

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

Exhibit A Page 6

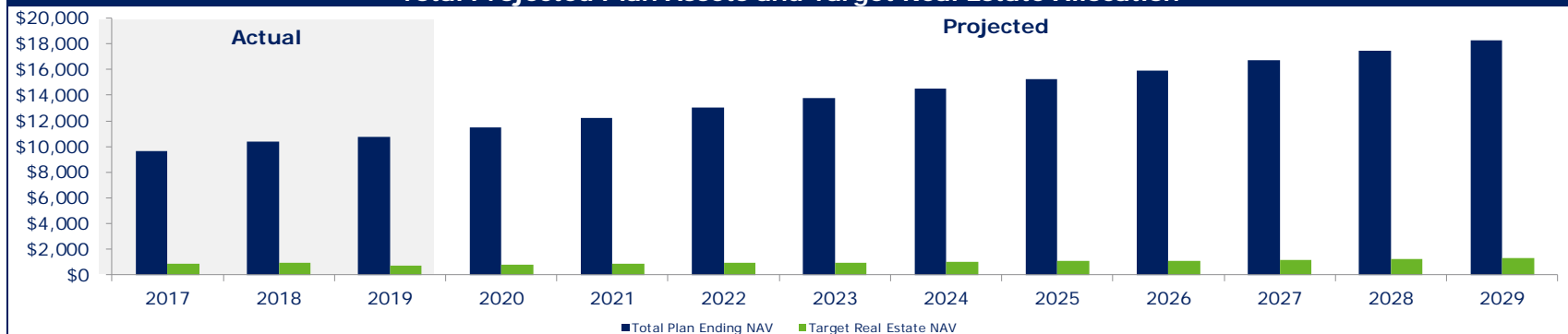
General Plan Assumptions

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%
		Expenses	0.1%	0.1%	0.1%
Total Real Estate NAV / Total Plan Assets	4.2%	Reserve for Expenses	0.0%	0.0%	0.0%
Total Real Estate Exposure / Total Plan Assets	6.2%	Net Growth Rate	6.8%	6.5%	6.9%
Target Real Estate Allocation % (Current Target)	7.0%	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

Exhibit A: Page 7

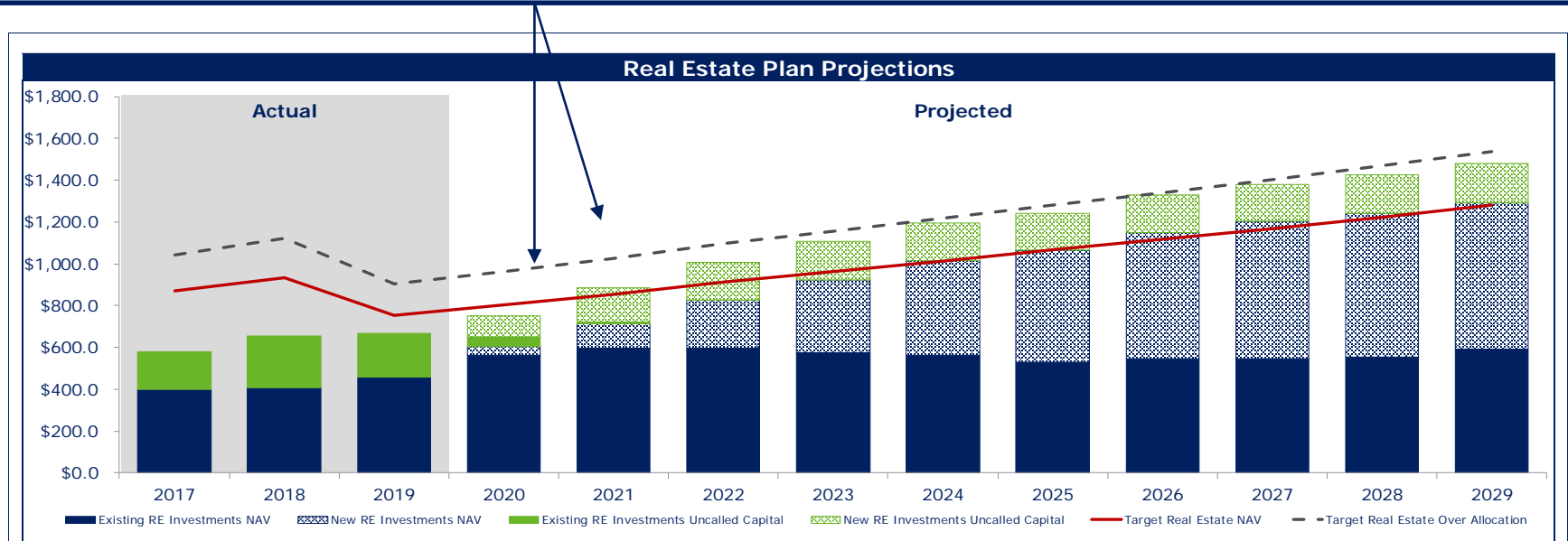
Existing Real Estate Investments										
Core Private (Open-End)										
Fund Name	Vintage Year	Committed	Paid In Capital	Capital to be Funded	Cumulative Distributed	Current Valuation (NAV)	Total Value	% of Dividends Reinvested	Current Redemption Requests	Redemption Request Year
American Realty Advisors	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
RREEF 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) /	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



Fund data as of 6/30/2019

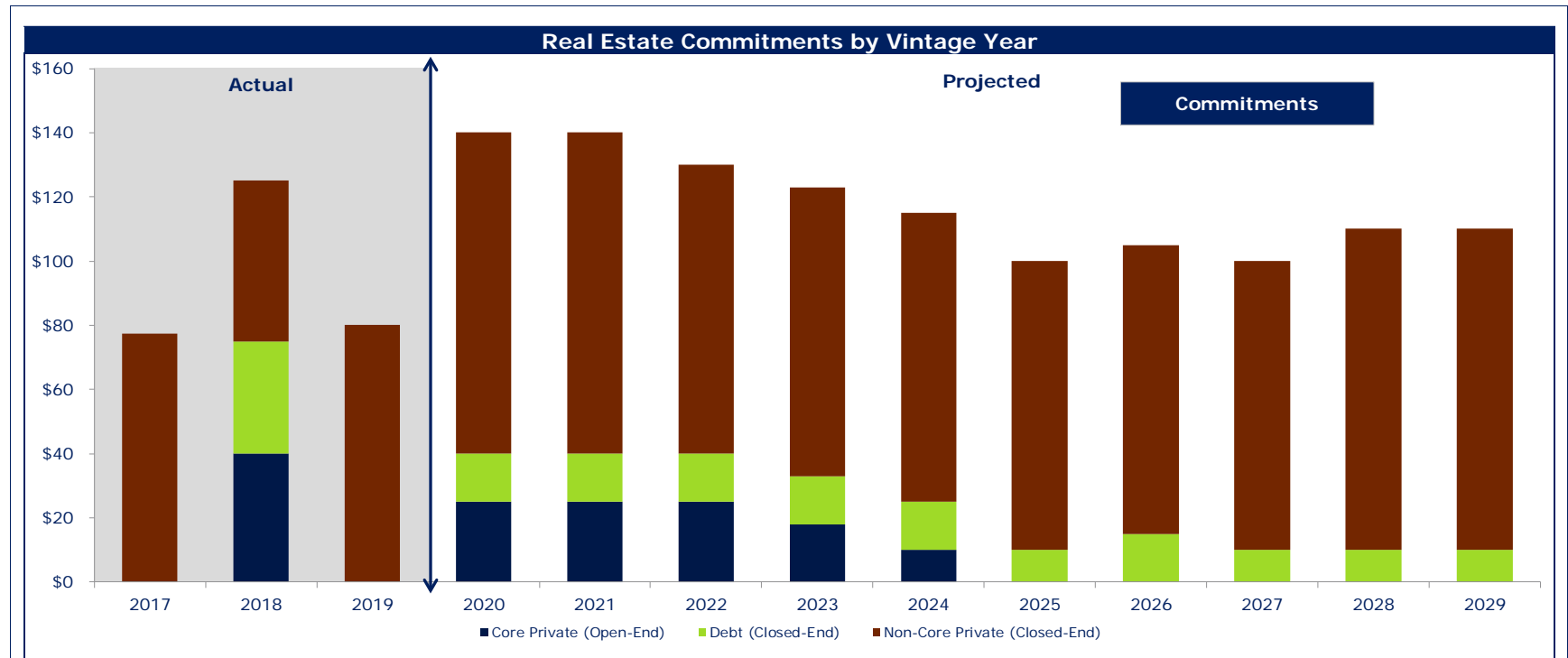
RECOMMENDED PACING PLAN: FUND PROJECTIONS

- **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.



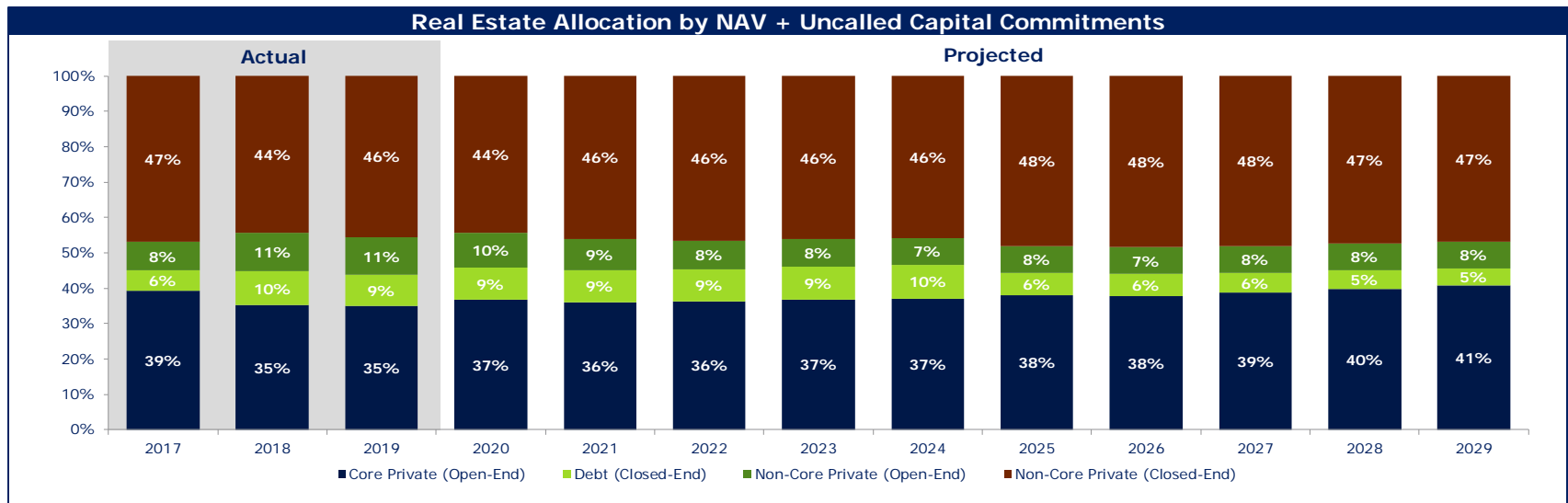
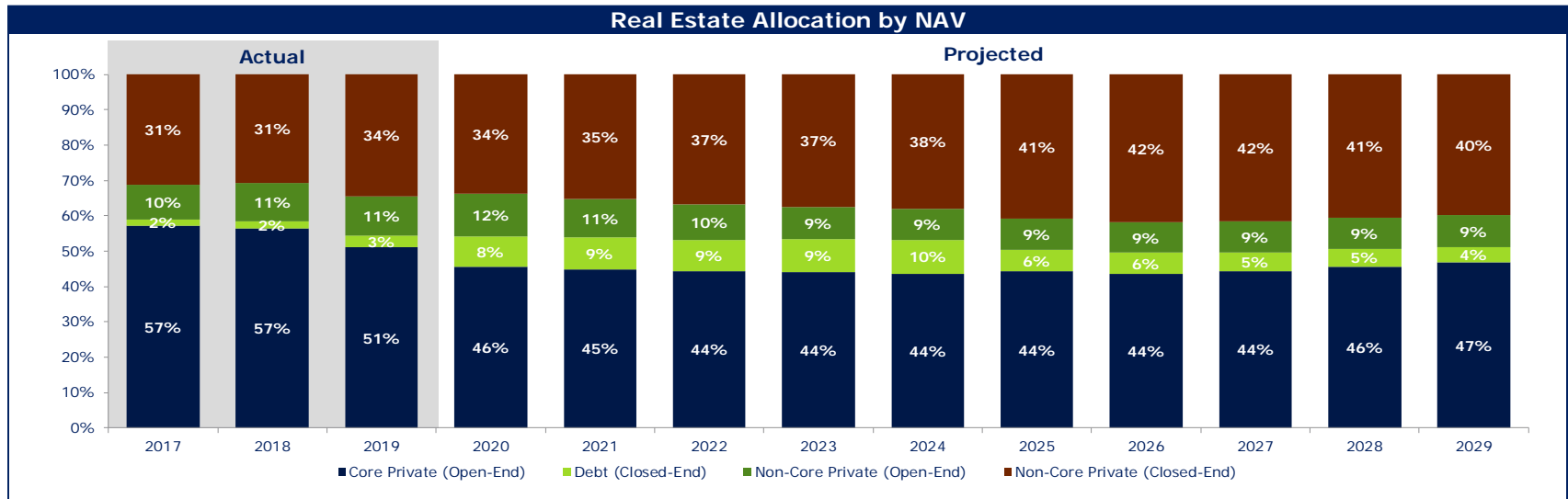
Year	Actual			Projected									
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Real Estate NAV	\$399	\$408	\$456	\$603	\$712	\$825	\$924	\$1,016	\$1,066	\$1,150	\$1,203	\$1,241	\$1,290
Uncalled Capital Commitments	\$180	\$247	\$209	\$149	\$174	\$182	\$182	\$181	\$176	\$178	\$176	\$183	\$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

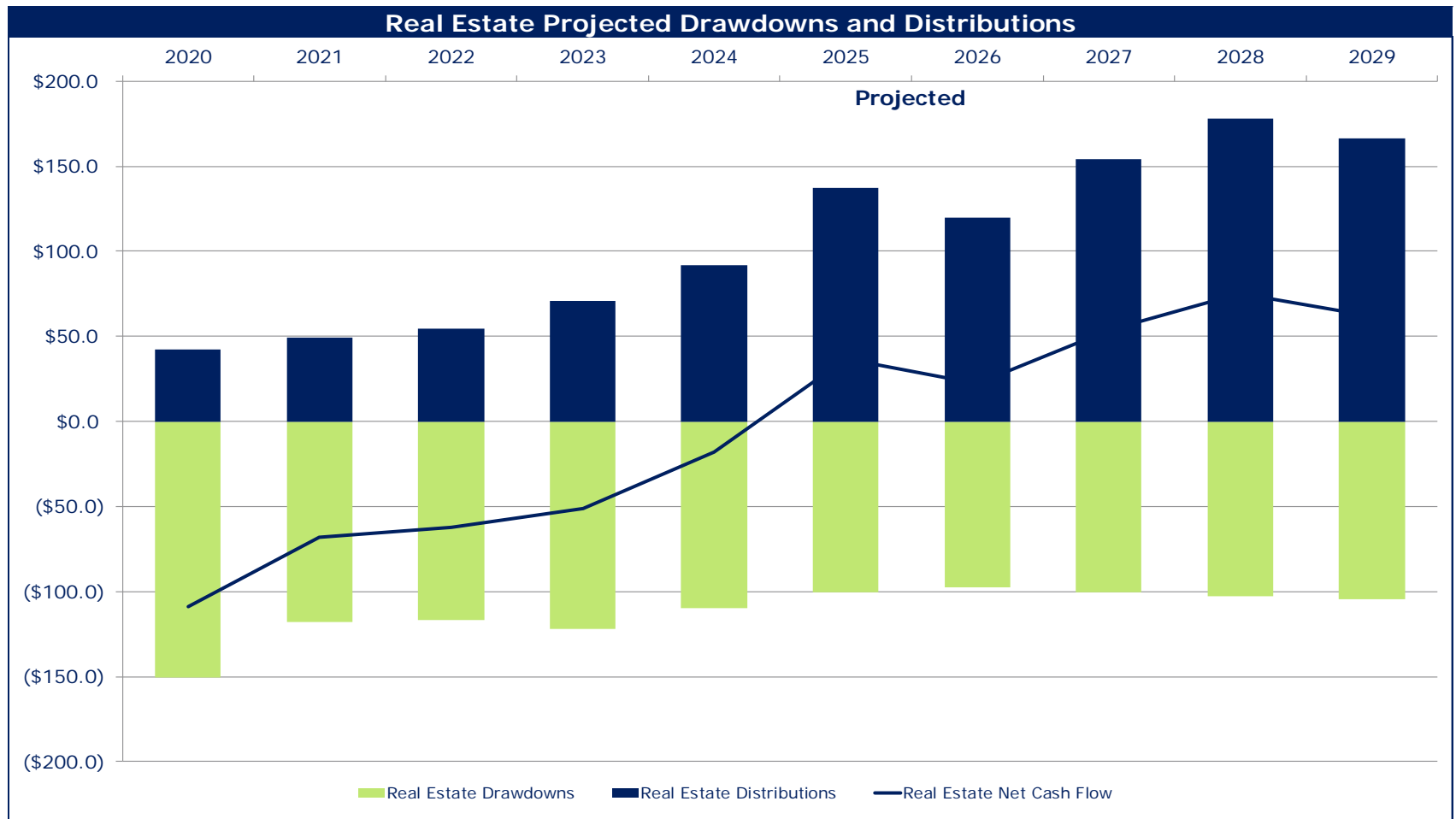


Real Estate Commitments by Vintage Year													
Commitments		Actual			More Certain			Less Certain					
Year	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Core Private (Open-End)	\$0	\$40	\$0	\$25	\$25	\$25	\$18	\$10	\$0	\$0	\$0	\$0	\$0
Debt (Closed-End)	0	35	0	15	15	15	15	15	10	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

- 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**