



COMMONWEALTH OF PENNSYLVANIA
PUBLIC SCHOOL EMPLOYEES' RETIREMENT SYSTEM

Public Investment Memorandum

LBC - PSERS Credit Fund, L.P.

High Yield Commitment

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Recommendation:

Staff, together with Portfolio Advisors, recommends the Board commit up to \$350 million to LBC - PSERS Credit Fund, L.P. (the "Fund"). The Fund will be structured as a separately managed account and is being raised in conjunction with LBC Credit Partners IV, L.P. ("Fund IV"), a commingled fund. The Fund will continue the investment strategy of LBC Credit Management, L.P. ("LBC" or the "Firm"). It is anticipated that the Fund will co-invest with Fund IV and its future successor funds on a pro-rata basis.

Firm Overview:

LBC was co-founded in 2005 by John Brignola, Christopher Calabrese, Nathaniel Cohen and Ira M. Lubert to provide financing solutions to North American middle market companies. The Firm is headquartered in Philadelphia, and employs 21 investment professionals. Today, LBC manages over \$1.75 billion of capital commitments and has invested ~\$3.5 billion (including leverage) across three investments funds:

Fund	Vintage	Commitments (\$mm)
LBC Credit Partners, L.P. ("Fund I")	2005	\$300
LBC Credit Partners II, L.P. ("Fund II")	2008	\$642
LBC Credit Partners III, L.P. ("Fund III")	2013	\$839

Investment Strategy:

The Fund will originate and manage a diversified portfolio of secured, middle market loans to North American borrowers. LBC defines middle market companies as those with revenues of typically less than \$750 million and EBITDA of \$5 million to \$50 million. LBC provides transitional capital to fund acquisitions, refinancings, growth, recapitalizations, and turnarounds on a sponsored or unsponsored basis. LBC stresses cash flow sustainability and proven business models when selecting borrowers and prefers secured debt to unsecured debt and equity. While their strategy is industry agnostic, LBC avoids service companies with low competitive barriers and tends to avoid the retail, general distribution and real estate development sectors. Typical investments will range in size and maturity; between \$10 million and \$50 million and three to seven years, respectively. The Fund will target 45 – 55 investments.

Investment Structure:

LBC employs a value oriented investment approach; seeking to maximize current return while providing downside protection. As such, LBC intends to structure the majority of its investments as secured debt with either a first or second lien on the company's assets which provides the potential to create a recovery floor. LBC typically seeks to obtain all of the rights and remedies of a senior secured lender and in the case of a junior secured transaction, lien subordination rather than debt subordination so as to reduce the risk of payment blockage. LBC also focuses on negotiating strict inter-creditor provisions that can limit debt layering and maximize their rights in the event of a bankruptcy.

LBC seeks to structure its investments with floating rate coupons linked to short-term market base rates (typically LIBOR or the Prime Rate), which helps reduce interest rate risk. The components of the investment yield will typically consist of up-front fees (1% to 3%), cash-pay interest (7% to 15%), PIK interest (up to 3%) and ancillary and recurring fees including anniversary, servicing, and monitoring fees (up to 3%). Opportunistically, structures may also include conversion rights, warrants and other types of equity yield enhancements, including equity participations, which could increase yields on those investments by an additional 2% to 5%.

Lastly, loan agreements will typically contain covenants designed to maintain the credit risk profile of the borrower in an effort to protect the rights of the Fund to receive timely payments of principal and interest and to preserve the enterprise value of the borrower.



Investment Instruments:

Typical investments are expected to be corporate loans possessing a senior lien on all or specific assets of a borrower or a junior lien on all assets of the borrower. The primary types of these loans are cash flow, uni-tranche, bifurcated term, second lien and secured mezzanine. The Fund may also invest in traditional unsecured mezzanine loans, broadly syndicated corporate loans and, to a lesser extent, equity participations, corporate leases, debtor-in-possession loans, loan pools and on a limited basis, bonds that are traded in the primary and secondary market. LBC's investments will generally be unrated and not actively traded in any secondary market.

Investment Team:

LBC's day-to-day management and operations are led by John J. Brignola, Christopher J. Calabrese, and Nathaniel R. Cohen. In total, LBC employs 30 total professionals, including 21 investment professionals. LBC's investment decision-making process is led by the Firm's seven-member Investment Committee (the "IC"). The IC is comprised of the Firm's four investment partners and three additional senior investment professionals. Decisions are made on an anonymous basis with five affirmative votes required for approval. The table below summarizes the experience of LBC's Partners and Managing Directors:

Name	Title	LBC Tenure / Industry Experience	Prior Experience
John J. Brignola*	Managing Partner	10 / 29	Citade Investments, PPM America, Meridan Bank
Christopher J. Calabrese*	Partner	10 / 29	Congress Financial, First Union Bank, Meridan Bank
Homyar Choksi*	Partner	8 / 33	GE Capital
Nathaniel R. Cohen*	Partner	10 / 27	LLR Partners, Comcast Corporation
Ira M. Lubert	Partner	10 / 36	Independence Capital Partners, TL Ventures, IBM
Allan Allweiss*	Sr. Managing Director	7 / 32	Bank of America, Fleet Bank, CIT
David E. Fraimow*	Sr. Managing Director	10/34	Murray, Devine & Co., First Union Bank, Meridian Bank
John Capperella*	Managing Director	6 / 21	GE Capital, American Capital, Heller Financial
John Jadach	Managing Director	5 / 20	JP Morgan Chase, Wachovia

* Denotes IC Member

Market Opportunity:

The impact of increased regulations and bank disintermediation has created a significant increase in market share for alternative lenders such as LBC. According to S&P Capital IQ, bank market share of total leveraged loan issuance has declined from over 70% to less than 12% over the last 20 years. In addition, according to Preqin, U.S. private equity firms have over \$340 billion of undrawn capital to make levered acquisitions and nearly half (in number) of private equity investments made since 2005 are over five years old, suggesting they are approaching the end of the typical holding period. This has the potential to create ample opportunity for LBC to create, issue and refinance sponsor-backed loans. LBC believes the middle market is underserved relative to the broader institutional market and provides a wide array of creditable borrowers and attractive risk-adjusted returns.



Investment Highlights:

Experienced & Cohesive Senior Management Team
LBC has assembled a management team with extensive experience in all aspects of middle market direct, private lending and debt investing consistent with the Fund's strategy. Messrs. Brignola, Calabrese and Cohen have known each other or worked together for the past 16 years and have over 85 years of collective investment experience. Further, LBC's senior investment professionals (Vice President level and above) average 21 years of investment experience. LBC has experienced minimal turnover with only one senior-level departure since the formation of Fund III.
Strong Track Record
Since inception through June 30, 2015, LBC has executed transactions with 153 borrowers across three prior funds, representing ~\$3.5 billion invested capital (including leverage and recycling). As of June 30, 2015: Fund I generated an 11.4% net IRR and a 1.4x net multiple; Fund II generated a 14.4% net IRR and a 1.3x net multiple; and Fund III generated a 16.3% net IRR and a 1.14x net multiple. In aggregate, the three prior funds generated a 13.2% net IRR (21% gross) and a 1.3x net multiple (1.4x gross).
Value Oriented Investment Strategy
LBC employs a value oriented investment approach; seeking to maximize current return while providing downside protection. As such, LBC intends to structure the majority of its investments as secured debt with either a first or second lien on the company's assets which provides the potential to create a recovery floor. LBC seeks to create transactions at ~3x Debt/EBITDA and this is evidenced by LBC's 3.31x weighted average Debt/EBITDA at closing across its three prior funds.
Low Default Rate & Loss Ratio Since Inception
Since inception in 2005 through June 30, 2015, the prior funds have had 12 defaulted borrowers out of a total of 153, representing an average annual default rate of less than 0.81% per year. LBC has recovered 122.5% of original capital based on amounts received to date and expected to be received in the future, with only four defaulted loans expected to return less than par. Fund III has not experienced any defaults or losses to date. In terms of fund-level and portfolio-level (unlevered) loss ratios, LBC generated a 3.0% and 1.2% loss ratio, respectively. This is a testament to the quality of LBC's underwriting capabilities and desire to construct a well-diversified portfolio.
Velocity of Distributions & Peak Invested Capital
LBC's yield-oriented investment strategy has resulted in consistent quarterly income distributions for limited partners mitigating the J-Curve profile relative to typical private funds. The Fund will seek to provide PSERS with a high degree of current income (targeted at 7% per annum with quarterly payments). In terms of peak invested capital, Fund I reached its peak net cash outstanding two years into its investment period at 62%; Fund II reached its peak at the end of its investment period at 58%; and Fund III is within its investment period with current net cash outstanding of 47%.

Investment Considerations:

Competition From Other Mid-Market Lenders
LBC's platform is differentiated due to their experienced team, high-quality underwriting process and strong track record. While the mid-market has seen many new entrants over recent years, the lower end of the middle market is underserved relative to the broader institutional market. Opportunities are generally relationship based where certainty of execution and experience are leading selection factors. Therefore, LBC's national brand awareness and 10-year track record should distinguish them from their competitors.
Use of Leverage
While there is inherent risk in any levered investment vehicle, LBC has demonstrated their ability to use leverage in a prudent manner across its three prior investment vehicles. This is evidenced by LBC's low fund-level loss ratio since inception (3.0%). Leverage will be limited to 50% of total assets (1:1 debt to equity) and LBC intends to build a diversified portfolio in terms of sector and industry. Lastly, leverage used by LBC has contributed ~350 basis points of incremental performance to the net returns of the prior funds.



PSERS History & Performance:

Since 2008, PSERS has committed \$615 million to two LBC-managed partnerships. As of September 30, 2015, LBC generated a 14.6% net IRR and a 1.25x net MOIC for PSERS. The table below summarizes PSERS' historical performance across LBC by partnership:

Fund (\$mm)	Portfolio	Vintage	Commitment	Contributions	Distributions	NAV	Net IRR	MOIC
LBC Credit Partners II, L.P.	HY	2008	\$ 375.0	\$ 348.8	\$ 413.6	\$ 40.7	14.8%	1.30x
LBC Credit Partners III, L.P.	HY	2013	240.0	166.7	58.3	134.2	13.5%	1.15x
Grand Total			\$ 615.0	\$ 515.5	\$ 471.8	\$ 174.9	14.6%	1.25x

Portfolio Fit:

A commitment to the Fund will be allocated to the Senior Loan bucket of PSERS' High Yield portfolio. As of June 30, 2015, the High Yield portfolio (based on total exposure) was allocated 52% Opportunistic, 22% Senior Loans, 19% Mezzanine and 7% Real Assets. An additional commitment to LBC will allow PSERS to continue its relationship with a high-conviction manager that is well positioned to execute on its investment strategy, evidenced by their top-quartile performance within PSERS' High Yield portfolio.

The table below summarizes PSERS' projected exposure inclusive of a recommended \$350 million commitment to the Fund:

Investment Type	Active Commitments ¹	%	Market Value	%	Unfunded ¹	%	Total Exposure ¹	%
Opportunistic	\$ 3,873.1	48.2%	\$ 1,574.1	50.5%	\$ 1,771.7	53.0%	\$ 3,345.8	49.5%
Senior Loans	2,665.0	33.2%	881.1	28.3%	855.6	25.6%	1,736.7	25.7%
Mezzanine	870.4	10.8%	385.8	12.4%	527.1	15.8%	1,215.2	18.0%
Real Assets	628.8	7.8%	277.2	8.9%	190.3	5.7%	467.5	6.9%
Total	\$ 8,037.2	100.0%	\$ 3,118.1	100.0%	\$ 3,344.8	100.0%	\$ 6,765.2	100.0%

(1) Include post Q2'2015 pending/closed commitments.

Liquidity & Leverage Profile:

The Fund will be structured as an evergreen investment vehicle which will continue until dissolved by either LBC or PSERS. PSERS' commitment to the Fund will be subject to a minimum commitment period of three (3) years. After the expiration of the minimum commitment period, PSERS will be entitled to issue a termination election notice and the Fund will enter its wind-down period. LBC will have the ability to recycle proceeds from portfolio investments limited to the invested capital portion of such proceeds.

The Fund will use portfolio-wide leverage and LBC anticipates leveraging the aggregate investment portfolio up to a 1:1 debt to equity ratio. LBC expects to borrow under one or more credit facilities, including a subscription facility, to fund the loans originated or otherwise acquired and will continue to borrow under the credit facilities to originate and acquire loans and other investments. LBC also expects to retain investment proceeds to pay down outstanding borrowings under the credit facilities to the extent of such available amounts.



Finance Committee Disclosure:

Relationship with Portfolio Advisors:	Acquired secondary interest in LBC Credit Partners II
Placement Agent:	None used for PSERS
PA Political Contributions:	None Disclosed
PA Presence:	Yes
Conflicts:	None Disclosed
First Time Fund With PSERS:	No
PSERS Internal Alpha Committee Approval:	November 17, 2015

Oversight Responsibility:

Investment Office:	Charles J. Spiller Managing Director James F. Del Gaudio Senior Investment Professional
External Consultant:	Portfolio Advisors LLC



November 12, 2015

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

Re: LBC - PSERS Credit Fund, L.P.

Dear Trustees:

LBC Credit Management ("LBC" or the "Firm") is seeking to create a Separate Managed Account with PSERS of up to \$350 million for LBC - PSERS Credit Fund, L.P. (the "PSERS SMA"). The PSERS SMA is being established to continue LBC's strategy of originating, executing and managing a diversified portfolio of privately negotiated, secured, high-yielding loans to middle market businesses. LBC defines the middle market as companies with revenues of less than \$750 million and EBITDA of \$5 million to \$50 million. Typical investments will range in size between \$10 million and \$50 million. The PSERS SMA will seek to provide PSERS with a high degree of current income (targeted at 7% per annum with quarterly payments) and a total net IRR of 14% to 16%. Consistent with the prior funds, the Firm will apply leverage to the aggregate investment portfolio of up to 50% of total assets (1:1 debt to equity investment ratio). LBC intends to originate and manage investments with maturities ranging from three to seven years. The Firm expects the actual tenure of the loan to be shorter than the contractual maturity due to principal reductions in the form of amortization, cash flow sweeps, and early full repayments.

The PSERS SMA will be value oriented by seeking to maximize current return while providing downside protection. The PSERS SMA intends to continue LBC's strategy of mitigating risk and minimizing volatility by making investments across a broad range of industry sectors based on comprehensive credit and operational evaluations. Typical investments are expected to be corporate loans possessing a senior lien on all or specific assets or a junior lien on all assets of the borrower. These loans will primarily be unitranche, bifurcated term, second lien and secured mezzanine. The PSERS SMA also may invest in traditional revolving and cash flow loans, unsecured mezzanine loans, broadly syndicated corporate loans and, to a lesser extent, equity participations, corporate leases, debtor-in-possession ("DIP") loans, loan pools and bonds that are traded in the primary and secondary market. The loans and other investments held by the PSERS SMA generally will be unrated and not actively traded in any secondary market. In pursuing the strategies outlined above, the PSERS SMA may utilize leverage, loan sales, hedging techniques and derivative instruments.

The majority of the loans will be structured with floating-rate coupons linked to short-term market base rates (typically LIBOR or the Prime Rate) and include interest rate floors, thereby minimizing risk to interest rate exposure. The components of the investment yield will typically consist of up-front fees (1% to 3%), cash-pay interest (7% to 15%), PIK interest (up to 3%) and ancillary recurring fees including



anniversary, servicing and monitoring fees (up to 3%). Opportunistically, structures may also include conversion rights, warrants and other types of equity enhancements which could increase yields on those investments by an additional 2% to 5%. Additionally, as with the prior three funds, LBC will recycle principal realized during the investment period.

Portfolio Advisors' recommendation is based upon the following analytical factors and is made within the context of PSERS' investment guidelines.

- Detailed due diligence, including interviews with industry peers and private equity professionals. The on-site due diligence visit was performed on October 9, 2015.
- Evaluation of the composition of the investment team, how they work together, compensation structure and other factors that help determine whether a group is likely to be able to replicate past successes as currently configured.
- Evaluation of the Fund's proposed investment strategy within the context of the current investment environment.
- The strategy proposed for the Fund is appropriate for the High Yield Fixed Income component of the portfolio.

The individuals at Portfolio Advisors who were primarily involved in the due diligence process for the Fund are:

John Kyles – Managing Director, Darien Office
Mckay Dunn – Senior Associate, Darien Office

Based on the above, Portfolio Advisors recommends that PSERS commit up to \$350 million in LBC - PSERS Credit Fund, L.P. Portfolio Advisors makes this recommendation considering the General Partner'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. Portfolio Advisors does not provide legal or other non-investment-related advice.

Sincerely,

A handwritten signature in blue ink, appearing to read "W. Indelicato", is written over a light blue horizontal line.

WILLIAM J. INDELICATO
MANAGING DIRECTOR