COMMONWEALTH OF PENNSYLVANIA
PUBLIC SCHOOL EMPLOYEES' RETIREMENT SYSTEM

Public Investment Memorandum

AG Realty Value Fund X, L.P.

Value-Add Real Estate Commitment

William P. Stalter
Senior Portfolio Manager

April 25, 2018

Recommendation:

Staff, together with Courtland, a StepStone company, recommends the Board commit up to $150 million to AG Realty Value Fund X, L.P. (the "Fund", "Fund X" or "Value Fund X"). Angelo, Gordon & Co. ("Angelo, Gordon", "AG" or the "Firm") seeks to acquire sub-performing real estate assets, primarily in the U.S., and employ value-added strategies to achieve targeted returns. The Fund will also co-invest up to 20% of Fund equity in value-add deals alongside Angelo, Gordon's Europe and Asia realty funds. The Fund will target returns of 16-17% Gross (12-13% Net) IRR and 1.8-1.9x (1.6-1.7x Net) MoC.

Firm Overview:

Angelo, Gordon & Co., L.P. is a privately held firm founded in 1988 by John Angelo (deceased) and Michael Gordon that specializes in global alternative (non-traditional) investments with an absolute return orientation. As of December 31, 2017, the Firm assets under management ("AUM") was approximately $28 billion, managed by over 450 employees, including 175 investment professionals. With headquarters in NYC and offices in Chicago, Houston, Los Angeles, San Francisco, London, Amsterdam, Frankfurt, Milan, Hong Kong, Tokyo, and Seoul, capital is managed for four different strategies: (i) real estate; (ii) corporate credit; (iii) direct lending; and (iv) securitized products. In each area, AG seeks to generate absolute returns in all market environments with less volatility than the general market by exploiting inefficiencies and capitalizing on situations that are not considered mainstream investment opportunities. The Firm is currently 100% owned by the founders and affiliated parties and the Firm is a U.S. Securities and Exchange registered investment adviser.

AG is an active investor in value-add real estate opportunities throughout the Unites States, Europe and Asia. Over nearly 25 years, AG has launched 19 funds and acquired more than $27 billion of real estate assets, deploying over $11 billion of equity.

Market Opportunity:

Substantial opportunities continue to exist to purchase underperforming real estate properties. Although liquidity and pricing for real estate assets have increased significantly since the global financial crisis, the market for underperforming properties in the current late cycle environment continues to be sizeable and inefficient. Angelo, Gordon is positioned to identify underperforming assets, which will benefit from hands-on repositioning and to take advantage of overleveraged capital structures and disinterested or out of the money ownership to acquire properties at a significant discount to replacement cost. There are many assets where the prior owner lacked the capital, expertise, time or motivation to maximize value. This can occur in all market environments and is expected to present Fund management with an attractive opportunity to utilize its value-add approach and deep operating partner relationships to maximize value.

The next four years are likely to be an attractive time to pursue value-add real estate investments. The U.S. economy has enjoyed a slow but steady strengthening over the last eight years, with improvement in gross domestic product, employment growth, household formation, and consumer spending, leading to increasing demand for real estate. Supply remains limited in most asset classes and in many markets, leading to an environment which should continue to see stable fundamentals.

Portfolio Fit:

A commitment to AG Realty Value Fund X, L.P. will be allocated to the Value-add portion of PSERS' Real Estate portfolio. Using the net market value from September 30, 2017, and adjusting the unfunded to include commitments from the prior and current Board meetings, the Real Estate portfolio would be 20.0% Core, 43.2% Opportunistic, and 36.8% Value-Added.

The table below summarizes PSERS' projected exposure inclusive of a recommended $150 million commitment to the Fund, as of September 30, 2017:

Investment Type ($M)	Market Value[1]	%	Unfunded	%	Total Exposure[1]	%	Long Term Target (%)
Core	1,567.3	25.9%	170.3	6.4%	**1,737.6**	**20.0%**	**20%**
Opportunistic	2,813.2	46.5%	947.7	35.7%	**3,760.9**	**43.2%**	**30%**
Value-Add	1,670.1	27.6%	1,538.7	57.9%	**3,208.8**	**36.8%**	**50%**
Total	**$ 6,050.6**	**100%**	**$ 2,656.7**	**100%**	**$ 8,707.3**	**100%**	**100%**

[1] Includes Gross PTRES Exposure

Investment Strategy:

The Fund's strategy emphasizes the purchase of underperforming and undervalued real estate assets which Angelo, Gordon can benefit from active asset management to reposition and stabilize properties. The firm typically purchases assets from owners who lack the capital, patience, incentives or expertise to improve cash flow and value. The assets are often attractively priced due to the lack of current cash flow, difficulty in obtaining debt financing, complexity of execution, and/or inefficiency of the sale process.

Generally, the Fund will work with a local operating partner to correct the asset's performance, increase cash flow and add significant value.

The Fund's targeted holding period for assets is expected to be three to six years, depending upon the length of time needed to correct an asset's underperformance. The goal of the Fund is that post-stabilization, assets, (i) will be highly sought after by traditional institutional real estate investors and (ii) will continue to appreciate even after asset underperformance has been corrected.

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

Theme	Description
Add Value in a Diversified Manner	Do so by: (i) improving operations, (ii) investing capital accretively in renovation strategies to increase occupancy, move rents higher and attract better quality tenants; and/or (iii) changing use to identify higher and better purpose for an asset.
Capital Preservation	AG will underwrite deals in a conservative manner, assuming limited rent growth and increasing cap rates on exit. The team will focus on acquisitions in major markets, which historically have provided more liquidity at exit. Additionally, the team will utilized modest levels of leverage, consistent with how they have utilized debt in the past.
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 New York-based Delaware Limited Partnership. The General Partner is AGR X LLC, a Delaware Limited Liability Company.

The Fund's Advisor/Manager is Angelo, Gordon & Co, L.P., an investment adviser registered with the SEC and is owned privately by the estate of John Angelo, Michael Gordon, and over 90 senior employees and their related parties.

Investment Instruments:

Investments by the Fund will be comprised of interests in real estate properties, which may be made through one of more real estate investment trusts or other subsidiary entities to maximize tax efficiency.

Investment Team:

The Angelo, Gordon real estate team has a long and successful history working together. The team has experience and expertise in purchasing and repositioning underperforming properties across a wide variety of product types and most geographic regions of the U.S. With additional offices in London, Amsterdam, Frankfurt, Hong Kong, Tokyo and Seoul, Angelo, Gordon has also actively pursued real estate opportunities in Europe and Asia. Although the team has extensive financial expertise, the firm places a strong emphasis on real estate operating experience in recruiting and training real estate professionals. Angelo, Gordon's real estate strategy heavily benefits from these skills and an understanding of how technical real estate issues such as mechanical systems, floor plate efficiency and ceiling heights affect the feasibility of such development or repositioning.

As mentioned previously, Angelo, Gordon is headquartered in New York, with additional offices located around the globe. The U.S., Europe and Asia teams are comprised of 46 investment professionals, of which 19 are partners. The investment team is led by Adam Schwartz and Reid Liffman, each of whom have over 20 years of real estate investment experience. Mr. Schwartz is co-Chief Investment Officer of Angelo, Gordon, a member of the firm's management committee and is head of the firm's global real estate group. Mr. Liffman is co-investment manager of the U.S. real estate funds with Mr. Schwartz, and assist in the oversight and management of the firm's real estate investments in the U.S. and Europe. Members of the U.S. Real Estate Team are identified below:

Real Estate Professionals	Title	Responsibility	Office	Years at AG	Years of Experience
Adam Schwartz	Managing Director	Co-CIO/Head of Real Estate	New York	18	21
Reid Liffmann	Managing Director	Co-Portfolio Manager of U.S.	Washington DC / New York	7	30
Dana Roffman	Managing Director	New York Tri-State Area	New York	23	28
Christina Lyndon	Managing Director	Mid Atlantic Region	New York	12	15
Chris Oka	Managing Director	U.S./Europe Hotels and Florida	New York	4	14
Matt Jackson	Director	Texas/Southeast Region (excluding FL)	New York	8	10
Danny Rudin	Director	New York Tri-State Area	New York	8	10
Ryan Klenovich	Director	Midwest Region & Boston	New York	7	8
6 Add'l Inv. Professionals	Analyst/Associate/VP	Support NY Office	New York		
Steve White	Managing Director	Deputy Portfolio Manager of U.S.	Los Angeles	14	19
Louis Friedel	Director	Orange County/National Homebuilding	Los Angeles	12	14
Allan Sternberg	Director	Southwest Region	Los Angeles	10	13
3 Add'l Inv. Professionals	Analyst/Associate/VP	Support LA Office	Los Angeles		

The Angelo, Gordon team compensation is significantly incentive-oriented, with many of the firm's investment professionals participating in the GP co-investment and the carry of the funds. Within the Value-add real estate strategy, all of the employees are fully dedicated to Value Fund X and predecessor funds. To further demonstrate financial alignment of interest with limited partners, Angelo, Gordon and employees have approximately $1 billion of capital invested in Angelo, Gordon-sponsored funds.

Investment Highlights:

Proven, Long-Term Investment Strategy
Over the past 24 years AG has consistently applied the same approach to their investments. Purchasing sub-performing real estate assets from owners that lack patience, capital, or expertise; causing distress or inefficiencies that are correctable with competent management and adequate resources.
Reputation and Resources of AG
In the U.S., Europe and Asia, AG prides itself on the importance of closing deals put under letter of intent. They perform their extensive due diligence prior to making an offer, and are then able to respond quickly to close. This is especially valued by lenders who are looking to sell distressed assets. As a leader in the alternative field with $28 billion in AUM, AG has been able to build a core business with deep resources that is responsive to investor needs and SEC requirements. They have fully built-out systems and backups, compliance, and internal control procedures.
Extensive Network of Deal Sources
AG has created a broad network of deal sources with local real estate operating firms, brokers, direct sellers and distressed debt players. The firm has over 50 real estate operating partners in the U.S. and is often shown transactions on an exclusive basis. These sources will provide a competitive advantage in acquiring and managing real estate.

Investment / Risk Considerations:

Late Cycle Investing Environment
AG was able to acquire attractive opportunities in 2017 despite a late cycle environment. These acquisitions include assets in Chicago (distressed retail sale); New York and San Francisco MSAs (change of use in infill residential locations); Washington DC MSA (Class A office and high-rise workforce housing, close to metro); Southern Florida (self-storage platform, hotel in trophy Miami location); and Philadelphia (workforce housing). *These assets were acquired for less than 55% of replacement cost on average, which should mitigate downside risk.*
Reliance on Joint Venture and Operating Partners
The Fund typically co-invests with third parties through partnerships, joint ventures or other entities. Such fund investments will involve risks in connection with such third-party involvement, including the possibility that a co-venturer may have financial, performance or operational difficulties that could negatively impact such fund investment. *AG works with an extensive network of operating partners and structures these ventures in a way to provide substantive governance and control rights, which could include replacing the partner with a more experienced operator.*
Non-US Investments and Currency
International relations may change, depending on the current United States leadership and potential insular actions. Regulatory risk may apply both in the U.S., Europe and Asia, depending on any changes to Dodd Frank, the Volcker Rule, etc. Britain's recent decision to withdrawal from the U.K. resulted in buying opportunities for AG; however, there is still risk of broader economic and currency impact. *AG has been investing globally through many cycles, and has realized returns above original underwriting targets. AG will maintain its underwriting approach to prospective Fund investments and expects that over the period of the Fund any of these impacts would be somewhat mitigated by time, and demand for quality real estate. The Fund is dollar-denominated and will typically hedge the equity investment of an asset plus approximately 50% of the Fund's projected profit for the full projected holding period.*

PSERS History & Performance:

PSERS relationship with Angelo Gordon began in 2011, when PSERS committed $75 million to AG Core Plus Realty Fund III, L.P. The following table summarizes PSERS' historical performance with Angelo Gordon, as of September 30, 2017:

Fund ($M)	Vintage	Fund Size	Commitment	Contributions	Distributions	NAV	Net IRR	MoC
AG Core Plus Realty Fund III, L.P.	2011	1,014.2	75.0	69.9	94.6	26.1	23.4	1.7
AG Core Plus Realty Fund IV, L.P.	2015	1,307.7	100.0	40.1	-	45.7	9.3	1.1
AG Europe Realty Fund II, L.P.	2017	n/a	100.0	-	-	n/a	n/a	n/a
Total			**$ 275.0**	**$ 110.0**	**$ 94.6**	**$ 71.8**	**21.2%**	**1.5x**

Note: AG Europe Realty II had not called capital prior to September 2017.

Finance Committee Disclosure:

Relationship with Courtland	None Disclosed
Introduction Source:	Fund Sponsor
Placement Agent:	None in the US. Angelo Gordon has engaged Ameris Capital S.A., a Chilean company, to assist in raising capital in Chile, Columbia and Peru
PA Political Contributions:	None Disclosed
PA Presence:	Angelo, Gordon-sponsored funds have exposure to three portfolio investments located in PA: (i) 183 acre residential development site in Edgemont; (ii) 235,000 square foot office building in the Parkway West Corridor submarket in Pittsburgh; and (iii) a multifamily portfolio in SE PA.
Potential Conflicts:	We are not aware of Angelo, Gordon having any investment conflicts.
First Time Fund With PSERS:	No
PSERS Allocation Implementation Committee Approval:	April 25, 2018

Oversight Responsibility:

Investment Office:	Charles J. Spiller	Deputy CIO, Non-Traditional Investments
	William P. Stalter	Senior Portfolio Manager
External Consultant:	Courtland, a StepStone company	

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April 11, 2018

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

Re: AG Realty Value Fund X, L.P.

Dear Trustees:

Courtland, a StepStone company ("Courtland"), having been duly authorized by the Board of PSERS, has evaluated AG Realty Value Fund X, L.P., ("the Fund"). The Fund will invest in a broad spectrum of value-add opportunities, from light value-add, where AG executes a strategy to improve operations and address existing vacancy, to heavy value-add, where AG repositions a property or even changes its use, as well as other value-add activity between these two ends of the spectrum. The Fund will enable the Firm to showcase its broad range of investment expertise, targeting underperforming properties and executing a business plan designed to create value, with the objective of creating a stabilized asset that can be sold to an income-oriented investor. AG believes this investment approach will enable the team to allocate capital to the best risk-adjusted opportunities available during the investment period.

The Fund's strategy emphasizes the purchase of underperforming and undervalued real estate assets which AG believes can benefit from active asset management to reposition and stabilize properties. The Firm typically purchases assets from owners who lack the capital, patience, incentives, or expertise to improve cash flow and value. The assets are often attractively priced due to the lack of current cash flow, difficulty in obtaining debt financing, complexity of execution, and/or inefficiency of the sale process. Generally, the Fund will form an alliance and work in tandem with a local operating partner to correct an asset's performance, increase cash flow, and add significant value. The strategy for the Fund is to invest in sub-performing assets across a broad spectrum of value-add opportunities, targeting 16-17% gross returns.

The Fund's targeted holding period for assets is expected to be three to six years, depending upon the length of time needed to correct an asset's underperformance. The Fund will seek to invest in a portfolio of assets that, after stabilization, (i) will be highly sought after by institutional real estate investors and (ii) will continue to appreciate even after asset underperformance has been corrected. The Fund will, therefore, seek opportunities to purchase assets with all or some of the following fundamental strengths:

- Clearly identifiable reasons for underperformance and a well-defined and achievable plan for turnaround.
- Purchase price and forecasted stabilized value that are at discounts to replacement cost.
- Favorable long-term demand growth in the local market.
- Barriers to new supply in the local market due to restrictions on land availability, zoning or entitlement.

The Fund will also consider investments in operating companies and debt securities (including direct origination), a business in which Angelo, Gordon has considerable experience. Over nearly 25 years, Angelo, Gordon has made many investments in the distressed real estate debt of real estate companies and properties. Drawing upon its expertise in credit has enabled the Firm to knowledgeably underwrite and efficiently execute complicated business plans, unlocking value not easily foreseen by the market.

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

- Detailed due diligence with key Angelo, Gordon management team members, and review of all relevant materials provided by AG.

- Evaluation of the Fund's proposed investment strategy within the context of the current investment environment.

- Evaluation of AG's 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, Courtland recommends that PSERS commit up to $150 million to the Fund. Courtland makes this recommendation considering AG'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,
COURTLAND, A STEPSTONE COMPANY

Steven Novick
Partner