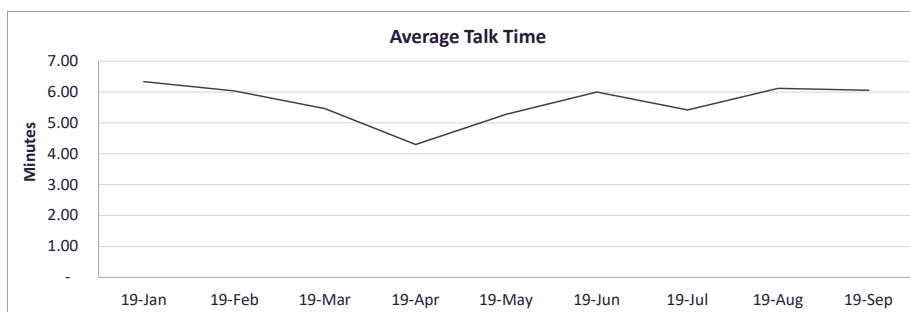
Tuition Distributions



Customer Service

Call Center Statistics

	Jan '19	Feb '19	Mar '19	April '19	May '19	June '19	July '19	August '19	September '19
Total Answered	1,270	599	605	1,384	506	391	636	891	758
Avg. Speed Answer	0:26	0:24	0:27	0:57	0:13	0:11	0:08	0:15	0:08
Avg. Talk Time	6:34	6:04	5:46	4:30	5:28	6:00	5:42	6:12	6:06



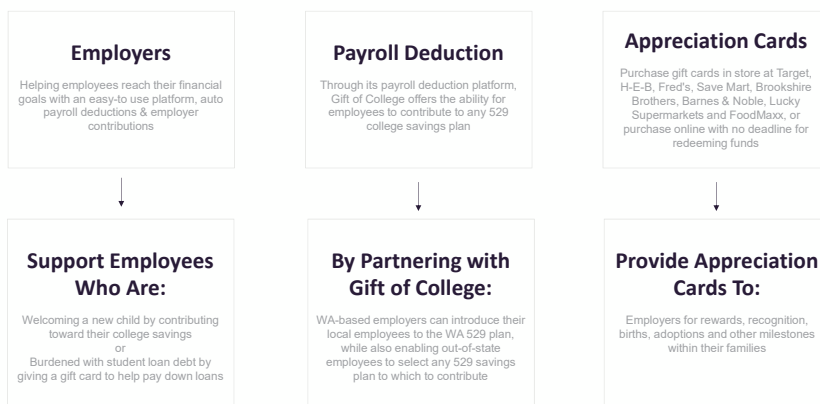
* The April ASA has been adjusted to remove abnormally high call volume that occurred on April 2.

17

Information Classification: Public

Gift of College

Gift of College™ finally makes an education affordable
Focusing on a **one-to-many** conversation between Plan and Employer



18

Information Classification: Public

Plaid 2.0 Enhanced Interface

Connect a bank account
Securely connect a bank account to make contributions or withdrawals.

Choose a connection method

☐ Sign in to your bank account
Use Plaid to securely sign in and connect your bank account

☐ Manually connect bank account
Enter an account and routing number (ADA Compliant)

[Back to settings](#) [Next](#)

- Upgrade allows for improved user interface when adding a bank account.
- The option to “add account manually” was difficult to locate with previous API version.

Connect a bank account
Securely connect a bank account to make contributions or withdrawals.

Choose a connection method

☒ Sign in to your bank account
Use Plaid to securely sign in and connect your bank account

☐ Manually connect bank account
Enter an account and routing number (ADA Compliant)

[Back to settings](#) [Next](#)

Sunday uses Plaid to link your bank

☒ **Secure**
Transfer of your information is encrypted end-to-end

☒ **Private**
Your credentials will never be made accessible to Sunday

[Continue](#)

By selecting "Continue", you agree to the [Plaid Bank Link Privacy Policy](#)

- Improved user interface clearly defines how to connect a bank through Plaid and how the participant's data is used and protected.

19 Information Classification: Public

Plaid 2.0 Enhanced Interface

Select your bank

Search

Bank of America CHASE

WELLS FARGO usbank

USAA KeyBank

Ally Bank Capital One

Select your bank

Search b

Bank of America
www.bankofamerica.com

CNB Bank & Trust, N.A.
www.cnbft.com

Boeing Employees Credit Union (BECU)
www.becu.org

Bank of Bluffs
www.bankofbluffs.com

Berkshire Bank - Personal & Small Business Online Banking
www.berkshirebank.com

Baker-Dotter Bank

[Cancel](#)

Enter your credentials

Bank of America

Online ID

Password

[Submit](#)

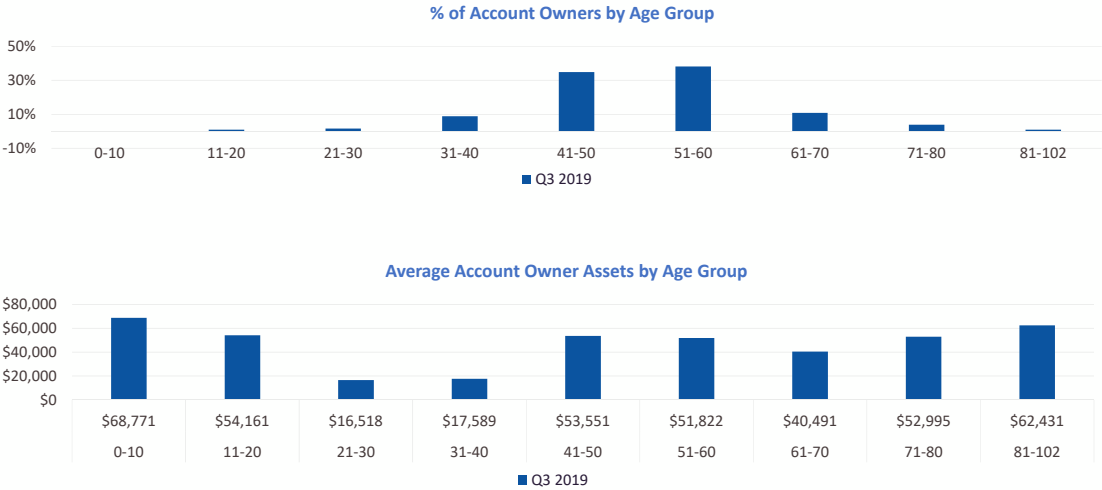
[Reset password](#)

- Support for 12,901 banking institutions (vs. 17 banks with previous API).
- Additional service for 3,882 banks allows for bank account names to be recorded in order to more easily identify a mis-match between participant name and bank account registration (future enhancement).
- Ability to process micro deposits if required for further authentication (future enhancement).

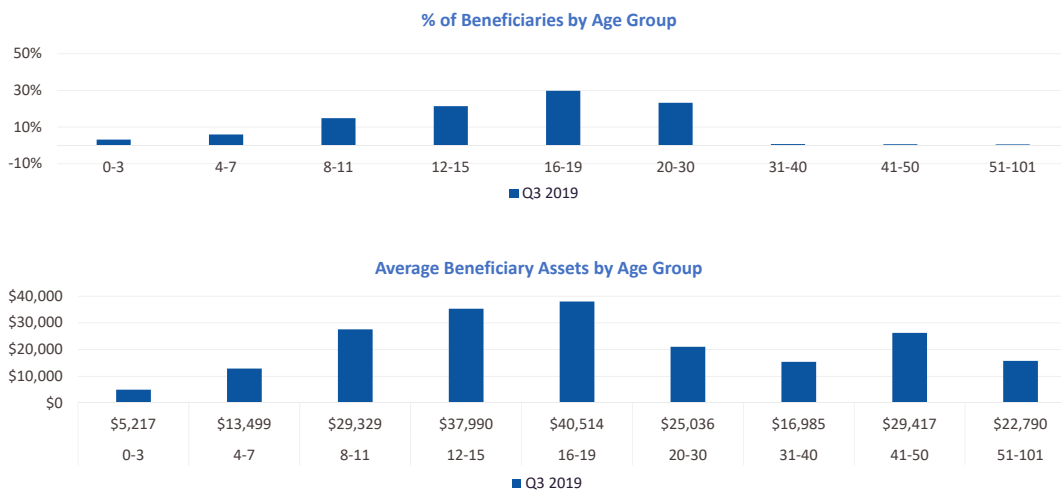
20 Information Classification: Public

APPENDIX

Account Owner Demographics



Beneficiary Demographics



23 Information Classification: Public

Google Analytics

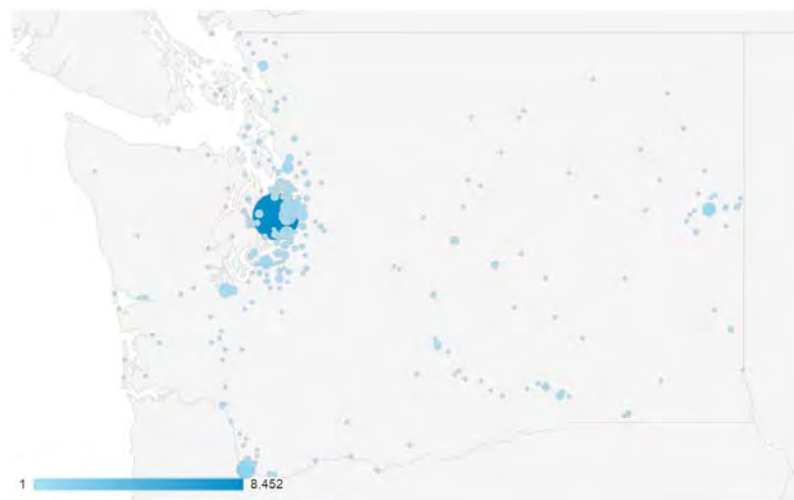
Site data on users activity by top locations

City	Acquisition			Behavior			Conversions		
	Users	New Users	Sessions	Bounce Rate	Pages / Session	Avg. Session Duration	Register (Goal 1 Conversion Rate)	Register (Goal 1 Completions)	Register (Goal 1 Value)
	22,568 (14.25%) (138,347)	17,507 (8.67%) (143,418)	47,212 (8.47%) (291,995)	15.66% (Average View: 14.88%) (5.37%)	7.74 (Avg for View: 7.22) (7.19%)	00:05:28 (Avg for View: 00:04:00) (2% 1.7%)	0.83% (Avg for View: 0.88% (+0.05%))	393 (8.47%) (17,149 (12,767))	\$0.00 (8.47%) (19,055)
1. Seattle	8,452 (37.77%)	6,299 (36.00%)	16,485 (34.92%)	16.29%	7.25	00:04:47	0.84%	138 (35.11%)	\$0.00 (35.00%)
2. Vancouver	1,211 (4.98%)	887 (5.02%)	2,208 (4.68%)	13.32%	8.46	00:05:37	1.09%	24 (6.11%)	\$0.00 (6.60%)
3. Bellevue	1,136 (4.67%)	806 (4.60%)	2,435 (5.16%)	14.87%	8.13	00:06:18	0.41%	10 (2.54%)	\$0.00 (3.50%)
4. Redmond	741 (3.00%)	507 (2.90%)	1,433 (3.04%)	14.03%	8.43	00:05:56	0.28%	4 (1.02%)	\$0.00 (1.50%)
5. Spokane	634 (2.81%)	454 (2.59%)	1,238 (2.62%)	16.32%	7.97	00:05:52	0.73%	9 (2.28%)	\$0.00 (3.00%)
6. Kirkland	631 (2.60%)	451 (2.58%)	1,309 (2.77%)	14.67%	7.70	00:06:00	0.53%	7 (1.78%)	\$0.00 (3.00%)
7. Tacoma	597 (2.44%)	439 (2.51%)	1,369 (2.88%)	11.83%	7.42	00:05:46	0.88%	12 (3.05%)	\$0.00 (3.00%)
8. Olympia	567 (2.30%)	411 (2.35%)	1,104 (2.36%)	16.49%	8.12	00:05:42	1.09%	12 (3.00%)	\$0.00 (3.00%)
9. Renton	545 (2.24%)	401 (2.29%)	1,102 (2.33%)	35.93%	5.32	00:03:38	0.27%	3 (0.76%)	\$0.00 (3.00%)
10. (not set)	493 (2.03%)	312 (1.78%)	920 (1.96%)	14.89%	7.74	00:05:50	0.87%	8 (2.04%)	\$0.00 (3.00%)

24 Information Classification: Public

Google Analytics

Site data on users activity by top locations



25 Information Classification: Public

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26 Information Classification: Public

DRAFT

**Washington College Savings Plans Rollovers
Report to the Governor and the Legislature
November 2019**

Introduction

The Committee on Advanced Tuition Payment and College Savings operates two 529 college savings plans: the Guaranteed Education Tuition (GET) program and the DreamAhead College Investment Plan. Per the plans' enabling statute, Chapter 28B.95 RCW, GET and DreamAhead were established to encourage savings and enhance the ability of Washington citizens to obtain financial access to institutions of higher education. The plans are also designed to complement one another to save towards the full cost of attending college.

Washington is one of 49 states, along with the District of Columbia, that offers one or more 529 college savings plans to the public. These tax-advantaged savings vehicles offer tax-deferred growth and tax-free withdrawals when a qualifying distribution is made. Qualifying distributions include those to cover qualified higher education expenses such as tuition, fees, room and board, books, and supplies. They also include rollover distributions to other 529 or 529A (ABLE) plans.

Statute, RCW 28B.95.045(2), requires the WA529 Committee to report annually to the Governor and the appropriate committees of the Legislature on:

- (a) The number of accounts that have been rolled into the Washington college savings program from out of state and
- (b) The number of accounts rolled out of the Washington college savings program to 529 plans into other states.

This statutory requirement only applies to DreamAhead (known statutorily as the "Washington College Savings Program"). However, for additional context, the following report provides these rollover statistics for both GET and DreamAhead for State Fiscal Year 2019.

WA529 Rollovers

Table 1 below provides an overview of these GET to DreamAhead rollovers, as well as rollovers between GET and out-of-state plans and DreamAhead and out-of-state plans.

TABLE 1: GET and DreamAhead Rollovers – State Fiscal Year 2019

Rollover Type	Number of Accounts
Incoming Rollovers From Out-of-State Plans	
Rollovers into GET	91
Rollovers into DreamAhead	44
Outgoing Rollovers to Out-of-State Plans	
Rollovers from GET	578
Rollovers from DreamAhead	13
Rollovers between GET and DreamAhead	
Rollovers from GET to DreamAhead	26,464
Rollovers from DreamAhead to GET	2

Additional Notes

- The majority of rollover activity for GET and DreamAhead that occurred in FY19 was a result of the passage of [Engrossed Senate Bill 6087](#) in the 2018 Legislative Session. A key provision in this legislation was to offer GET customers a limited 90-day window to roll their GET accounts over to DreamAhead at a “Special Unit Cash Value Price,” of \$143 (a 33 percent premium over the then current standard GET payout value).
- It is also important to consider that the non-penalty contribution refund period for GET participants was still in effect through September 12, 2018. This led to a higher number of enrollments to out-of-state plans from GET than is typical.
- Additional details underlying these rollovers (dollar amounts, sending/receiving plans, etc.) are available upon request to WA529 Director, Luke Minor at lucasm@wsac.wa.gov.
- The WA529 Committee will provide an update to this report before December 1, 2020.

DRAFT

**DreamAhead College Investment Plan Program Fees
Report to the Governor and the Legislature
November 2019**

Introduction

The DreamAhead College Investment Plan is the state's 529 college investment plan, opened in April 2018. Per the plan's enabling statute, Chapter 28B.95 RCW, DreamAhead is intended to complement the Guaranteed Education Tuition (GET) prepaid tuition program to help families save towards the full cost of college.

Washington is one of 49 states, along with the District of Columbia, that offers a direct-sold 529 college investment plan directly to the public without an intermediary such as an investment advisor or broker. Unlike prepaid tuition plans such as GET, which typically permit only savers who reside within the plan's home state, college investment plans are typically available to savers nationwide.

Accordingly, in order to ensure DreamAhead is competitive nationally, the Legislature has set statutory limitations on investment fees charged to plan participants. Specifically, RCW 28B.95.087(3) states: "beginning January 1, 2018, fees charged to the owner may not exceed one-half of one percent for any investment option on an annual basis." Additionally, the Legislature requires the WA529 Committee to report to the Governor and the appropriate committees of the Legislature regarding the total fees charged to each investment option offered by DreamAhead.

The following report provides the fees charged for each investment portfolio, as of September 24, 2019 – the most recent publication date of the DreamAhead Program Details Booklet.

DreamAhead Fee Review

DreamAhead has no commissions, loads, or sales charges. As of September 24, 2019, total annual asset-based fees vary from 0.255% to 0.400%, depending upon the Portfolio(s) a participant chooses. See Table 1 below for an overview of the fees charged for each of the 37 different investment portfolios.

TABLE 1: ANNUAL DREAMAHEAD ASSET-BASED FEES BY INVESTMENT PORTFOLIO

Portfolio name	Underlying fund fee	Service fee	State Administrative fee	Total Annual Asset-Based Fee
Static				
Cash Preservation	0.180%	0.12%	0.10%	0.400%
Income	0.089%	0.12%	0.10%	0.309%
Income & Growth	0.054%	0.12%	0.10%	0.274%
Balanced	0.054%	0.12%	0.10%	0.274%
Conservative Growth	0.054%	0.12%	0.10%	0.274%
Moderate Growth	0.055%	0.12%	0.10%	0.275%
Growth	0.035%	0.12%	0.10%	0.255%
Conservative Year of Enrollment				
2018	0.054%	0.12%	0.10%	0.274%
2020	0.054%	0.12%	0.10%	0.274%
2022	0.054%	0.12%	0.10%	0.274%
2024	0.054%	0.12%	0.10%	0.274%
2026	0.067%	0.12%	0.10%	0.287%
2028	0.081%	0.12%	0.10%	0.301%
2030	0.089%	0.12%	0.0%	0.309%
2032	0.126%	0.12%	0.10%	0.346%
2034	0.126%	0.12%	0.10%	0.346%
2036	0.126%	0.12%	0.10%	0.346%
Moderate Year of Enrollment				
2018	0.045%	0.12%	0.10%	0.265%
2020	0.045%	0.12%	0.10%	0.265%
2022	0.055%	0.12%	0.10%	0.275%
2024	0.055%	0.12%	0.10%	0.275%
2026	0.054%	0.12%	0.10%	0.274%
2028	0.054%	0.12%	0.10%	0.274%
2030	0.060%	0.12%	0.10%	0.280%
2032	0.067%	0.12%	0.10%	0.287%
2034	0.082%	0.12%	0.10%	0.302%
2036	0.096%	0.12%	0.10%	0.316%
Growth Year of Enrollment				
2018	0.045%	0.12%	0.10%	0.265%
2020	0.045%	0.12%	0.10%	0.265%
2022	0.045%	0.12%	0.10%	0.265%
2024	0.045%	0.12%	0.10%	0.265%
2026	0.055%	0.12%	0.10%	0.275%
2028	0.055%	0.12%	0.10%	0.275%
2030	0.054%	0.12%	0.10%	0.274%
2032	0.054%	0.12%	0.10%	0.274%
2034	0.053%	0.12%	0.10%	0.273%
2036	0.096%	0.12%	0.10%	0.316%

Additional Notes

- Due to the quick growth of DreamAhead generated by the incentivized GET rollover activity via Senate Bill 6087 (2018 Legislative Session), DreamAhead's investment manager has been able to secure share class upgrades for the underlying Vanguard and Fidelity mutual funds. This allowed the program to pass on costs savings of one to two basis points per investment portfolio, compared to the fees charged upon plan opening.
- As of September 30, 2019, DreamAhead was ranked sixteenth for lowest average asset-based fees out of 51 direct-sold 529 plans nationwide. This ranking does not account for the recent fee reductions. The fee reductions could cause DreamAhead to move up three to four positions in future rankings.
- DreamAhead also charges an Annual Account Maintenance Fee of \$35 to each Account. The Committee intends to negotiate the reduction or removal of this fee once total DreamAhead plan assets exceed \$1 billion.
- The WA529 Committee will provide an update to this report before December 1, 2020.



GET Prepaid College Tuition Program

Quarterly Report – September 30, 2019

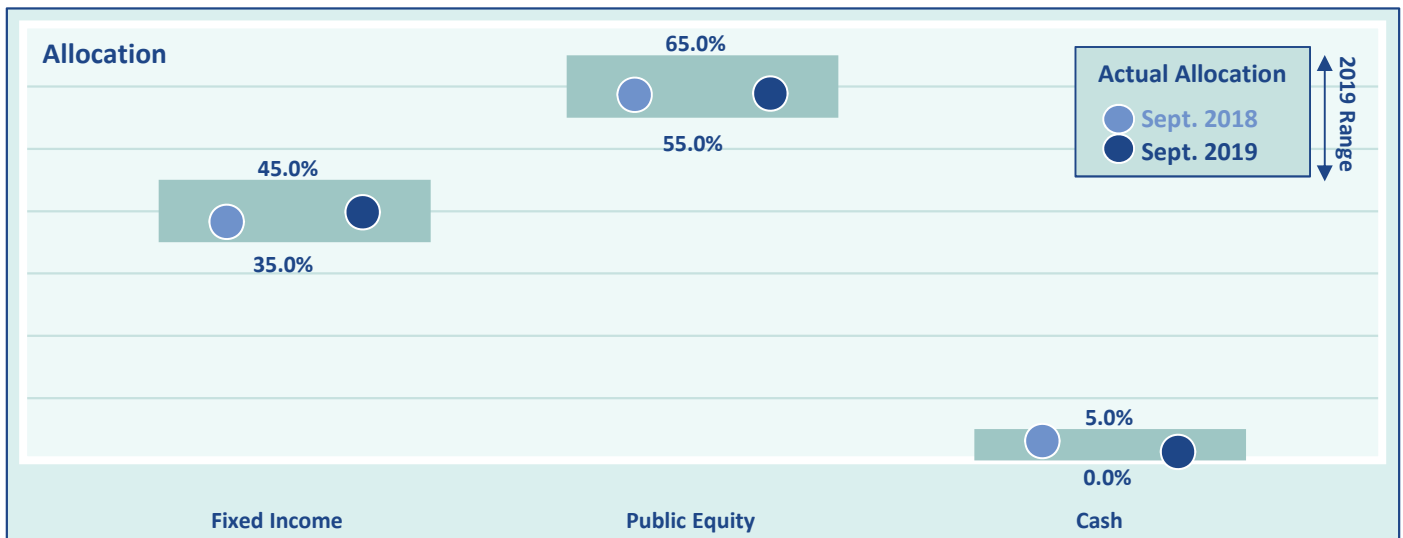
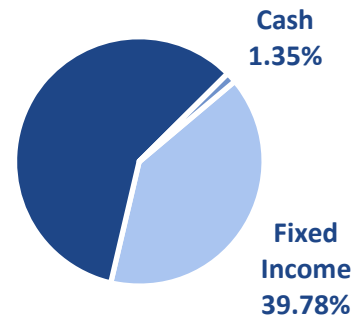
Portfolio Size, Allocation, and Assets Under Management	2
Performance.....	3



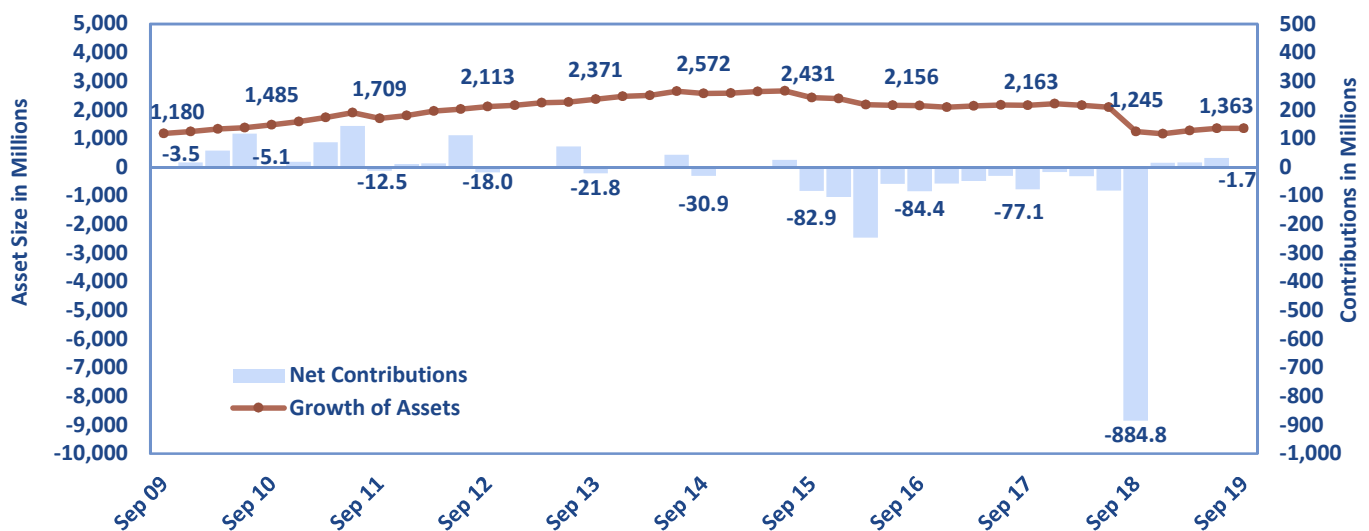
Portfolio Size

Actual Asset Allocation

Total	\$1,362,867,183
Cash	\$18,449,953
Fixed Income	\$542,156,235
Equity	\$802,260,995

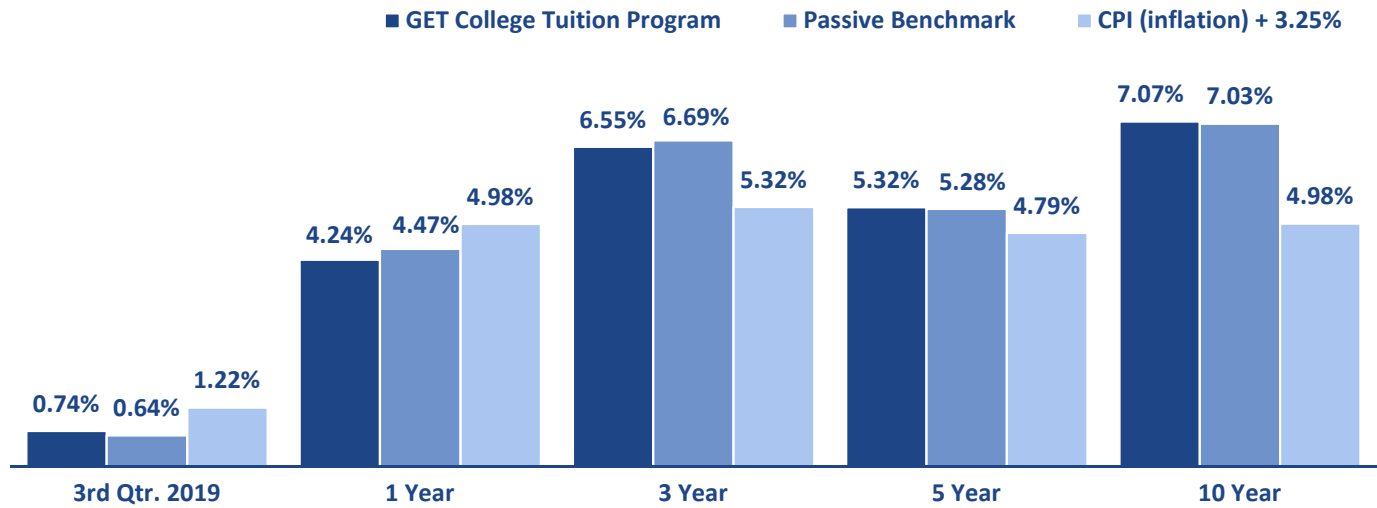
Equity
58.87%

Assets Under Management



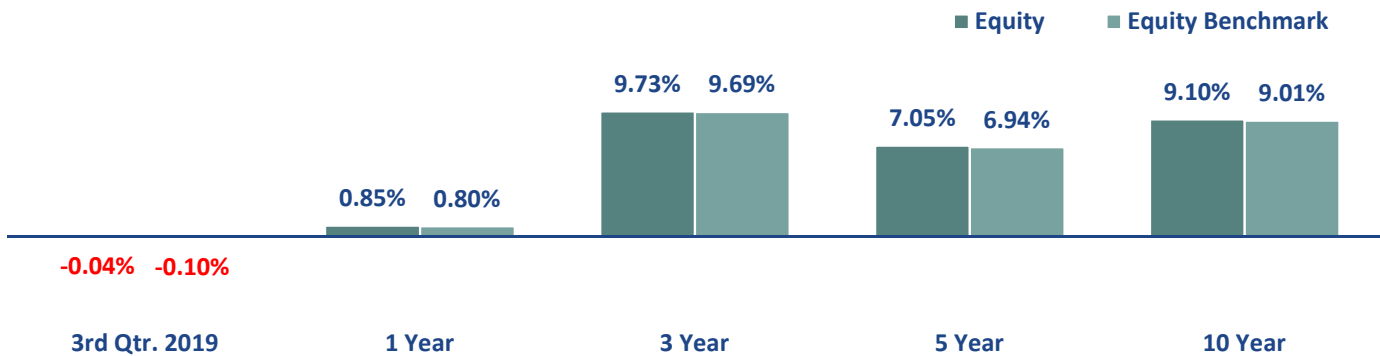


Total Return *



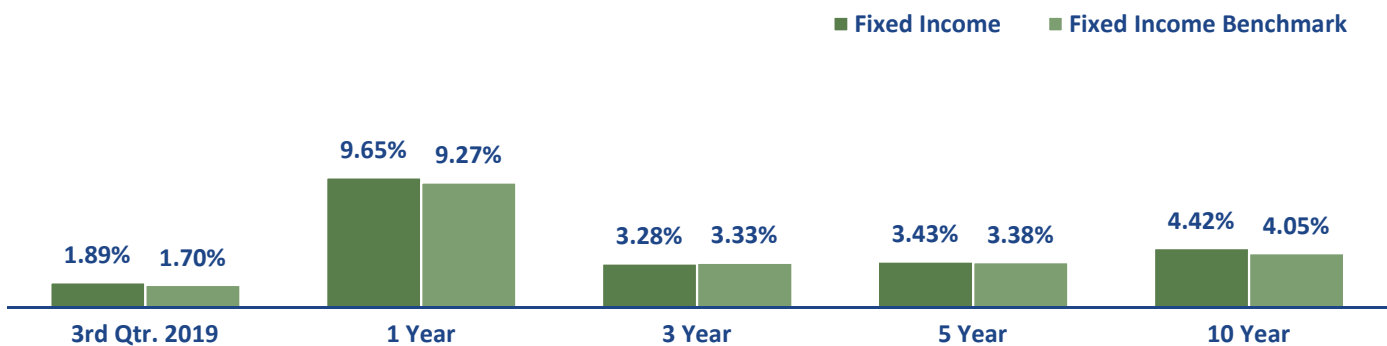
Equity Return *

Benchmark: MSCI ACWI IMI w/U.S. Gross and a historical blended return



Fixed Income Return *

Benchmark: Bloomberg Barclays Intermediate Credit and a historical blended return



* The return numbers above are net of manager fees and other expenses that can be directly debited from the account for portfolio management but do not include the WSIB management fee.



Washington State Investment Board Guaranteed Education Tuition (GET) 2019 Asset Allocation Discussion

M E K E T A I N V E S T M E N T G R O U P

BOSTON
MASSACHUSETTS

CHICAGO
ILLINOIS

MIAMI
FLORIDA

PORTLAND
OREGON

SAN DIEGO
CALIFORNIA

LONDON
UNITED KINGDOM

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Agenda

- 1. Today's objective**
- 2. Background and recap**
- 3. Investment policy review and current portfolio**
- 4. Capital market assumptions**
- 5. Asset allocation discussion**
- 6. Recommendations**

Appendix

Today's Objective

Today's Objective

Determine and approve an asset allocation policy for GET Program.

- Key risk tradeoffs/considerations:
 - Maintenance of unit-tuition purchasing power
 - Downside investment risk exposure
 - Affordability of GET prepaid units

Background and Recap

Background and Recap

The Committee last reviewed an allocation policy for the GET Program in late 2014

- Current investment policy mix is 60% Public Equity and 40% Fixed Income.

The GET Program has experienced significant evolution

- Significant transfer of assets out of the GET Program into new DreamAhead 529 program.

Investment policy can be influenced by projected financial balances and cash flows

- Current funding and reserve policy translate to a cash flow positive assumption
- The program is open and accepting purchases of new units
- Latest fiscal year (2019): GET inflows = \$75.5M, GET outflows (ex-DreamAhead transfers) = \$59.5M

Asset allocation is one of several tools utilized to manage GET Program's sustainability

- Program design is tilted toward long-term protection/solvency.
- Per OSA, GET is now 132% funded status (\$350 million reserve) at June 30, 2019¹
- Unit pricing incorporates reserving feature.
- Use of unit financing rates.

Investment Policy Review and Current Portfolio

Current GET Investment Policy (as of June 30, 2019)

Investment responsibility granted to Washington State Investment Board (WSIB)

- Per RCW 28B.95.070
- Prudent management and oversight of GET funds.

Current Investment Objective: maximize return at prudent level of risk

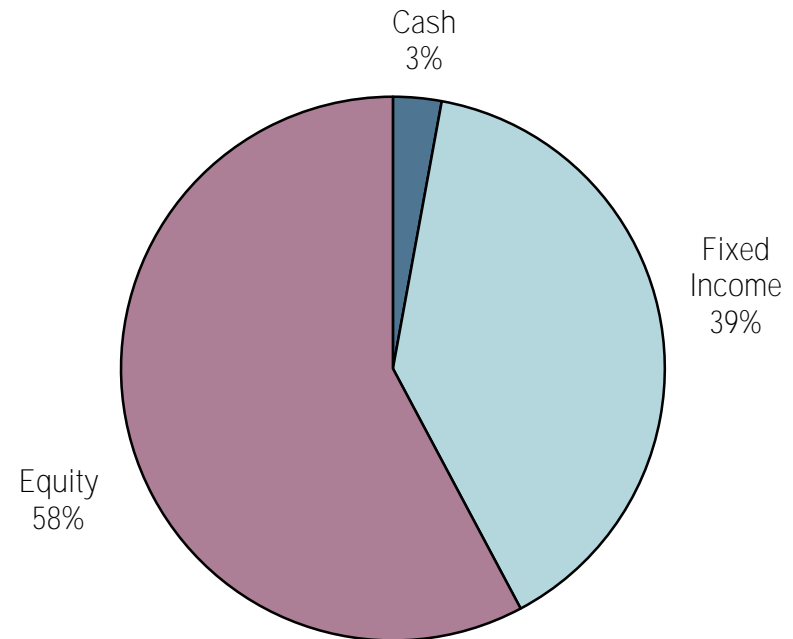
- Ensure availability of assets to sufficiently meet expected tuition payments.
- Achieve a maximum return that will meet or exceed the rate of college tuition growth over a 10-year period.
- Maintain solvency and stability as measured by OSA.
- Invest in order to maintain public confidence in the Program.

Diversification considerations

- Diversify portfolio to moderate fluctuations in Program's assets.
- Ensure that investment assets meet or exceed estimated liabilities.
- Current GET allocation targets: Public Equity – 60%; Fixed Income – 40%
 - Public Equity allocation passively replicates global equity market.
 - Fixed Income is actively managed by WSIB

Current GET Investment Policy (as of June 30, 2019)

Total (\$M)	\$1,355
Cash	39
Fixed Income	533
Equity	783



Today's objective is to determine if GET's 60/40 portfolio should be maintained, or adjusted

Long-term expectations for each class will drive investment policy.

Capital Market Assumptions

GET Assets – Capital Market Assumptions (CMAs)

	Expected Arithmetic Return	Expected Standard Deviation	Expected Geometric Return
Global Equity	8.5	18.5	7.1
WSIB Bond Funds	4.4	6.0	4.2
Cash Equivalents	2.6	1.5	2.6

Expected Correlations	Global Equity	WSIB Bond Funds	Cash Equivalents
Global Equity	1.00		
WSIB Bond Funds	0.15	1.00	
Cash Equivalents	0.00	0.20	1.00

CMAs are used to project the long-term growth of assets.

WSIB reviews and updates its CMAs on a bi-annual basis (last completed in April 2019).

- Global Equity is the only GET asset class expected to exceed expected long-term tuition growth (5.0%)
- WSIB Bond Fund expectations reflects WSIB's unique approach to fixed income management.

Asset Allocation Discussion

GET Asset Allocation Discussion – Initial Comments

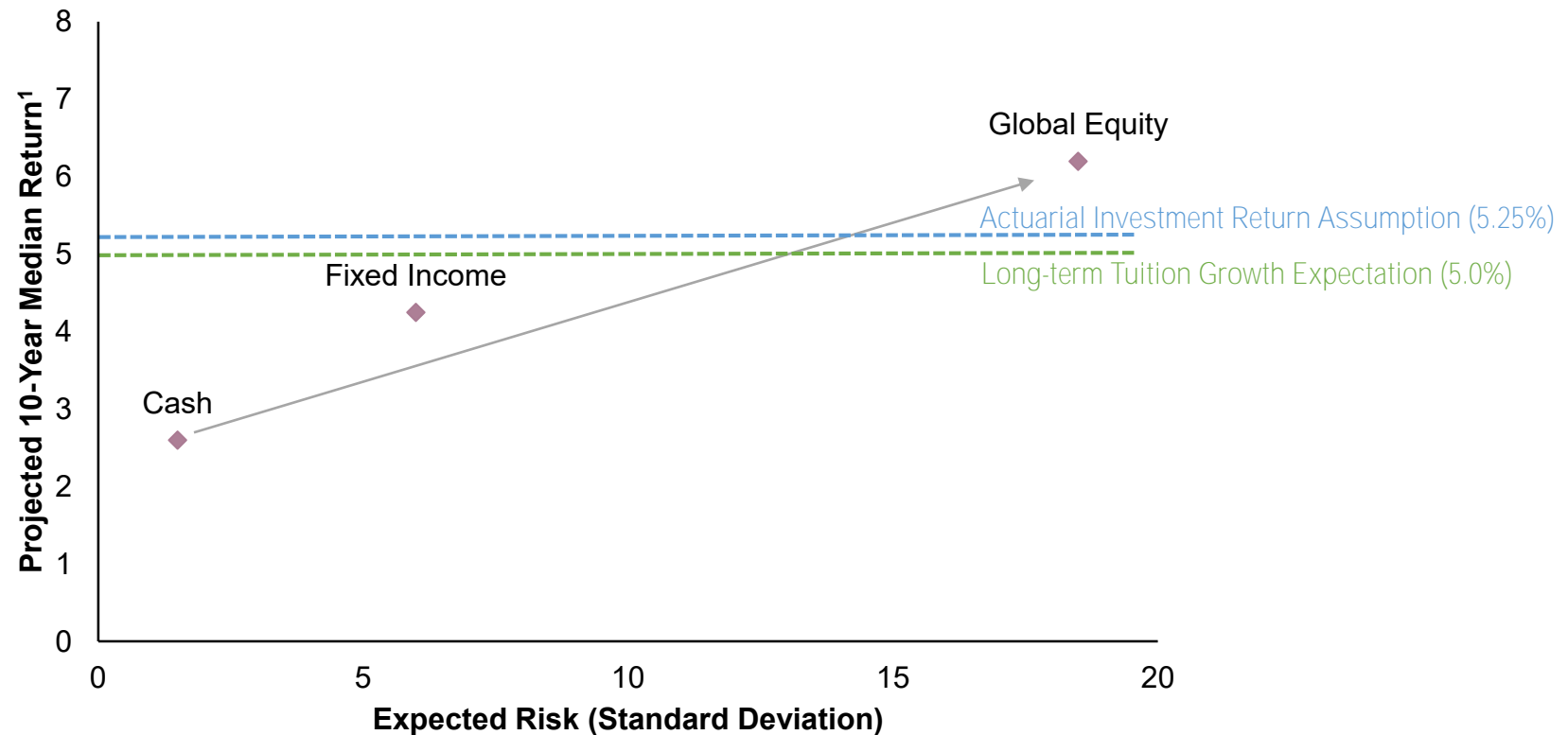
Things to remember...

- “All models are wrong, but some are useful.” – George Box, 1978.
- “It is difficult to make predictions, especially about the future” – attributed to a variety of individuals/groups.
- A key aspect of any financial modeling is that the results are more indicative than they are precise.

Asset allocation policy should reflect preferences and risk-concerns of GET decision-makers.

Assuming continuation of GET Program and reserving framework, GET’s future prospects appear healthy.

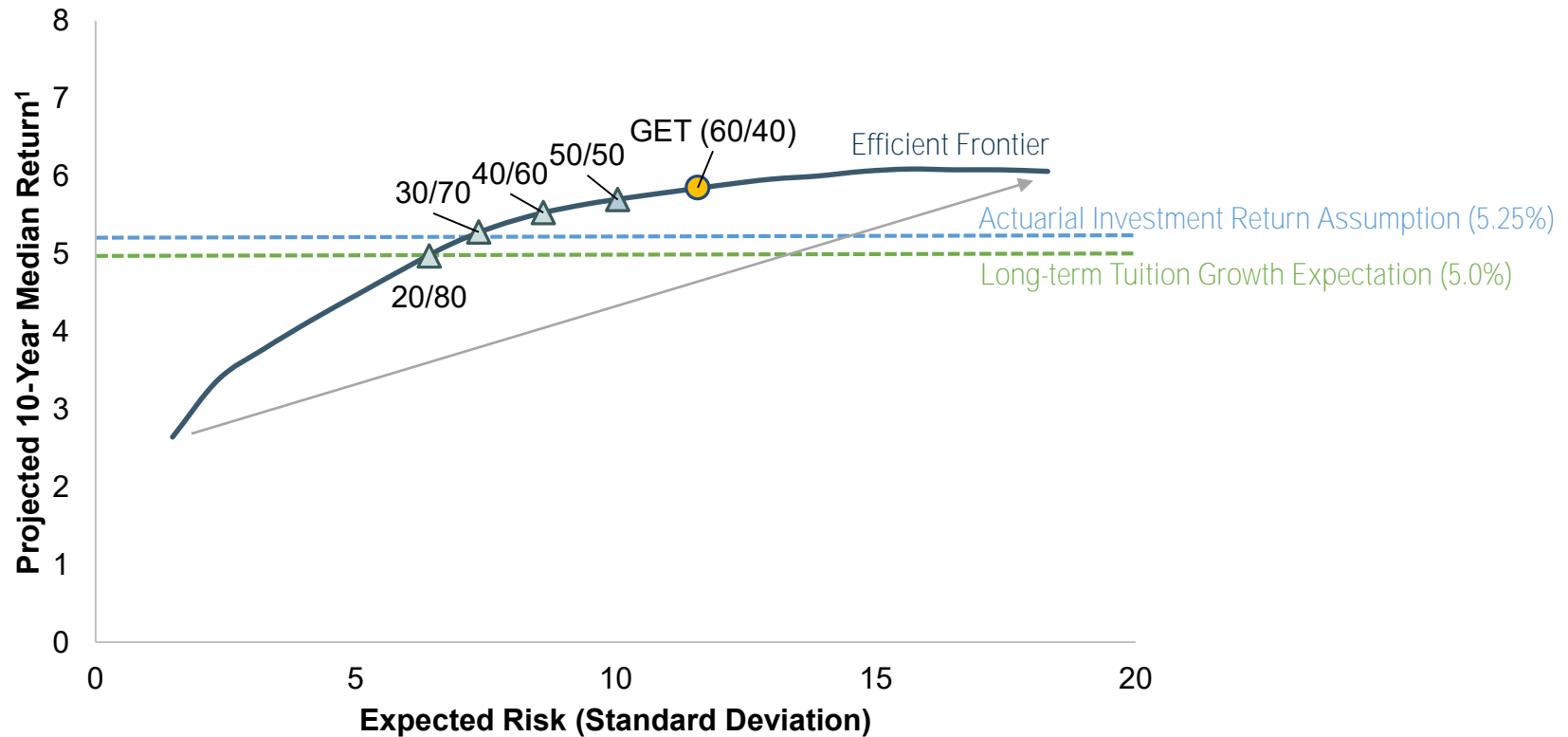
- 132% funded status and \$350 million reserve at June 30, 2019¹
- Unit-pricing framework provides for expected default positive net cash flow outcomes.
- 2019 Capital Market Assumptions (CMAs) should allow for allocation policy flexibility.
- GET assets expected to produce significant growth under a spectrum of return scenarios.

GET Asset Allocation Discussion – Risk/Return Tradeoff of Asset Classes

To capture higher returns one must invest in more risky types of assets.

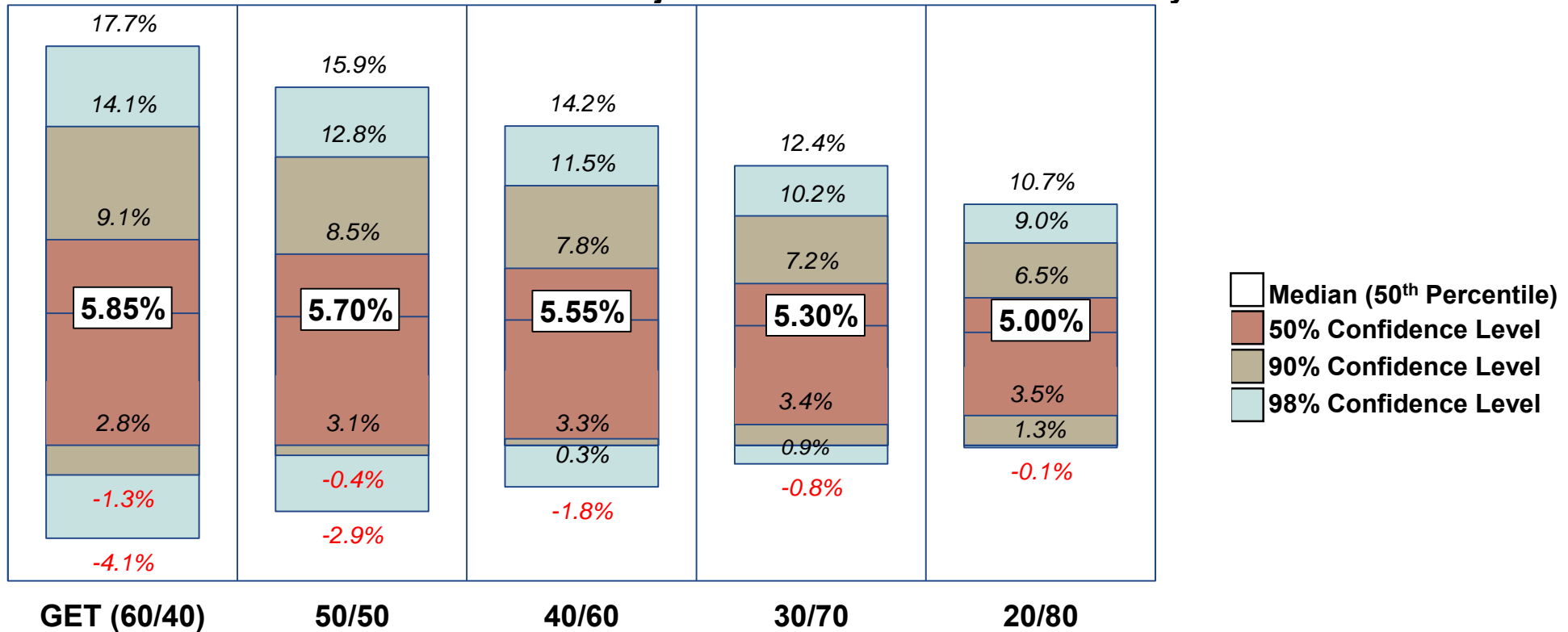
If assets are highly correlated, changing the asset allocation mix would move along a straight line from least risky to highest returning.

GET Efficient Frontier



The efficient frontier finds portfolios that maximize expected return for given levels of risk

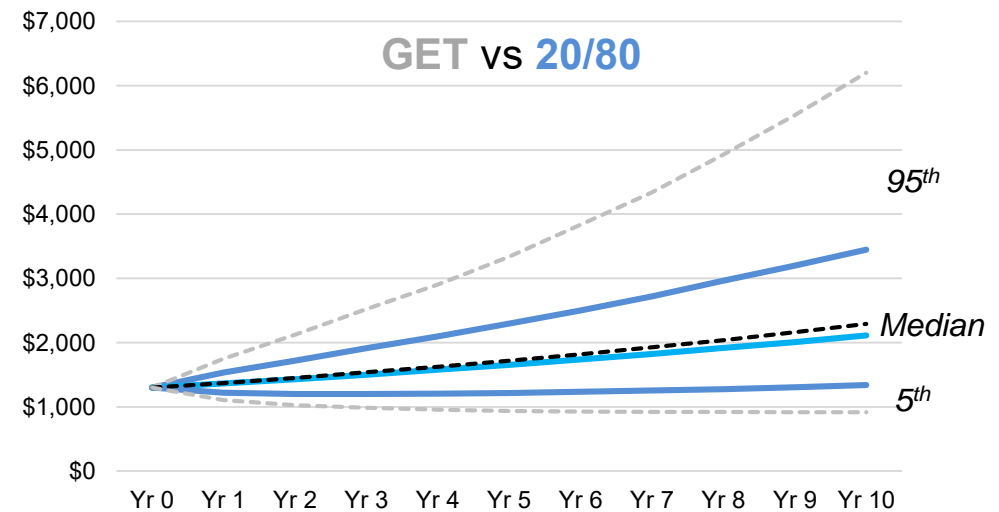
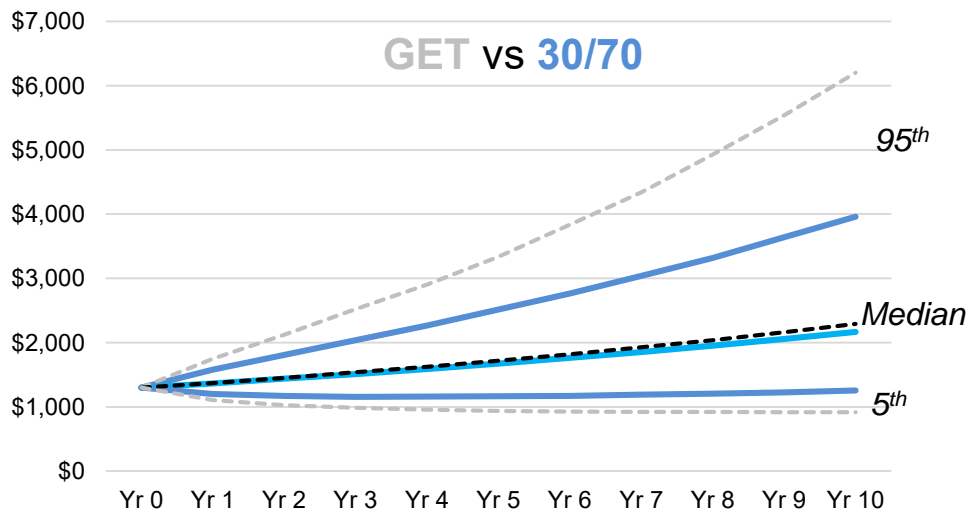
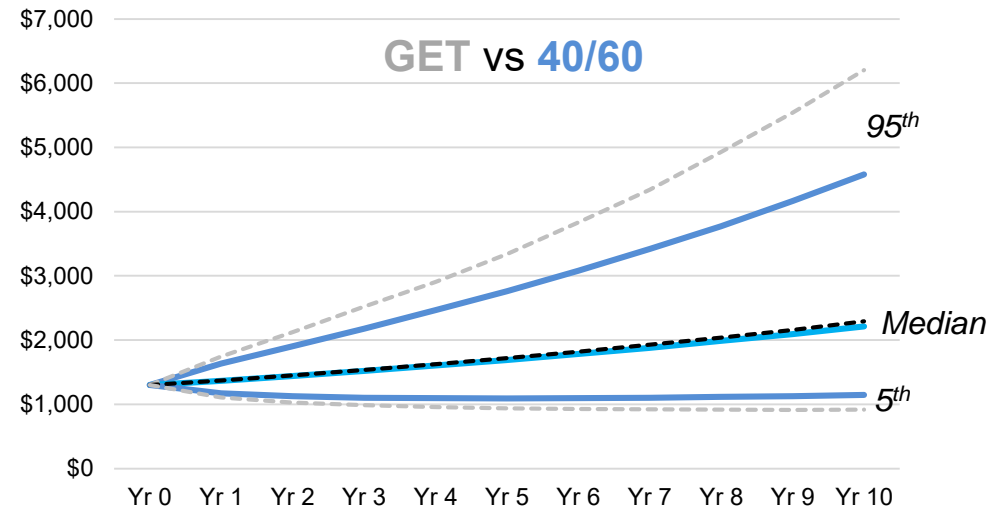
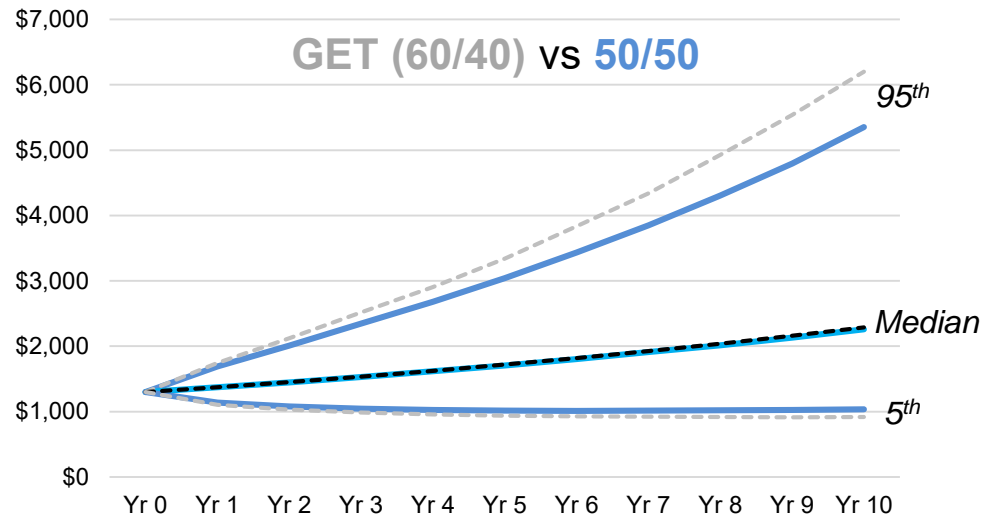
- Combining low-correlated assets can result in lower risk or higher returning portfolios than any one asset.
- The current GET portfolio is on the efficient frontier (i.e., it is one “optimal” option).
- There are other portfolio options on the efficient frontier that are expected to exceed long-term tuition growth (5.0%) with less risk

GET Efficient Frontier: Projected 10-Year Return Portfolio Analysis¹

55%	54%	53%	50%	45%	Probability of $\geq 5.25\%$ return over 10-yrs
58%	57%	56%	54%	50%	Probability of $\geq 5.00\%$ return over 10-yrs
-\$293m	-\$249m	-\$204m	-\$165m	-\$135m	Expected maximum 1-yr loss on \$1.3B

All options are expected meet or exceed long-term tuition inflation assumption of 5.0% over 10-years.

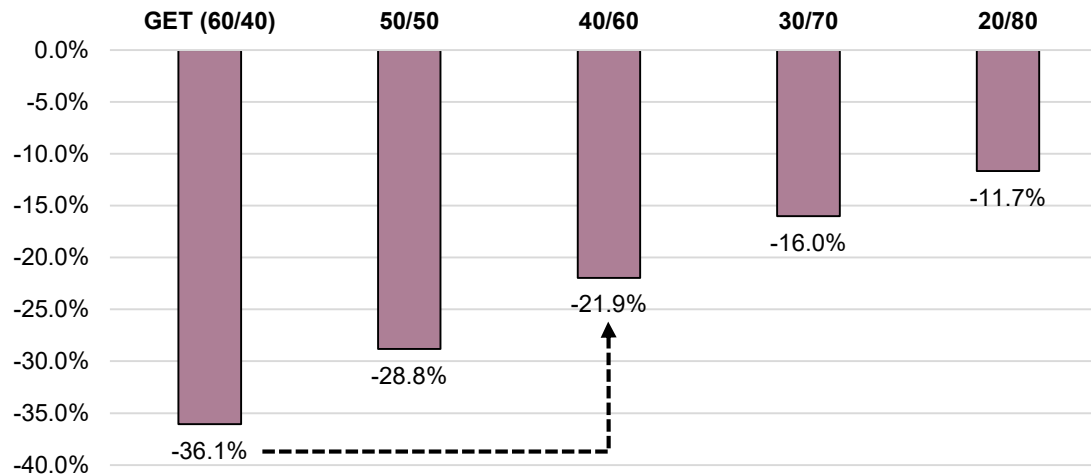
- The 30/70 and 20/80 portfolio represent the most significant reduction in expected return (>50bps/year)

GET Wealth Growth Comparisons¹

All alternative options tighten the range of expected outcomes.

GET Efficient Frontier: Projected Return Portfolio Analysis¹

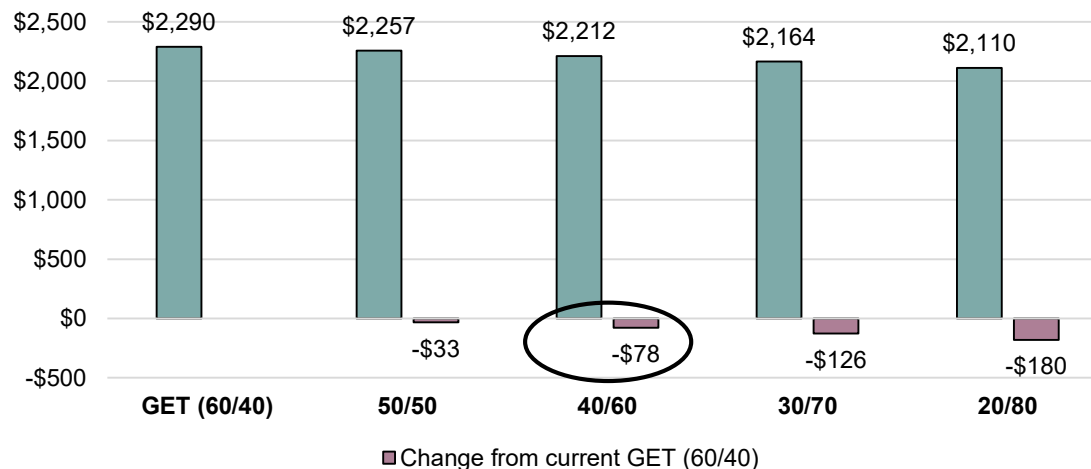
Average of Worst 10% Drawdown



Material reduction in expected drawdown from GET (60/40) to 40/60

- ~14% absolute expected improvement

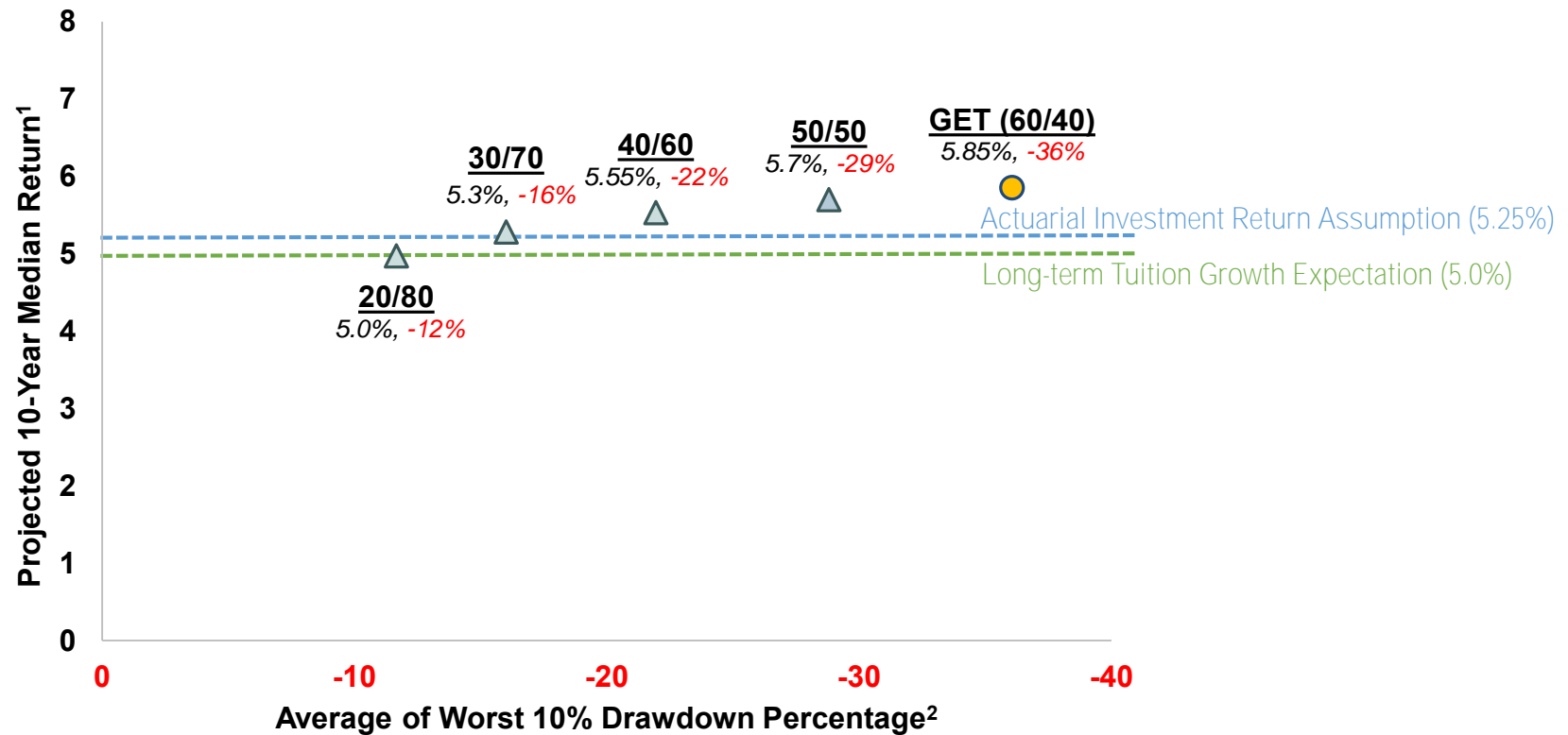
10-Year Median Growth of \$1,300 Million (Neutral Cash Flows)



Small reduction in median expected growth from GET (60/40) to 40/60

- ~\$78m absolute expected reduction

GET Efficient Frontier: Portfolio Comparisons



Potential for material reduction in expected downside risk while still meeting long-term return targets

- 40/60 portfolio materially reduces the expected drawdown versus current GET (-36% to -22%)
- 40/60 portfolio gives up 0.3% in expected return (5.85% to 5.55%) but is still expected to exceed long-term tuition inflation (5.0%) and the current actuarial investment return assumption (5.25%)

OSA GET Unit Pricing Analysis Estimates

Asset Allocation and Calculated Price			
2019 Best Estimate and Adopted Unit Price			\$121.00
Asset Allocation (Equity/Bonds)	OSA Assumed Rate of Investment Return	Calculated Unit Price	Change in Unit Price from 60/40 Allocation
(Current GET) 60/40	5.25%	\$121.00	---
50/50	5.20%	\$122.00	\$1.00
40/60	5.10%	\$124.00	\$3.00
30/70	4.90%	\$128.00	\$7.00
20/80	4.65%	\$132.00	\$11.00

Source: OSA

- **Unit pricing analysis was provided by OSA and relies upon return distributions provided by Meketa**
 - The OSA reduces the base-case expected return to account for the significant degree of uncertainty in estimating future returns
 - The analysis isolates only the impact of changing the asset allocation / assumed rate of investment return
 - All other data, assumptions, and methods match those used by the OSA to determine the 2019 best estimate and adopted price of \$121
 - The actual change in the unit price from an asset allocation change may vary from these OSA estimates
- **The 30/70 and 20/80 allocations could be viewed as material departures from current asset policy**

GET Asset Allocation Discussion

Findings

- All four alternate portfolios are expected to reduce the investment risk from the current GET allocation
- Only the 20/80 portfolio is not expected to meet the 5.25% assumption over the next 10-years.
- All portfolios are expected to meet or exceed the 5.0% long-term tuition inflation assumption over the next 10-years.
- Expected downside investment risk can potentially be reduced by 7% to 24%, depending on GET Board preference.
- Long-term expected returns are broadly similar for GET, 50/50 and 40/60 options (+/-0.3%)
- Current GET policy is a viable “higher-risk” option.
- Moving to a significantly more conservative portfolio may require changes to future unit pricing and / or impact the current funded ratio

Recommendations

GET Asset Allocation Discussion

Meketa / WSIB recommends that GET adopt a 40% equity, 60% fixed income allocation.

- Long-term return expectations still exceeds the actuarial investment return (5.25%) and long-term tuition growth assumptions (5.0%).
- Material downside risk reduction
- Should improve long-term Program stability
- Should still allow for considering reserving framework flexibility

Comparison Statistic ¹	GET (60/40)	40/60	Expected Change
Projected 10-Year Median Return	5.85%	5.55%	-0.3%
Risk (Standard Deviation)	11.6%	8.6%	-3.0%
Average of Worst 10% Drawdown	-36%	-22%	+14%
Probability of $\geq 5.25\%$ over 10-years	55%	53%	-2%
Probability of $\geq 5.00\%$ over 10-years	58%	56%	-2%
~1-yr loss on \$1.3 billion (1% probability)	-293m	-204m	+89m

Appendix

Appendix - Role of Capital Market Assumptions

Expected Return Assumption

- Most sensitive modeling assumption
- Historical capital market data
- Current interest rates
- Market expectations for future inflation
- Other relevant factors

Expected Risk Assumption

- Measured as annual standard deviation
- Historical data examined
- Relevance to current market environment

Expected Correlations

- Most tied to historical information

Reviewed and adopted by the WSIB periodically (most recently in April of 2019).

Appendix - CMA Definitions: Expected Return

Expected Return – measures the change in an asset's value over time; includes both income and changes in principal value.

Two types of return to understand:

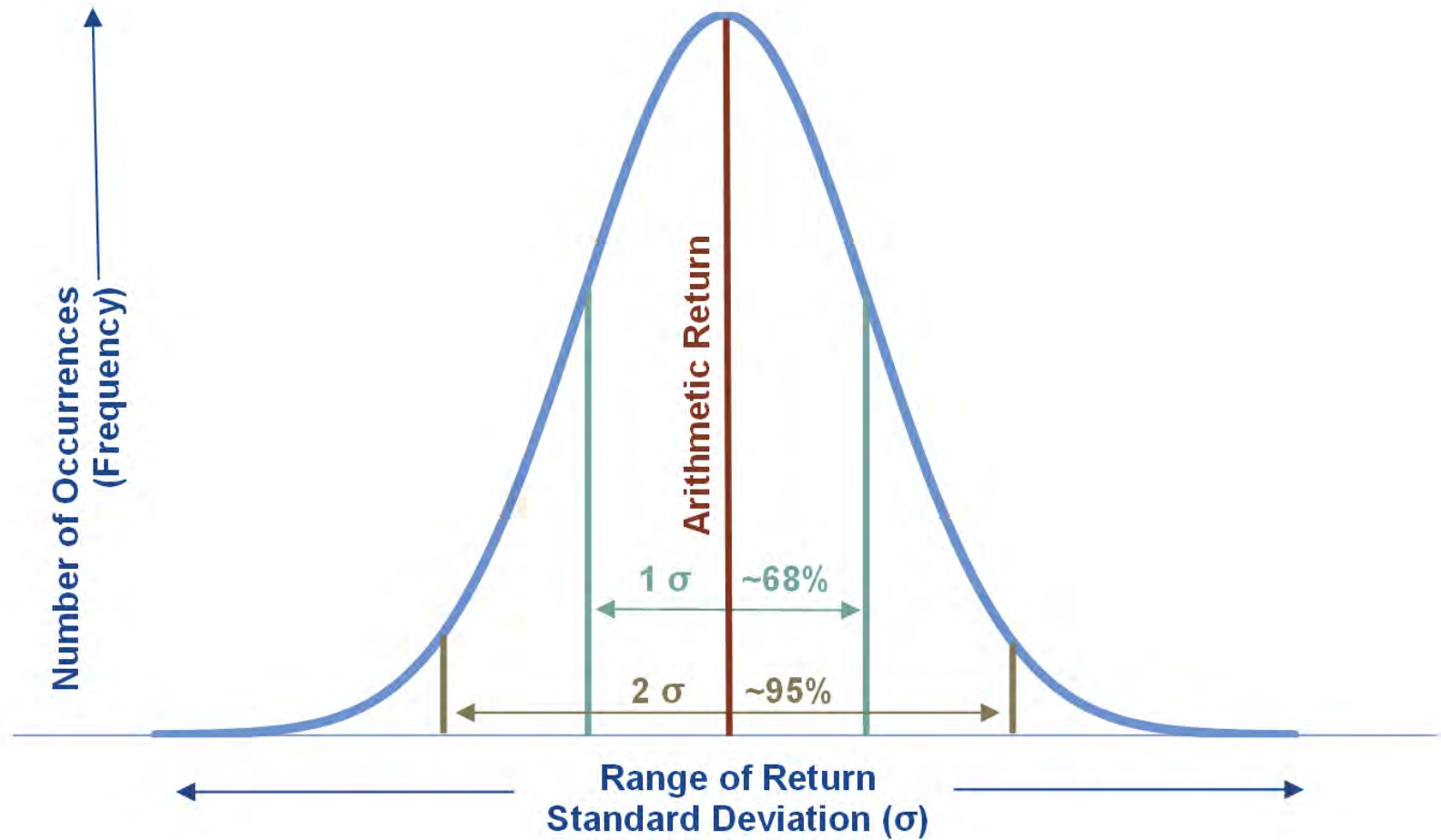
- **Arithmetic average** return – the return occurring (or expected to occur) in any 1 year during the investment horizon.
- **Compound** (geometric average) return – the average annual return occurring (or expected to occur) over the entire investment horizon.

Because investors incur potential risks over a multi-year horizon (versus 1-year), *the compound return is always less than the arithmetic return.*

- Basic formula: arithmetic return – risk penalty = compound return

Expected investment returns are usually derived from a combination of:

- Traditional finance theory
- Historical capital markets data
- Current interest rates
- Market expectations for future inflation
- Fundamental market expectations
- Consensus assumptions/expectations
- Other economic variables

Appendix – CMA Definition: Risk

Appendix - CMA Definitions: Correlation

Correlation is how asset classes move in relationship to each other on average.

- A high correlation between two assets implies they will tend to move in the same direction at the same time.
- The relationship is standardized into a number between 1 and -1.
 - Correlation of +1.0 means they always move in the same direction.
 - Correlation of -1.0 means they always move in the opposite direction.

Assets that have a dependably low correlation to each other create the most diversified portfolios.



Investment Advisory
Summary Report
Third Quarter 2019

Washington Student
Achievement Council
Prepared by Lockwood
Advisors, Inc.

LKA-RKM-457-19

1

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Third Quarter 2019 Capital Market Review

- Markets Optimistic but Worried about Numerous Political and Geopolitical Risks
- Global Interest Rates Exert Gravity on US Rates
- Dissent in Central Banks Highlight Uncertainty in the Global Economy
- Strong US Dollar Puts Pressure on Many Global Capital Markets
- Economic Indicators Appear Mixed

2

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Mind the Gap



Source: Bing Image Search

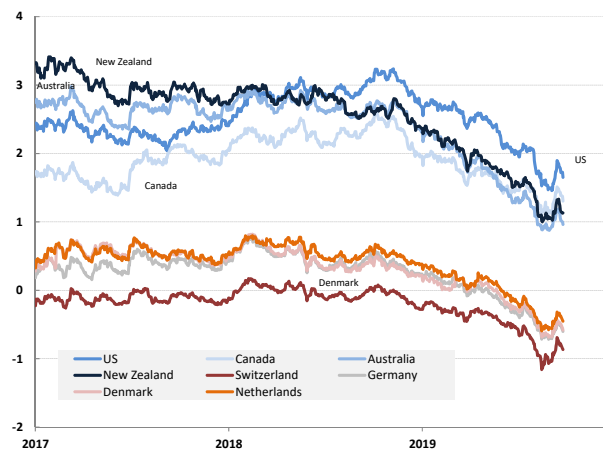
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Interest Rates

Highest and Lowest Developed Market Interest Rates (%)



Source: Bloomberg. Data as of September 30, 2019. Visual created by Lockwood Advisors, Inc. Yields represent 10-year sovereign bonds in each country. Past performance is not a guarantee of future results.

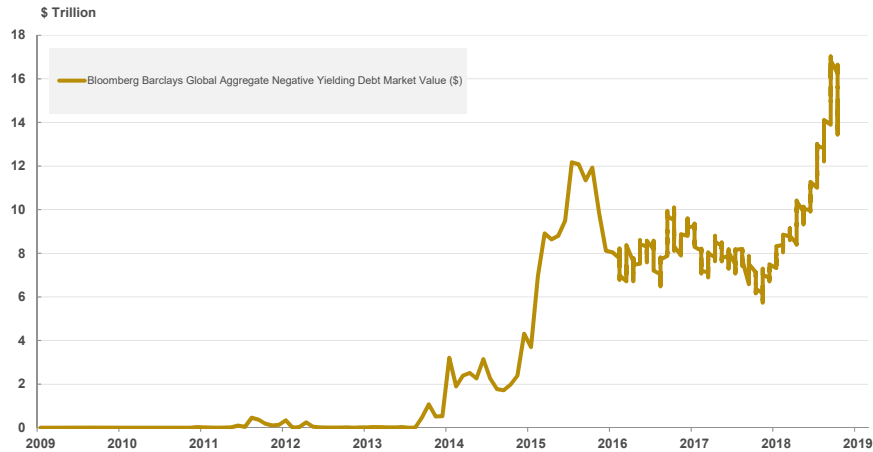
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Mind the Gap

Market Value of Negative Yield Debt (\$Trillion)



Sources: St. Louis Federal Reserve and Bloomberg. Data as of September 30, 2019. Visual created by Lockwood Advisors, Inc. Past performance is not a guarantee of future results. Indices are unmanaged and are not available for direct investment.

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The U.S. Yield Curve

Most U.S. Yields under Fed Funds



Sources: U.S. Treasury Department. Data as of September 30, 2019. Visual created by Lockwood Advisors, Inc. Past performance is not a guarantee of future results.

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Yield Curve Steepened from Inversion



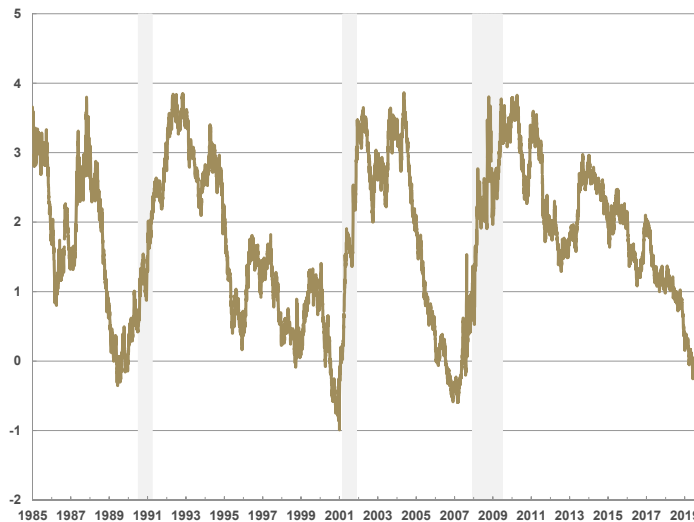
Source: Bloomberg, U.S. Treasury Department. Data through September 30, 2019. Visual created by Lockwood Advisors, Inc. **Past performance is not a guarantee of future results.**

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Steeper Yield Curve



Source: Bloomberg, U.S. Treasury Department. Data through October 15, 2019. Visual created by Lockwood Advisors, Inc. Yield curve is the difference between the 10 Year U.S. Treasury Note rate (%) and the 3 Month Treasury Bill Rate (%). **Past performance is not a guarantee of future results.**

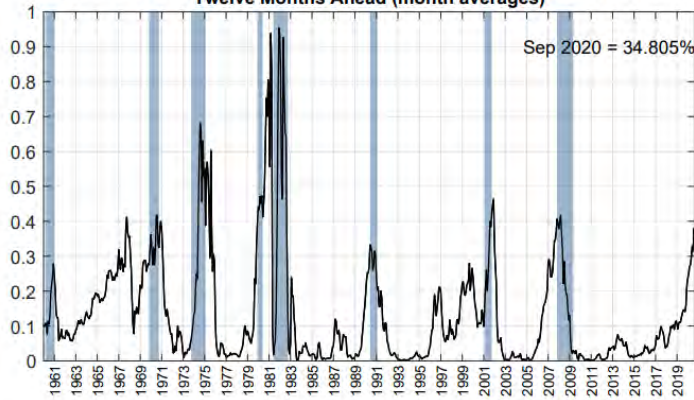
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Recession Watch?

Probability of US Recession Predicted by Treasury Spread*
Twelve Months Ahead (month averages)



*Parameters estimated using data from January 1959 to December 2009, recession probabilities predicted using data through Sep 2019. The parameter estimates are $\alpha = -0.5333$, $\beta = -0.6330$.

Updated 03-Oct-2019

Source: Federal Reserve Bank of New York. Visual created by Federal Reserve Bank of New York. *Parameters estimated using data from January 1959 to December 2009, recession probabilities predicted using data through October 3, 2019. **Past performance is not a guarantee of future results.**

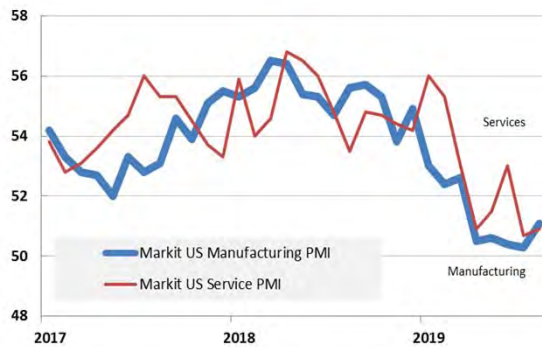
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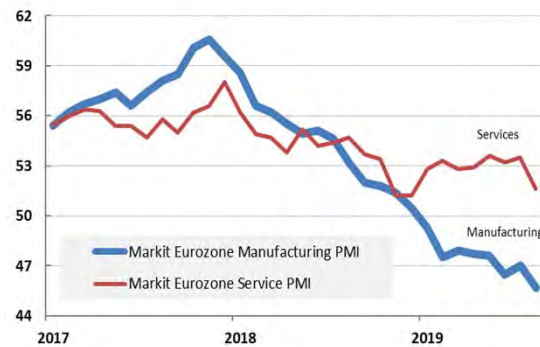
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Manufacturing Versus Services

US Manufacturing Versus Services



Europe Manufacturing Versus Services



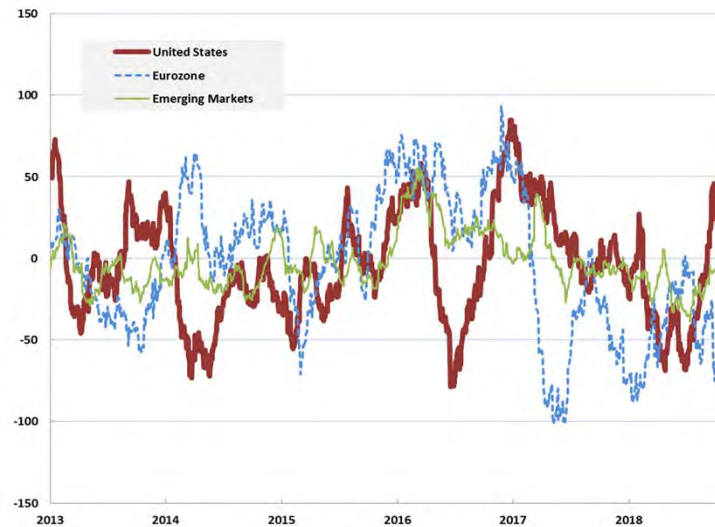
PMI = Purchasing Managers' Index™ All data seasonally adjusted.
Source: Bloomberg. Data as of September 30, 2019. Visual created by Lockwood Advisors, Inc.

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Global Economic Surprise Indices



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Official Forecasts Still Expect Growth

U.S. Real Gross Domestic Product (GDP) Growth Forecasts

	Growth Forecasts		
	2019	2020	2021
Federal Reserve	2.2	2.0	1.9
Congressional Budget Office	2.3	1.7	1.6
IMF: International Monetary Fund	2.4	2.1	1.8
Professional Forecasters	2.3	1.7	1.8
OECD	2.4	2.0	
Council of Economic Advisors	3.2	3.1	3.0

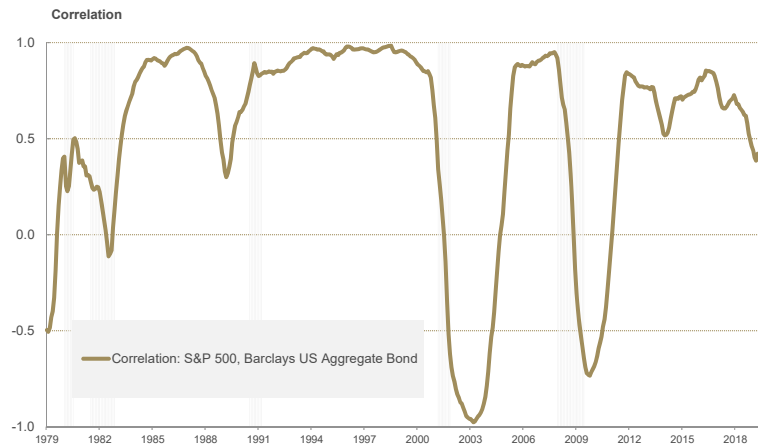
Sources: IMF, Congressional Budget Office, Federal Reserve, Council of Economic Advisors, Bloomberg. Data as of October 21, 2019. Visual created by Lockwood Advisors, Inc.

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Bond and Stock Correlation Dives During Recession



Source: Bloomberg, U.S. Treasury Department. Data through September, 2019. Visual created by Lockwood Advisors, Inc. Indices are unmanaged and are not available for direct investment. **Past performance is not a guarantee of future results.**

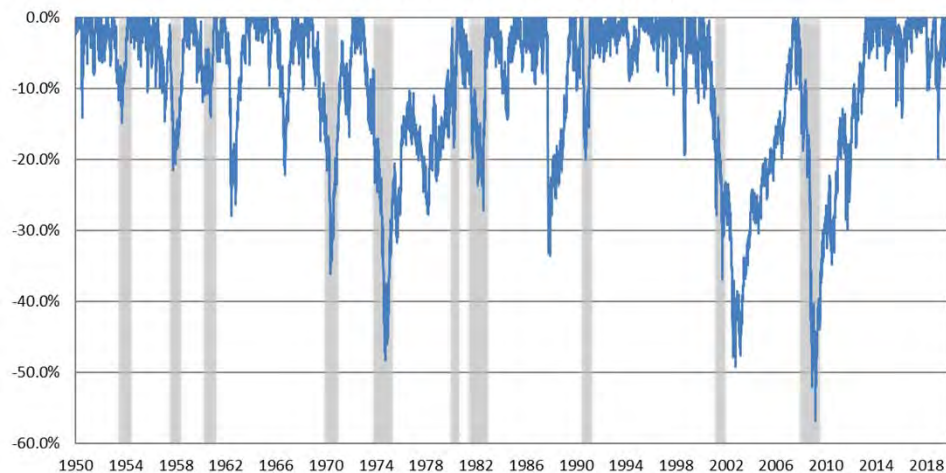
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Recession Watch

S&P 500® Price Index Drawdown



Sources: Morningstar, Inc. NBER. Data through September 12, 2019. Visual created by Lockwood Advisors, Inc. Indices are unmanaged and are not available for direct investment. **Past performance is not a guarantee of future results.**

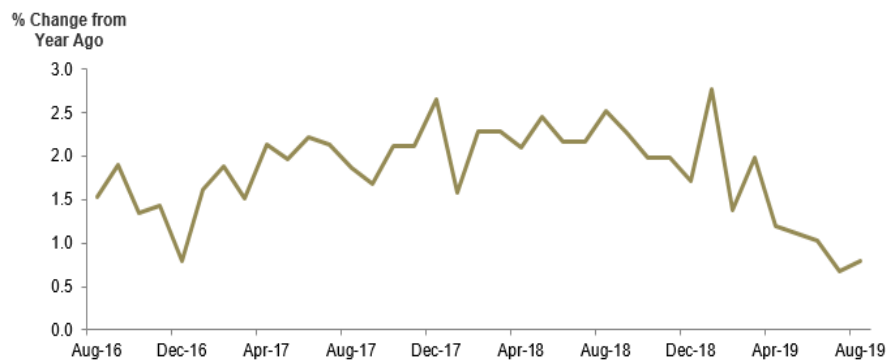
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Manufacturing Hours Pointing to Slower Growth

Aggregate Weekly Hours: Production and Nonsupervisory Employees (SA, YOY%)



Source: Federal Reserve Bank of St. Louis Economic Database (FRED). Data through August 2019. Visual created by Lockwood Advisors, Inc.

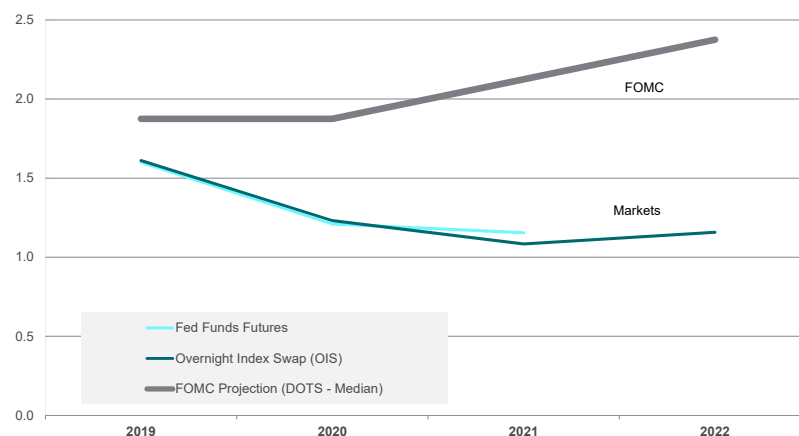
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Fed Policy Rate Expectations

Fed Projections Versus the Markets



2020, 2021 and 2022 data are estimates. Actual results may differ materially from those projected.

Sources: Federal Reserve and Bloomberg. Data as of September 30, 2019. Visual created by Lockwood Advisors, Inc.

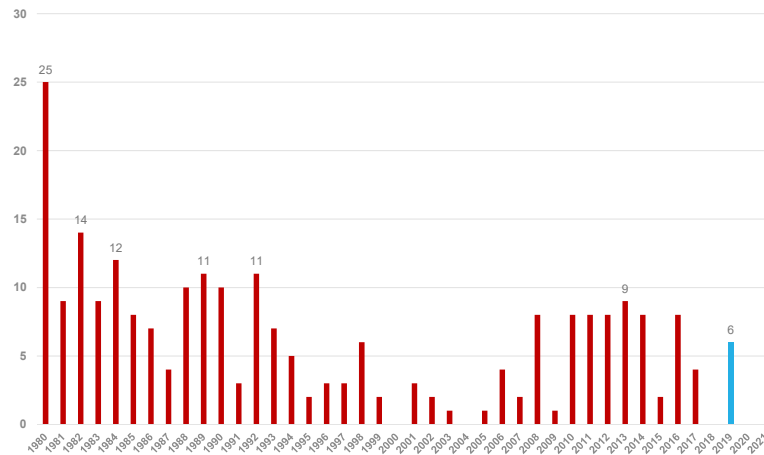
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FOMC

FOMC Number of Dissenting Votes



Sources: Lockwood Advisors, Inc., St. Louis Federal Reserve and Bloomberg. Data as of September 30, 2019. Visual created by Lockwood Advisors, Inc.

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Where Is Inflation?



Source: Getty Images

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Fed's Preferred Inflation Gauge Under 2% Target

Personal Consumption Expenditure Deflator (PCE, %)



Source: St. Louis Federal Reserve; Data through August 2019. Visual created by Lockwood Advisors, Inc.

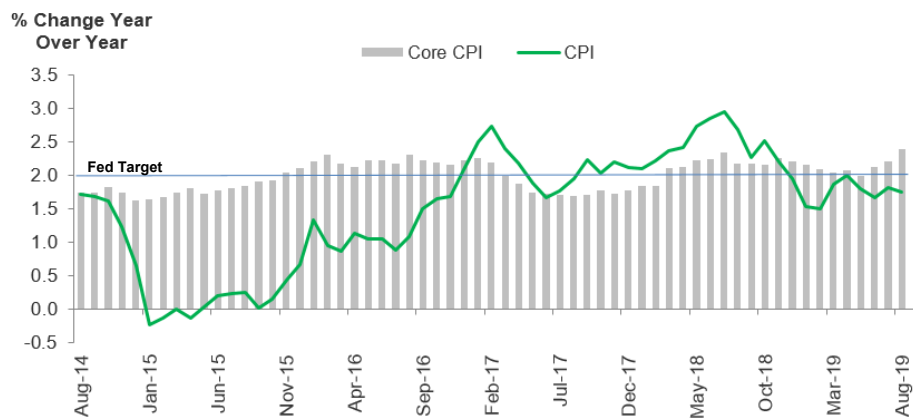
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Headline Inflation Under 2% Target

Headline & Core Consumer Price Index (SA, YOY%)



Sources: St. Louis Federal Reserve. Data as of August, 2019. Visual created by Lockwood Advisors, Inc.

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Inflation Expectations Heading Lower

NY Federal Reserve Survey of Consumer Expectations



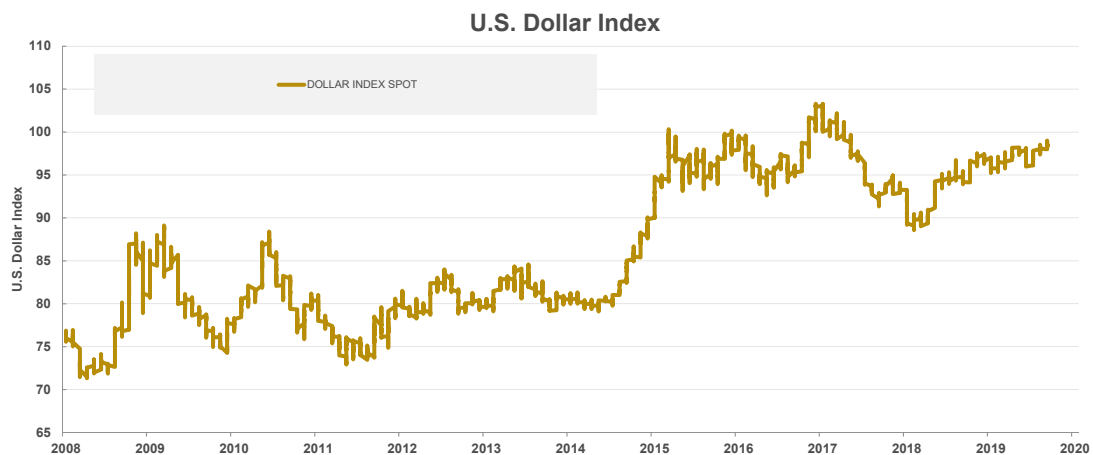
Source: Survey of Consumer Expectations, New York Federal Reserve Bank. Data through August 2019. Visual created by Lockwood Advisors, Inc.

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The Dollar



Source: Federal Reserve. Data as of September 30, 2019. Visual created by Lockwood Advisors, Inc. Past performance is not a guarantee of future results. Indices are unmanaged and are not available for direct investment.

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Trade War Worries



Source: Getty Images

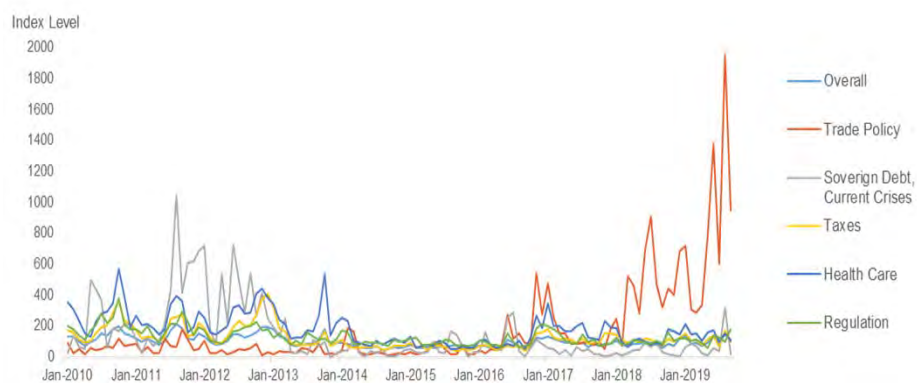
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Economic Policy Uncertainty

Heightened Trade Policy Uncertainty



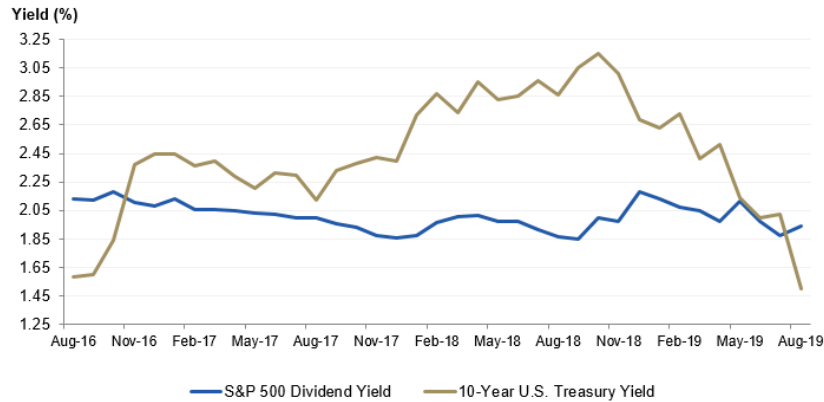
Source: Federal Reserve Bank of St. Louis, FRED, Federal Reserve Economic Data and Economic Policy Uncertainty Indices. The daily news-based Economic Policy Uncertainty Index is based on newspapers in the United States. Data through September 2019. Visual created by Lockwood Advisors, Inc.

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Bond Yields Now Well Below Stock Dividends



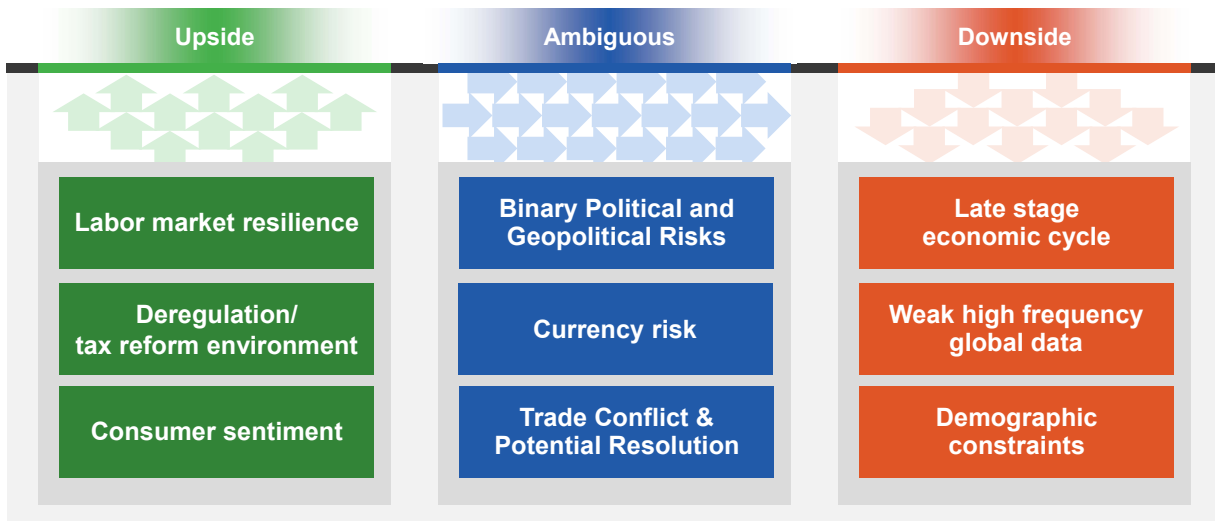
Source: U.S. Treasury Department, Morningstar. Data through August 2019. Visual created by Lockwood Advisors, Inc. Indices are unmanaged and are not available for direct investment. S&P 500 Index dividend is the estimated dividend-per-share divided by the current price. The estimate is by either an internal estimate of the growth rate or a third party. **Past performance is not a guarantee of future results.**

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Indicators We Are Watching



Source: Lockwood Advisors—September 2019

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Market Overview

Index Returns (%) as of September 30, 2019

Index	3rd Qtr.	1 Yr.	3 Yr.^	5 Yr.^	2018	2017	2016	2015
S&P 500	1.7	4.3	13.4	10.8	(4.4)	21.8	12.0	1.4
MSCI USA Small Cap	(1.2)	(4.8)	9.8	8.9	(10.0)	17.3	19.8	(3.6)
MSCI EAFE (net of taxes)	(1.1)	(1.3)	6.5	3.3	(13.8)	25.0	1.0	(0.8)
MSCI Emerging Markets (net of taxes)	(4.2)	(2.0)	6.0	2.3	(14.6)	37.3	11.2	(14.9)
Bloomberg Barclays US Aggregate Bond	2.3	10.3	2.9	3.4	0.0	3.5	2.6	0.5
Bloomberg Barclays Global Aggregate ex-US	(0.6)	5.3	0.4	0.9	(2.1)	10.5	1.5	(6.0)
S&P GSCI Crude Oil	(7.5)	(26.2)	3.9	(9.9)	(24.8)	12.5	45.0	(30.5)
S&P GSCI Gold	3.8	22.5	3.0	3.3	(2.8)	12.8	7.7	(10.9)
Bloomberg Commodity	(1.8)	(6.6)	(1.5)	(7.2)	(11.2)	1.7	11.8	(24.7)
Bloomberg Barclays US Treasury Bill 6–9 Month	0.5	2.7	1.5	1.0	1.8	0.7	0.5	0.1
Inflation §	0.4	1.8	2.2	1.6	1.9	2.1	2.1	0.7

^3 year and 5 year returns are annualized

Sources: MSCI; Bloomberg Barclays; Standard and Poor's (©2019, S&P Dow Jones Indices LLC. All rights reserved); Bureau of Labor Statistics.

§ Inflation data through August 2019 and measured by the Consumer Price Index (CPI). Visual created by Lockwood Advisors, Inc. For additional information regarding the indices shown, please refer to the Important Disclosures at the end of this document. Indices are unmanaged and are not available for direct investment. **Past performance is not a guarantee of future results.**

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Performance Review

- All Static and Year of Enrollment portfolios have met their respective benchmarks in Q3 2019 and YTD 2019 through 9/30/2019.
- No remedial action is necessary.
- There are no funds on the Watch List. All funds have performed as expected.

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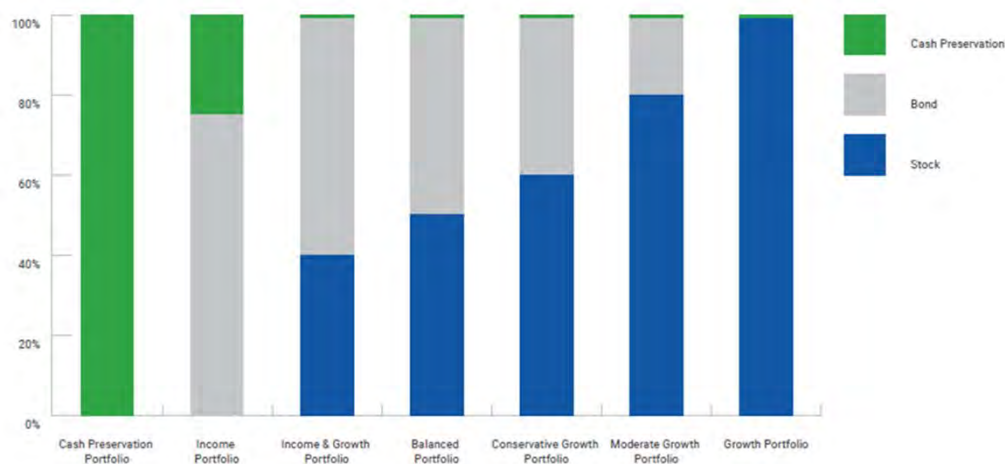


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Static Portfolio Review

Static Asset Class Allocations



Source: SumDay Administration, LLC, a BNY Mellon Company. SumDay is an affiliate of Lockwood Advisors, Inc. Portfolio allocations as of 9/30/2019.

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Static Portfolio Review

Growth Portfolio	Q3 2019	YTD
Gross of Fees Return	-0.31	15.49
Net of All Fees Return	-0.37	15.31
Blended Benchmark	-0.33	15.49
Excess Return	-0.04	-0.18

Income & Growth Portfolio	Q3 2019	YTD
Gross of Fees Return	1.48	11.84
Net of All Fees Return	1.43	11.66
Blended Benchmark	1.36	11.73
Excess Return	0.07	-0.07

Moderate Growth Portfolio	Q3 2019	YTD
Gross of Fees Return	0.36	14.63
Net of All Fees Return	0.30	14.44
Blended Benchmark	0.29	14.56
Excess Return	0.01	-0.12

Income Portfolio	Q3 2019	YTD
Gross of Fees Return	2.08	7.28
Net of All Fees Return	2.03	7.10
Blended Benchmark	2.03	7.38
Excess Return	0.00	-0.28

Conservative Growth Portfolio	Q3 2019	YTD
Gross of Fees Return	0.95	13.37
Net of All Fees Return	0.89	13.19
Blended Benchmark	0.85	13.22
Excess Return	0.04	-0.03

Cash Preservation Portfolio	Q3 2019	YTD
Gross of Fees Return	0.53	1.55
Net of All Fees Return	0.47	1.39
Benchmark	0.54	1.76
Excess Return	-0.07	-0.37

Balanced Portfolio	Q3 2019	YTD
Gross of Fees Return	1.18	12.51
Net of All Fees Return	1.13	12.33
Blended Benchmark	1.08	12.42
Excess Return	0.05	-0.09

YTD performance through 9/30/2019. Please see Blended Benchmark Definitions in the Important Disclosures section at the end of this report.

Source: SumDay Administration, LLC, a BNY Mellon Company. SumDay is an affiliate of Lockwood Advisors, Inc.

Performance is calculated using a time and asset-weighted Modified Dietz methodology. The Gross of Fees Return shown reflects the deduction of fees and expenses associated with the underlying mutual funds held in the portfolio (the "Underlying Fund Fee"). The Net of Fees Return shown reflects the deduction of the Underlying Fund Fee, Service Fee, and State Administrative Fee (together, the "Total Annual Asset-Based Fee"). The returns shown do not reflect account maintenance fees or other account level service-based fees (e.g., returned check fees, statement delivery fees, etc.).

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Conservative Year of Enrollment Portfolio Review

Asset Category	Fund	Ticker	2036	2034	2032	2030	2028	2026	2024	2022	2020	2018
U.S. Large Cap Blend	Fidelity® Total Market Index Fund	FSKAX	15	13	10	8	5	4	3	2	0	0
U.S. Large Cap Blend	Schwab Total Stock Market Index Fund®	SWTSX	14	13	10	7	5	4	2	1	0	0
Foreign Large Blend	Fidelity® International Index Fund	FSPSX	19	18	15	11	7	5	4	2	0	0
Diversified Emerging Mkts	Fidelity® Emerging Markets Index Fund	FPADX	7	6	5	4	3	2	1	0	0	0
Intermediate-Term Bond	Fidelity® U.S. Bond Index Fund	FXNAX	17	20	24	28	28	26	26	18	20	20
Intermediate-Term Bond	Vanguard Total Bond Market Index Fund Institutional Plus Shares	VBMPX	18	20	24	28	29	27	27	18	21	21
Long Government	Vanguard Long-Term Treasury Index Fund Institutional Shares	VLGIX	3	3	4	4	4	4	4	3	3	3
Inflation-Protected Bond	Schwab® Treasury Inflation Protected Securities Index Fund	SWRSX	4	4	5	7	7	6	6	4	4	4
Emerging Markets Bond	Vanguard Emerging Markets Government Bond Index Fund Institutional Shares	VGIVX	2	2	2	2	2	2	2	2	2	2
Cash	JPMorgan U.S. Government Money Market Fund Capital Shares	OGVXX	1	1	1	1	10	20	25	50	50	50
		TOTAL	100	100	100	100	100	100	100	100	100	100

Source: SumDay Administration, LLC, a BNY Mellon Company. SumDay is an affiliate of Lockwood Advisors, Inc.
Portfolio allocations as of 9/30/2019.

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Conservative Year of Enrollment Portfolio Review

Conservative Year of Enrollment 2036 Portfolio	Q3 2019	YTD
Gross of Fees Return	1.04	12.99
Net of All Fees Return	0.98	12.80
Blended Benchmark	0.95	12.79
Excess Return	0.03	0.01

Conservative Year of Enrollment 2026 Portfolio	Q3 2019	YTD
Gross of Fees Return	1.76	8.68
Net of All Fees Return	1.70	8.50
Blended Benchmark	1.69	8.71
Excess Return	0.01	-0.21

Conservative Year of Enrollment 2034 Portfolio	Q3 2019	YTD
Gross of Fees Return	1.20	12.57
Net of All Fees Return	1.15	12.39
Blended Benchmark	1.08	12.42
Excess Return	0.07	-0.03

Conservative Year of Enrollment 2024 Portfolio	Q3 2019	YTD
Gross of Fees Return	1.81	7.94
Net of All Fees Return	1.75	7.76
Blended Benchmark	1.73	8.01
Excess Return	0.02	-0.25

Conservative Year of Enrollment 2032 Portfolio	Q3 2019	YTD
Gross of Fees Return	1.52	12.45
Net of All Fees Return	1.47	12.27
Blended Benchmark	1.44	12.48
Excess Return	0.03	-0.21

Conservative Year of Enrollment 2022 Portfolio	Q3 2019	YTD
Gross of Fees Return	1.46	5.77
Net of All Fees Return	1.40	5.59
Blended Benchmark	1.42	5.93
Excess Return	-0.02	-0.34

Conservative Year of Enrollment 2030 Portfolio	Q3 2019	YTD
Gross of Fees Return	1.73	11.60
Net of All Fees Return	1.67	11.41
Blended Benchmark	1.68	11.72
Excess Return	-0.01	-0.31

Conservative Year of Enrollment 2020 Portfolio	Q3 2019	YTD
Gross of Fees Return	1.56	5.36
Net of All Fees Return	1.50	5.18
Blended Benchmark	1.52	5.50
Excess Return	-0.02	-0.32

Conservative Year of Enrollment 2028 Portfolio	Q3 2019	YTD
Gross of Fees Return	1.89	10.83
Net of All Fees Return	1.83	10.65
Blended Benchmark	1.78	10.86
Excess Return	0.05	-0.21

Conservative Year of Enrollment 2018 Portfolio	Q3 2019	YTD
Gross of Fees Return	1.56	5.33
Net of All Fees Return	1.50	5.16
Blended Benchmark	1.52	5.50
Excess Return	-0.02	-0.34

YTD performance through 9/30/2019. Please see Blended Benchmark Definitions in the Important Disclosures section at the end of this report.

Source: SumDay Administration, LLC, a BNY Mellon Company. SumDay is an affiliate of Lockwood Advisors, Inc.

Performance is calculated using a time and asset-weighted Modified Dietz methodology. The Gross of Fees Return shown reflects the deduction of fees and expenses associated with the underlying mutual funds held in the portfolio (the "Underlying Fund Fee"). The Net of Fees Return shown reflects the deduction of the Underlying Fund Fee, Service Fee, and State Administrative Fee (together, the "Total Annual Asset-Based Fee"). The returns shown do not reflect account maintenance fees or other account level service-based fees (e.g., returned check fees, statement delivery fees, etc.).

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Moderate Year of Enrollment Portfolio Review

[illegible]

Source: SumDay Administration, LLC, a BNY Mellon Company. SumDay is an affiliate of Lockwood Advisors, Inc.
Portfolio allocations as of 9/30/2019



Moderate Year of Enrollment Portfolio Review

Moderate Year of Enrollment 2036 Portfolio	Q3 2019	YTD
Gross of Fees Return	0.04	15.11
Net of All Fees Return	-0.02	14.93
Blended Benchmark	-0.01	15.15
Excess Return	-0.01	-0.22

Moderate Year of Enrollment 2026 Portfolio	Q3 2019	YTD
Gross of Fees Return	1.16	12.52
Net of All Fees Return	1.11	12.33
Blended Benchmark	1.08	12.42
Excess Return	0.03	-0.09

Moderate Year of Enrollment 2034 Portfolio	Q3 2019	YTD
Gross of Fees Return	0.02	14.99
Net of All Fees Return	-0.04	14.81
Blended Benchmark	-0.01	15.15
Excess Return	-0.03	-0.34

Moderate Year of Enrollment 2024 Portfolio	Q3 2019	YTD
Gross of Fees Return	1.49	11.15
Net of All Fees Return	1.43	10.97
Blended Benchmark	1.41	11.10
Excess Return	0.02	-0.13

Moderate Year of Enrollment 2032 Portfolio	Q3 2019	YTD
Gross of Fees Return	0.49	14.76
Net of All Fees Return	0.44	14.58
Blended Benchmark	0.29	14.56
Excess Return	0.15	0.02

Moderate Year of Enrollment 2022 Portfolio	Q3 2019	YTD
Gross of Fees Return	1.83	9.78
Net of All Fees Return	1.77	9.60
Blended Benchmark	1.74	9.77
Excess Return	0.03	-0.17

Moderate Year of Enrollment 2030 Portfolio	Q3 2019	YTD
Gross of Fees Return	0.63	13.94
Net of All Fees Return	0.57	13.75
Blended Benchmark	0.57	13.87
Excess Return	0.00	-0.12

Moderate Year of Enrollment 2020 Portfolio	Q3 2019	YTD
Gross of Fees Return	1.94	8.40
Net of All Fees Return	1.89	8.22
Blended Benchmark	1.86	8.44
Excess Return	0.03	-0.22

Moderate Year of Enrollment 2028 Portfolio	Q3 2019	YTD
Gross of Fees Return	0.93	13.31
Net of All Fees Return	0.87	13.12
Blended Benchmark	0.85	13.22
Excess Return	0.02	-0.10

Moderate Year of Enrollment 2018 Portfolio	Q3 2019	YTD
Gross of Fees Return	2.00	6.90
Net of All Fees Return	1.94	6.73
Blended Benchmark	1.94	7.04
Excess Return	0.00	-0.31

YTD performance through 9/30/2019. Please see Blended Benchmark Definitions in the Important Disclosures section at the end of this report.

Source: SumDay Administration, LLC, a BNY Mellon Company. SumDay is an affiliate of Lockwood Advisors, Inc.

Source: SunLife Administration, LLC, a BNY Mellon Company. SunLife is an affiliate of Lookwood Advisors, Inc. Performance is calculated using a time and asset-weighted Modified Dietz methodology. The Gross of Fees Return shown reflects the deduction of fees and expenses associated with the underlying mutual funds held in the portfolio (the "Underlying Fund Fee"). The Net of Fees Return shown reflects the deduction of the Underlying Fund Fee, Service Fee, and State Administrative Fee (together, the "Total Annual Asset-Based Fee"). The returns shown do not reflect account maintenance fees or other account level service-based fees (e.g., returned check fees, statement delivery fees, etc.).

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Growth Year of Enrollment Portfolio Review

Asset Category	Fund	Ticker	2036	2034	2032	2030	2028	2026	2024	2022	2020	2018
U.S. Large Cap Blend	Fidelity® Total Market Index Fund	FSKAX	25	25	24	24	22	21	16	11	5	3
U.S. Large Cap Blend	Schwab Total Stock Market Index Fund*	SWTSX	24	24	23	23	22	21	15	10	5	2
Foreign Large Blend	Fidelity® International Index Fund	FSPSX	35	35	33	33	31	29	22	14	7	4
Diversified Emerging Mkts	Fidelity® Emerging Markets Index Fund	FPADX	11	11	10	10	10	9	7	5	3	1
Intermediate-Term Bond	Fidelity® U.S. Bond Index Fund	FXNAX	1	1	3	3	3	6	15	24	33	24
Intermediate-Term Bond	Vanguard Total Bond Market Index Fund Institutional Plus Shares	VBMPX	1	1	2	2	4	6	15	24	33	24
Long Government	Vanguard Long-Term Treasury Index Fund Institutional Shares	VLGIX	1	1	1	1	2	2	3	4	4	4
Inflation-Protected Bond	Schwab® Treasury Inflation Protected Securities Index Fund	SWRSX	0	0	2	2	3	3	4	5	7	6
Emerging Markets Bond	Vanguard Emerging Markets Government Bond Index Fund Institutional Shares	VGIVX	1	1	1	1	2	2	2	2	2	2
Cash	JPMorgan U.S. Government Money Market Fund Capital Shares	OGVXX	1	1	1	1	1	1	1	1	1	30
		TOTAL	100	100	100	100	100	100	100	100	100	100

Source: SumDay Administration, LLC, a BNY Mellon Company. SumDay is an affiliate of Lockwood Advisors, Inc.
Portfolio allocations as of 9/30/2019.

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Growth Year of Enrollment Portfolio Review

Growth Year of Enrollment 2036 Portfolio	Q3 2019	YTD
Gross of Fees Return	-0.11	15.47
Net of All Fees Return	-0.16	15.28
Blended Benchmark	-0.14	15.46
Excess Return	-0.02	-0.18

Growth Year of Enrollment 2026 Portfolio	Q3 2019	YTD
Gross of Fees Return	0.35	14.62
Net of All Fees Return	0.29	14.43
Blended Benchmark	0.29	14.56
Excess Return	0.00	-0.13

Growth Year of Enrollment 2034 Portfolio	Q3 2019	YTD
Gross of Fees Return	-0.10	15.41
Net of All Fees Return	-0.16	15.22
Blended Benchmark	-0.14	15.46
Excess Return	-0.02	-0.24

Growth Year of Enrollment 2024 Portfolio	Q3 2019	YTD
Gross of Fees Return	1.01	14.40
Net of All Fees Return	0.95	14.21
Blended Benchmark	0.94	14.39
Excess Return	0.01	-0.18

Growth Year of Enrollment 2032 Portfolio	Q3 2019	YTD
Gross of Fees Return	0.05	15.16
Net of All Fees Return	0.00	14.97
Blended Benchmark	-0.01	15.15
Excess Return	0.01	-0.18

Growth Year of Enrollment 2022 Portfolio	Q3 2019	YTD
Gross of Fees Return	1.58	13.00
Net of All Fees Return	1.52	12.82
Blended Benchmark	1.50	13.03
Excess Return	0.02	-0.21

Growth Year of Enrollment 2030 Portfolio	Q3 2019	YTD
Gross of Fees Return	0.05	15.18
Net of All Fees Return	-0.01	15.00
Blended Benchmark	-0.01	15.15
Excess Return	0.00	-0.15

Growth Year of Enrollment 2020 Portfolio	Q3 2019	YTD
Gross of Fees Return	2.09	11.51
Net of All Fees Return	2.03	11.33
Blended Benchmark	1.96	11.51
Excess Return	0.07	-0.18

Growth Year of Enrollment 2028 Portfolio	Q3 2019	YTD
Gross of Fees Return	0.18	14.88
Net of All Fees Return	0.13	14.69
Blended Benchmark	0.13	14.85
Excess Return	0.00	-0.16

Growth Year of Enrollment 2018 Portfolio	Q3 2019	YTD
Gross of Fees Return	1.72	7.57
Net of All Fees Return	1.67	7.39
Blended Benchmark	1.65	7.67
Excess Return	0.02	-0.28

YTD performance through 9/30/2019. Please see Blended Benchmark Definitions in the Important Disclosures section at the end of this report.

Source: SumDay Administration, LLC, a BNY Mellon Company. SumDay is an affiliate of Lockwood Advisors, Inc.

Performance is calculated using a time and asset-weighted Modified Dietz methodology. The Gross of Fees Return shown reflects the deduction of fees and expenses associated with the underlying mutual funds held in the portfolio (the "Underlying Fund Fee"). The Net of Fees Return shown reflects the deduction of the Underlying Fund Fee, Service Fee, and State Administrative Fee (together, the "Total Annual Asset-Based Fee"). The returns shown do not reflect account maintenance fees or other account level service-based fees (e.g., returned check fees, statement delivery fees, etc.).

Past performance is not a guarantee of future results. Current performance may be lower or higher than the performance data quoted. The investment return and principal value of an investment will fluctuate, so that an investor's assets, when sold, may be worth more or less than their original cost. Indices are unmanaged and are not available for direct investment.

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DreamAhead Conservative Year of Enrollment Portfolio Changes

The following portfolio changes occurred July 1-2, 2019 in tandem with the regular quarterly rebalancing.

Asset Category	Fund	Ticker	2036	2034	2032	2030	2028	2026	2024	2022	2020	2018										
U.S. Large Cap Blend	Fidelity® Total Market Index Fund	FSKAX	15	15	13	13	12	10	9	8	7	5	4	4	3	3	2	2	0	0	0	0
U.S. Large Cap Blend	Schwab Total Stock Market Index Fund*	SWTSX	14	14	13	13	11	10	9	7	6	5	4	4	2	2	1	1	0	0	0	0
Foreign Large Blend	Fidelity® International Index Fund	FSPSX	19	19	18	18	16	15	12	11	8	7	5	5	4	4	2	2	0	0	0	0
Diversified Emerging Mkts	Fidelity® Emerging Markets Index Fund	FPADX	7	7	6	6	6	5	5	4	4	3	2	2	1	1	0	0	0	0	0	0
Intermediate-Term Bond	Fidelity® U.S. Bond Index Fund	FXNAX	17	17	20	20	21	24	26	28	29	28	26	26	26	26	18	18	20	20	20	20
Intermediate-Term Bond	Vanguard Total Bond Market Index Fund Institutional Plus Shares	VBMPX	18	18	20	20	22	24	26	28	30	29	27	27	27	27	18	18	21	21	21	21
Long Government	Vanguard Long-Term Treasury Index Fund Institutional Shares	VLGIX	3	3	3	3	4	4	4	4	5	4	4	4	4	4	3	3	3	3	3	3
Inflation-Protected Bond	Schwab® Treasury Inflation Protected Securities Index Fund	SWRSX	4	4	4	4	5	5	6	7	8	7	6	6	6	6	4	4	4	4	4	4
Emerging Markets Bond	Vanguard Emerging Markets Government Bond Index Fund Institutional Shares	VGIVX	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Cash	JPMorgan U.S. Government Money Market Fund Capital Shares	OGVXX	1	1	1	1	1	1	1	1	1	1	10	20	20	25	25	50	50	50	50	50
		TOTAL	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Previous allocations are highlighted in green. New allocations, highlighted in yellow, are as of July 1, 2019.

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DreamAhead Growth Year of Enrollment Portfolio Changes

Asset Category	Fund	Ticker	2036	2034	2032	2030	2028	2026	2024	2022	2020	2018								
U.S. Large Cap Blend	Fidelity® Total Market Index Fund	FSKAX	25	25	25	24	24	24	22	22	21	21	18	16	13	11	8	5	3	3
U.S. Large Cap Blend	Schwab Total Stock Market Index Fund*	SWTSX	24	24	24	24	23	23	22	22	21	21	18	15	13	10	7	5	2	2
Foreign Large Blend	Fidelity® International Index Fund	FSPSX	35	35	35	33	33	33	31	31	29	29	26	22	18	14	11	7	4	4
Diversified Emerging Mkts	Fidelity® Emerging Markets Index Fund	FPADX	11	11	11	10	10	10	10	10	9	9	8	7	6	5	4	3	1	1
Intermediate-Term Bond	Fidelity® U.S. Bond Index Fund	FXNAX	1	1	1	1	3	3	3	3	3	6	6	10	15	20	24	28	33	24
Intermediate-Term Bond	Vanguard Total Bond Market Index Fund Institutional Plus Shares	VBMPX	1	1	1	1	2	2	2	2	4	4	6	6	10	15	20	24	28	33
Long Government	Vanguard Long-Term Treasury Index Fund Institutional Shares	VLGIX	1	1	1	1	1	1	2	2	2	2	3	3	3	4	4	4	4	4
Inflation-Protected Bond	Schwab® Treasury Inflation Protected Securities Index Fund	SWRSX	0	0	0	2	2	2	3	3	3	3	4	4	4	5	7	7	6	6
Emerging Markets Bond	Vanguard Emerging Markets Government Bond Index Fund Institutional Shares	VGIVX	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2
Cash	JPMorgan U.S. Government Money Market Fund Capital Shares	OGVXX	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	30	30
			100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Previous allocations are highlighted in green. New allocations, highlighted in yellow, are as of July 1, 2019.

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Any factors discussed, including past performance of various investment strategies, sectors, vehicles and indices, are not indicative of future results.

Past performance is not a guarantee of future results. Current performance may be lower or higher than the performance data quoted. The investment return and principal value of an investment will fluctuate, so that an investor's assets, when sold, may be worth more or less than their original cost.

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There is no guarantee that investment objectives will be attained. Results may vary. There is no guarantee that risk can be managed successfully.

Diversification and strategic asset allocation do not guarantee a profit or protect against a loss in declining markets. **All investments are subject to risk, including the loss of principal.**

It is important to remember that there are risks inherent in any investment and that there is no assurance that any money manager, fund, asset class, index, style or strategy will provide positive performance over time.

Investors should carefully consider the investment objectives, risks, charges and expenses of any mutual fund before investing. This and other important information can be found in the fund prospectus and, if available, the summary prospectus, which may be obtained by visiting www.morningstar.com. Please read the prospectus and, if available, the summary prospectus carefully.

Foreign investments are subject to risks not ordinarily associated with domestic investments, such as currency, economic and political risks, and may follow different accounting standards than domestic investments.

Investments in emerging or developing markets involve exposure to economic structures that are generally less diverse and mature, and to political systems that can be expected to have less stability than those of more developed countries. These securities may be less liquid and more volatile than investments in US and longer established non-US markets.

Portfolios that invest in fixed income securities are subject to several general risks, including interest rate risk, credit risk, the risk of issuer default, liquidity risk and market risk. These risks can affect a security's price and yield to varying degrees, depending upon the nature of the instrument, and may occur from fluctuations in interest rates, a change to an issuer's individual situation or industry, or events in the financial markets. In general, a bond's yield is inversely related to its price. Bonds can lose their value as interest rates rise and an investor can lose principal. If sold prior to maturity, fixed income securities are subject to gains/losses based on the level of interest rates, market conditions and the credit quality of the issuer.

Liquidity risk increases when particular investments are difficult to purchase or sell. A lack of liquidity also may cause the value of investments to decline. Illiquid investments may be harder to value, especially in changing markets. Typically liquid investments may become illiquid, particularly during periods of market turmoil. When illiquid assets must be sold in such market conditions (to meet redemption requests or other cash needs for example), it may be necessary to sell such assets at a loss.

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Short-term fixed income securities are susceptible to fluctuations in interest rates. If interest rates rise, bond prices will decline, despite the lack of change in both coupon and maturity. Price volatility typically increases with the length of the maturity and decreases as the size of the coupon decreases.

Investments in intermediate- and long-term fixed income securities involve interest rate risk and inflation risk, which could reduce the value or real return of an investment should interest rates rise.

Inflation is the rate at which the general level of prices for goods and services is rising and, consequently, the purchasing power of currency is falling.

Mutual funds included in portfolios charge additional fees and expenses outside of the Total Annual Asset-Based Fee for this program. Mutual funds may additionally charge a redemption fee if shares are redeemed by within a specified period of time. The amount of the redemption fee, as well as the minimum holding period, is disclosed in each of the respective fund prospectuses. For complete details, please refer to the applicable fund prospectus.

Mutual funds may use derivatives that are often more volatile than other investments and may magnify the fund's gains or losses. An investment that uses derivatives could be negatively affected if the change in the market value of its securities fails to correlate adequately with the values of the derivatives it purchased or sold.

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All performance is expressed in US dollars. Sources: Bloomberg Barclay; Federal Reserve Board; MSCI; Standard & Poor's; US Treasury Department; Bloomberg; and US Bureau of Labor Statistics.

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Bloomberg Barclays Global Aggregate ex-U.S. Bond Index is designed to be a broad-based measure of the global investment-grade, fixed rate, fixed income corporate markets outside the United States.

Bloomberg Barclays Global Aggregate Negative Yielding Debt TR Index Value Unhedged USD represents the market value in US dollars (\$) of unhedged global negative-yielding debt securities.

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Bloomberg Barclays U.S. Aggregate Bond Index represents securities that are SEC registered, taxable and dollar denominated. The index covers the U.S. investment-grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities and asset-backed securities. These major sectors are subdivided into more specific indices that are calculated and reported on a regular basis. Securities must have at least one year to final maturity regardless of call features and must have at least \$250 million par amount outstanding.

Bloomberg Barclays U.S. Treasury Bill 6–9 Month Index represents United States-issued government debt with a bond maturity between six months and nine months.

Bloomberg Commodity Index is designed to be a highly liquid and diversified benchmark for the commodity futures market. The index is composed of exchange-traded futures and represents 20 physical commodities, which are weighted to account for economic significance and market liquidity (subject to weighting restrictions).

Bloomberg Barclays Long U.S. Treasury Index includes all publicly issued, U.S. Treasury securities that have a remaining maturity of 10 or more years, are rated investment grade and have \$250 million or more of outstanding face value. In addition, the securities must be denominated in U.S. dollars and must be fixed rate and non-convertible.

Bloomberg Barclays U.S. Treasury Inflation Protected Securities (TIPS) Index represents inflation-protected securities issued by the U.S. Treasury. Securities must be investment-grade, publicly issued, dollar-denominated, have at least one year remaining to maturity and have at least \$250 million par amount outstanding.

Bloomberg Barclays USD Emerging Markets Government RIC Capped Index is designed to measure the investment return of dollar-denominated bonds that have maturities longer than one year and were issued by emerging market governments and government-related issuers. The index is capped, which means that its exposure to any particular bond is limited to a maximum of 20% and its aggregate exposure to issuers that individually constitute 5% or more is limited to 48%. If the index, as constituted based on market weights, exceeds the 20% or 48% limits, the excess is reallocated to bonds of other issuers represented in the index.

Bloomberg Barclays U.S. Treasury Bill 1–3 Month Index is the one-to-three month component of the U.S. Treasury Bill Index. The Bloomberg Barclays Treasury Bill Index includes U.S. Treasury bills with a remaining maturity from one up to (but not including) 12 months. It excludes zero coupon strips.

Bloomberg Barclays U.S. Aggregate Float Adjusted Index provides broad exposure to the U.S. investment-grade bond market. The float-adjusted index excludes U.S. Treasuries, agencies, and mortgage-backed securities (MBS) held in Federal Reserve accounts, thereby reducing the market value weight of these securities.

Dow Jones U.S. Total Stock Market Index is an unmanaged, float-adjusted market-capitalization-weighted index providing broad-based coverage of the U.S. equity market. The index is considered a total market index, representing the top 95% of the U.S. stock market based on market capitalization. To be included in the index, a security generally must be all of the following: an equity security (common stock, REIT or limited partnership), a security that has its primary market listing in the U.S. and be issued by U.S. headquartered company.

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MSCI ACWI (All Country World Index) Index ex-USA (net of taxes) is a subset of the MSCI ACWI Index, a free-float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed and emerging markets. This version of the index excludes the United States. The index is net because dividends are reinvested after deducting a withholding tax from dividend distributions. Since taxes are withheld from the MSCI ACWI Index ex-USA (net of taxes), the performance of the MSCI ACWI Index ex-USA (net of taxes) will generally be lower than that of the MSCI ACWI Index ex-USA (gross of taxes).

MSCI ACWI (All Country World Index) Index (net of taxes) is a free-float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed and emerging markets. As of May 30, 2019, the MSCI ACWI consisted of 47 country indices comprising 23 developed and 24 emerging market country indices. The developed market country indices included are Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, the United Kingdom and the United States. The emerging market country indices included are Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Pakistan, Peru, Philippines, Poland, Qatar, Russia, South Africa, Taiwan, Thailand, Turkey and United Arab Emirates. The index is net because dividends are reinvested after deducting a withholding tax from dividend distributions. Since taxes are withheld from the MSCI ACWI Index (net of taxes), the performance of the MSCI ACWI Index (net of taxes) will generally be lower than that of the MSCI ACWI Index (gross of taxes).

MSCI EAFE (Europe, Australasia and the Far East) Index (net of taxes) is a free-float-adjusted market-capitalization index that is designed to measure developed market equity performance, excluding the United States and Canada. As of May 30, 2019, the MSCI EAFE Index consisted of the following 21 developed market country indices: Australia, Austria, Belgium, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland and the United Kingdom. The index is net because dividends are reinvested after deducting a withholding tax from dividend distributions. Since taxes are withheld from the MSCI EAFE Index (net of taxes), the performance of the MSCI EAFE Index (net of taxes) will generally be lower than that of the MSCI EAFE Index (gross of taxes).

MSCI Emerging Markets Index (net of taxes) is a free-float adjusted, market-capitalization index that is designed to measure equity market performance of emerging markets. As of May 30, 2019, the MSCI Emerging Markets Index consisted of the following 26 emerging market country indices: Argentina, Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Pakistan, Peru, Philippines, Poland, Qatar, Russia, Saudi Arabia, South Africa, Taiwan, Thailand, Turkey and United Arab Emirates. The index is net because dividends are reinvested after deducting a withholding tax from dividend distributions. Since taxes are withheld from the MSCI Emerging Markets Index (net of taxes), the performance of the MSCI Emerging Markets Index (net of taxes) will generally be lower than that of the MSCI Emerging Markets Index (gross of taxes).

MSCI USA Investable Market Index (IMI) is designed to measure the performance of the large, mid and small cap segments of the US market. With 2,428 constituents, the index covers approximately 99% of the free float-adjusted market capitalization in the U.S.

MSCI USA Small Cap Index is an unmanaged index designed to measure the performance of the small-cap segment of the US equity market. The index represents approximately 14% of the free float-adjusted market capitalization in the U.S.

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Purchasing Managers' Index™ (PMI™) data are compiled by IHS Markit for more than 40 economies worldwide. The monthly data are derived from surveys of senior executives at private sector companies and are available only via subscription. The PMI dataset features a headline number, which indicates the overall health of an economy, and sub-indices, which provide insights into other key economic drivers such as GDP, inflation, exports, capacity utilization, employment and inventories. The PMI data are used by financial and corporate professionals to better understand where economies and markets are headed, and to uncover opportunities.

S&P GSCI Gold Index, a sub-index of the S&P GSCI Index, provides investors with a reliable and publicly available benchmark for investment performance in the gold commodity markets. The index is designed to be tradable, readily accessible to market participants and cost efficient to implement. The S&P GSCI Index is widely recognized as the leading measure of general commodity price movements and inflation in the world economy.

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S&P 500 Index, an unmanaged index, includes 500 of the largest stocks (in terms of stock market value) in the United States; prior to March 1957, it consisted of 90 of the largest stocks. Although the S&P 500 focuses on the large-cap segment of the market, with approximately 80% coverage of U.S. equities, it is also used as a proxy for the total U.S. equity market.

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Blended Benchmark Definitions As of September 30, 2019

Growth Portfolio

50% Dow Jones US Total Stock Market TR USD, 37% MSCI EAFE NR USD, 12% MSCI EM NR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Moderate Growth Portfolio

42% Dow Jones US Total Stock Market TR USD, 29% MSCI EAFE NR USD, 9% MSCI EM NR USD, 12% Bloomberg Barclays US Aggregate Bond TR USD, 2% Bloomberg Barclays Long Term US Treasury TR USD, 3% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Conservative Growth Portfolio

32% Dow Jones US Total Stock Market TR USD, 21% MSCI EAFE NR USD, 7% MSCI EM NR USD, 30% Bloomberg Barclays US Aggregate Bond TR USD, 3% Bloomberg Barclays Long Term US Treasury TR USD, 4% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Balanced Portfolio

26% Dow Jones US Total Stock Market TR USD, 18% MSCI EAFE NR USD, 6% MSCI EM NR USD, 40% Bloomberg Barclays US Aggregate Bond TR USD, 3% Bloomberg Barclays Long Term US Treasury TR USD, 4% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Income & Growth Portfolio

20% Dow Jones US Total Stock Market TR USD + 15% MSCI EAFE NR USD + 5% MSCI EM NR USD + 48% Bloomberg Barclays US Aggregate Bond TR USD + 4% Bloomberg Barclays Long Term US Treasury TR USD + 5% Bloomberg Barclays US Treasury US TIPS TR USD + 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD + 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Income Portfolio

60% Bloomberg Barclays US Aggregate Bond TR USD + 5% Bloomberg Barclays Long Term US Treasury TR USD + 8% Bloomberg Barclays US Treasury US TIPS TR USD + 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD + 25% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Cash Preservation Portfolio

100% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

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Conservative Year of Enrollment 2036 Portfolio

29% Dow Jones US Total Stock Market TR USD, 19% MSCI EAFE NR USD, 7% MSCI EM NR USD, 35% Bloomberg Barclays US Aggregate Bond TR USD, 3% Bloomberg Barclays Long Term US Treasury TR USD, 4% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Conservative Year of Enrollment 2034 Portfolio

26% Dow Jones US Total Stock Market TR USD, 18% MSCI EAFE NR USD, 6% MSCI EM NR USD, 40% Bloomberg Barclays US Aggregate Bond TR USD, 3% Bloomberg Barclays Long Term US Treasury TR USD, 4% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Conservative Year of Enrollment 2032 Portfolio

20% Dow Jones US Total Stock Market TR USD, 15% MSCI EAFE NR USD, 5% MSCI EM NR USD, 48% Bloomberg Barclays US Aggregate Bond TR USD, 4% Bloomberg Barclays Long Term US Treasury TR USD, 5% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Conservative Year of Enrollment 2030 Portfolio

15% Dow Jones US Total Stock Market TR USD, 11% MSCI EAFE NR USD, 4% MSCI EM NR USD, 56% Bloomberg Barclays US Aggregate Bond TR USD, 4% Bloomberg Barclays Long Term US Treasury TR USD, 7% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Conservative Year of Enrollment 2028 Portfolio

10% Dow Jones US Total Stock Market TR USD, 7% MSCI EAFE NR USD, 3% MSCI EM NR USD, 57% Bloomberg Barclays US Aggregate Bond TR USD, 4% Bloomberg Barclays Long Term US Treasury TR USD, 7% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 10% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Conservative Year of Enrollment 2026 Portfolio

8% Dow Jones US Total Stock Market TR USD, 5% MSCI EAFE NR USD, 2% MSCI EM NR USD, 53% Bloomberg Barclays US Aggregate Bond TR USD, 4% Bloomberg Barclays Long Term US Treasury TR USD, 6% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 20% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

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Conservative Year of Enrollment 2024 Portfolio

5% Dow Jones US Total Stock Market TR USD, 4% MSCI EAFE NR USD, 1% MSCI EM NR USD, 53% Bloomberg Barclays US Aggregate Bond TR USD, 4% Bloomberg Barclays Long Term US Treasury TR USD, 6% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 25% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Conservative Year of Enrollment 2022 Portfolio

3% Dow Jones US Total Stock Market TR USD, 2% MSCI EAFE NR USD, 36% Bloomberg Barclays US Aggregate Bond TR USD, 3% Bloomberg Barclays Long Term US Treasury TR USD, 4% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 50% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Conservative Year of Enrollment 2020 Portfolio

41% Bloomberg Barclays US Aggregate Bond TR USD, 3% Bloomberg Barclays Long Term US Treasury TR USD, 4% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 50% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Conservative Year of Enrollment 2018 Portfolio

41% Bloomberg Barclays US Aggregate Bond TR USD, 3% Bloomberg Barclays Long Term US Treasury TR USD, 4% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 50% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Moderate Year of Enrollment 2036 Portfolio

47% Dow Jones US Total Stock Market TR USD, 33% MSCI EAFE NR USD, 10% MSCI EM NR USD, 5% Bloomberg Barclays US Aggregate Bond TR USD, 1% Bloomberg Barclays Long Term US Treasury TR USD, 2% Bloomberg Barclays US Treasury US TIPS TR USD, 1% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Moderate Year of Enrollment 2034 Portfolio

47% Dow Jones US Total Stock Market TR USD, 33% MSCI EAFE NR USD, 10% MSCI EM NR USD, 5% Bloomberg Barclays US Aggregate Bond TR USD, 1% Bloomberg Barclays Long Term US Treasury TR USD, 2% Bloomberg Barclays US Treasury US TIPS TR USD, 1% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Moderate Year of Enrollment 2032 Portfolio

42% Dow Jones US Total Stock Market TR USD, 29% MSCI EAFE NR USD, 9% MSCI EM NR USD, 12% Bloomberg Barclays US Aggregate Bond TR USD, 2% Bloomberg Barclays Long Term US Treasury TR USD, 3% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

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Important Disclosures

Moderate Year of Enrollment 2030 Portfolio

36% Dow Jones US Total Stock Market TR USD, 26% MSCI EAFE NR USD, 8% MSCI EM NR USD, 20% Bloomberg Barclays US Aggregate Bond TR USD, 3% Bloomberg Barclays Long Term US Treasury TR USD, 4% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Moderate Year of Enrollment 2028 Portfolio

32% Dow Jones US Total Stock Market TR USD, 21% MSCI EAFE NR USD, 7% MSCI EM NR USD, 30% Bloomberg Barclays US Aggregate Bond TR USD, 3% Bloomberg Barclays Long Term US Treasury TR USD, 4% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Moderate Year of Enrollment 2026 Portfolio

26% Dow Jones US Total Stock Market TR USD, 18% MSCI EAFE NR USD, 6% MSCI EM NR USD, 40% Bloomberg Barclays US Aggregate Bond TR USD, 3% Bloomberg Barclays Long Term US Treasury TR USD, 4% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Moderate Year of Enrollment 2024 Portfolio

18% Dow Jones US Total Stock Market TR USD, 12% MSCI EAFE NR USD, 5% MSCI EM NR USD, 49% Bloomberg Barclays US Aggregate Bond TR USD, 4% Bloomberg Barclays Long Term US Treasury TR USD, 5% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 5% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Moderate Year of Enrollment 2022 Portfolio

10% Dow Jones US Total Stock Market TR USD, 7% MSCI EAFE NR USD, 3% MSCI EM NR USD, 55% Bloomberg Barclays US Aggregate Bond TR USD, 5% Bloomberg Barclays Long Term US Treasury TR USD, 8% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 10% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Moderate Year of Enrollment 2020 Portfolio

5% Dow Jones US Total Stock Market TR USD, 4% MSCI EAFE NR USD, 1% MSCI EM NR USD, 55% Bloomberg Barclays US Aggregate Bond TR USD, 5% Bloomberg Barclays Long Term US Treasury TR USD, 8% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 20% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

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Moderate Year of Enrollment 2018 Portfolio

55% Bloomberg Barclays US Aggregate Bond TR USD, 5% Bloomberg Barclays Long Term US Treasury TR USD, 8% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 30% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Growth Year of Enrollment 2036 Portfolio

49% Dow Jones US Total Stock Market TR USD, 35% MSCI EAFE NR USD, 11% MSCI EM NR USD, 2% Bloomberg Barclays US Aggregate Bond TR USD, 1% Bloomberg Barclays Long Term US Treasury TR USD, 1% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Growth Year of Enrollment 2034 Portfolio

49% Dow Jones US Total Stock Market TR USD, 35% MSCI EAFE NR USD, 11% MSCI EM NR USD, 2% Bloomberg Barclays US Aggregate Bond TR USD, 1% Bloomberg Barclays Long Term US Treasury TR USD, 1% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Growth Year of Enrollment 2032 Portfolio

47% Dow Jones US Total Stock Market TR USD, 33% MSCI EAFE NR USD, 10% MSCI EM NR USD, 5% Bloomberg Barclays US Aggregate Bond TR USD, 1% Bloomberg Barclays Long Term US Treasury TR USD, 2% Bloomberg Barclays US Treasury US TIPS TR USD, 1% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Growth Year of Enrollment 2030 Portfolio

47% Dow Jones US Total Stock Market TR USD, 33% MSCI EAFE NR USD, 10% MSCI EM NR USD, 5% Bloomberg Barclays US Aggregate Bond TR USD, 1% Bloomberg Barclays Long Term US Treasury TR USD, 2% Bloomberg Barclays US Treasury US TIPS TR USD, 1% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Growth Year of Enrollment 2028 Portfolio

44% Dow Jones US Total Stock Market TR USD, 31% MSCI EAFE NR USD, 10% MSCI EM NR USD, 7% Bloomberg Barclays US Aggregate Bond TR USD, 2% Bloomberg Barclays Long Term US Treasury TR USD, 3% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Growth Year of Enrollment 2026 Portfolio

42% Dow Jones US Total Stock Market TR USD, 29% MSCI EAFE NR USD, 9% MSCI EM NR USD, 12% Bloomberg Barclays US Aggregate Bond TR USD, 2% Bloomberg Barclays Long Term US Treasury TR USD, 3% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

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Growth Year of Enrollment 2024 Portfolio

31% Dow Jones US Total Stock Market TR USD, 22% MSCI EAFE NR USD, 7% MSCI EM NR USD, 30% Bloomberg Barclays US Aggregate Bond TR USD, 3% Bloomberg Barclays Long Term US Treasury TR USD, 4% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Growth Year of Enrollment 2022 Portfolio

21% Dow Jones US Total Stock Market TR USD, 14% MSCI EAFE NR USD, 5% MSCI EM NR USD, 48% Bloomberg Barclays US Aggregate Bond TR USD, 4% Bloomberg Barclays Long Term US Treasury TR USD, 5% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Growth Year of Enrollment 2020 Portfolio

10% Dow Jones US Total Stock Market TR USD, 7% MSCI EAFE NR USD, 3% MSCI EM NR USD, 66% Bloomberg Barclays US Aggregate Bond TR USD, 4% Bloomberg Barclays Long Term US Treasury TR USD, 7% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 1% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

Growth Year of Enrollment 2018 Portfolio

5% Dow Jones US Total Stock Market TR USD, 4% MSCI EAFE NR USD, 1% MSCI EM NR USD, 48% Bloomberg Barclays US Aggregate Bond TR USD, 4% Bloomberg Barclays Long Term US Treasury TR USD, 6% Bloomberg Barclays US Treasury US TIPS TR USD, 2% Bloomberg Barclays USD Emerging Markets Government RIC Capped TR USD, 30% Bloomberg Barclays US Treasury Bill 1-3 Mon TR USD

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