



**PENSION RESERVES  
INVESTMENT  
MANAGEMENT BOARD**

**FISCAL YEAR 2018 OPERATING BUDGET**  
As Approved by the PRIM Board on May 16, 2017

**Deborah B. Goldberg, Chair**  
**Michael G. Trotsky, CFA, Executive Director and Chief Investment Officer**

## BUDGET DISCUSSION

The Pension Reserves Investment Management (PRIM) Board's fiscal year (FY) 2018 Operating Budget reflects the investment management, advisory, and operational costs necessary to implement, measure, and monitor the approximated \$64 billion in investments of the Pension Reserves Investment Trust (PRIT) Fund.

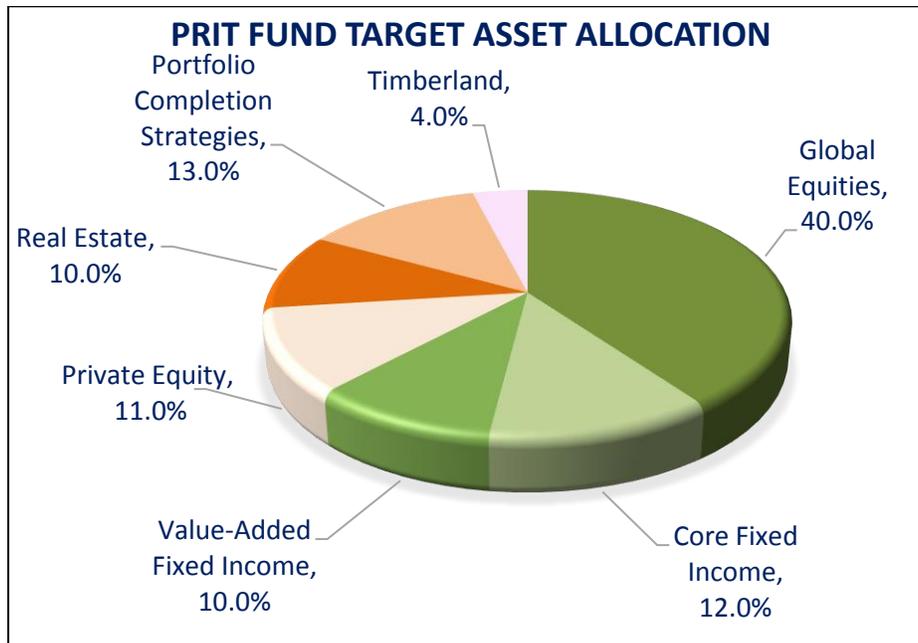
### *Budget Highlights*

The projected FY 2018 budget of \$359.1 million is 56 basis points (bps) of projected average PRIT Fund assets (\$64 billion), a \$13.5 million, or 3.9%, budget increase from the prior year. As is our custom, budgeted expenses for FY 2018 are conservative and foresee continued asset growth. Actual expenses incurred may vary because most expenses are a function of asset levels and investment performance is not predictable.

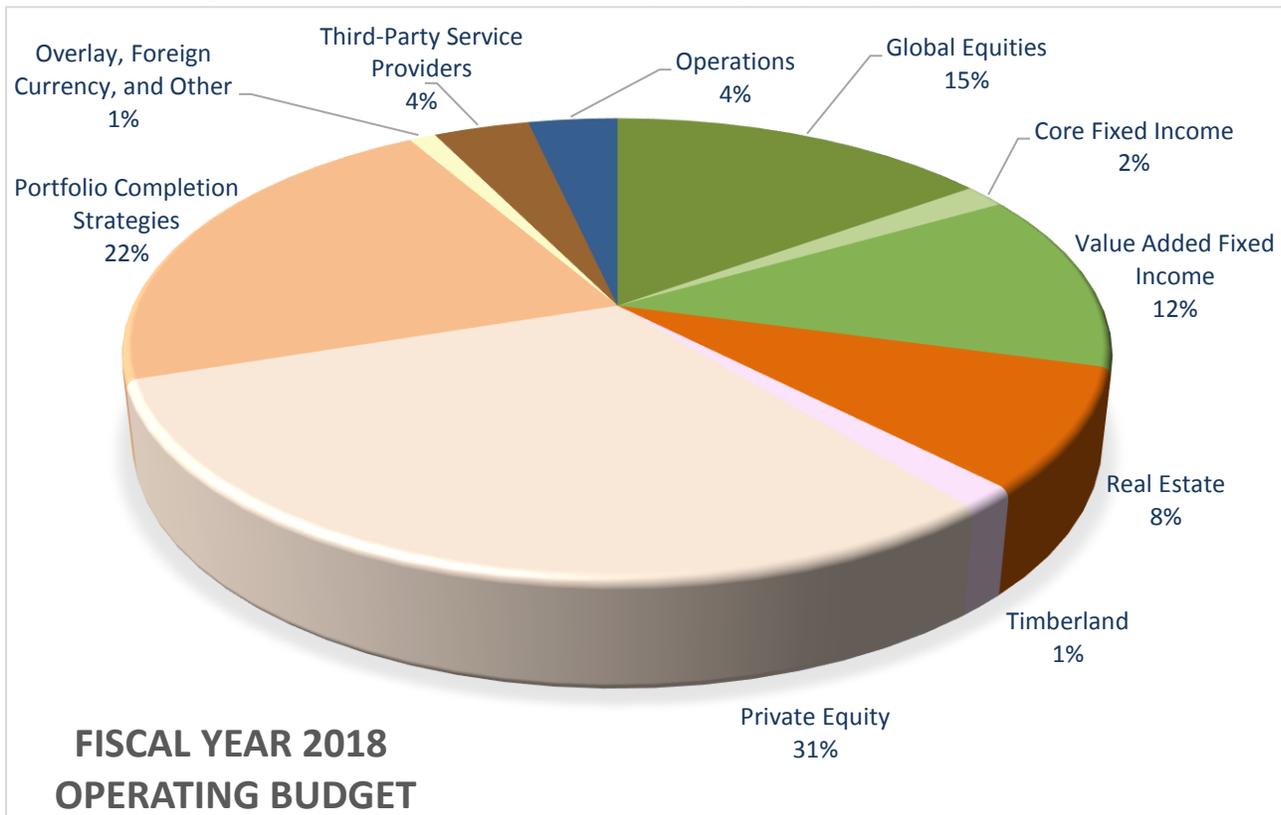
Investment Management Fees and Third-Party Service Providers comprise \$346 million, or 96.3%, of the total budget. Investment Management Fees increased by \$9.3 million, or 2.9%, due primarily to the \$4 billion budgeted growth in assets. Projected costs for Third-Party Service Providers increases \$2.4 million, or 21.6%, in support of the managed account investment initiative.

Operations comprise \$13.1 million, or 3.7%, of the total budget. Operations increases by \$1.5 million, or 16.7%, due to increase in staff size and computer software updates.

The PRIM Board's current target asset allocation, approved in January 2017, is as follows:



Based on this target asset allocation, PRIM's FY2018 Operating Budget is projected to be as follows:



**PENSION RESERVES INVESTMENT MANAGEMENT BOARD**

**Fiscal Year 2018 Budget Summary**

	<u>FY18</u> <u>(bps)#</u>	<u>FY17</u> <u>(bps) #</u>	<u>FY 2018</u>	<u>FY 2017</u>
<b><u>Investment Management Fees ^</u></b>				
Global Equities	19.2	18.9	\$ 53,850,000	\$ 45,446,000
Core Fixed Income	7.6	7.5	5,900,000	6,298,000
Value Added Fixed Income	85.5	82.8	45,140,000	42,035,000
Real Estate	47.4	49.6	30,286,000	30,206,000
Timberland	23.1	22.6	5,505,000	4,635,000
Private Equity	162.2	154.8	109,960,000	105,400,000
Portfolio Completion Strategies (PCS)	119.9	127.1	78,100,000	85,060,000
Overlay, Foreign Currency, and Other	63.8	46.2	3,754,000	4,158,000
	<b>52.0</b>	<b>53.9</b>	<b>332,495,000</b>	<b>323,238,000</b>
<b><u>Third-Party Service Providers</u></b>				
Custodian	0.1	0.1	805,000	805,000
Advisory Services - General	0.2	0.1	976,000	883,000
Advisory Services - Real Estate & Timberlands	2.6	1.1	2,315,000	645,000
Advisory Services - Private Equity	2.2	2.2	1,500,000	1,500,000
Advisory Services - Hedge Funds and PCS	8.7	7.1	5,665,000	4,750,000
Audit & Tax	0.1	0.1	428,000	470,000
Legal	0.1	0.1	450,000	450,000
Governance	0.0	0.1	265,000	300,000
Risk Measurement and Investment Analytics	0.2	0.2	1,100,000	1,300,000
	<b>2.1</b>	<b>1.9</b>	<b>13,504,000</b>	<b>11,103,000</b>
<b><u>Operations</u></b>				
Compensation & Employee Benefits	1.5	1.4	9,780,000	8,154,000
Occupancy	0.2	0.2	1,130,000	976,000
Insurance	0.0	0.1	313,000	311,000
General Office Expenses	0.0	0.0	315,000	306,000
Computer & MIS Expenses	0.2	0.1	1,057,000	860,000
DD Travel, Prof. Develop, Dues & Subscriptions	0.1	0.1	452,000	420,000
Client Service	0.0	0.0	94,000	88,000
PRIM Board Elections	0.0	0.0	-	150,000
	<b>2.1</b>	<b>1.9</b>	<b>13,141,000</b>	<b>11,265,000</b>
<b>Total Operating Budget</b>				
	<b>56.1</b>	<b>57.6</b>	<b>\$ 359,140,000</b>	<b>\$ 345,606,000</b>

# Basis points (bps) for Investment Management Fees are calculated by dividing the budgeted fees by the estimated assets under management (AUM) for each asset class. Advisory Services for Real Estate & Timberlands, Private Equity, and PCS are also calculated based upon each asset classes estimated AUM. For all other expenses, the bps are calculated based upon the total PRIT Fund AUM, which is estimated to be \$64 billion and \$60 billion for FY18 and FY17, respectively.

^ No investment performance, incentive, or carried interest fees are budgeted.

**Global Equities**

<b><u>Domestic Equities</u></b>	<b><u>FY 2018</u></b>	<b><u>FY 2017</u></b>
SSgA (S&P 500 Index)	\$ 870,000	\$ 850,000
SSgA (Russell 2500 Index)	160,000	145,000
Frontier	2,900,000	2,275,000
Huber	2,710,000	2,600,000
Riverbridge	1,300,000	1,125,000
Summit Creek	2,280,000	2,150,000
	<b>10,220,000</b>	<b>9,145,000</b>
<b><u>International Equity</u></b>		
SSgA (World Ex-US Index)	400,000	300,000
Marathon	8,210,000	7,700,000
Baillie Gifford	5,370,000	4,800,000
Mondrian Investment	3,040,000	2,650,000
The FIS Group	700,000	660,000
Potential Small Cap Managers	-	2,500,000
Acadian	1,890,000	-
AQR	1,050,000	-
LMCG	400,000	-
Strategic Global	850,000	-
TimesSquare	2,130,000	-
	<b>24,040,000</b>	<b>18,610,000</b>
<b><u>Emerging Markets Equity</u></b>		
SSgA (EM Index)	370,000	341,000
Acadian	1,490,000	1,500,000
Wasatch	970,000	1,050,000
Acadian (Frontier)	1,760,000	1,450,000
Baillie Gifford	4,130,000	3,750,000
City of London Investment **	800,000	700,000
Driehaus	2,910,000	2,800,000
Harding Loevner	3,230,000	2,800,000
Pzena	3,930,000	3,300,000
AQR (Performance Fees Only) ^	-	-
	<b>19,590,000</b>	<b>17,691,000</b>
<b><u>Total Global Equities</u></b>	<b>\$ 53,850,000</b>	<b>\$ 45,446,000</b>

\*\* This portfolio invests in closed-end and commingled funds. Budgeted fees exclude the costs of underlying closed-end and commingled funds, which charge average fees ranging from 1% to 2% of net assets under management.

^ No investment performance, incentive, or carried interest fees are budgeted.

Pension Reserves Investment Management Board  
 Fiscal Year 2018 Operating Budget

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**Core Fixed Income**

	<b><u>FY 2018</u></b>	<b><u>FY 2017</u></b>
Blackrock (BA Index)	\$ 160,000	\$ 108,000
Blackrock (TIPS Index)	100,000	85,000
Blackrock (ILB)	1,570,000	1,590,000
Blackrock (STRIPS Index)	290,000	450,000
PIMCO	820,000	830,000
Loomis Sayles	1,610,000	1,850,000
Community Capital	120,000	120,000
AFL-CIO *	200,000	205,000
Access Capital *	660,000	685,000
Progress	370,000	375,000
	<b><u>5,900,000</u></b>	<b><u>6,298,000</u></b>

**Value-Added Fixed Income**

Fidelity	1,180,000	1,110,000
Loomis Sayles	1,770,000	1,545,000
Shenkman	1,240,000	1,165,000
Eaton Vance *	4,300,000	2,600,000
Voya *	2,800,000	1,700,000
PIMCO	1,190,000	1,100,000
Ashmore *	2,960,000	2,900,000
Investec	1,000,000	1,915,000
Pictet	1,000,000	2,100,000
Stone Harbor	900,000	1,650,000
Distressed Debt *	23,500,000	24,250,000
Potential Other Credit Strategies	3,300,000	-
	<b><u>\$ 45,140,000</u></b>	<b><u>\$ 42,035,000</u></b>

\* Investments are in investment structures (commingled funds, partnerships, etc.) where management fees are not directly paid to the investment managers by PRIM, but rather fees are indirectly paid via a reduction of PRIM's investment.

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**Real Estate**

<b><u>REITs</u></b>	<b><u>FY 2018</u></b>	<b><u>FY 2017</u></b>
INVESCO	\$ 1,280,000	\$ 1,380,000
CenterSquare	2,640,000	2,758,000
Brookfield	1,490,000	1,335,000
Presima	530,000	550,000
	<u>5,940,000</u>	<u>6,023,000</u>
<b><u>Core Strategy</u></b>		
AEW *	7,300,000	7,443,000
INVESCO *	3,800,000	4,353,000
JP Morgan *	3,700,000	3,344,000
LaSalle *	5,285,000	5,233,000
	<u>20,085,000</u>	<u>20,373,000</u>
<b><u>Non - Core Strategy</u></b>		
Non-Core Investments *	4,201,000	3,634,000
Canyon Johnson *	-	77,000
Intercontinental *	-	21,000
New Boston Fund *	60,000	78,000
	<u>4,261,000</u>	<u>3,810,000</u>
<b><u>Total Real Estate</u></b>	<b><u>\$ 30,286,000</u></b>	<b><u>\$ 30,206,000</u></b>

\* Investments are in investment structures (commingled funds, partnerships, etc.) where management fees are not directly paid to the investment managers by PRIM, but rather fees are indirectly paid via a reduction of PRIM's investment.

**Timberland**

	<b><u>FY 2018</u></b>	<b><u>FY 2017</u></b>
Forest Investment Associates *	\$ 2,200,000	\$ 2,055,000
Campbell Group *	3,305,000	2,580,000
	<b><u>5,505,000</u></b>	<b><u>4,635,000</u></b>

**Private Equity**

**Venture Capital**

Domestic Venture Capital *	29,660,000	28,000,000
International Venture Capital *	3,000,000	2,400,000
	<b><u>32,660,000</u></b>	<b><u>30,400,000</u></b>

**Special Equity**

Domestic Special Equity *	56,700,000	55,000,000
International Special Equity *	20,600,000	20,000,000
	<b><u>77,300,000</u></b>	<b><u>75,000,000</u></b>

**Total Private Equity**

<b><u>\$ 109,960,000</u></b>	<b><u>\$ 105,400,000</u></b>
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\* Investments are in investment structures (commingled funds, partnerships, etc.) where management fees are not directly paid to the investment managers by PRIM, but rather fees are indirectly paid via a reduction of PRIM's investment.

**Portfolio Completion Strategy (PCS)**

	<b><u>FY 2018</u></b>	<b><u>FY 2017</u></b>
Replication Strategies	\$ 125,000	\$ 100,000
PAAMCO – Hedge Fund-of-Funds * <	3,700,000	7,760,000
Direct Hedge Funds*	31,300,000	44,750,000
Separately Managed Hedge Fund Accounts*	29,875,000	21,000,000
Risk Premia *	7,200,000	7,297,410
Real Assets *	4,100,000	4,152,590
Potential Equity Hedge Strategy *	1,800,000	-
	<b><u>78,100,000</u></b>	<b><u>85,060,000</u></b>

**Overlay, Foreign Currency and Other**

Parametric (Overlay)	475,000	550,000
Russell (Foreign Currency)	425,000	120,000
Portable Alpha Wind-Down <	4,000	8,000
Private Natural Resources Wind-Down *	2,850,000	3,480,000
	<b><u>\$ 3,754,000</u></b>	<b><u>\$ 4,158,000</u></b>

\* Investments are in investment structures (commingled funds, partnerships, etc.) where management fees are not directly paid to the investment managers by PRIM, but rather fees are indirectly paid via a reduction of PRIM's investment.

< Excludes costs of underlying hedge funds, which charge average fees ranging from 1% to 2% of net assets under management, plus performance fees of up to 20% of excess returns. These costs are embedded in net hedge fund performance and grow in proportion to the assets under management.

**Third-Party Service Providers**

<b><u>Custody</u></b>	<b><u>FY 2018</u></b>	<b><u>FY 2017</u></b>
Master Custody Services	\$ 650,000	\$ 650,000
OTC Valuation	95,000	95,000
GASB Reporting and Other	60,000	60,000
	<b>805,000</b>	<b>805,000</b>

**Advisory Services - General**

Investment Advisor - Public Markets	320,000	320,000
Investment Advisor - Asset Allocation	225,000	225,000
Legislative Restrictions	75,000	50,000
Communications	83,000	78,000
Compensation and Human Resources	100,000	50,000
Benchmarking, Currency Trading Analysis, Other	173,000	160,000
	<b>976,000</b>	<b>883,000</b>

**Advisory Services - Real Estate and Timberlands**

Investment Advisor - Real Estate and Timberlands	940,000	370,000
Debt Compliance and Reporting	275,000	175,000
Direct Investment Advisory & Other Advisory Projects	1,100,000	100,000
	<b>2,315,000</b>	<b>645,000</b>

**Advisory Services - Private Equity**

Investment Advisor - Private Equity	1,500,000	1,500,000
	<b>1,500,000</b>	<b>1,500,000</b>

**Advisory Services – Portfolio Completion Strategies**

Investment Advisor - Hedge Funds & PCS	900,000	750,000
Managed Account Platform Provider	4,765,000	4,000,000
	<b>5,665,000</b>	<b>4,750,000</b>

**Third-Party Service Providers (continued)**

<b><u>Audit and Tax</u></b>	<b><u>FY 2018</u></b>	<b><u>FY 2017</u></b>
Annual Financial Statement Audits	\$ 270,000	\$ 280,000
Agreed-Upon Procedures	58,000	90,000
Tax Services & Other	100,000	100,000
	<b><u>428,000</u></b>	<b><u>470,000</u></b>
<b><u>Legal</u></b>		
Outside Counsel	450,000	450,000
	<b><u>450,000</u></b>	<b><u>450,000</u></b>
<b><u>Governance</u></b>		
Proxy Voting Services	150,000	180,000
Council of Institutional Investors	30,000	35,000
Board Education	20,000	20,000
Advisory Services and Other	65,000	65,000
	<b><u>265,000</u></b>	<b><u>300,000</u></b>
<b><u>Risk Measurement and Analytics</u></b>		
Risk Measurement Systems	700,000	700,000
Investment Tools and Analytics	400,000	600,000
	<b><u>1,100,000</u></b>	<b><u>1,300,000</u></b>
<b><u>Total Third-Party Service Providers</u></b>	<b><u>\$ 13,504,000</u></b>	<b><u>\$ 11,103,000</u></b>

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**Operations**

**Compensation & Employee Benefits**

	<b><u>FY 2018</u></b>	<b><u>FY 2017</u></b>
Full-Time Staff (including vacant positions)	\$ 9,577,000	\$ 7,975,000
Dental and Vision	8,000	7,000
Disability	55,000	45,000
Medicare Tax	125,000	112,000
Unemployment Contingency	15,000	15,000
	<b><u>9,780,000</u></b>	<b><u>8,154,000</u></b>

**Occupancy**

Lease	1,025,000	876,000
Utilities	60,000	65,000
Leasehold Improvements and Other	45,000	35,000
	<b><u>1,130,000</u></b>	<b><u>976,000</u></b>

**Insurance**

Fiduciary	275,000	275,000
Business Insurance Policies	30,000	30,000
Workers Compensation	8,000	6,000
	<b><u>313,000</u></b>	<b><u>311,000</u></b>

**General Office Expenses**

Printing, Postage, and Courier	71,000	80,000
Payroll / Employee Timesheets	20,000	11,000
Meeting Expenses and Stenographer	20,000	35,000
Records Storage	15,000	15,000
Office Supplies, Equipment, and Other	149,000	100,000
Temporary Labor	40,000	65,000
	<b><u>315,000</u></b>	<b><u>306,000</u></b>

**Computer & MIS Expenses**

Hardware & Software	271,000	220,000
Support and Development	700,000	550,000
MIS Other / ISP & Remote Access	86,000	90,000
	<b><u>\$ 1,057,000</u></b>	<b><u>\$ 860,000</u></b>

**Operations (continued)**

**Due Diligence Travel, Prof. Development & Dues and Subscriptions**

	<b><u>FY 2018</u></b>	<b><u>FY 2017</u></b>
Due Diligence Travel	\$ 215,000	\$ 215,000
Professional Development	132,000	125,000
Professional Dues and Subscriptions	105,000	80,000
	<b><u>452,000</u></b>	<b><u>420,000</u></b>

**Client Service**

Meetings and Conferences	55,000	55,000
Auto Mileage & Parking	24,000	21,000
Printing	15,000	12,000
	<b><u>94,000</u></b>	<b><u>88,000</u></b>

**Board Elections**

PRIM Board Members' Elections	-	150,000
	<b><u>-</u></b>	<b><u>150,000</u></b>

**Total Operations**

<b><u>\$ 13,141,000</u></b>	<b><u>\$ 11,265,000</u></b>
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### **OPERATING BUDGET NARRATIVE**

The Fiscal Year (FY) 2018 Operating Budget is presented in three broad expense categories:

- Investment Management Fees
- Third-Party Service Providers
- Operations

#### **Investment Management Fees:**

PRIM employs professional investment managers and gives them discretion, consistent with specified objectives and guidelines, to manage the PRIT Fund's assets. Investment management fees are the fees paid these investment managers for their services. Each investment manager operates under a contract (generally an investment management agreement or a partnership agreement) that delineates its responsibilities and appropriate performance expectations. Budget projections for investment management fees are based on the following factors and year-to-year budget fluctuations reflect changes to one or more of these factors:

- The PRIT Fund asset allocation
- Assets under management
- Contractual fee schedules
- Capital commitments

No performance fees, incentive fees, or carried interest are included in this budget due to the difficulty in estimating these fees in advance.

#### **Third Party Service Providers:**

PRIM employs third-party service providers to support PRIM staff, Committees, and the Board to manage the PRIT Fund. Budget projections for third-party service providers are generally estimated based upon current service contracts and estimated future potential services.

#### **Operations:**

Operations expenses are projected based on current expenses and strategic initiatives that are deemed to be both probable and estimable.

**Investment Management Fees**

**Global Equities**

Global Equities is comprised of Domestic Equity, International Equity and Emerging Markets Equity. PRIM's target asset allocation for Global Equities is:

Domestic Equity:	18.0%
International Equities:	16.0%
Emerging Markets Equities:	<u>6.0%</u>
<b>Global Equities:</b>	<b>40.0%</b>

*Domestic Equity*

The total Domestic Equity fee budget of \$10.2 million, increases \$1.1 million, or 11.8%, in FY 2018 due to an increase in AUM.

Manager	Mandate	Active/ Passive	Fee Type
<b>SSgA</b>	S&P 500 Index	Passive	Net Asset Value (NAV)
<b>SSgA</b>	Russell 2500 Index	Passive	NAV
<b>Frontier</b>	Russell 2000 Value	Active	NAV
<b>Huber</b>	Russell 2000 Value	Active	NAV
<b>Riverbridge</b>	Russell 2500 Growth	Active	NAV
<b>Summit Creek</b>	Russell 2000 Growth	Active	NAV

*International Equity*

The total International Equity fee budget of \$24.0 million, increases by \$5.4 million, or 29.2%, in FY 2018 due primarily to the new allocation to International Small Cap Equities.

Manager	Mandate	Active/ Passive	Fee Type
<b>SSgA</b>	Custom World-Ex US Index	Passive	NAV
<b>Marathon</b>	Custom MSCI EAFE	Active	NAV
<b>Baillie Gifford</b>	Custom MSCI EAFE	Active	NAV
<b>Mondrian</b>	Custom MSCI EAFE	Active	NAV
<b>The FIS Group</b>	Custom MSCI EAFE – Emerging Managers	Active	NAV
<b>Acadian</b>	Custom MSCI EAFE – Small Cap	Active	NAV
<b>AQR</b>	Custom MSCI EAFE – Small Cap	Active	NAV
<b>LMCG</b>	Custom MSCI EAFE – Small Cap	Active	NAV

<b>Strategic Global Advisors</b>	Custom MSCI EAFE – Small Cap	Active	NAV
<b>TimesSquare</b>	Custom MSCI EAFE – Small Cap	Active	NAV

#### Emerging Markets Equity

The total Emerging Markets Equity fee budget of \$19.6 million, increases \$1.9 million, or 10.7%, in FY 2018 due to an increase in AUM.

Manager	Mandate	Active/ Passive	Fee Type
<b>SSgA</b>	Custom MSCI EM IMI Index	Passive	NAV
<b>Acadian</b>	EM Small Cap	Active	NAV
<b>Wasatch</b>	EM Small Cap	Active	NAV
<b>Acadian</b>	Frontier	Active	NAV
<b>AQR</b>	Emerging Markets	Active	Performance
<b>Baillie Gifford</b>	Emerging Markets	Active	NAV
<b>City of London</b>	Frontier	Active	NAV
<b>Driehaus</b>	Emerging Markets	Active	NAV
<b>Harding Loevner</b>	Emerging Markets	Active	NAV
<b>Pzena</b>	Emerging Markets	Active	NAV

#### Core Fixed Income

The total Core Fixed Income fee budget of \$5.9 million, decreases \$398,000, or 6.3%, in FY 2018 due to a decrease in AUM.

Manager	Mandate	Active/ Passive	Fee Type
<b>BlackRock</b>	BA Index	Passive	NAV
<b>BlackRock</b>	TIPS	Passive	NAV
<b>BlackRock</b>	ILB	Active	NAV
<b>BlackRock</b>	STRIPS	Passive	NAV
<b>PIMCO</b>	Core FI	Active	Funded and Performance
<b>Loomis Sayles</b>	Core FI	Active	NAV
<b>Community Capital</b>	Core FI - ETI	Active	NAV
<b>AFL-CIO</b>	Core FI - ETI	Active	Commingled Fund – NAV
<b>Access Capital</b>	Core FI - ETI	Active	Commingled Fund – NAV
<b>Progress</b>	Core FI – Emerging Managers	Active	NAV

**Value-Added Fixed Income**

The total Value-Added Fixed Income fee budget of \$45.1 million, increases by \$3.1 million, or 7.4%, in FY 2018, due primarily to asset allocation changes. Partnership level management fees for Distressed Debt range from 1.0% to 2.5% of capital commitments.

Manager	Mandate	Active/ Passive	Fee Type
<b>Fidelity</b>	HY Bonds	Active	NAV
<b>Loomis Sayles</b>	HY Bonds	Active	NAV
<b>Shenkman</b>	HY Bonds	Active	NAV
<b>Eaton Vance</b>	Bank Loans	Active	Commingled Fund – NAV
<b>Voya</b>	Bank Loans	Active	Commingled Fund – NAV
<b>PIMCO</b>	EM Debt Hard Currency	Active	NAV
<b>Ashmore</b>	EM Debt Hard Currency	Active	Commingled Fund – NAV
<b>Investec</b>	EM Debt Local Currency	Active	NAV
<b>Pictet</b>	EM Debt Local Currency	Active	NAV
<b>Stone Harbor</b>	EM Debt Local Currency	Active	NAV
<b>Various Managers</b>	Distressed Debt	Active	Commingled Funds – Committed Capital
<b>Potential Various Managers</b>	Other Credit Strategies	Active	NAV

**Real Estate**

*Real Estate Investment Trusts (REITs)*

The total REITs fee budget of \$5.9 million, decreases by \$83,000, or 1.4%, in FY 2018, due to reallocations among managers.

Manager	Mandate	Active/ Passive	Fee Type
<b>Invesco</b>	Global REITs	Active	NAV
<b>CenterSquare</b>	Global REITs	Active	NAV
<b>Brookfield</b>	Global REITs	Active	NAV
<b>Presima</b>	Global REITs	Active	NAV

**Core Strategy**

The total Core Strategy fee budget of \$20.1 million, decreases by \$288,000, or 1.4%, in FY 2018 due to a slight decrease in NAV.

Manager	Mandate	Active/ Passive	Fee Type
<b>AEW</b>	Core Real Estate	Active	Funded Amount
<b>INVESCO</b>	Core Real Estate	Active	Funded Amount
<b>JP Morgan</b>	Core Real Estate	Active	Funded Amount
<b>LaSalle</b>	Core Real Estate	Active	Funded Amount

**Non – Core Strategy**

The total Non - Core Strategy fee budget of \$4.3 million, increases by \$451,000, or 11.8%, in FY 2018 due primarily to the new industrial allocation and the aging of existing Non-Core investments.

Manager	Mandate	Active/ Passive	Fee Type
<b>Various Managers</b>	Non-Core	Active	Generally - Committed Capital
<b>New Boston Fund</b>	Non-Core - ETI	Active	Cost of Remaining Investments

**Timberland**

The total Timberland fee budget of \$5.5 million, increases by \$870,000, or 18.8%, in FY 2018 due to an increase in NAV.

Manager	Mandate	Active/ Passive	Fee Type
<b>Forest Investment Advisors</b>	Timberland	Active	NAV
<b>Campbell Global</b>	Timberland	Active	NAV

**Private Equity**

The total Private Equity fee budget of \$110.0 million, increases by \$4.6 million, or 4.3%, in FY 2018. Private Equity management fees are typically 1.0% to 2.5% of committed capital during the active investment period, and become a percentage of cost of remaining investments later in the life of the partnership.

Manager	Mandate	Active/ Passive	Fee Type
<b>Various Managers</b>	Private Equity	Active	Generally Committed Capital

**Portfolio Completion Strategies (PCS)**

The total Portfolio Completion Strategies fee budget of \$78.1 million, decreases by \$7.0 million, or 8.2%, in FY 2018, due primarily to continued successful fee negotiations with new and existing hedge funds and PCS managers. PCS and Hedge Fund management fees are typically 1.0% to 2.0% of the NAV of the partnership.

Manager	Mandate	Active/ Passive	Fee Type
Various Managers	PCS and Hedge Funds	Active	Generally NAV

**Overlay, Foreign Currency and Other**

The total Overlay, Foreign Currency and Other fee budget of \$3.8 million, decreases by \$404,000, or 9.7%, in FY 2018 due to the decreasing AUM in liquidating portfolios.

Manager	Mandate	Active/ Passive	Fee Type
Parametric	Overlay	Active	NAV
Russell	Foreign Currency Trading	Active	NAV
Various Managers	Portable Alpha – Wind-Down	Active	Generally NAV
Various Managers	Private Natural Resources Wind-Down	Active	Cost of Remaining Investments

### **Third-Party Service Provider Fees**

The FY 2018 budget for Third-Party Service Provider Fees (including Custody and Advisors as well as Audit & Tax, Legal, Governance and Risk Measurement & Investment Analytics) of \$13.5 million increases by \$2.4 million, or 21.6%. The increase is driven primarily by the continued expansion of PRIM’s managed account initiative. Costs in this category are the result of competitively bid contracts.

#### **Custodian**

BNY Mellon currently provides the PRIT Fund with global custody, accounting and performance measurement services. BNY Mellon provides custody for PRIT assets, records all investment transactions for the PRIT Fund, and provides recordkeeping for all participant activity for member retirement systems, including participant performance analysis.

#### **Advisory Services – General**

PRIM employs several professional advisors to provide comprehensive advisory services to staff and the Board including recommendations on asset allocation, investment analysis, manager selection and oversight, communications, governance and compensation policies.

Advisor Name	Advisor Role
NEPC, LLC	Asset Allocation
Callan Associates	Public Markets
Institutional Shareholder Services (ISS)	Restricted Securities Lists
O’Neill and Associates	Communications
FX Transparency	Foreign Currency Cost Analysis
Cortex Research	Governance
McLagan	Compensation

#### **Advisory Services - Real Estate & Timberlands**

The FY 2018 budget reflects the contractual fees for Real Estate and Timberland consulting, financial reporting costs associated with the real estate leverage program, expenses related to potential direct investments and other. The current consulting contract runs through June 2017. An RFP is in process for consultants starting FY 2018.

#### **Advisory Services - Private Equity**

Hamilton Lane provides advisory, legal services, monthly accounting, and detailed performance reporting for the PRIT Fund's Private Equity program.

**Advisory Services – Portfolio Completion Strategies**

The FY 2018 budget reflects the contractual fees for Aberdeen and HedgeMark. Aberdeen is PRIM’s hedge fund advisor and HedgeMark is PRIM’s managed account platform service provider. Funds for a possible PCS advisor are also factored in to the FY 2018 budget.

**Audit & Tax**

KPMG provides annual financial statement audits for the PRIT Fund and PRIM. KPMG also performs an annual examination of the internal controls surrounding PRIM's procurement of investment managers and other third-party service providers and reviews the PRIT Fund's benchmark and performance calculations in accordance with the guidance contained in the AICPA Statement on Standards for Attestation Engagements.

KPMG also provides audit services for PRIM’s Real Estate, Timberland, and certain PCS investments. The audit fees for this work are charged to the underlying investments and are not included in the PRIM budget.

Deloitte provides PRIM with tax advisory services. Real Estate and Timberland property level tax return preparation fees and tax advisory fees are charged to the underlying properties and, as such, are not a part of the PRIM budget. However, the general tax advisory work is paid directly by PRIM.

**Legal**

PRIM retains outside counsel as necessary to provide legal services to PRIM. Outside legal expenditures can be difficult to predict and have historically fluctuated significantly based on the nature of activities of the PRIT Fund and PRIM.

**Governance**

Institutional Shareholder Services (ISS) provides a comprehensive analysis of proxy issues and vote recommendations for the PRIT Fund's domestic and international securities in accordance with PRIM's custom proxy guidelines. The governance budget also includes annual membership fees associated with participation in the Council of Institutional Investors and anticipated costs for hosting PRIM Board Education sessions.

**Risk Measurement and Investment Analytics**

PRIM utilizes MSCI’s BarraOne, a single platform multi-asset class investment risk measurement tool. Other investment analytical tools include FactSet, eVestment, Bloomberg, and others.

### **Operations**

The FY 2018 Operations budget of \$13.1 million increases \$1.9 million or, 17%, reflecting primarily an increase in three areas; Occupancy, due to expansion on the 3<sup>rd</sup> floor; Computer, due to software updates; and Compensation, due to new PRIM staff positions.

#### **Compensation & Employee Benefits**

The FY 2018 Compensation budget includes allocations for additional positions and potential compensation increases for existing employees based upon the December 2015 Board-approved PRIM salary bands.

Per PRIM's Compensation Philosophy, to ensure PRIM remains competitive with market trends, a comprehensive compensation level analysis was conducted in 2015 by PRIM's compensation consultant, McLagan. Based upon this compensation level analysis, the PRIM Board approved new salary bands in December 2015. To make incremental progress within these salary bands we have accordingly included allocations in the FY 2018 budget for potential base salary increases and for potential promotions (a 4.0% year-over-year increase). The budget for employee benefits consists primarily of dental, vision, and disability costs for employees as well as a contingency to cover potential unemployment claims since PRIM does not participate in the state's unemployment insurance pool. The budget also includes estimated Medicare taxes for all employees.

FY 2018 Budget Compensation	\$ 9,780,000
FY 2017 Budget Compensation	\$ 8,154,000
Year-over-year change	\$ 1,626,000
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New positions and benefits increase	\$ 1,300,000
Potential compensation increases	\$ 326,000
Year-over-year change	\$ 1,626,000

#### **Occupancy**

The occupancy budget includes expenses associated with office space, including rent, maintenance charges, and utilities.

PRIM's office building at 84 State Street is owned by PRIT Core Realty Holdings LLC and is managed by INVESCO. PRIM occupies the entire second floor of the building (10,794 rentable square feet) and in FY 2018 will also occupy the entire third floor (10,756 rentable square feet). The increase in Occupancy reflects the expansion on the third floor.

**Insurance**

The budget includes insurance premium costs for fiduciary liability, commercial crime, employment practices, commercial property, and workers' compensation policies. PRIM's current insurance policies are summarized in the following table:

Policy Type	Coverage	Deductible
<b>Fiduciary Liability</b>	\$15,000,000	\$ 250,000
<b>Commercial Crime</b>	\$10,000,000	\$ 100,000
<b>Employment Practices Liability</b>	\$ 1,000,000	\$ 50,000
<b>Workers Compensation</b>	\$ 1,000,000	N/A
<b>Commercial General Liability</b>	\$ 1,000,000	N/A
<b>Commercial Property</b>	\$ 617,100	\$ 250
<b>Umbrella Liability</b>	\$ 4,000,000	\$ 10,000
<b>Hired Auto</b>	\$ 1,000,000	N/A

**General Office Expenses**

This budget category includes all expenses relating to office operations including postage, office supplies, copying, printing, telephone expenses, temporary labor and office infrastructure.

**Computer and MIS Expenses**

The budget for Computer & MIS Expenses increases by 22.9% from the prior year due to Hardware and Software planned upgrades in FY 2018. This category also includes offsite data backup, licensing, hardware, and equipment for current and new staff. The Support & Development category includes maintenance, support, and enhancement of PRIM's core IT infrastructure and applications at both PRIM's primary and backup sites.

**Due Diligence Travel, Professional Development & Dues and Subscriptions**

This budget category represents costs associated with due diligence travel, ongoing professional education of PRIM Board members and staff, including related travel expenses and dues & subscriptions, which includes membership dues in professional associations and subscription costs for professional journals, investment industry publications, and newspaper subscriptions. The budget includes tuition reimbursement charges (e.g., for approved CFA and higher education courses), required continuing education costs for maintaining professional licenses (e.g., CPA license), and attendance at professional conferences and seminars. PRIM is committed to supporting its Board members and staff in their pursuit of professional development.

**Client Service**

Currently, 94 of the Commonwealth's 104 retirement systems invest in the PRIT Fund. The client service budget allows for PRIM-sponsored client conferences and on-site client meetings. This budget includes the cost of traveling to client meetings, conferences, and related activities. Additionally, the costs associated with printing and binding the PRIT Fund's Comprehensive Annual Financial Report is included in this budget.

**Board Member Elections**

The PRIM Board consists of nine members, two of whom are elected, one by active and retired Massachusetts teachers and the other by active and retired Massachusetts state employees. PRIM administers and pays the expenses associated with the election. Elections are held every three years with the next election occurring in FY 2020.

## **Appendix I.**

### **Key Assumptions**

#### **Estimated Assets Under Management and Asset Allocation in FY 2018**

Many of the budgeted expenses for FY 2018 are based upon the estimated average assets under management and the estimated average actual asset allocation.

The estimated average assets under management for FY 2018 is \$64 billion. To estimate PRIM's FY 2018 average assets under management, the beginning AUM of FY 2018 (July 1, 2017) was estimated to equal the PRIT Fund assets under management as of January 31, 2017, the most current and available information when creating this budget. The ending AUM of FY 2018 (June 30, 2018) was estimated to increase by NEPC's expected 5-7-year return forecast of 6.8%. The estimated average AUM of FY 2018 is the average of the estimated beginning and ending AUM, which approximated \$64 billion. Please note that future investment performance is not predictable and actual performance will vary.

The estimated asset allocation in FY 2018 is based on the actual asset allocation of the PRIT Fund as of January 31, 2017 and projected future allocation changes. Projected allocation changes include an increase in Private Equity, Bank Loans, and TIPS and a decrease in STRIPS, Emerging Markets Debt Local Currency, and Distressed Debt. Additionally, the FY 2018 budget estimates investing in Other Credit Strategies, a new asset allocation.

#### **Performance, Incentive, or Carried Interest Fees**

No investment performance, incentive, or carried interest fees are budgeted in FY 2018. These fees vary dramatically from year-to-year and are not predictable.