



Investment Option Performance Results and Statistics

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Before directing retirement funds to a separate account, investors should carefully consider the investment objectives, risks, charges and expenses of the separate account as well as their individual risk tolerance, time horizon and goals. For additional information contact us at 1-800-547-7754 or by visiting principal.com.



Portfolio Review

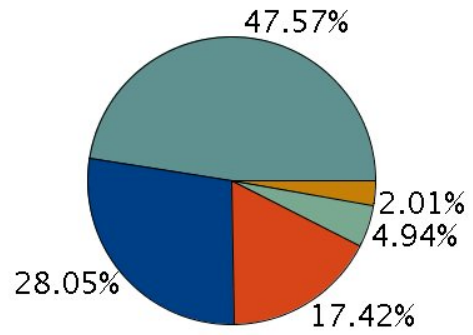
Investment Review - Allocation 10/31/2018 through 10/31/2018		
<i>Inv Manager or Sub-Advisor</i>	Beginning Balance	Ending Balance
Investment Option		
Large U.S. Equity		
Large Value		
<i>Principal Global Investors</i> Equity Income Separate Account-Z ^{3, 11, 36}	\$6,442,540	\$6,442,540
Large Blend		
<i>Principal Global Investors</i> LargeCap S&P 500 Index Separate Account-Z ^{2, 8, 22, 34, 44}	\$2,714,127	\$2,714,127
Large Growth		
<i>T. Rowe Price/Brown Advisory</i> LargeCap Growth I Separate Account-Z ^{3, 16, 35}	\$6,321,298	\$6,321,298
Small/Mid U.S. Equity		
Mid Cap Value		
<i>LA Capital Mgmt/Victory</i> MidCap Value I Separate Account-Z ^{1, 3, 16, 31, 35}	\$912,451	\$912,451
Mid Cap Growth		
<i>Robert Baird/Eagle Asset Mgmt</i> MidCap Growth III Separate Account-Z ^{1, 3, 16, 35, 37}	\$883,503	\$883,503
Small Value		
<i>Vaughan Nelson/LA Capital/H&W</i> SmallCap Value II Separate Account-Z ^{1, 3, 16, 35, 41}	\$472,056	\$472,056
Small Growth		
<i>AB/Brown/Emerald</i> SmallCap Growth I Separate Account-Z ^{1, 3, 16, 32, 35}	\$457,908	\$457,908
International Equity		
Diversified Emerging Markets		
<i>Principal Global Investors</i> International Emerging Markets Separate Account-Z ^{4, 34}	\$1,956,894	\$1,956,894
Foreign Large Value		
<i>Causeway / Barrow Hanley</i> Overseas Separate Account-Z ^{3, 4, 16, 35}	\$6,260,852	\$6,260,852
Foreign Small/Mid Blend		
<i>Principal Global Investors</i> International SmallCap Separate Account-Z ^{1, 4, 34, 43}	\$1,397,554	\$1,397,554

Investment Review - Allocation 10/31/2018 through 10/31/2018		
<i>Inv Manager or Sub-Advisor</i>	Beginning Balance	Ending Balance
Balanced/Asset Allocation		
World Allocation		
<i>Multiple Sub-Advisors</i>		
Diversified Real Asset Separate Account-Z ^{3, 11, 18, 22, 35}	\$1,111,250	\$1,111,250
Fixed Income		
High Yield Bond		
<i>Mellon/DDJ/Post</i>		
High Yield I Separate Account-Z ^{3, 5, 13, 14, 35, 38}	\$2,299,270	\$2,299,270
Intermediate Core		
<i>Mellon Investments Corp.</i>		
Bond Market Index Separate Account-Z ^{2, 13, 14, 35}	\$5,120,514	\$5,120,514
<i>Principal Global Investors</i>		
Core Plus Bond Separate Account-Z ^{13, 14, 22, 30, 34}	\$15,314,081	\$15,314,081
Owned Real Estate		
<i>Principal Real Estate Inv</i>		
U.S. Property Separate Account-Z ^{19, 34}	\$3,518,278	\$3,518,278
TOTAL	\$55,182,576	\$55,182,576

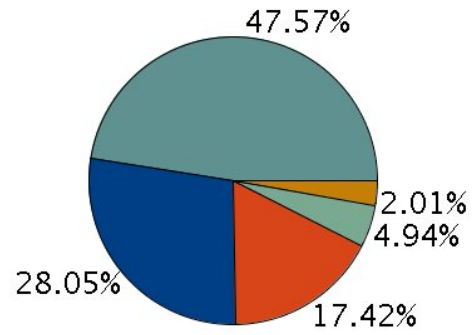
Please see important information at the end of this presentation.

Allocation of Assets

Beginning % As Of 10/31/2018



Ending % As Of 10/31/2018



- Fixed Income
- Large U.S. Equity
- International Equity
- Small/Mid U.S. Equity
- Balanced/Asset Allocation



Investment Performance

Investment results shown represent historical performance and do not guarantee future results. Investment returns and principal values fluctuate with changes in interest rates and other market conditions so the value, when redeemed may be worth more or less than original costs. Current performance may be lower or higher than the performance data shown.

In situations where the net and gross total investment expense figures are different, the mutual fund or underlying fund in which a Separate Account invests has waived/capped a portion of its management fees through the date displayed in the Waiver Expiration Date or Contractual Cap Expiration Date column. Differences may also be shown due to the fund family choosing to pay certain expenses that would normally be payable by the fund. Returns displayed are always based on net total investment expense.

For more performance information, including most recent month-end performance, visit www.principal.com, contact your representative of the Principal Financial Group® (The Principal®), or call our participant contact center at 1-800-547-7754.

Average Annual Total Returns through 06/30/2019								
Inv Manager or Sub-Advisor Investment Option	1 yr.	3 yr.	5 yr.	10 yr.	Since Inception	Inception Date	Total Inv. Exp. Net / Gross	Contractual Cap/Waiver Expire Date
Large U.S. Equity								
Large Value								
Principal Global Investors Equity Income Separate Account-Z ^{3, 11, 36}	11.64	13.30	9.39	13.93	9.06	06/30/2009	0.30 / 0.31	02/29/2020 -
Large Blend								
Principal Global Investors LargeCap S&P 500 Index Separate Account-Z ^{2, 8, 22, 34, 44}	10.35	14.11	10.63	14.62	9.66	01/01/1990	0.05 / 0.05	- -
Large Growth								
T. Rowe Price/Brown Advisory LargeCap Growth I Separate Account-Z ^{3, 16, 35}	13.47	21.30	14.55	17.28	7.38	12/29/2000	0.38 / 0.40	02/29/2020 02/29/2020
Small/Mid U.S. Equity								
Mid Cap Value								
LA Capital Mgmt/Victory MidCap Value I Separate Account-Z ^{1, 3, 16, 31, 35}	4.96	10.17	6.38	13.87	8.36	07/01/1999	0.49 / 0.51	02/28/2021 02/28/2021
Mid Cap Growth								
Robert Baird/Eagle Asset Mgmt MidCap Growth III Separate Account-Z ^{1, 3, 16, 35, 37}	13.61	16.13	10.30	14.74	7.31	10/28/1999	0.64 / 0.72	- 02/29/2020
Small Value								
Vaughan Nelson/LA Capital/H&W SmallCap Value II Separate Account-Z ^{1, 3, 16, 35, 41}	-4.26	8.77	5.43	13.36	7.94	06/01/2004	0.73 / 0.77	02/29/2020 02/29/2020
Small Growth								
AB/Brown/Emerald SmallCap Growth I Separate Account-Z ^{1, 3, 16, 32, 35}	9.67	19.97	11.86	17.22	7.28	12/29/2000	0.74 / 0.83	02/29/2020 02/29/2020

Average Annual Total Returns through 06/30/2019								
Inv Manager or Sub-Advisor Investment Option	1 yr.	3 yr.	5 yr.	10 yr.	Since Inception	Inception Date	Total Inv. Exp. Net / Gross	Contractual Cap/Waiver Expire Date
International Equity								
Diversified Emerging Markets								
Principal Global Investors International Emerging Markets Separate Account-Z ^{4, 34}	-5.77	8.90	1.68	5.84	8.10	01/01/1995	0.72 / 0.72	- -
Foreign Large Value								
Causeway / Barrow Hanley Overseas Separate Account-Z ^{3, 4, 16, 35}	-3.81	7.61	0.53	6.55	5.23	09/30/2008	0.66 / 0.73	- 02/29/2020
Foreign Small/Mid Blend								
Principal Global Investors International SmallCap Separate Account-Z ^{1, 4, 34, 43}	-4.92	9.45	4.89	11.10	11.05	01/01/1995	0.73 / 0.73	- -
Balanced/Asset Allocation								
World Allocation								
Multiple Sub-Advisors Diversified Real Asset Separate Account-Z ^{3, 11, 18, 22, 35}	0.88	4.38	-0.35	-	4.11	12/31/2010	0.56 / 0.59	12/30/2019 12/30/2019
Short-Term Fixed Income								
Short Term Bond								
Principal Global Investors LDI Short Duration Separate Account-Z ^{13, 14, 35, 42}	5.71	2.09	2.04	2.61	2.86	07/31/2012	0.24 / 0.24	- -
Money Market								
Principal Global Investors Liquid Assets Separate Account-Z ^{6, 21, 33, 34}	2.24	1.40	0.88	0.48	4.62	12/10/1980	0.18 / 0.18	- -
SEC 7-Day Yield as of 06/30/2019 is 2.30% ^{***}	-	-	-	-	-			
Fixed Income								
High Yield Bond								
Mellon/DDJ/Post High Yield I Separate Account-Z ^{3, 5, 13, 14, 35, 38}	5.75	6.00	3.57	8.34	6.95	12/31/2004	0.49 / 0.51	- 02/28/2022
Intermediate Core								
Mellon Investments Corp. Bond Market Index Separate Account-Z ^{2, 13, 14, 35}	7.68	2.07	2.70	-	3.38	12/30/2009	0.16 / 0.16	- -
General Investment Account ⁺	-	-	-	-	-	06/15/1941		- -
Intermediate Core-Plus								
Principal Global Investors Core Plus Bond Separate Account-Z ^{13, 14, 22, 30, 34}	8.06	3.21	3.24	5.89	7.55	02/01/1983	0.26 / 0.26	- -
Long Government								
Barrow Hanley LDI Extended Duration Separate Account-Z ^{13, 14, 28, 35}	12.86	0.42	6.91	8.70	8.60	07/31/2012	0.32 / 0.32	- -
Owned Real Estate								
Principal Real Estate Inv U.S. Property Separate Account-Z ^{19, 34}	7.08	8.19	10.05	9.77	7.23	01/01/1982	0.79 / 0.79	- -

Average Annual Total Returns through 06/30/2019								
<i>Inv Manager or Sub-Advisor Investment Option</i>	1 yr.	3 yr.	5 yr.	10 yr.	Since Inception	Inception Date	Total Inv. Exp. Net / Gross	Contractual Cap/Waiver Expire Date
Corporate Bond								
Principal Global Investors LDI Intermediate Duration Separate Account-Z 13, 14, 36	11.08	3.66	4.32	-	4.56	07/31/2012	0.23 / 0.23	- -
Principal Global Investors LDI Long Duration Separate Account-Z ^{13, 14, 23,} 34	14.74	4.49	5.57	8.10	6.52	07/29/2005	0.21 / 0.21	- -

Must be accompanied by important information on the following page.

Important Information

Sub-advised Investment Options include Separate Accounts available through a group annuity contract with the Principal Life Insurance Company. Insurance products and plan administrative services, if applicable, are provided by Principal Life Insurance Company a member of the Principal Financial Group, Des Moines, IA 50392. See the fact sheet for the full name of the Separate Account. Certain investment options may not be available in all states or U.S. commonwealths. Principal Life Insurance Company reserves the right to defer payments or transfers from Principal Life Separate Accounts as described in the group annuity contracts providing access to the Separate Accounts or as required by applicable law. Such deferment will be based on factors that may include situations such as: unstable or disorderly financial markets; investment conditions which do not allow for orderly investment transactions; or investment, liquidity, and other risks inherent in real estate (such as those associated with general and local economic conditions). If you elect to allocate funds to a Separate Account, you may not be able to immediately withdraw them.

+ *This is not a sub-advised Investment option. Guarantees are backed by all the assets in the Principal Life general account.*

Returns shown for periods of less than one year are not annualized. All returns displayed here are after Total Investment Expense of the investment option.

**** The 7-Day Yield % more closely reflects the current earnings of this money market investment option than the total return displayed.*

Separate Accounts are made available through a group annuity contract with the Principal Life Insurance Company, Des Moines, IA 50392. They may not be available in all states. Ask your representative for more details.

Before directing retirement funds to a separate account, investors should carefully consider the investment objectives, risks, charges and expenses of the separate account as well as their individual risk tolerance, time horizon and goals. For additional information contact us at 1-800-547-7754 or by visiting principal.com.

Investment options are subject to investment risk. Shares or unit values will fluctuate and investments, when redeemed, may be worth more or less than their original cost. This does not apply, however, to the guaranteed portions of group annuity contracts issued by Principal Life that constitute guaranteed benefit policies as defined in ERISA §401(b)(2)(B).

For a Separate Account investment option, Total Investment Expense gross equals the sum of these expenses: (a) the amount of money, expressed as a percentage, deducted for the costs of managing a separate account where applicable, fees for plan administrative services and agent compensation, plus (b) if the separate account invests in an underlying mutual fund, the total fund operating expenses of the underlying mutual fund, plus (c) if an underlying mutual funds invests in other mutual funds, the weighted-average management fee of those other mutual funds, as listed in the most recent prospectus. The actual Total Investment Expense may change if an underlying mutual fund's allocation of assets to other mutual funds changes.

Any operating expenses of a mutual fund or underlying mutual fund that are part of net Total Investment Expense are obtained from the mutual fund's most recent prospectus. The operating expenses shown as part of net Total Investment Expense include voluntary expense limits and fee credit.

Investment Options may charge a short-term trading or redemption fee to protect the interests of long-term Contractholders.

Compliance number: 686356-122018

- 1. Small-cap and mid-cap investment options are subject to more fluctuation in value and may have additional risks than other investment options with stocks of larger, more stable companies.*
- 2. Each index based investment option is invested in the stocks or bonds of the index it tracks. Performance of indexes reflects the unmanaged results for the market segment the selected stocks or bonds represent. There is no assurance an index based investment option will match the performance of the index tracked.*
- 3. This Separate Account invests solely in the least expensive share class of the Principal Funds. All voting rights associated with ownership of shares in the mutual fund are the rights of the Separate Account, not of contract holders investing in the Separate Account. For further information on the underlying mutual fund, see the prospectus of the fund.*

4. *International and global investment options are subject to additional risk due to fluctuating exchange rates, foreign accounting and financial policies, and other economic and political environments.*
5. *High yield investment options are subject to greater credit risk and volatility that is associated with high yield bonds.*
6. *Liquid asset investment options are not insured or guaranteed by the Federal Deposit Insurance Corporation (FDIC), or any other government agency. Although the investment option may seek to preserve the value of an investment, it is possible to lose money by investing in the portfolio.*
8. *S&P 500 is a trademark of S&P Global and is used under license. The product is not sponsored, endorsed, sold or promoted by Standard & Poor's and Standard & Poor's makes no representation regarding the advisability of investing in the product.*
11. *These calculated returns reflect the historical performance of the oldest share class of the fund, adjusted to reflect a portion of the fees and expenses of this share class. For time periods prior to inception date of the fund, predecessor performance is reflected. Please see the fund's prospectus for more information on specific expenses, and the fund's most recent shareholder report for actual date of first sale. Expenses are deducted from income earned by the fund. As a result, dividends and investment results will differ for each share class.*
13. *Fixed-income investment options are subject to interest rate risk, and their value will decline as interest rates rise. Neither the principal of bond investment options nor their yields are guaranteed by the U.S. government.*
14. *Fixed-income and asset allocation investment options that invest in mortgage securities are subject to increased risk due to real estate exposure.*
16. *This Separate Account invests solely in the least expensive share class of a mutual fund (Fund) from Principal Funds, Inc. The investment manager of the Fund, Principal Global Investors, invests between 10% and 40% of the Fund's assets in common stocks in an attempt to match or exceed the performance of the Fund's benchmark index for performance.*
18. *Fixed-income investment options are subject to interest rate risk, and their value will decline as interest rates rise. Neither the principal of bond investment options nor their yields are guaranteed by the U.S. or any other government entity. Concentrating investments in natural resources industries can be affected significantly by events relating to those industries, such as variations in the commodities markets, weather, disease, embargoes, international, political and economic developments, the success of exploration projects, tax and other government regulations and other factors. Investment in derivatives entails specific risks relating to liquidity, leverage and credit that may reduce returns and/or increase volatility. REIT securities are subject to risk factors associated with the real estate industry and tax factors of REIT registration. An MLP that invests in a particular industry (e.g., oil and gas) may be harmed by detrimental economic events within that industry. As partnerships, MLPs may be subject to less regulation (and less protection for investors) under state laws than corporations. In addition, MLPs may be subject to state taxation in certain jurisdictions, which may reduce the amount of income paid by an MLP to its investors.*
19. *This investment option is subject to investment and liquidity risk and other risks inherent in real estate such as those associated with general and local economic conditions. If you elect to contribute funds into the U.S. Property Separate Account, withdrawals may be delayed for up to 3 years.*
21. *The net return experienced may be negative if the costs to maintain and operate the Liquid Assets Separate Account exceed returns. Participants may also see negative returns if plan expenses, if applicable, are netted or deducted from their accounts.*
22. *The risks associated with derivative investments include that the underlying security, interest rate, market index, or other financial asset will not move in the direction the Investment Adviser and/or Sub-Advisor anticipated, the possibility that there may be no liquid secondary market, the risk that adverse price movements in an instrument can result in a loss substantially greater than a fund's initial investment, the possibility that the counterparty may fail to perform its obligations; and the inability to close out certain hedged positions to avoid adverse tax consequences.*
23. *Formerly known as Ultra Long Bond Separate Account.*
28. *Effective July 6, 2015, this portfolio is sub-advised by Barrow Hanley. Prior to July 6, 2015, the portfolio was sub-advised by PIMCO. The portfolio has had various sub-advisors since its inception. Performance results displayed reflect all sub-advisors managing this portfolio during the time periods displayed.*
30. *Formerly known as Bond and Mortgage Separate Account.*

31. Effective June 30, 2016, this portfolio is sub-advised by LA Capital and Victory Capital. Prior to June 30, 2016, the portfolio was sub-advised by Goldman Sachs and LA Capital. The portfolio has had various sub-advisors since its inception. Performance results displayed reflect all sub-advisors managing this portfolio during the time periods displayed.
32. Effective September 30, 2016, this portfolio is sub-advised by AB LP, Brown Advisory and Emerald Advisors, LLC. Prior to September 30, 2016, the portfolio was sub-advised by AB LP, Brown Advisory, Emerald Advisors, LLC. and Columbus Circle Investors. The portfolio has had various sub-advisors since its inception. Performance results displayed reflect all sub-advisors managing this portfolio during the time periods displayed.
33. Prior to January 1, 2017, the name of this investment option was Principal Money Market Separate Account.
34. Investment manager/sub-advisor means either the Investment Advisor or Sub-Advisor to the investment option or the underlying asset(s). Principal Life Insurance Company is the Investment Manager as defined by ERISA, with regard to the assets of the Separate Accounts. Principal Global Investors is a member of the Principal Financial Group.
35. Investment manager/sub-advisor means either the Investment Advisor or Sub-Advisor to the investment option or the underlying asset(s).
36. Investment manager/sub-advisor means either the Investment Advisor or Sub-Advisor to the investment option or the underlying asset(s). Principal Life Insurance Company is the Investment Manager as defined by ERISA, with regard to the assets of the Separate Accounts. Principal Global Investors is a member of the Principal Financial Group. Edge Asset Management is an internal investment boutique of Principal Global Investors.
37. Effective June 30, 2017, this portfolio is sub-advised by Robert Baird and Eagle Asset Management. Prior to June 30, 2017, the portfolio was sub-advised by Robert Baird and William Blair. The portfolio has had various sub-advisors since its inception. Performance results displayed reflect all sub-advisors managing this portfolio during the time periods displayed.
38. Effective October 2, 2017, this portfolio is sub-advised by Neuberger Berman, Mellon and DDJ. Prior to October 2, 2017, the portfolio was sub-advised by JP Morgan and Neuberger Berman. The portfolio has had various sub-advisors since its inception. Performance results displayed reflect all sub-advisors managing this portfolio during the time periods displayed.
41. Effective June 29, 2018, this portfolio is sub-advised by Vaughn Nelson, LA Capital and Hotchkis & Wiley. Prior to June 29, 2018, the portfolio was sub-advised by DFA, Vaughn Nelson and LA Capital. The portfolio has had various sub-advisors since its inception. Performance results displayed reflect all sub-advisors managing this portfolio during the time periods displayed.
42. Effective September 21, 2018, this portfolio is sub-advised by Principal Global Investors. Prior to September 21, 2018, the portfolio was sub-advised by DFA. The portfolio has had various sub-advisors since its inception. Performance results displayed reflect all sub-advisors managing this portfolio during the time periods displayed.
43. Effective September 21, 2018, this portfolio is sub-advised by Principal Global Investors. Prior to September 21, 2018, the portfolio was sub-advised by DFA and Principal Global Investors. The portfolio has had various sub-advisors since its inception. Performance results displayed reflect all sub-advisors managing this portfolio during the time periods displayed.
44. For the NE Rate level, Principal Life Insurance Company (Principal Life) 1. pays the Sub-Adviser the management fee and compensation for services provided to the separate account, and 2. pays the separate account the expected operating expenses proportionally attributable to the NE Rate level in the maintenance of the Separate Account. Operating expenses may be greater or less than expected in any given period. The NE Rate level is only available to Contract holders who meet certain requirements and select certain additional products and services made available by Principal Life or an affiliate. Ask your Principal representative for additional details.

Glossary of Terms

7 Day Yield - The 7-Day Yield % more closely reflects the current earnings of this money market investment option than the total return displayed.

Total Investment Expense Gross - The current maximum expense ratio, as a percentage of assets that can be applied to this investment option.

Total Investment Expense Net - You will be responsible for this expense and it will be automatically taken prior to calculating performance. Total Investment Expense Net is the Total Investment Expense Gross expense ratio less any fee waivers, reimbursements or caps, if applicable. The expenses ratio, as a percentage of net assets, includes applicable operating expenses, management fees, including 12b-1 fees, and administrative fees.

Expense Waiver - The investment advisor can waive a portion of their management fees resulting in a lower net investment expense ratio.

Contractual Cap - A contractual agreement between the investment advisor and the fund to limit, as a percentage of net assets, the expenses borne by the fund.

Inception Date - Date on which the investment option began its operations.

Investment Advisor - May include Registered Investment Advisers as defined in the Advisers Act of 1940, Investment Advisers as defined in the Investment Company Act of 1940, as well as a company employed by the investment option's advisor to handle the investment option's day-to-day management. In these instances, the portfolio manager generally works for the fund's subadvisor, and not the advisor. See definition of Multiple Sub-Advisor appearing elsewhere in this presentation for greater detail about Sub-Advisors.

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