



COMMONWEALTH OF PENNSYLVANIA
PUBLIC SCHOOL EMPLOYEES' RETIREMENT SYSTEM

Public Investment Memorandum

Cabot Industrial Value Fund V, L.P.

Real Estate Commitment

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August 30, 2016



Recommendation:

Staff, together with Courtland Partners, Ltd, recommends the Board commit up to \$100 million to Cabot Industrial Value Fund V, L.P. (“Fund” or “Cabot V”). Cabot Properties (“Cabot” or the “Firm”) seeks to continue to provide superior real estate returns by value-add investing in industrial properties, located primarily in the United States, with up to 20% invested in Europe.

Firm Overview:

Cabot was initially formed in 1986 to invest in and develop real estate. Since 1987 the Firm has operated as an investment fiduciary for institutional investors, and since 1990 has been exclusively focused on the industrial sector. In January 1998, Cabot clients and other investors (including PSERS) contributed 125 properties as part of an IPO of a NYSE traded real estate investment trust. From 1998 – 2001 the Cabot REIT invested in 298 additional properties. In December 2001, the REIT was sold to a private institutional investor in an all-cash transaction valued at \$2.1 billion. Since 2001 Cabot has continued focusing on acquiring, developing, redeveloping, operating, leasing and selling value-added and core industrial properties on behalf of investors via a series of limited partnership funds.

Cabot is now a privately-owned, registered investment adviser with assets under management of over \$2.3 billion as of March 31, 2016. The active investments include two value-added funds and a core fund with properties in 27 markets and including approximately 37.4 million square feet (excluding partially completed developments). Fund I and Fund III have been fully liquidated, each having been sold as a portfolio to a public REIT, achieving returns far beyond the original target range of a net IRR of 13-15% for Fund I and 13-14% for Fund III.

Since 2001, Cabot has invested in 606 value-add industrial properties in 277 transactions with gross cost of \$3.7 billion.

Property Type	Number of Properties	Number of Transactions	Markets	International %	Total Square Feet
Industrial – Value-add	606	277	21	7.1% UK and Canada	74.7 million SF

Market Opportunity:

There are notable and sustainable long-term demand drivers that are likely to continue to impact industrial demand over time. These demand drivers include: the growth of third party logistics businesses (commonly referred to as “3PL’s”), rising levels of consumption, and e-commerce. 3PL operators have grown market share and demand substantially for functional, well-located properties, as businesses hire them in order to operate more efficiently and reduce their cost of managing and distributing inventories. Consumption increases are driven by the increasing population, and e-commerce has pushed inventory to wholesale from retail, creating demand for additional industrial product. The e-commerce fulfillment model has not yet become as efficient as traditional logistics. The evolution of consumer demand behind e-commerce is driving the need for a range of properties located nationwide. Not only are multiple locations needed for one-day delivery, they are required to meet consumer driven ‘reverse logistics’ (product returns) demand.

The fundamentals of the industrial market remain strong, with low vacancy and increasing rents. The level of supply remains well below levels experienced prior to the financial crisis, representing only 0.77% of the existing stock versus the historical average of 1.9%. Much of the current development is concentrated in larger buildings, not the typical 100-200k square foot ‘Cabot-style’ properties. Strong investor demand for diversified, income-producing portfolios of large scale continues to drive robust exits. The first quarter 2016 year over year net operating income growth hit 6.7%, roughly double the ten year average growth.



Portfolio Fit:

A commitment to the Fund will be allocated to the Real Estate portion of PSERS' Real Assets portfolio. As of March 31, 2016, and adjusted to include commitments from the March, May, June, and the current Board meeting, the Real Estate portfolio is 49.5% Opportunistic, 32.8% Value-Added, and 17.7% Core. Investment in this Fund will increase PSERS' Value-Add real estate exposure, which is currently below a long term target of 50%.

The table below summarizes PSERS' projected exposure inclusive of a recommended \$100 million commitment to the Fund:

Investment Type (\$M)	Market Value	%	Unfunded ⁽¹⁾	%	Total Exposure	%
Opportunistic	3,242.6	57.7%	1,037.5	34.4%	4,280.1	49.5%
Value-Add	1,406.2	25.0%	1,429.6	47.3%	2,835.8	32.8%
Core	974.9	17.3%	550.8	18.3%	1,525.7	17.7%
Total	\$ 5,623.7	100.0%	\$ 3,017.9	100.0%	\$ 8,641.6	100.0%

⁽¹⁾ Includes post Q1'2016 pending/closed commitments, and the three deals to be presented to the Board on October 7, 2016 (Cabot IVF V, Exeter IVF IV and Bell Institutional Fund VI)

Investment Strategy:

The Fund strategy will continue to focus on accretive acquisition, development, redevelopment, operating, leasing and selling of industrial properties. Targeted investments are value-add in nature and tend to be smaller in size (average deal size since 2001 has been approximately \$14 million). By the end of the four-year investment period, it is expected that Funds will distribute approximately 6% annually from income.

Pursue deals based on (i) locations with growing demand, (ii) disciplined valuations, (iii) ability to enhance value through active management, (iv) maximizing distributable current income, and (v) options for harvesting gains.

Fund V will be invested based on the following investment themes:

Theme	Description
Markets with Growing Demand	Primary focus on major industrial markets, and their submarkets, with characteristics including: (i) limitations on type and quantity of new development, (ii) proximity and access to labor, amenities, highways, railroads, airports and seaports, (iii) strong job growth and tenant demand, and (iv) market liquidity driven by amount of existing space, tenants and investor interest.
Disciplined Attention to Value	Use value-oriented experience to: (i) examine relationship between cost and market rents, (ii) establish a competitive cost basis, considering investment cost versus replacement cost, and (iii) assess repositioning potential, including leasing and renovations.
Create Value with Active Management and Development	Across fund portfolio, undertake actions to: (i) consider geographic and regional diversification, lease expiration schedules, building characteristics and tenant credit concentrations, (ii) communicate continuously with tenants for repeat business, and assist with their cost containment, including real estate tax management (iii) invest prudently in capital projects to balance tenant good-will and property value.
Provide Attractive Income Return	Industrial properties have low ongoing capital requirements, and the tenants pay all expenses related to the properties. Once favorable lease structures are implemented, such as fixed increases over the term, and accretive leverage is applied (less than 65% loan to cost), income is increased and distributed quarterly.
Realize Returns	Continually re-evaluate individual exit strategies for each investment and liquidate if the value has peaked and the future contributions to returns are nominal. Consider capital flows within the broader markets to determine if a portfolio premium may be achieved. Shift focus from acquisition to disposition efforts among markets as underlying characteristics evolve.



Investment Structure:

The Fund is a Delaware Limited Partnership that is domiciled in Boston. The General Partner is Cabot Industrial Value Fund V Manager, a Massachusetts Limited Partnership.

The Fund's sponsor, Cabot Properties, L.P., was formed in 2001 as a Delaware Limited Partnership and is registered as an investment adviser with the SEC. The firm is an employee-owned private partnership.

Investment Instruments:

Investments are expected to primarily be interests in real estate properties. The Fund is also authorized to invest up to 15% in mezzanine debt, or publicly traded securities.

Investment Team:

Cabot headquarters is in Boston, where they employ 39 individuals, including the six senior partner members of the Fund V Investment Committee that have worked together at Cabot an average of 21 years. The average tenure at Cabot for the entire investment professional team is 14 years. As the senior partners retire, the other partners increase their ownership on a pro-rata basis, and additional partners may be elected.

The Cabot team compensation is significantly incentive-oriented, with 15 of the 19 total investment professionals participating in the GP co-investment and the carry of the funds. All of the employees are fully dedicated to the core and value-added fund series, as there are not any other lines of business within Cabot.

Investment Highlights:

Longevity and experience of the Cabot firm and team
Cabot's experienced and cohesive team has been focused on the industrial arena for over 30 years and has demonstrated the ability to capitalize on their large network of national relationships as well as their broad local market relationships.
Creative exit solutions
Extensive experience in pursuing various exit routes. In 1998 they created the publicly traded Cabot REIT, which they subsequently sold in 2001. Fund I, established in 2002, was sold in a single transaction in 2005, realizing a net IRR of 120% and a 2.2x equity multiple for the fund investors. The remaining \$1.5 billion of Fund III assets were sold in one transaction in 2013, realizing a net IRR of 22% and a 1.5x equity multiple. Proven ability to select an effective and efficient marketing channel and team for any disposition efforts.
Strong value-added performance results
Cabot has realized all investments from the Cabot REIT, and Cabot Industrial Value Funds I & III which represents 66% of the \$5.7 billion in investments made since 1998. The net realized IRR of each of those investments exceeded 11% and the combined net realized IRR is 13.6%. Since 2001, exclusive of the Cabot REIT, Cabot has invested \$3.8 billion in 280 industrial transactions involving 606 value-add properties and 5 core properties, and has sold 307 properties; generating net returns greater than their target range of a 13-15% IRR.

Investment / Risk Considerations:

Development
The Fund expects development to continue to be an important component of their value-added business; however, they will continue to be limited to a maximum 20% speculative development. As of March 31, 2016, twelve percent of the portfolio was under development. Cabot will use their lessons learned to continue to consider projects in proven, permitted, in-fill locations, with demonstrated premium rents and tenant demand.



Reliance on Local/Regional Property Management and Leasing

Although Cabot outsources property management and leasing, their hands-on approach to asset management focuses on close relationships with tenants, stringent budgetary controls, and careful oversight of third-party leasing and management agents. They believe that superior property management is an essential tenant service, and regular tenant communication increases the likelihood that tenants will perform under lease obligations and greatly enhances tenant retention. Cabot focuses its asset management on tenant retention, and on improvements that will have a direct impact on rental rates. While Cabot pursues the more cost effective, direct lease renewals, they typically list all vacant space through leading local leasing broker relationships, which can provide them with access to new investment opportunities. Brokers bringing acquisition opportunities to Cabot know they generally will be awarded the leasing agency on a property purchased by Cabot.

PSERS History & Performance:

PSERS relationship with Cabot began in 1998, when PSERS' directly held industrial properties, valued at \$110 million, were traded for 5.5 million shares of the public Cabot REIT. The shares were tendered in 2001 for a gain of \$22 million and a net IRR of 11.3%.

More recently, PSERS has committed to three Cabot funds, and the table below summarizes these investments and performance as of March 31, 2016; except for the Core fund that had its final closing on June 20, 2016.

<u>Fund (\$,M)</u>	<u>Portfolio</u>	<u>Vintage</u>	<u>Commitment</u>	<u>Contributions</u>	<u>Distributions</u>	<u>NAV</u>	<u>Net IRR</u>	<u>Net MOIC</u>
Cabot Value Fund III	RE	2008	100.0	81.7	123.2	0	21.9%	1.5x
Cabot Value Fund IV	RE	2013	75.0	31.6	1.2	33.6	11.5%	1.1x
Cabot Core Fund	RE	2015	150.0	0	n/a	n/a	n/a	n/a
Total			\$325.0	\$113.3	\$124.5	\$33.6	21.2%	1.4x

Finance Committee Disclosure:

Relationship with Courtland Partners, Ltd:	None Disclosed
Introduction Source:	Fund Sponsor
Placement Agent:	No
PA Political Contributions:	None Disclosed
PA Presence:	Since 1998 Cabot invested in 15 PA assets totaling over \$175 million. PA continues to be a target market, and current Cabot holdings include three buildings with a total value of \$78M (including one development building under construction).
Potential Conflicts:	We are not aware of Cabot having any investment conflicts
First Time Fund With PSERS:	No
PSERS Allocation Implementation Committee Approval:	August 30, 2016

Oversight Responsibility:

Investment Office:	Charles J. Spiller Deputy CIO, Non-Traditional Investments Laurann H. Stepp Senior Portfolio Manager
External Consultant:	Courtland Partners, Ltd.

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August 30, 2016

Board of Trustees
Commonwealth of Pennsylvania,
Public School Employees' Retirement System
5 North 5th Street
Harrisburg, PA 17101

Re: Cabot Industrial Value Fund V, L.P.

Dear Trustees:

Courtland Partners, Ltd. ("Courtland"), having been duly authorized by the Board of PSERS, has evaluated Cabot Industrial Value Fund V, L.P. (the "Fund"). Cabot's objective is to build a high quality industrial property portfolio that will provide growing cash flow and achieve a premium valuation. Cabot's approach generally has been to assemble fund portfolios on a building by building basis or a few properties together in small transactions. Cabot is focused on achieving the best relative value (as compared to replacement costs) for each investment.

Cabot intends to achieve its attractive returns by: (i) focusing exclusively on the industrial sector; (ii) targeting locations with growing demand and scarcity value; (iii) underwriting with disciplined attention to value; (iv) creating value through active management; (v) providing attractive current income; and (vi) realizing returns. Cabot's industrial focus, extensive experience and longstanding market relationships in the industrial sector provide a competitive advantage over other investors in terms of market knowledge, deal flow and execution. The industrial real estate market is a large, fragmented and inefficient market made up of mostly smaller assets under \$20 million and offers opportunities for well-capitalized, experienced investors with the confidence to act quickly. Drawing on its experience, Cabot segments the market by type of building, use, and tenant size in order to identify and capitalize on supply and demand imbalances within segments as well as across target markets in North America and in England. The Fund will target value-add industrial assets in the North American (80%) and European (20%, with focus on the U.K.) markets.

Cabot invests primarily in large industrial markets, and focuses on submarkets with the following characteristics: limitations on the type and quantity of new development; proximity to labor and amenities; superior access to major highways, railroads, airports and seaports; strong job growth and tenant demand; and market liquidity, driven by a critical mass of existing property, tenants and investor interest. Based on extensive experience, market presence and tenant feedback, Cabot continually evaluates which locations are most likely to outperform the overall market. As the quality of investment opportunities and underlying market characteristics evolve, Cabot is able to shift its acquisition and/or disposition efforts among markets.

Cabot seeks properties that are under-leased or vacant. Immediate or near-term vacancy risk presents property owners with management concerns and significant financing challenges. Cabot is able to underwrite leasing risk giving the company a competitive advantage in accessing and acquiring assets at favorable prices per square foot. Cabot also creates value through the development process through (i) careful site selection; (ii) state-of-the-art building designs; (iii) careful management of construction cost and risk; (iv) aggressive and focused leasing; and (v) an understanding of tenant demand and market supply

trends. As an active acquirer, Cabot is able to identify when returns from development are appropriate on a risk-adjusted basis, allowing it to migrate between acquisition and development to exploit different economic and market cycles.

Cabot believes a value-add investment strategy is attractive at this time, given the economic recovery, improving industrial market fundamentals, relatively attractive pricing for value-add buildings given low in place rents, ability to pursue targeted development, low interest rates, and continuing strong institutional demand for high quality portfolios.

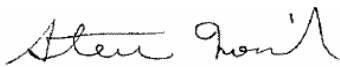
Courtland's recommendation is based upon the following factors and is made within the context of PSERS' investment guidelines.

- Detailed due diligence, including interviews with key Cabot Properties management team members, and review of all relevant materials provided by Cabot Properties.
- Evaluation of the Fund's proposed investment strategy within the context of the current investment environment.
- Evaluation of Cabot Properties' track record and organizational resources.
- Discussion and review of the market conditions in markets relative to the proposed investment strategy.
- The strategy proposed for the Fund is appropriate for the real estate component of the portfolio.

Based on the above factors, Courtland recommends that PSERS commit up to \$100 million to the Fund. Courtland makes this recommendation considering Cabot's qualifications and PSERS' overall investment guidelines.

This recommendation is given solely for the benefit of PSERS and cannot be relied upon by other investors considering an investment in the Fund, since their needs, objectives and circumstances may not be identical to those of PSERS. The scope of this recommendation is limited to the investment merits of the Fund. Courtland does not provide legal or other non-investment-related advice.

Sincerely,



Steven Novick
Principal-Chief Operating Officer

COURTLAND PARTNERS, LTD.