INVESTMENT SELECTIONS

For Pacific Life's Pacific Select Harbor VUL, a flexible premium variable universal life insurance product.

PACIFIC LIFE

Pacific Life Insurance Company

Form series P19PHV, S19PHV, varies based on state of policy issue.

A variable life insurance policy is primarily purchased to provide death benefit protection. Additionally, owning a variable universal life insurance policy requires decisions about allocating your net premiums and policy cash values among the product's variable and fixed investment options. Work with your financial professional[1] to determine which option—or combination of options—may be right for you.

1 In order to sell life insurance, a financial professional must be a properly licensed and appointed life insurance producer.

Variable Universal Life Insurance generally requires additional premium payments after the initial premium. If either no premiums are paid, or subsequent premiums are insufficient to continue coverage, it is possible that coverage will expire.

Life insurance is subject to underwriting and approval of the application and will incur monthly policy charges.

<table>
<tr><td>Investment and Insurance Products: Not a Deposit</td><td colspan="2">Not Insured by any Federal Government Agency</td></tr>
<tr><td>Not FDIC Insured</td><td>No Bank Guarantee</td><td>May Lose Value</td></tr>
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This brochure provides an overview of the investment options available in Pacific Life's variable universal life insurance products, Pacific Select Harbor VUL.

Each variable investment option[2] invests in a corresponding portfolio of the American Century Variable Portfolios, Inc., American Funds Insurance Series®, BlackRock Variable Series Funds, Inc., DFA Investment Dimensions Group Inc., Fidelity Variable Insurance Products Funds, Franklin Templeton Variable Insurance Products Trust, Invesco Variable Insurance Funds, Janus Aspen Series, Lazard Retirement Series, Inc., Legg Mason Partners Variable Equity Trust, Lincoln Variable Insurance Product Trust, Lord Abbett Series Fund, Inc., MFS Variable Insurance Trust, Neuberger Berman Advisers Management Trust, PIMCO Variable Insurance Trust, Pacific Select Fund, T. Rowe Price Equity Series, Inc., or Vanguard Variable Insurance Fund. The portfolios are managed by firms recognized in their particular fields of investment expertise.

There is greater potential for higher returns through the variable investment options, but your investment is subject to the risk of poor investment performance and can vary depending on the performance of the variable investment options you have chosen. Each variable investment option will have its own unique risks. The value of each variable investment option will fluctuate with the value of the investments it holds, and returns are not guaranteed. You can lose money by investing in the policy, including loss of principal and prior earnings. Therefore, the actual value of any policy distribution can be greater or less than its original cost. You bear the risk of any variable investment options you choose. You should read each Fund prospectus carefully before investing. You can obtain a Fund prospectus by contacting your life insurance producer or by visiting PacificLife.com. No assurance can be given that a Fund will achieve its investment objectives.

The fixed options, on the other hand, have guaranteed minimum interest rates, but can earn higher rates based on the company's current declared interest rate. The guarantees associated with the fixed options are subject to Pacific Life's claims-paying ability.

2 Although some funds may have names or investment goals/objectives that resemble retail mutual funds managed by the fund manager, these funds will not have the same underlying holdings or performance as the retail mutual funds.

Domestic Equity Funds

VALUE	BLEND	GROWTH
LARGE-CAP	**LARGE-CAP**	**LARGE-CAP**
• DFA VA US Large Value • MFS® VIT Value Series Init Cl • PSF Value Advantage Cl P (JPMorgan) • PSF Value Cl P (Putnam) • T. Rowe Price Equity Income-I	• American Funds IS® Growth-Income Cl 2 • Fidelity® VIP Total Market Index Svc Cl 2 • Neuberger Berman AMT Sustainable Equity Cl I • PSF Dividend Growth Cl P (T. Rowe Price) • PSF Equity Index Cl P (BlackRock) • PSF Large-Cap Core Cl P (JPMorgan)	• American Funds IS® Growth Cl 2 • PSF Growth Cl P (MFS) • T. Rowe Price Blue Chip Growth-I
MID-CAP	**MID-CAP**	**MID-CAP**
• LVIP American Century VP Mid Cap Value Std II	• ClearBridge Variable Mid Cap Cl I • Fidelity® VIP Mid Cap Init Cl • Vanguard VIF Mid-Cap Index	
SMALL-CAP	**SMALL-CAP**	**SMALL-CAP**
• DFA VA US Targeted Value • PSF Small-Cap Equity Cl P (Franklin/ BlackRock) • PSF Small-Cap Value Cl P (Avantis)	• Invesco V.I. Main Street® Small Cap Series I • PSF Small-Cap Index Cl P (BlackRock)	• ClearBridge Variable Small Cap Growth Cl I • MFS® VIT New Discovery Series Init Cl

Asset Allocation Funds

TARGET DATE	TARGET ALLOCATION	GLOBAL ASSET ALLOCATION
• Fidelity® VIP Freedom® Income Init Cl • Fidelity® VIP Freedom® 2030 Init Cl • Fidelity® VIP Freedom® 2035 Init Cl • Fidelity® VIP Freedom® 2045 Init Cl	• American Funds IS® Asset Allocation Cl 2 • BlackRock® 60/40 Target Allocation ETF V.I. Cl I • MFS® VIT Total Return Series Init Cl • PSF ESG Diversified Cl P (PLFA) • PSF ESG Diversified Growth Cl P (PLFA) • PSF Pacific Dynamix – Aggressive Growth Cl P (PLFA) • PSF Pacific Dynamix – Conservative Growth Cl P (PLFA) • PSF Pacific Dynamix – Growth Cl P (PLFA) • PSF Pacific Dynamix – Moderate Growth Cl P (PLFA)	• BlackRock® Global Allocation V.I. Cl I • Invesco V.I. Global Series I

Fixed Income Funds

MONEY MARKET / SHORT TERM	CORE / CORE-PLUS	HIGH YIELD / MULTI-SECTOR
• Fidelity® VIP Govt Money Market Svc Cl • PSF Short Duration Bond Cl P (T. Rowe Price)	• Fidelity® VIP Bond Index Svc Cl 2 • PSF Intermediate Bond Cl P (JPMorgan) • PSF Diversified Bond Cl P (Loomis Sayles) • Lord Abbett Series Total Return VC Shares	• American Funds IS® American High-Income Trust Cl 2 • Lord Abbett Series Bond Debenture VC Shares • PIMCO VIT Income Administrative Cl

Foreign / International Funds

VALUE	BLEND	GROWTH
LARGE-CAP	LARGE-CAP	LARGE-CAP
• DFA VA Intl Value • Templeton Foreign VIP Cl 1	• Fidelity® VIP Intl Index Svc Cl 2	• American Funds IS® Intl Cl 2 • Invesco V.I. EQV Intl Equity Series I • PSF Intl Growth Cl P (ClearBridge)
	SMALL / MID	
	• PSF Intl Small-Cap Cl P (FIAM)	

Emerging Markets / World Stocks / World Bonds Funds

GLOBAL BOND	EMERGING MARKETS
• Templeton Global Bond VIP Cl 1	• American Funds IS® New World Cl 2

Specialty Funds

REAL ESTATE	UTILITIES
• PSF Real Estate Cl P (Principal REI) • Vanguard VIF Real Estate Index	• MFS® VIT Utilities Series Init Cl

American Funds Insurance Series®

PORTFOLIO MANAGER	PORTFOLIO	INVESTMENT SUMMARY
Capital Research and Management Company	American Funds IS® American High-Income Trust Cl 2	Seeks to provide a high level of current income with a secondary investment objective of capital appreciation through investments primarily in higher yielding and generally lower quality debt.
Capital Research and Management Company	American Funds IS® Asset Allocation Cl 2	Seeks high total return (including income and capital gains) consistent with preservation of capital over the long term through investment in equity and fixed income securities of both U.S. and non-U.S. companies and in money market instruments.
Capital Research and Management Company	American Funds IS® Growth Cl 2	Seeks long-term growth of capital through investment in equity securities of both U.S. and non U.S. companies of any size that appear to offer superior opportunities for growth of capital.
Capital Research and Management Company	American Funds IS® Growth-Income Cl 2	Seeks long-term growth of capital and income through investment in equity securities of both U.S. and non-U.S. companies of any size and other securities which demonstrate the potential for appreciation and/or dividends.
Capital Research and Management Company	American Funds IS® Intl Cl 2	Seeks long-term growth of capital through investments primarily in common stocks of companies domiciled outside of the U.S., including companies domiciled in emerging markets.
Capital Research and Management Company	American Funds IS® New World Cl 2	Seeks long-term capital appreciation through investments primarily in common stocks of companies with significant exposure to countries with developing economies and/or markets and that the investment adviser believes have potential of providing capital appreciation.

BlackRock Variable Series Funds, Inc.

PORTFOLIO MANAGER	PORTFOLIO	INVESTMENT SUMMARY
BlackRock Advisors, LLC	BlackRock® 60/40 Target Allocation ETF V.I. Cl I	A fund-of-funds that seeks to provide total return primarily through investments of underlying exchange-traded funds ("ETFs") that seek to track equity, fixed income and alternative indices.
BlackRock Advisors, LLC	BlackRock® Global Allocation V.I. Cl I	Seeks high total investment return through investment in a mix of U.S. and foreign equity, debt and money market securities.

DFA Investment Dimensions Group Inc.

PORTFOLIO MANAGER	PORTFOLIO	INVESTMENT SUMMARY
Dimensional Fund Advisors LP	DFA VA Intl Value	Seeks to achieve long-term capital appreciation through investment in securities of large non-U.S. companies that are deemed to be value stocks.
Dimensional Fund Advisors LP	DFA VA US Large Value	Seeks to achieve long-term capital appreciation through investment in securities of large U.S. companies that are deemed to be value stocks.
Dimensional Fund Advisors LP	DFA VA US Targeted Value	Seeks to achieve long-term capital appreciation through investment in securities of small and mid cap U.S. companies that are deemed to be value stocks with higher profitability.

Fidelity Variable Insurance Products Funds

PORTFOLIO MANAGER	PORTFOLIO	INVESTMENT SUMMARY
FMR Co., Inc.	Fidelity® VIP Bond Index Svc Cl 2	Seeks to provide investment results that correspond to the aggregate price and interest performance of the debt securities in the Bloomberg Barclays U.S. Aggregate Bond Index.
FMR Co., Inc.	Fidelity® VIP Freedom® 2030 Init Cl	Seeks high total return with a secondary objective of principal preservation as the fund approaches its target date and beyond.
FMR Co., Inc.	Fidelity® VIP Freedom® 2035 Init Cl	Seeks high total return through investment in underlying Fidelity VIP equity, fixed income, and short-term funds.
FMR Co., Inc.	Fidelity® VIP Freedom® 2045 Init Cl	Seeks high total return through investment in underlying Fidelity VIP equity, fixed income, and short-term funds.
FMR Co., Inc.	Fidelity® VIP Freedom® Income Init Cl	Seeks high total return with a secondary objective of principal preservation.
FMR Co., Inc.	Fidelity® VIP Govt Money Market Svc Cl	"Seeks as high a level of current income as is consistent with preservation of capital and liquidity."
FMR Co., Inc.	Fidelity® VIP Intl Index Svc Cl 2	Seeks to provide investment results that correspond to the total return of foreign developed and emerging stock markets.
FMR Co., Inc.	Fidelity® VIP Mid Cap Init Cl	Seeks long-term growth of capital through investment primarily in equity securities of companies with medium market capitalization.
FMR Co., Inc.	Fidelity® VIP Total Market Index Svc Cl 2	Seeks to provide investment results that correspond to the total return of a broad range of U.S. stocks.

Franklin Templeton Variable Insurance Products Trust

PORTFOLIO MANAGER	PORTFOLIO	INVESTMENT SUMMARY
Franklin Advisers, Inc.	Templeton Global Bond VIP Cl 1	Seeks high current income, consistent with preservation of capital, with capital appreciation as a secondary consideration. Under normal market conditions, the fund invests at least 80% of its net assets in bonds, which include debt securities of any maturity, such as bonds, notes, bills, and debentures.
Templeton Investment Counsel, LLC	Templeton Foreign VIP Cl 1	Seeks long-term capital growth. Under normal market conditions, the fund invests at least 80% of its net assets in investments of issuers located outside the U.S., including those in emerging markets.

Invesco Variable Insurance Funds

PORTFOLIO MANAGER	PORTFOLIO	INVESTMENT SUMMARY
Invesco Advisers, Inc.	Invesco V.I. EQV Intl Equity Series I	Seeks long-term growth of capital through investment primarily in a diversified portfolio of international equity securities whose issuers are considered to have strong earnings growth.
Invesco Advisers, Inc.	Invesco V.I. Global Series I	Seeks capital appreciation through investment in common stock of U.S. and foreign companies. The fund does not limit its investments to companies of a particular market capitalization range, but primary invests in mid- and large- cap companies.
Invesco Advisers, Inc.	Invesco V.I. Main Street® Small Cap Series I	Seeks capital appreciation through investment in at least 80% of its assets in securities of small-cap companies, and in derivatives and other instruments that have economic characteristics similar to such securities.

Legg Mason Partners Variable Equity Trust

PORTFOLIO MANAGER	PORTFOLIO	INVESTMENT SUMMARY
ClearBridge Investments, LLC	ClearBridge Variable Mid Cap Cl I	Seeks long-term growth of capital through investment in at least 80% of its assets equity securities of medium capitalization companies.
ClearBridge Investments, LLC	ClearBridge Variable Small Cap Growth Cl I	Seeks long-term growth of capital through investment in at least 80% of its assets in equity securities of companies with small market capitalizations and related investments.

Lincoln Variable Insurance Product Trust (LVIP)

PORTFOLIO MANAGER	PORTFOLIO	INVESTMENT SUMMARY
American Century Investment Management, Inc.	LVIP American Century VP Mid Cap Value Std II	Seeks long-term capital growth through investment in mid-cap stocks. Income is a secondary objective.

Lord Abbett Series Fund, Inc.

PORTFOLIO MANAGER	PORTFOLIO	INVESTMENT SUMMARY
Lord, Abbett & Co. LLC	Lord Abbett Series Bond Debenture VC Shares	Seeks to deliver high current income and the opportunity for capital appreciation to produce a high total return by investing primarily in a variety of fixed income securities and select equity-related securities.
Lord, Abbett & Co. LLC	Lord Abbett Series Total Return VC Shares	Seeks to deliver income and capital appreciation to produce a high total return by investing primarily in U.S. investment grade corporate, government, and mortgage- and asset-backed securities, with select exposure to high yield, emerging market, and convertible debt securities.

MFS Variable Insurance Portfolios

PORTFOLIO MANAGER	PORTFOLIO	INVESTMENT SUMMARY
MFS Investment Management	MFS® VIT New Discovery Series Init Cl	Seeks capital appreciation and invests primarily in equity securities of small capitalization companies. Focuses on the stocks of companies believed to have above average earnings growth potential compared to other companies (growth companies).
MFS Investment Management	MFS® VIT Total Return Series Init Cl	Seeks total return by investing in equity securities and debt instruments.
MFS Investment Management	MFS® VIT Utilities Series Init Cl	Seeks total return by investing at least 80% of its net assets in securities of issuers in the utilities industry. The may invest in U.S. and foreign securities, including emerging markets.
MFS Investment Management	MFS® VIT Value Series Init Cl	Seeks capital appreciation and invests primarily in equity securities of large capitalization companies. Focuses on the stocks of companies believed to be undervalued compared to their perceived worth (value companies).

Neuberger Berman Advisers Management Trust

PORTFOLIO MANAGER	PORTFOLIO	INVESTMENT SUMMARY
Neuberger Berman Management LLC	Neuberger Berman AMT Sustainable Equity Cl I	Seeks long-term growth of capital by investing primarily in securities of companies that meet the Fund's financial criteria and social policy.

Pacific Select Fund

PORTFOLIO MANAGER	PORTFOLIO	INVESTMENT SUMMARY
Avantis Investors	PSF Small-Cap Value Cl P	Seeks long-term growth of capital through investment in at least 80% of its assets in small-capitalization equity securities.
BlackRock Investment Management, LLC	PSF Equity Index Cl P	Seeks investment results that correspond to the total return of common stocks publicly traded in the U.S. through investment in at least 80% of its assets in equity securities of companies included in the portfolio's applicable benchmark index, including derivatives.
BlackRock Investment Management, LLC	PSF Small-Cap Index Cl P	Seeks investment results that correspond to the total return of an index of small capitalization companies through investment in at least 80% of its assets in securities of companies with small market capitalizations, included in the portfolio's applicable benchmark index, including derivatives.
ClearBridge Investments, LLC	PSF Intl Growth Cl P	Seeks long-term growth of capital by investing primarily in common stocks of foreign companies, either directly or through depository receipts that, in the sub-adviser's opinion, appear to offer above average growth potential and trade at a significant discount to the sub-adviser's assessment of their intrinsic value.
FIAM LLC	PSF Intl Small-Cap Cl P	Seeks long-term growth of capital through investment in at least 80% of its assets in securities of companies with small market capitalization. Generally, these companies are located in developed, foreign countries.
Franklin Mutual Advisers, LLC & BlackRock Investment Management, LLC	PSF Small-Cap Equity Cl P	Seeks long-term growth of capital through investment in at least 80% of its assets in securities of companies with small market capitalizations, including instruments with characteristics of small-capitalization equity securities (such as derivatives).
J.P. Morgan Investment Management Inc.	PSF Intermediate Bond Cl P	Seeks to maximize total return by investing at least 80% of its assets in debt securities. These debt securities will be focused on investment grade intermediate-term debt. The debt securities are comprised of corporate bonds issued by U.S. entities.
J.P. Morgan Investment Management Inc.	PSF Large-Cap Core Cl P	Seeks long-term growth of capital and income and principally invests in common stocks of U.S. companies of large market capitalization.
J.P. Morgan Investment Management Inc.	PSF Value Advantage Cl P	Seeks to provide long-term total return from a combination of income and capital gains primarily through investment in equity securities across all market capitalizations.
Loomis Sayles & Company, L.P.	PSF Diversified Bond Cl P	Seeks to maximize total return consistent with prudent investment management through investment in at least 80% of its assets in debt securities of any maturity and credit quality.
MFS Investment Management	PSF Growth Cl P	Seeks long-term growth through investment in common stocks believed to have above-average earnings growth potential compared to other companies (growth companies). While the Investment Manager may invest the portfolio's assets in companies of any size, the manager generally focuses on companies with large capitalizations.

Pacific Select Fund (continued)

PORTFOLIO MANAGER	PORTFOLIO	INVESTMENT SUMMARY
Pacific Life Fund Advisors LLC	PSF ESG Diversified Cl P	Seeks long-term growth of capital and low to moderate income, while giving consideration to certain environmental, social and governance (“ESG”) criteria, with a target equity/debt blend of 55-65% equity/35-45% debt through investment in underlying funds that meet the adviser’s ESG criteria.
Pacific Life Fund Advisors LLC	PSF ESG Diversified Growth Cl P	Seeks long-term growth of capital and low to moderate income, while giving consideration to certain environmental, social and governance (“ESG”) criteria, with a target equity/debt blend of 70-85% equity/15-30% debt through investment in underlying funds that meet the adviser’s ESG criteria.
Pacific Life Fund Advisors LLC	PSF Pacific Dynamix – Aggressive Growth Cl P	An asset allocation fund-of-funds that seeks high, long-term growth of capital with a target equity/debt blend of 85-100%/0-15%, through investment in certain underlying portfolios of Pacific Select Fund.
Pacific Life Fund Advisors LLC	PSF Pacific Dynamix – Conservative Growth Cl P	An asset allocation fund-of-funds that seeks current income and moderate growth of capital along with a target equity/debt blend of 30-50%/50-70%, through investment in certain underlying portfolios of Pacific Select Fund.
Pacific Life Fund Advisors LLC	PSF Pacific Dynamix – Growth Cl P	An asset allocation fund-of-funds that seeks moderately high, long-term growth of capital with low, current income along with a target equity/debt blend of 70-90%/10-30%, through investment in certain underlying portfolios of Pacific Select Fund.
Pacific Life Fund Advisors LLC	PSF Pacific Dynamix – Moderate Growth Cl P	An asset allocation fund-of-funds that seeks long-term growth of capital and low to moderate income along with a target equity/debt blend of 50-70%/30-50%, through investment in certain underlying portfolios of Pacific Select Fund.
Principal Real Estate Investors LLC	PSF Real Estate Cl P	Seeks current income and long-term capital appreciation through investment in at least 80% of its assets in securities of companies operating in the real estate and related industries.
Putnam Investment Management, LLC	PSF Value Cl P	Seeks long-term growth of capital by investing at least 80% of its assets in common stock.
T. Rowe Price Associates, Inc.	PSF Dividend Growth Cl P	Seeks dividend income and long-term capital appreciation by normally investing in at least 65% of its assets in equity securities of dividend-paying companies that the manager expects to increase their dividends over time and also provide long-term appreciation.
T. Rowe Price Associates, Inc.	PSF Short Duration Bond Cl P	Seeks current income by normally investing in at least 80% of its assets in fixed income securities, including short- and intermediate-term investment-grade corporate, government, and mortgage backed securities.

PIMCO Variable Insurance Trust

PORTFOLIO MANAGER	PORTFOLIO	INVESTMENT SUMMARY
Pacific Investment Management Company LLC	PIMCO VIT Income Administrative Cl	Seeks to maximize current income with long-term capital appreciation as a secondary objective by investing under normal circumstances at least 65% of its total assets in a multi-sector portfolio of Fixed Income Instruments of varying maturities. Long-term capital appreciation is a secondary objective.

T. Rowe Price Equity Series, Inc.

PORTFOLIO MANAGER	PORTFOLIO	INVESTMENT SUMMARY
T. Rowe Price Associates, Inc.	T. Rowe Price Blue Chip Growth	Seeks long-term capital growth through investment primarily in equity securities of large- and medium-sized "blue chip" growth companies; income is a secondary objective.
T. Rowe Price Associates, Inc.	T. Rowe Price Equity Income	Seeks a high level of dividend income and long-term capital growth primarily through investments in stocks, with an emphasis on large-capitalization stocks that have a strong track record of paying dividends or that are believed to be undervalued.

Vanguard Variable Insurance Fund

PORTFOLIO MANAGER	PORTFOLIO	INVESTMENT SUMMARY
The Vanguard Group, Inc.	Vanguard VIF Mid-Cap Index	Seeks to track the performance of a benchmark index that measures the investment return of mid-capitalization stocks.
The Vanguard Group, Inc.	Vanguard VIF Real Estate Index	Seeks to provide a high level of income and moderate long-term capital appreciation by tracking the performance of a benchmark index that measures the performance of publicly traded equity REITs and other real estate-related investments.

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Insurance products and their guarantees, including optional benefits and any crediting rates, are backed by the financial strength and claims-paying ability of the issuing insurance company, but they do not protect the value of the variable investment options. Look to the strength of the life insurance company with regard to such guarantees as these guarantees are not backed by the broker/dealer, insurance agency, or their affiliates from which products are purchased. Neither these entities nor their representatives make any representation or assurance regarding the claims-paying ability of the life insurance company.

Not all investment options may be available in all VUL products. Please check your product prospectus for details.

This material must be preceded or accompanied by the variable life insurance product prospectus. Contact your life insurance producer or visit PacificLife.com for more information, including product and underlying fund prospectuses that contain more complete information about Pacific Life Insurance Company and a variable life insurance policy's risks, charges, limitations, and expenses, as well as the risks, charges, expenses, and investment goals/objectives of the underlying investment options. Read them carefully before investing or sending money.

Pacific Life Insurance Company reserves the right to change or modify any non-guaranteed or current elements. The right to modify these elements is not limited to a specific time or reason.

Unless otherwise noted, all aforementioned money managers and their distributors are not affiliated companies of Pacific Life Insurance Company and Pacific Select Distributors, LLC.

Pacific Life Fund Advisors (PLFA) is the investment adviser to the Pacific Select Fund (PSF) and the manager of certain PSF portfolios.

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