

PRIVATE REAL ESTATE STRATEGIC INVESTMENT PLAN

SAN BERNADINO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

January 2020



BOSTON | ATLANTA | CHARLOTTE | CHICAGO | DETROIT | LAS VEGAS | PORTLAND | SAN FRANCISCO

REAL ESTATE MARKET VIEWS

General Market Thoughts

- **Core real estate markets remain healthy, but growth slowing**
 - Fundamentals (rent growth, occupancy, net absorption) show strength in most markets, but appreciation continues to moderate
 - We continue to emphasize strategies that provide income durability and/or the potential for outsized income growth (relative to the overall market)
 - REITs were up significantly in the first three quarters of 2019; strong performance consistent across sub-sectors
- **Opportunity remains in non-core strategies**
 - We continue to favor debt and demographically-driven strategies such as US senior housing
 - Outside the US, Europe remains relatively attractive for asset-focused managers not making macro bets on growth; select opportunities in Asia provide additional diversification benefits

Real Estate Implementation Views

| Strategy | | Outlook | Commentary |
|------------------|---------------|----------|--|
| Core | Private | Neutral | New exposure should be built over time; consider core-plus or “tactical core” strategies to enhance return potential as appreciation slows |
| | Public REITs | Neutral | Consider rebalancing existing exposure; expect volatility in the short term |
| Non-Core | Value-Add | Positive | Flight to quality will continue to favor US real estate; emphasize demographically-driven sectors and strong cash flowing strategies; may see some targeted opportunities in other areas (e.g., retail distress); select opportunities outside the US provide additional diversification |
| | Opportunistic | Positive | |
| Real Estate Debt | | Positive | Leverage levels remain healthy; conservative debt strategies are attractive and can provide strong current income as well as downside protection in the event of moderate asset value declines |



**SAN BERNADINO
COUNTY
EMPLOYEES'
RETIREMENT
ASSOCIATION**

CURRENT INVESTMENT PROGRAM

- **San Bernardino County Employees' Retirement Association ("SBCERA") has a long-term strategic target allocation of 7% to real estate, with a permitted range of 0% to 14%**
- **SBCERA's current exposure to real estate is as follows:**
 - \$456 million net asset value (4.2% of total plan assets)
 - \$209 million in uncalled capital commitments (1.9% of total plan assets)
 - Which results in a potential of \$666 million in total real estate exposure (6.2% of total plan assets)
- **SBCERA's current sub-strategy exposures (including uncalled capital are as follows:**
 - 35% core private (open-end)
 - 46% non-core private (closed-end)
 - 11% non-core private (open-end)
 - 9% debt
- **SBCERA has minimum sub-strategy target allocations of 50% to core private real estate (which may include real estate debt) and 30% to non-core private real estate**
 - SBCERA's current sub-strategy exposures (based on NAV) are 54% core private real estate (including 3% to real estate debt) and 46% non-core private real estate
 - The sub-strategy allocations are intended to allow for flexibility based on market conditions and attractive manager opportunities
 - Only allocate based on targets if market conditions and manager opportunities are attractive

PRIVATE REAL ESTATE PLAN RECOMMENDATION

- **NEPC recommends the following investment pacing model to achieve the target allocations:**
 - Commit approximately \$110 million to \$140 million to real estate annually (2020-2022)
 - This range allows for flexibility while maintaining an allocation to real estate and providing vintage year diversification
 - In order to maintain a minimum sub-allocation to private non-core real estate of 30%:
 - Commit a minimum of \$40 million to non-core real estate, and up to \$70 million to core real estate per year
 - In order to maintain a minimum sub-allocation to private core real estate (including debt) of 50%:
 - Commit a minimum of \$40 million to core real estate (including real estate debt) and up to \$100 million in non-core real estate per year
 - Continue with regular commitments to real estate thereafter
- **These recommendations are intended to be used as a directional guideline based on market conditions and revisited annually**

FUND OVERVIEW AND ASSUMPTIONS

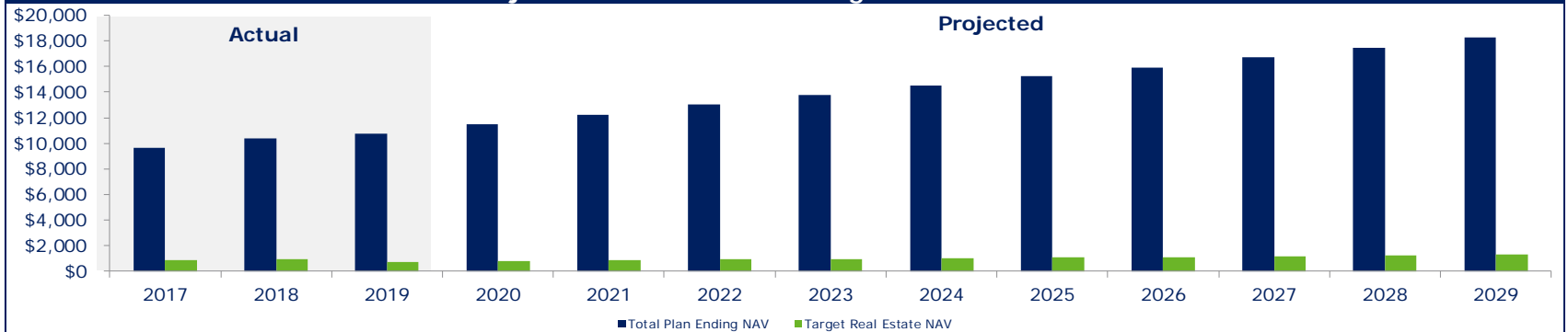
General Plan Assumptions

| | | | | | |
|--|----------|--------------------------|------|------|----------|
| Total Plan Assets | \$10,748 | Plan Return Assumptions | 2020 | 2021 | 2022 |
| Total Real Estate NAV | \$456 | Target Investment Return | 7.6% | 7.6% | 7.6% |
| Total Real Estate Capital to be Funded | \$209 | Contributions | 4.9% | 4.6% | 4.8% |
| Total Real Estate Exposure | \$666 | Payouts | 5.7% | 5.6% | 5.5% |
| Total Real Estate NAV / Total Plan Assets | 4.2% | Expenses | 0.1% | 0.1% | 0.1% |
| Total Real Estate Exposure / Total Plan Assets | 6.2% | Reserve for Expenses | 0.0% | 0.0% | 0.0% |
| Target Real Estate Allocation % (Current Target) | 7.0% | Net Growth Rate | 6.8% | 6.5% | 6.9% |
| | | Plan-Level data as of | | | 09/30/19 |
| | | Fund-Level data as of | | | 06/30/19 |

Total Projected Plan Assets

| | Actual | | | Projected | | | | | | | | | |
|-------------------------------|---------|----------|----------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
| Total Plan Net Growth Rate | 11.7% | 7.3% | 3.6% | 6.8% | 6.5% | 6.9% | 5.3% | 5.4% | 5.0% | 4.7% | 4.7% | 4.7% | 4.7% |
| Total Plan Beginning NAV | \$8,653 | \$9,667 | \$10,376 | \$10,748 | \$11,478 | \$12,222 | \$13,066 | \$13,758 | \$14,501 | \$15,226 | \$15,942 | \$16,691 | \$17,476 |
| Yearly Net Growth | \$1,013 | \$710 | \$372 | \$730 | \$744 | \$843 | \$692 | \$743 | \$725 | \$716 | \$749 | \$784 | \$821 |
| Total Plan Ending NAV | \$9,667 | \$10,376 | \$10,748 | \$11,478 | \$12,222 | \$13,066 | \$13,758 | \$14,501 | \$15,226 | \$15,942 | \$16,691 | \$17,476 | \$18,297 |
| Target Real Estate Allocation | 9.0% | 9.0% | 7.0% | 7.0% | 7.0% | 7.0% | 7.0% | 7.0% | 7.0% | 7.0% | 7.0% | 7.0% | 7.0% |
| Target Real Estate NAV | \$870 | \$934 | \$752 | \$803 | \$856 | \$915 | \$963 | \$1,015 | \$1,066 | \$1,116 | \$1,168 | \$1,223 | \$1,281 |

Total Projected Plan Assets and Target Real Estate Allocation



EXISTING PRIVATE REAL ESTATE INVESTMENTS

Existing Real Estate Investments

Core Private (Open-End)

| Fund Name | Vintage Year | Committed | Paid In Capital | Capital to be Funded | Cumulative Distributed | Current Valuation (NAV) | Total Value | % of Dividends Reinvested | Current Redemption Requests | Redemption Request Year |
|--------------------------------------|--------------|----------------|-----------------|----------------------|------------------------|-------------------------|----------------|---------------------------|-----------------------------|-------------------------|
| American Realty Advisors | 1996 | \$128.0 | \$128.0 | \$0.0 | \$278.4 | \$0.1 | \$278.5 | 100% | \$0.0 | NA |
| Prudential PRISA II | 2004 | \$140.0 | \$140.0 | \$0.0 | \$46.1 | \$169.4 | \$215.5 | 100% | \$0.0 | NA |
| Invesco Real Estate Asia Fund | 2014 | \$51.7 | \$51.7 | \$0.0 | \$10.2 | \$63.4 | \$73.6 | 100% | \$0.0 | NA |
| Total Core Private (Open-End) | | \$319.7 | \$319.7 | \$0.0 | \$334.7 | \$232.9 | \$567.6 | NA | \$0.0 | NA |

Debt (Closed-End)

| Fund Name | Vintage Year | Committed | Paid In Capital | Capital to be Funded | Cumulative Distributed | Current Valuation (NAV) | Total Value | Net benefit | DPI Ratio | TVPI Ratio |
|--------------------------------|--------------|---------------|-----------------|----------------------|------------------------|-------------------------|---------------|--------------|--------------|--------------|
| Starwood Debt Fund II, LP | 2008 | \$20.0 | \$17.6 | \$2.4 | \$21.9 | \$0.0 | \$21.9 | \$4.3 | 1.25x | 1.25x |
| Pramerica PRECap VI | 2016 | \$25.7 | \$13.7 | \$12.0 | \$6.3 | \$9.2 | \$15.5 | \$1.8 | 0.46x | 1.13x |
| Kayne Anderson RE Debt III | 2018 | \$20.0 | \$6.5 | \$13.5 | \$1.0 | \$5.9 | \$7.0 | \$0.4 | 0.16x | 1.06x |
| Marathon Real Estate Debt Fund | 2018 | \$15.0 | \$0.0 | \$15.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | NA | NA |
| Total Debt (Closed-End) | | \$80.7 | \$37.8 | \$42.8 | \$29.3 | \$15.1 | \$44.4 | \$6.5 | 0.77x | 1.17x |

Non-Core Private (Open-End)

| Fund Name | Vintage Year | Committed | Paid In Capital | Capital to be Funded | Cumulative Distributed | Current Valuation (NAV) | Total Value | % of Dividends Reinvested | Current Redemption Requests | Redemption Request Year |
|--|--------------|---------------|-----------------|----------------------|------------------------|-------------------------|---------------|---------------------------|-----------------------------|-------------------------|
| Prudential PRISA III | 2003 | \$75.0 | \$54.8 | \$20.2 | \$46.5 | \$51.0 | \$97.5 | 0% | \$0.0 | NA |
| Total Non-Core Private (Open-End) | | \$75.0 | \$54.8 | \$20.2 | \$46.5 | \$51.0 | \$97.5 | NA | \$0.0 | NA |

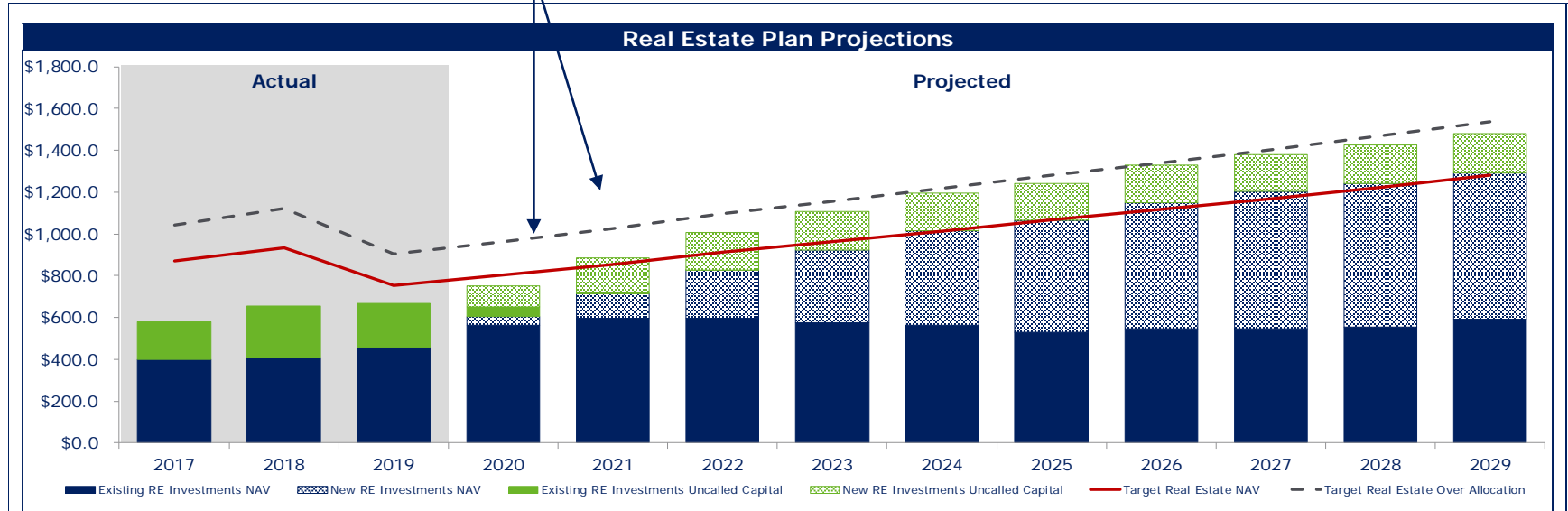
Non-Core Private (Closed-End)

| Fund Name | Vintage Year | Committed | Paid In Capital | Capital to be Funded | Cumulative Distributed | Current Valuation (NAV) | Total Value | Net benefit | DPI Ratio | TVPI Ratio |
|---|--------------|----------------|-----------------|----------------------|------------------------|-------------------------|----------------|---------------|--------------|--------------|
| Walton Street Real Estate Fund IV, LP | 2003 | \$10.0 | \$9.8 | \$0.2 | \$15.9 | \$5.9 | \$21.8 | \$12.1 | 1.63x | 2.23x |
| Bryanston Retail Opportunity Fund, L.P. | 2004 | \$20.0 | \$8.2 | \$11.8 | \$18.8 | \$8.5 | \$27.3 | \$19.1 | 2.29x | 3.32x |
| RREF America REIT III | 2004 | \$20.0 | \$20.5 | (\$0.5) | \$23.7 | \$0.0 | \$23.7 | \$3.1 | 1.15x | 1.15x |
| CBRE Strategic Partners IV | 2005 | \$40.0 | \$40.0 | \$0.0 | \$2.6 | \$0.0 | \$2.6 | (\$37.4) | 0.07x | 0.07x |
| INVESCO Real Estate Fund I | 2005 | \$10.0 | \$9.2 | \$0.8 | \$10.0 | \$0.0 | \$10.0 | \$0.8 | 1.08x | 1.08x |
| LaSalle Income & Growth Fund IV | 2005 | \$20.0 | \$19.5 | \$0.5 | \$13.5 | \$0.0 | \$13.5 | (\$6.0) | 0.69x | 0.69x |
| North Haven Real Estate Fund V Internation | 2005 | \$27.5 | \$27.4 | \$0.1 | \$32.1 | \$1.2 | \$33.2 | \$5.8 | 1.17x | 1.21x |
| Tri Continental Capital VII | 2005 | \$23.0 | \$22.3 | \$0.7 | \$2.8 | \$0.8 | \$3.6 | (\$18.6) | 0.13x | 0.16x |
| BlackRock Diamond Property Fund | 2005 | \$25.0 | \$25.0 | \$0.0 | \$15.2 | \$0.0 | \$15.2 | (\$9.8) | 0.61x | 0.61x |
| Beacon Capital Strategic Partners IV, L.P. | 2006 | \$38.0 | \$38.0 | \$0.0 | \$31.4 | \$0.0 | \$31.4 | (\$6.6) | 0.83x | 0.83x |
| Fillmore East Fund | 2006 | \$25.0 | \$31.4 | (\$6.4) | \$20.8 | \$0.0 | \$20.8 | (\$10.6) | 0.66x | 0.66x |
| Starwood Capital Hospitality Fund I-2 | 2006 | \$30.0 | \$30.0 | \$0.0 | \$26.2 | \$4.3 | \$30.4 | \$0.4 | 0.87x | 1.01x |
| Starwood Opportunity Fund VII - A | 2006 | \$25.0 | \$25.0 | \$0.0 | \$18.2 | \$2.0 | \$20.3 | (\$4.7) | 0.73x | 0.81x |
| Walton Street Real Estate Fund V, LP | 2006 | \$40.0 | \$40.0 | \$0.0 | \$24.7 | \$5.9 | \$30.5 | (\$9.5) | 0.62x | 0.76x |
| Beacon Capital Strategic Partners V, L.P. | 2007 | \$18.0 | \$18.0 | \$0.0 | \$11.2 | \$0.0 | \$11.2 | (\$6.8) | 0.62x | 0.62x |
| Invesco Asian Real Estate Partners II (USD) | 2007 | \$20.0 | \$8.4 | \$11.6 | \$11.3 | \$0.1 | \$11.5 | \$3.1 | 1.35x | 1.36x |
| Square Mile Partners II | 2007 | \$19.8 | \$19.8 | \$0.0 | \$5.3 | \$0.0 | \$5.3 | (\$14.5) | 0.27x | 0.27x |
| Fillmore West Fund | 2008 | \$20.0 | \$19.6 | \$0.4 | \$21.2 | \$0.0 | \$21.2 | \$1.6 | 1.08x | 1.08x |
| Square Mile Partners III LP | 2008 | \$20.0 | \$19.7 | \$0.3 | \$28.8 | \$0.1 | \$28.9 | \$9.2 | 1.46x | 1.46x |
| Bryanston Real Estate Opportunity Fund II, | 2009 | \$20.0 | \$8.6 | \$11.4 | \$18.8 | \$8.5 | \$27.3 | \$18.7 | 2.19x | 3.18x |
| Fortress Japan Opportunity Fund II | 2012 | \$21.7 | \$3.7 | \$18.1 | \$21.3 | \$6.5 | \$27.8 | \$23.9 | 5.78x | 7.55x |
| Oaktree Real Estate Opportunities V | 2012 | \$25.0 | \$25.0 | \$0.0 | \$37.8 | \$2.4 | \$40.1 | \$14.7 | 1.51x | 1.61x |
| Partners Group RE Secondary 2013 (USD) f | 2014 | \$65.0 | \$49.5 | \$15.5 | \$18.6 | \$53.6 | \$72.3 | \$23.1 | 0.38x | 1.46x |
| Apollo US RE II | 2015 | \$20.0 | \$12.2 | \$7.8 | \$3.4 | \$13.5 | \$16.9 | \$4.7 | 0.28x | 1.39x |
| Partners Group Project Camino | 2016 | \$8.4 | \$5.7 | \$2.7 | \$0.0 | \$7.5 | \$7.5 | \$1.7 | 0.00x | 1.30x |
| Partners Group RE Secondaries 2017 | 2017 | \$75.0 | \$22.5 | \$52.5 | \$0.1 | \$24.7 | \$24.8 | \$2.2 | 0.01x | 1.10x |
| Kayne Anderson Real Estate Partners V | 2018 | \$20.0 | \$8.9 | \$11.1 | \$0.0 | \$8.6 | \$8.6 | (\$0.1) | 0.00x | 0.97x |
| Southport Industrial Park | 2017 | \$2.4 | \$1.0 | \$1.4 | \$0.0 | \$1.0 | \$1.0 | (\$0.0) | 0.00x | 0.97x |
| Partners Hawthorne Holdings | 2018 | \$9.0 | \$2.4 | \$6.6 | \$0.0 | \$2.3 | \$2.3 | (\$0.1) | 0.00x | 0.96x |
| Total Non-Core Private (Closed-End) | | \$717.9 | \$571.4 | \$146.4 | \$433.8 | \$157.3 | \$591.1 | \$19.3 | 0.76x | 1.03x |



RECOMMENDED PACING PLAN: FUND PROJECTIONS

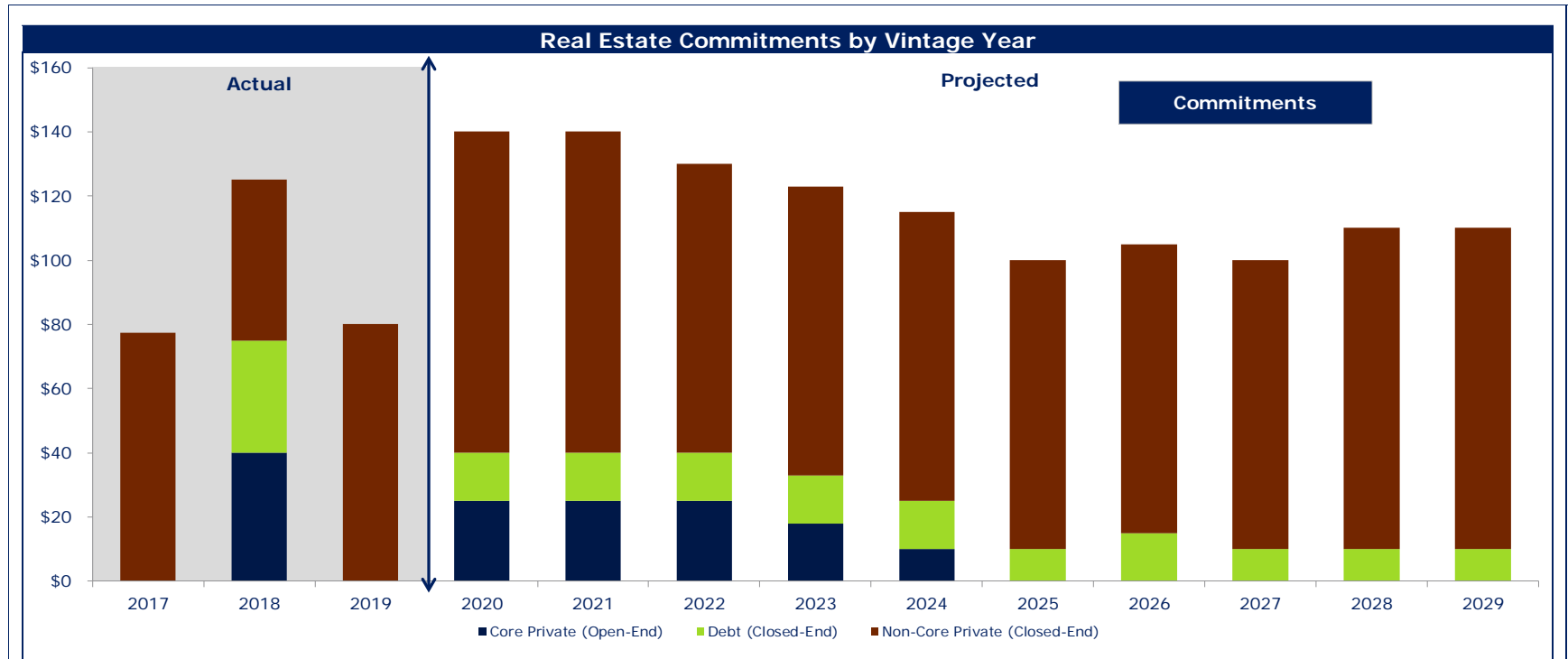
- **Red line** is the 7% target private real estate allocation based on projected plan total NAV; **Black dashed line** is the 1.2x over-commitment.
- Goal is to keep private real estate NAV (**blue bar**) plus uncalled capital commitments (**green bar**), between red line and black dashed line.



| Year | Actual | | | Projected | | | | | | | | | |
|--|---------|---------|-------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
| Real Estate NAV | \$399 | \$408 | \$456 | \$603 | \$712 | \$825 | \$924 | \$1,016 | \$1,066 | \$1,150 | \$1,203 | \$1,241 | \$1,290 |
| Uncalled Capital Commitments | \$180 | \$247 | \$209 | \$149 | \$174 | \$182 | \$182 | \$181 | \$176 | \$178 | \$176 | \$183 | \$189 |
| Real Estate NAV + Uncalled Capital Commitments | \$579 | \$654 | \$666 | \$752 | \$886 | \$1,007 | \$1,107 | \$1,197 | \$1,242 | \$1,328 | \$1,379 | \$1,424 | \$1,479 |
| Target Real Estate NAV | \$870 | \$934 | \$752 | \$803 | \$856 | \$915 | \$963 | \$1,015 | \$1,066 | \$1,116 | \$1,168 | \$1,223 | \$1,281 |
| Weighted Over-Commitment Pace | 1.2x | 1.2x | 1.2x | 1.2x | 1.2x | 1.2x | 1.2x | 1.2x | 1.2x | 1.2x | 1.2x | 1.2x | 1.2x |
| Target Real Estate Over Allocation | \$1,044 | \$1,121 | \$903 | \$964 | \$1,027 | \$1,098 | \$1,156 | \$1,218 | \$1,279 | \$1,339 | \$1,402 | \$1,468 | \$1,537 |
| Percent of Total Plan Assets | | | | | | | | | | | | | |
| Real Estate NAV (%) | 4.1% | 3.9% | 4.2% | 5.3% | 5.8% | 6.3% | 6.7% | 7.0% | 7.0% | 7.2% | 7.2% | 7.1% | 7.1% |
| Real Estate Uncalled Capital Commitments (%) | 1.9% | 2.4% | 1.9% | 1.3% | 1.4% | 1.4% | 1.3% | 1.2% | 1.2% | 1.1% | 1.1% | 1.0% | 1.0% |
| NAV + Uncalled Capital Commitments (%) | 6.0% | 6.3% | 6.2% | 6.6% | 7.3% | 7.7% | 8.0% | 8.3% | 8.2% | 8.3% | 8.3% | 8.2% | 8.1% |
| Target Real Estate Allocation (%) | 9.0% | 9.0% | 7.0% | 7.0% | 7.0% | 7.0% | 7.0% | 7.0% | 7.0% | 7.0% | 7.0% | 7.0% | 7.0% |
| Target Real Estate Over Allocation (%) | 10.8% | 10.8% | 8.4% | 8.4% | 8.4% | 8.4% | 8.4% | 8.4% | 8.4% | 8.4% | 8.4% | 8.4% | 8.4% |



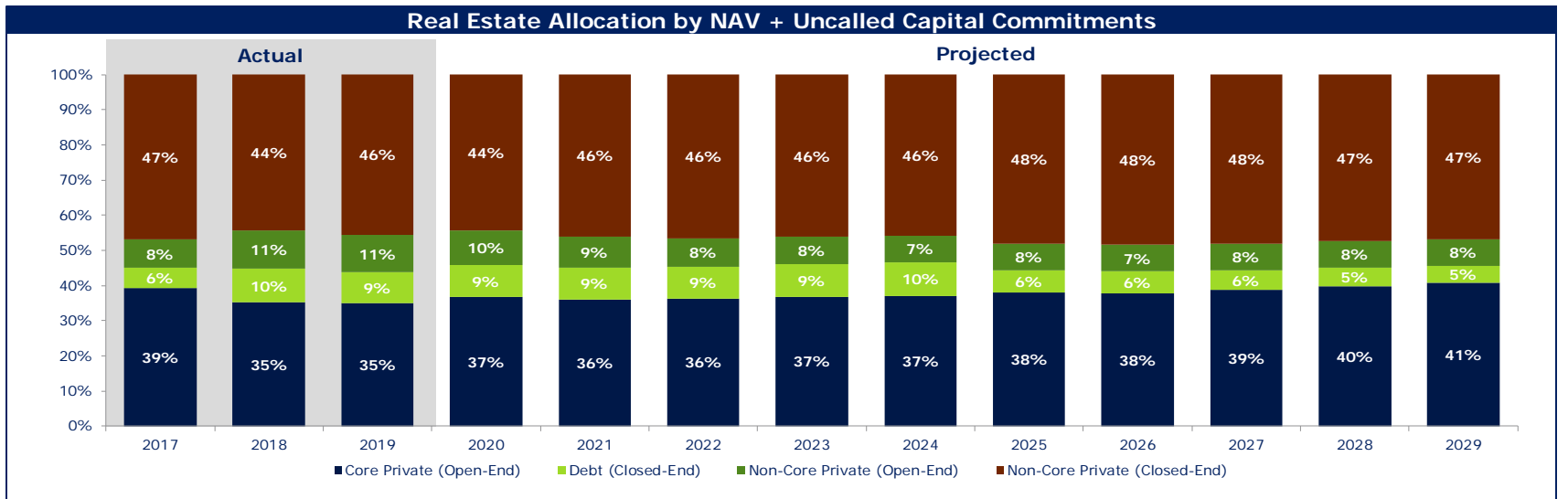
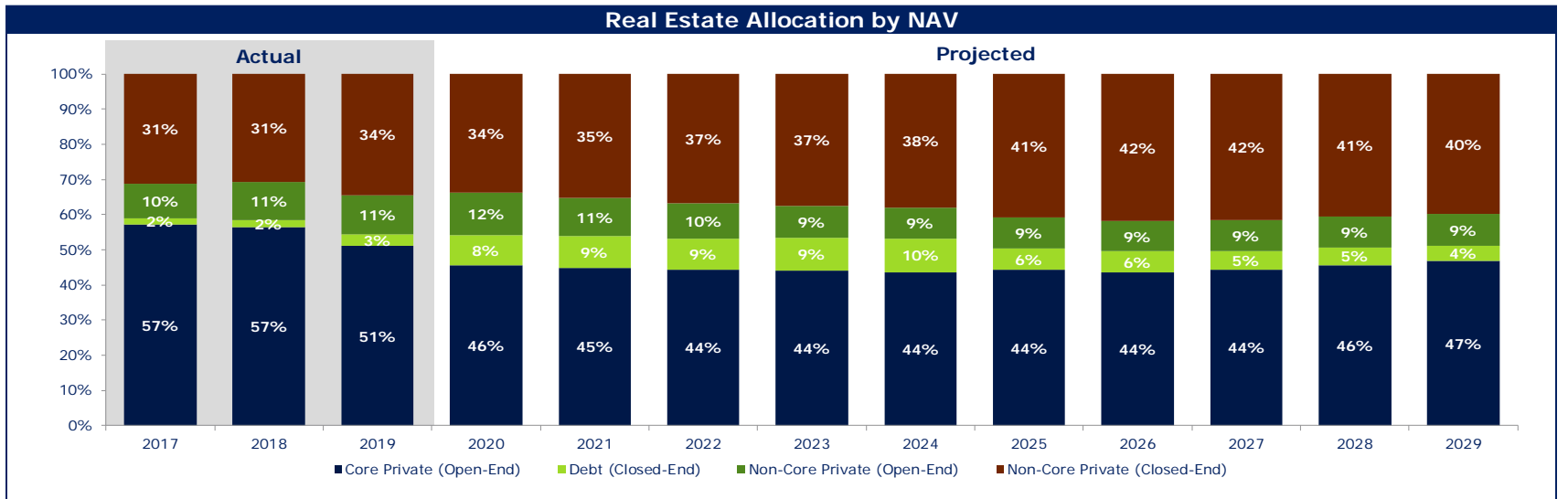
PRIVATE REAL ESTATE COMMITMENTS



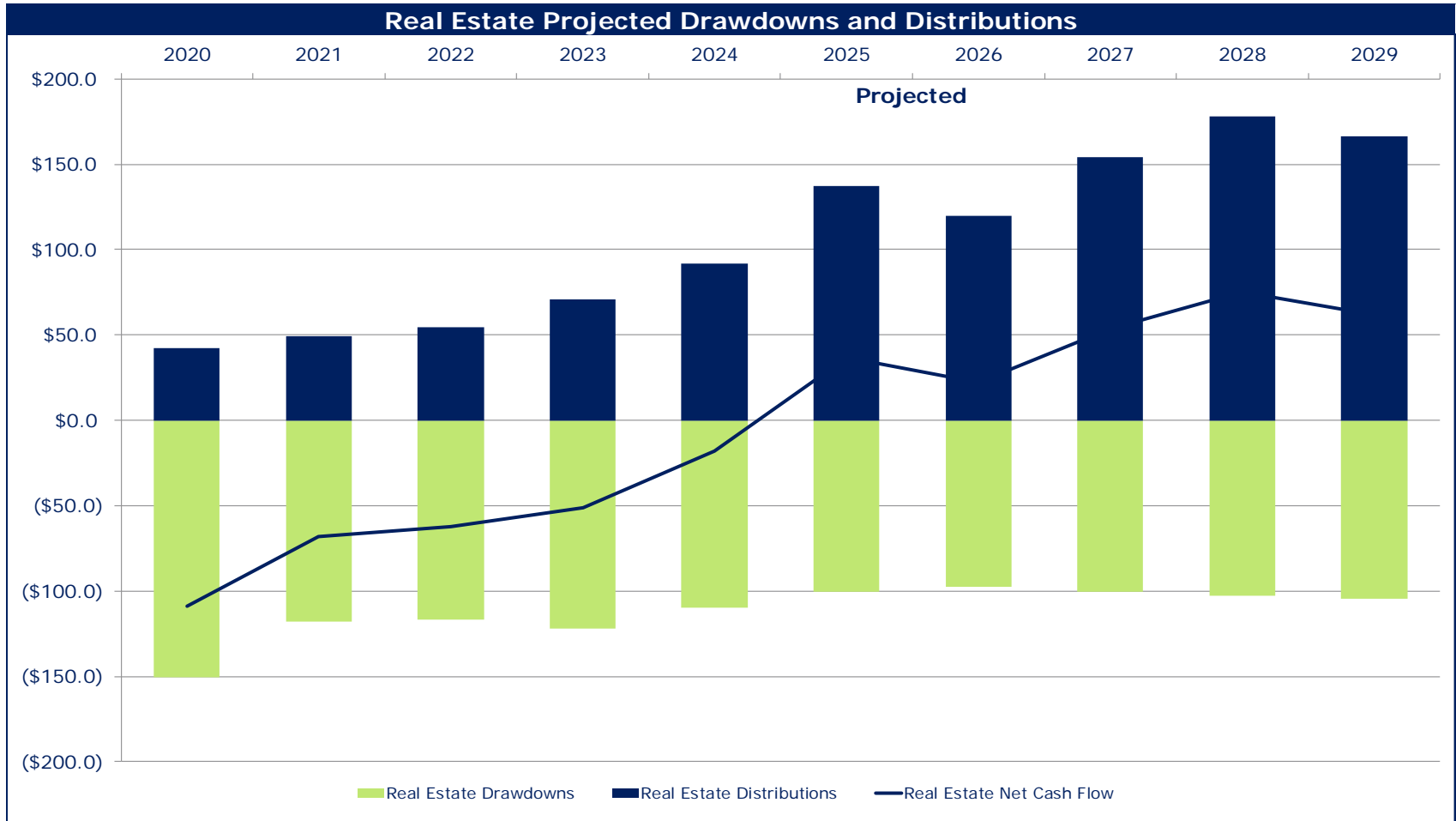
Real Estate Commitments by Vintage Year

| Commitments | Actual | | | More Certain | | | Less Certain | | | | | | |
|-------------------------------|-------------|--------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
| Core Private (Open-End) | \$0 | \$40 | \$0 | \$25 | \$25 | \$25 | \$18 | \$10 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Debt (Closed-End) | 0 | 35 | 0 | 15 | 15 | 15 | 15 | 15 | 10 | 15 | 10 | 10 | 10 |
| Non-Core Private (Closed-End) | 77 | 50 | 80 | 100 | 100 | 90 | 90 | 90 | 90 | 90 | 90 | 100 | 100 |
| Total Commitments | \$77 | \$125 | \$80 | \$140 | \$140 | \$130 | \$123 | \$115 | \$100 | \$105 | \$100 | \$110 | \$110 |

PRIVATE REAL ESTATE SUB-ALLOCATIONS



PRIVATE REAL ESTATE CASH FLOWS



| | Projected | | | | | | | | | | |
|---------------------------|-----------|---------|---------|---------|---------|---------|--------|---------|---------|---------|--|
| Year | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | |
| Real Estate Drawdowns | (\$151) | (\$118) | (\$117) | (\$122) | (\$110) | (\$100) | (\$98) | (\$100) | (\$103) | (\$105) | |
| Real Estate Distributions | 42 | 50 | 54 | 71 | 92 | 137 | 120 | 154 | 178 | 166 | |
| Real Estate Net Cash Flow | (\$109) | (\$68) | (\$62) | (\$51) | (\$18) | \$37 | \$22 | \$54 | \$75 | \$62 | |



APPENDIX

PACING PLAN DISCLAIMERS

- NEPC's private markets pacing analysis projects a potential level of future assets and cash flows for a single scenario based on a series of assumptions. This analysis is intended to help estimate future exposure levels. It is not a guarantee of future cash flows, appreciation or returns.
- The timing and amounts of projected future cash flows and market values of investments could vary significantly from the amounts projected in this pacing analysis due to manager-specific and industry-wide macroeconomic factors.
- Estimates of projected cash flows and market values for existing private markets commitments were made at the Fund level and do not incorporate any underlying portfolio company projections or analysis.
- The opinions presented herein represent the good faith views of NEPC as of the date of this report and are subject to change at any time.
- Data used to prepare this report was obtained directly from the investment managers and other third parties. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.
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ALTERNATIVE INVESTMENT DISCLOSURES

It is important that investors understand the following characteristics of non-traditional investment strategies including hedge funds and private equity:

1. Performance can be volatile and investors could lose all or a substantial portion of their investment
2. Leverage and other speculative practices may increase the risk of loss
3. Past performance may be revised due to the revaluation of investments
4. These investments can be illiquid, and investors may be subject to lock-ups or lengthy redemption terms
5. A secondary market may not be available for all funds, and any sales that occur may take place at a discount to value
6. These funds are not subject to the same regulatory requirements as registered investment vehicles
7. Managers may not be required to provide periodic pricing or valuation information to investors
8. These funds may have complex tax structures and delays in distributing important tax information
9. These funds often charge high fees
10. Investment agreements often give the manager authority to trade in securities, markets or currencies that are not within the manager's realm of expertise or contemplated investment strategy