EMPLOYEES' RETIREMENT SYSTEM OF THE COUNTY OF MILWAUKEE

MINUTES OF THE APRIL 27, 2016 ANNUAL PENSION BOARD MEETING

1. Call to Order

   Vice Chair Laurie Braun, serving as Acting Chair, called the meeting to order at 9:30 a.m. in the Grand Ballroom at the Italian Community Center, 631 East Chicago Street, Milwaukee, Wisconsin 53202.

2. Roll Call

Members Present	Members Excused
Linda Bedford	Dr. Brian Daugherty (Chair)
Laurie Braun (Acting Chair)	
Aimee Funck	
Norb Gedemer	
Michael Harper	
D.A. Leonard	
Patricia Van Kampen	
Vera Westphal	

Others Present:
Marian Ninneman, Director-Retirement Plan Services
James Carroll, Assistant Corporation Counsel
Erika Bronikowski, Retirement Plan Services Manager
Brett Christenson, Marquette Associates, Inc.
Larry Langer, Buck Consultants
Bob DeBolt, Mesirow Financial Private Equity
Tom Hynes, Mesirow Financial Private Equity
Steven Huff, Reinhart Boerner Van Deuren s.c.
Marilyn Mayr, Prior Pension Board Member
Mark Grady, Retiree
Milwaukee County Retirees and other attendees

3. <u>Pension Board Acting Chair Remarks</u>

Laurie Braun introduced herself as Vice Chair of the Pension Board of the Employees' Retirement System of the County of Milwaukee ("ERS"). Ms. Braun explained that she will serve as Acting Chair for today's meeting because the Chairman could not attend due to scheduling conflicts. Ms. Braun welcomed the retirees, employee members and other attendees in the audience. Ms. Braun stated the Annual Pension Board meeting is held for the benefit of ERS's retirees and employee members, and it is designed to provide them with information on the status of the ERS Pension Fund and allow them the opportunity to ask questions.

Ms. Braun then recognized the members of the Pension Board. D.A. Leonard serves as the retiree-elected member on the Board. Aimee Funck holds a seat on the Pension Board as one of three employee-elected representatives. Ms. Funck has a financial background within the Clerk of Courts and was recently re-elected for a second term on the Board. Ms. Braun encouraged all ERS retirees and current employees to remain involved in ERS by voting to select their representative members on the Pension Board. Patricia Van Kampen was appointed to the Pension Board by the County Executive and also serves as Chair of ERS's Investment Committee. Ms. Van Kampen also coordinates with Marquette Associates and the Retirement Plan Services ("RPS") office to conduct open procurement searches for new investment managers. Norb Gedemer holds a seat on the Pension Board as the appointed representative of the Milwaukee Deputy Sheriffs' Association. Vera Westphal is an employee-elected member on the Board and also serves as Chair of ERS's Audit Committee. The Audit Committee holds intensive monthly meetings to discuss a variety of issues before they are addressed at the Pension Board meetings. Ms. Braun reminded the attendees that the Committee and Pension Board meetings are open to the public and they are welcome to attend any of those meetings. Linda Bedford previously served as a member of the Pension Board and recently returned to the Board as a County Board Chair appointee. Ms. Bedford's background allows her to provide investment insights to the Board. Michael Harper was also recently appointed to the Pension Board by the County Board Chair. Mr. Harper also offers valuable and thoughtful investment-related insight to the Pension Board. Dr. Brian Daugherty, a County Executive appointee, is Chairman of the Pension Board. Dr. Daugherty holds a PhD in accounting and is an Associate Professor of Accounting at the University of Wisconsin Milwaukee's Lubar School of Business. Ms. Braun praised the Board members for their dedicated service and noted the Board devotes a great deal of time to ensure ERS remains a stable and positive fund, securing longevity of benefits for ERS's current and future retirees.

Prepared presentations followed the opening remarks. Attendees heard remarks from the following organizations:

4. 2015 Pension Investment Summary—Marquette Associates

Ms. Braun introduced Brett Christenson of Marquette Associates, Inc. Marquette has served as the Fund's investment manager since 2009.

Mr. Christenson first summarized the role of Marquette Associates. Marquette is a Chicago-based investment firm with 30 years of experience in investing and consulting with institutions such as ERS. Marquette's primary objective is to deliver investment advice to the Pension Board designed to consistently earn a return at, or above, the Fund's actuarial assumed rate of return with the least risk. Marquette performs frequent asset allocation studies to help determine ERS's optimal allocation of assets to stocks, bonds and alternative investments. Marquette then assists the Board with hiring and monitoring of the Fund's individual investment managers. Marquette provides in-depth monthly reports to the Pension Board, and holds monthly discussions with the Investment Committee to monitor the Fund's investment performance and ensure favorable results for the Fund. Mr. Christenson noted there are a great deal of moving parts involved with a pension fund the size of ERS and Marquette attends over 20 meetings each year where substantial time is dedicated to discussing the Fund's investments.

Mr. Christenson next reviewed ERS's 2015 significant agenda items. After careful review and analysis with Marquette, the Pension Board approved funding new hedged equity and private equity investment managers. Mr. Christenson explained that ERS invests in private equity because private equity has consistently outperformed the U.S. stock market by 2% to 3%, net-of-fees, over the last 30 to 50 years. As a public pension fund, ERS must legally conduct open procurement searches and publicly post any new investment manager searches by engaging in an extensive request for proposal ("RFP") process. ERS typically receives 40 or more responses to its RFPs. Marquette spends a great deal of time analyzing and reviewing RFP responses with the Pension Board and Investment Committee before the Pension Board ultimately engages in a contract with a new investment manager. Marquette also conducted a full asset allocation study of ERS in 2015 and engaged in multiple, in-depth discussions with the Pension Board and Investment Committee on the topic. After thorough analysis of Marquette's asset allocation study results, the Pension Board approved changes to ERS's Investment Policy to revise the Fund's asset allocation targets. Specifically, the Fund's target allocation to fixed income was reduced from 22% to 18%, and the Fund's target allocation to private equity was increased from 6% to 10%.

Mr. Christenson then summarized the Fund's 2015 cash flows. The Fund's 2015 beginning market value was $1,790,647,107. Net withdrawals, mostly representing benefit payments, totaled approximately $120 million. The Fund had a return on investment earnings of approximately $45 million in 2015. After all fees were paid, the

Fund's 2015 ending market value stood at $1,715,482,327. Mr. Christenson explained that ERS will typically pay out 6.5% of its assets annually to cover benefits and expenses, and noted that amount is fairly standard relative to other U.S. public pension funds. ERS's 2015 annual return of 2.4% was disappointing relative to the Fund's 8% actuarial assumed rate of return. However, ERS's 2015 annual return ranked in the second percentile of all U.S. public pension fund returns for 2015. The annual return of the median public pension fund in 2015 was approximately 1%. ERS outperformed on a relative basis in 2015 given the extremely difficult market environment.

Mr. Christenson continued with a discussion of the Fund's historical net returns. Following the 2008 financial crisis and the resulting market volatility, the Fund was down approximately -22% in 2008. Except for 2011, which was essentially a flat year, the Fund had a favorable run and earned double digit returns from 2009 to 2013. After all fees, these figures translate to a five-year annualized return of 6.8% as of December 31, 2015. The Fund's ten-year net annualized return is at 5.6% as of December 31, 2015, but that figure incorporates the negative 2008 returns. As previously mentioned, ERS's peer group rankings are strong. Relative to its peers, ERS ranks in the 2nd percentile for 2015 returns, the 36th percentile for five-year annualized net returns, and the 35th percentile for ten-year annualized net returns. Marquette and the Board adhere to a long-term investment approach and maintain diversified investments in the Fund designed to weather market volatility. The Board has done an excellent job as stewards of the Fund's assets by producing consistent above-peer performance, while mitigating risk and utilizing alternative investments to smooth returns.

Mr. Christenson next discussed market values as of December 31, 2015. Fixed income investments, which include bonds, U.S. Treasuries, mortgages and corporate bonds, represent just under $300 million of ERS's total portfolio. U.S. equity assets represent $412 million of ERS's portfolio and international equity assets total $320 million. The total percentage of stocks equates to 45% of ERS's portfolio and drives the majority of volatility in the Fund. The remainder of ERS's portfolio is in alternative investments. The long-short equity asset class is a component of hedge funds and represents approximately $182 million or 10.6% of ERS's total portfolio. Long-short investments in hedged equity performed as intended by capturing a high ratio of upside market returns, while preserving capital in down markets. The Fund's real estate investments are currently at approximately $198 million. At 11.6%, real estate is slightly over the investment policy target of 8.5%, but that overweight has been intentionally maintained because real estate has produced very favorable returns over the last several years. Infrastructure assets are at $153 million and private equity investments at $91 million. Infrastructure and private equity are unique investments that are privately-appraised and, therefore, do not have the volatility of the public markets. The Fund's alternative investments are designed to provide stability over time by producing returns in excess of the traditional public market investments.

Mr. Christenson next discussed the Fund's asset allocation mix relative to the median U.S. public pension fund. ERS has historically been more conservative, with lower volatility and less risk, than the median public pension fund or "peer group." The median U.S. public pension fund has fixed income assets allocated at 29.8%. With a current allocation of 17.5%, ERS remains strategically underweight to fixed income because bonds are currently yielding only 1.5% to 2%. A significant allocation to fixed income would be a drag on the Fund's annual returns, but fixed income is also necessary to provide a stable and liquid source for benefits payments. However, it is the role of the Board and Marquette to try and consistently earn an annual return that meets or exceeds the Fund's actuarial assumed rate of return. After thorough and careful analysis, the Pension Board approved reducing the Fund's fixed income target from 22% to 18% and reallocated some of those assets to alternative investments. ERS's allocations in alternative investments such as real estate, infrastructure, hedged equity and private equity are strategically higher than its peer group. ERS currently maintains two infrastructure investment managers, IFM and J.P. Morgan. IFM and J.P. Morgan manage alternative investments in solar and wind technologies, and more traditional investments in pipelines, bridges, toll roads and airports. These investments are located across the globe and generate returns in excess of 6% annually. The Pension Board also approved increasing the Fund's private equity allocation from 6% to 10%. Equities are the most volatile asset class in the portfolio and, therefore, ERS is approximately 10% underweight to equities relative to its peer group. ERS is following a more conservative approach relative to its peer group by reducing risk in the Fund while optimizing returns through alternative investments.

Mr. Christenson continued by discussing the components of the Fund's 2015 net-of-fees returns. Once again, real estate was the top-performing asset class in the Fund with a 2015 return of 14.2%. At 5.5%, private equity was the second best-performing asset class in the Fund for 2015. The Fund's infrastructure and long/short equity portfolios generated 2015 returns of 5.3% and 2.2% respectively. The Fund's fixed income portfolio produced a 2015 return of 1.1%. The Fund's U.S. and international equity portfolios each generated negative 2015 returns of -0.7% and -2.0% respectively in a volatile market. The Fund's total 2015 return of 2.4% was primarily driven by its alternative investments.

Mr. Christenson concluded with a discussion of the Fund's investment managers.
Mr. Christenson reviewed a current listing of the Fund's investment managers.
Mr. Christenson noted the Pension Fund and Committee meetings are open to the public and the detailed information presented monthly relative to manager returns and fees are very transparent. The Fund maintains two index managers under equities, Mellon Capital and Northern Trust. Index managers attempt to replicate the total return of the U.S. stock market as measured by the S&P 500 and are cost-effective because they have low fees. The Fund also utilizes active managers such as Boston Partners, Silvercrest, OFI and J.P. Morgan to ideally outperform the index and add value to the Fund. The Fund currently

maintains three real estate managers, Morgan Stanley, American Realty and UBS. The Fund maintains two managers under long/short equity, ABS Investment Management and Parametric. The Board recently hired Parametric as a replacement hedged equity manager which resulted in a substantial savings on fees. Parametric also provides enhanced liquidity to the Fund with weekly liquidity, versus quarterly liquidity under the former manager. The Fund maintains three private equity managers, Adams Street Partners, Siguler Guff and Mesirow Financial. ERS recently completed an open procurement search for a new private equity manager and the Pension Board approved a contract with Mesirow. Because the Fund recently increased its allocation to private equity, Marquette has invited Mesirow to present today and provide an overview of the general characteristics and objectives of private equity investments.

5. Market Overview and Private Equity—Mesirow Financial

Ms. Braun introduced Bob DeBolt as the Chief Investment Officer at Mesirow Financial Private Equity and Tom Hynes as the Senior Managing Director at Mesirow.

Mr. Hynes began the discussion by congratulating the Pension Board and Marquette for achieving a favorable 2015 annual return for the Fund despite the difficult market environment. Mr. Hynes next explained that Mesirow is an employee-owned private equity investment firm based in Chicago with an experienced and integrated investment team. Mesirow currently manages approximately $4.5 billion in private equity assets.

Mr. Hynes then provided a general economic overview. Mr. Hynes explained that he is not an economist and his observations are from the viewpoint of a practitioner. The volatility experienced in the markets in 2015 has continued into 2016. The Standard & Poor’s 500 Index (the "S&P 500") fell over 10% in February 2016, but the index has since rallied with a return of just over 3% year-to-date. Several key factors in the U.S. and abroad are currently affecting returns in the fixed income and equity markets, and economic growth in general. The first key factor is Central Bank intervention. Since the 2008 global financial crisis, the Federal Reserve (the "Fed") has supported the U.S. economy and the stock market through its quantitative easing ("QE") program by reducing interest rates. The Fed began reversing its QE program in December 2015 by raising interest rates for the first time in nearly a decade. The Fed's recent reversal of its QE program has created some disruption in the U.S. stock market as investors have reacted somewhat nervously to the lack of Fed support. However, the Fed has pulled back on its initial plan to implement subsequent rate hikes in 2016, and may not implement any additional rate increases for the balance of the year. Central banks in other countries are just beginning to cut interest rates to bolster their economy, which is creating some interesting dynamics. Other key factors affecting the general economy include the energy markets and the decline in oil prices, employment figures and the Chinese economy.

Mr. Hynes continued by explaining that interest rate reductions in countries abroad have resulted in a substantial appreciation of the U.S. dollar. Mesirow predicts the U.S. economy will likely grow 1.75% to 2% in 2016. However, there is also a slight risk that the U.S. could slide into a recession-like environment. Although the U.S. economy is exhibiting signs of slow growth, the strong U.S. dollar has created substantial headwinds for many U.S. businesses competing abroad and the economy in general. The cost of borrowing for U.S. companies has also risen substantially and has further hindered businesses from investing additional capital through borrowing. The dramatic decline in oil prices and the ensuing fallout in oil-related businesses and industries have dramatically affected the performance of the S&P 500. The price of oil was $100 per barrel in 2013/2014. Earlier this year, the price of oil bottomed out at $25 per barrel, but the price has since recovered to just over $40 per barrel. The dramatic decline in the price of oil has resulted in the idling of a number of oil rigs and approximately 250,000 lay-offs in energy-related industries. Any additional fallout in the oil industry remains unclear, given the pressure on producers to continue pumping oil. However, as company earnings continue to decline and take a toll, there will likely be some oil industry-related bankruptcies in the near future. Mesirow believes that the price of oil may balance out to around $50 per barrel within the next year. However, the days of $100 per barrel oil will likely not return for quite some time. The resulting lower gasoline prices could also stimulate the U.S. economy, as U.S. consumers now have access to additional disposable income.

During the financial crisis, unemployment in the U.S. peaked at approximately 10%. Currently, U.S. unemployment is hovering around 5% and has been somewhat positive in terms of generating U.S. economic growth. However, the 5% unemployment figure is somewhat misleading because the reduced figure is in part due to a decline in general labor force participation. Besides the number of people who have become discouraged and have simply stopped searching for jobs, there are currently a high number of underemployed workers in the job market. These underemployed workers have taken jobs with substantially less earnings and, therefore, are likely spending less and negatively affecting consumer demand in the U.S. The economic outlook is much gloomier in Europe and Japan. Unlike the U.S., Europe was late to address their economic problems following the 2008 global financial crisis. The European Central Bank (the "ECB") only recently began its own QE program which has somewhat helped to ease the economic situation in Europe, but has further weakening the value of its currency. There is also a great deal of disagreement and dysfunction between the various governments in the European community. Countries with very troubled economies such as Greece, Portugal and Spain have been a drag on the overall European economy. Structural growth issues are also occurring in Europe, resulting from high unemployment figures related to aging populations and onerous labor practices. Political risks are also increasing in Europe and have been largely exacerbated by a resurgence in populism, immigration and the ongoing refugee crisis from Syria. Adding an additional layer of uncertainty is the upcoming Brexit vote in Great Britain to determine whether Great

Britain will withdraw from the European Union. There are fears that a Brexit vote in favor of leaving the European Union could spark a recession. Another remarkable occurrence in certain European countries and Japan is the application of negative interest rates. Negative interest rates are an unproven methodology and difficult to comprehend, but further demonstrate the desperate lengths to which these countries are attempting to stimulate economic growth.

Mr. Hynes continued with a discussion of the Chinese economy. China has become a major player in the world economy over the last 10 to 15 years. The Chinese economy has experienced many years of solid 10+% growth and it is the second largest world economy behind the U.S. China's economic boon has greatly benefited the world economy and was instrumental in helping the U.S., and the rest of the world, weather the 2008 global financial crisis. However, economic stimulation from China came to an abrupt halt in 2015 as China experienced a dramatic slowdown in its economic growth. The economic slowdown in China has created an enormous ripple effect throughout the rest of the world. A credit binge in China over the last decade is one of the main reasons behind China's current growth problems. As of the end of 2015, the total debt to GDP ratio in China was approximately 250%. China invested a great deal of government and corporate funds in property development as populations migrated from the countryside to coastal cities. Massive overdevelopment ensued, resulting in an enormous overhang in the Chinese housing and economic slowdown. Structural issues are also occurring in China because its command and control/top-down-driven economy has certain limitations. One positive sign is that the Chinese government has recently implemented economic stimulation practices and depreciated its currency, which should benefit Chinese exports. Despite the significant headwinds in the Chinese economy, the Chinese consumer has proven to be very resilient and consumer spending is increasing in China. There is some hope that the Chinese consumer may help lift China out of its economic doldrums and place China back on a course of economic growth.

Mr. Hynes concluded his discussion with a summary of key points. Slow economic growth, combined with a variety of headwinds both domestically and abroad, suggests a somewhat muddled outlook for the general U.S. economy. In terms of the markets, Mesirow predicts that equities will produce low to mid-single digit returns for the near to mid-term. With the potential for the Fed to implement additional rate increases, the outlook for returns in fixed income is not very optimistic either. The disappointing outlook in fixed income is one reason many public pension funds are increasing allocations to alternative investments such as private equity. The private equity markets have a much higher expected return than fixed income and are not contingent on the public markets performing strongly.

Mr. DeBolt continued the discussion by providing a general overview of private equity investments. Private equity involves investing in the equity of a company which is not publicly-traded on one of the major exchanges. These are typically smaller companies that retail investors would not invest in. Private equity investments are long-term, illiquid investments that generally tie up capital for ten years or more. Institutional investors typically invest in private equity funds. Because of the illiquid nature of private equity, funds typically maintain smaller allocations to this asset class. On average, the largest pension funds are allocating approximately 9% to 10% to private equity investments. A typical private equity fund is managed by a general partner. It typically takes a general partner three to four years to build a private equity portfolio of 10 to 20 underlying companies. The general partner will then hold those companies for three to five years. During that holding period, the general partner will actively work with the management teams of the individual companies to build value in those companies. After adding value, the general partner will then try to make a profit by selling those companies to a corporate acquirer or through a public offering. There is an elevated level of risk involved with private equity investments. One way to combat that risk is through diversification. The three core strategies within private equity are venture capital/growth equity, buyout and "special situations." Venture capital involves financing for start-up and emerging growth companies, typically in the information technology, life sciences or bio pharmaceuticals sectors. Leverage buyout managers control investments in more mature companies, and typically use debt or "leverage" to finance 50% to 70% of the purchase price with the intention of improving operations. "Special situations" is a category of private equity that involves a variety of credit-focused strategies. These are unique situations where buyout managers are involved in operational turnarounds by investing in failing companies or companies coming out of bankruptcy. Private equity touches virtually every growth sector and includes well-known companies such as PetSmart, Uber, Facebook, Twitter, Planet Fitness, Portillo's, Spotify and Etsy.

Mr. DeBolt next discussed the benefits of investing in private equity. Private equity investments have the potential to generate returns well above the public equity markets. Certain academic studies suggest private equity has historically generated a 300 to 400 basis point premium over public market returns. As of September 30, 2015, the 25-year annualized net return for the Cambridge U.S. Private Equity Index is at 13.4%, versus the S&P 500 at 8.1%, and the Russell 2000 Index at 9.1%. The excess returns in private equity are achieved at the expense of illiquidity and increased risk. A very long-term investment horizon is necessary due to the complexity of building and maintaining an appropriately diversified portfolio. Elevated risks generally result due to the nature of the individual companies in the portfolio. These are typically smaller companies experiencing rapid growth in new and unestablished technologies. There is also an elevated level of risk involved relative to buyouts, because there is typically more leverage involved in private equity buyouts compared to publicly-traded companies. It is important to realize that not all private equity funds and managers are created equal. The median private equity manager is generating returns that are on par with the S&P 500 and funds would likely be better off investing in an index fund to save on fees. The top-quartile private equity managers are generating returns on average of 900 basis points over the public markets. However, the top-quartile managers are oversubscribed with capital and closed to new investors. As a of fund-of-funds manager with access to top private equity managers, Mesirow can provide significant outperformance, while maintaining appropriate diversification to mitigate risk. Manager selection is a key component to driving portfolio performance. Mesirow reviews the broad private equity universe of approximately 500 managers to select a few top-tier managers. A top-tier manager will have several important characteristics. The manager should have a stable team with low turnover and deep industry expertise. The fund size should also be appropriate. Successful managers often raise too much capital which can be a hazard in private equity investing and lead to a loss in focus. Finally, the alignment of interest between general partners and limited partners is an important factor to provide transparency. Mesirow wants to see that a manager is substantially investing in their own fund.

Mr. DeBolt then discussed private equity investment case studies. Lightspeed Venture Partners is a venture capital manager that Mesirow invested with in 2012 via its Fund 9. The Lightspeed Fund 9 invested in approximately 40 underlying portfolio companies in various technology sectors and one of those companies was Snapchat. Snapchat is a mobile phone application popular with millennials that allows users to share photos and videos with friends in a unique way. The explosive popularity of Snapchat has been phenomenal making it a current threat to Facebook and a potentially valuable asset. Originally created by two Stanford students in their dorm room, Snapchat was most recently valued at $16 billion. Planet Fitness is an example of a successful growth buyout company. Planet Fitness is the leading franchisor of high-value, low-cost fitness clubs in the U.S. TSG Consumer Partners ("TSG") is a buyout fund that Mesirow invests with. TSG purchased the privately-held Planet Fitness franchise from two brothers in 2012. TSG retained control ownership of Planet Fitness while implementing a number of operational fixes to enhance profits. Under TSG's control, Planet Fitness grew from 606 fitness clubs in 2012 to over 1,100 units. TSG's control-ownership was a key driver of profitability and led to a public offering of Planet Fitness in August 2015. A special situations turnaround buyout case study involves KPS Capital Partners. KPS typically purchases industrial companies that are deeply troubled and bleeding cash. After purchasing four underperforming breweries in upstate New York, KPS combined those brewers and created North American Breweries in 2009. KPS invested $40 million in new plants, hired a CEO and sales team, and modernized the facilities, radically transforming these struggling breweries. North American Breweries launched 40 new products and brews brands such as Honey Brown, Genesee and Labatt Blue. KPS was able to double cash flows for North American Breweries and ultimately sold the company to a corporate buyer at an attractive return.

Mr. DeBolt concluded by summarizing recent trends in private equity. Private equity is exiting a three-year consecutive period of record distributions to investors. These record distributions have maintained strong investor interest, resulting in a strong fundraising environment for private equity. Mesirow has observed that many public pension funds are increasing allocations to private equity investments. Although large amounts of capital are currently being raised, it is not an unhealthy amount and private equity remains an attractive investment source for institutional investors. A few premier managers will continue to drive returns in the private equity asset class. The recent record distributions in private equity will slow for the near-term but should lead to a reset of valuations, which will result in improved returns over the longer-term.

In response to a question from an attendee regarding fees, Mr. DeBolt stated the performance figures previously discussed regarding private equity's 300 to 400 basis points outperformance relative to the S&P 500 were on a net-of-fees basis.

6. ERS Actuary Remarks—Buck Consultants

Ms. Braun introduced Larry Langer of Buck Consultants. Buck Consultants has served as the Fund's actuarial consultant since 2006, and Mr. Langer has served as ERS's acting actuary under Buck since 2008.

Mr. Langer first discussed the role of the actuary. ERS is actuarially prefunded, which means that Milwaukee County makes its contributions to the Pension Fund on a member's behalf during the course of each member's career. It is the role of the actuary to determine the amount of annual contributions necessary to ensure the availability of sufficient funds upon a member's retirement. The process used to determine the annual contributions is called the actuarial valuation. County and member contributions to ERS, combined with investment earnings, are estimated to result in sufficient funds to pay a member's pension benefits upon retirement. Besides securing benefits for current and future retirees, the actuarial prefunding process ensures an active member's benefits are appropriately funded by the current generation of taxpayers receiving the benefit of such active member's service.

Mr. Langer then reviewed the actuarial valuation process. Mr. Langer explained the actuarial valuation process is essentially a budgeting process whereby the actuary estimates the future costs of the Pension Fund. There are many unknown variables involved in the retirement process which presents challenges when estimating the amount of annual contributions. The RPS office works with Buck to collect and provide certain data the actuary must have to project future retirement benefits. This data includes variables such as membership data, benefit provisions and current Fund assets. The actuary analyzes the collected data and develops an actuarial projection model based on factors such as projected life span, retirement age and salary data. The actuarial projection model is then used to project the amount of contributions necessary to sufficiently fund benefits. The actuary also works with RPS staff and the Pension Board to develop a prudent funding policy designed to systematically pay for all projected benefits. After analyzing ERS's funding policy with Buck in 2015, the Pension Board adopted certain changes to ERS's funding policy designed to strengthen the financial well-being of the Fund. In addition, the Pension Board approved reducing the Fund's investment return assumption last month from 8% to 7.5%. While the lower assumption rate will result in increased contributions, the change is also designed to ensure ERS remains financially strong. Once the annual valuation process is complete, the Board and actuary typically present the recommended annual contribution funding request to the County Executive in May or June.

Mr. Langer continued with a discussion of prudent actuarial policies. The Pension Board makes use of several prudent actuarial policies to help ensure that members' benefits are appropriately funded over time. First, the actuarial valuation reports are completed within five months of the data snapshot date. For example, the actuarial data collected as of January 1, 2016 will typically be presented for review and discussion at the May 2016 Pension Board meeting. It takes approximately four to five months for Buck to collect and analyze the complex data necessary to produce the annual valuation. Once the annual valuation is complete, projected funding amounts are recommending by the actuary and adopted by the Pension Board. The County then makes the recommended contribution amount. Finally, the underlying actuarial assumptions used in the valuation process are reviewed by the Pension Board every five years. Since the actuarial assumptions used in the valuation may change over the course of time, it is prudent to perform an experience review every five years to reflect any necessary assumption changes.

Mr. Langer next discussed ERS's funded status. In general, Milwaukee County is up to date on its contributions and ERS is in good condition from an actuarial perspective. As of January 1, 2015, the County's cumulative contributions over the last 15 years have exceeded the Pension Board's recommended contribution amounts by $400 million. The timing and delivery of the pension obligation bonds ("POBs") in 2009 account for the majority of the $400 million in excess contributions and have significantly improved ERS's funded status. Buck estimates that the current amount of benefits accrued in ERS is approximately $2.2 billion. As of the January 1, 2015 actuarial valuation, the actual assets in the Fund were stated at approximately $1.75 billion, resulting in a funded status of 80%. Any additional contributions are systematically scheduled to be paid over the course of time via ERS's funding policy. Mr. Langer noted ERS is currently funded better than the average U.S. public pension fund, which is funded at 70% to 75%.

Mr. Langer concluded by summarizing the key points of his discussion. As of the January 1, 2015 valuation, ERS has sufficient assets in the trust to pay all projected benefits for current retirees. The County has contributed almost $400 million more than the actuary's recommendations and is largely due to the POB proceeds contributed to the Fund in 2009. Certain benefit and contribution reforms implemented over the past few years, such as the implementation of the state-mandated member contributions under Act 10, have also helped to improve the sustainability of ERS. With a funded percentage of 80%, ERS is currently funded better than the national average. ERS is well-funded due to prudent actuarial policies utilized by the Pension Board and the County's commitment to funding the amounts recommended by the Pension Board. Mr. Langer expressed his gratitude to the Pension Board and stated he appreciates working with the Pension Board to ensure ERS's members' benefits are funded appropriately.

7. Questions and Answers

Mr. Langer then called for questions from those assembled.

Ms. Braun asked Mr. Langer to comment on a statement at the end of his presentation which reads "sufficient assets are currently in the ERS trust to pay all projected benefits for current retirees." Ms. Braun reminded Mr. Langer the Annual Pension Board meeting is not held solely for the benefit of retirees but all members of ERS. Ms. Braun expressed concern with Mr. Langer's statement because ERS has a high ratio of retirees to active employees.

Mr. Langer responded to Ms. Braun by first explaining that the phrase "current retirees" refers to all retirees in the Fund as of January 1, 2015. The cost to cover the total amount of accrued benefits in the Fund to date is referred to as the actuarial accrued liability. If all of the assumptions are met, ERS could pay for all benefits accrued in the Fund to date. In 2015, the Fund's actuarial accrued liability was approximately $2.2 billion and the actual amount of assets in the Fund was approximately $1.75 to $1.8 billion. This would suggest a current shortfall, as the Fund does not currently have sufficient assets to cover all benefits accrued to date. While the amount of assets currently in the Fund would not be sufficient to cover benefits accrued to date by all ERS members, they will cover benefits accrued by current retirees. Mr. Langer explained there are two separate components involved when the actuary develops the Fund's annual contributions. The first contribution component involves ensuring that sufficient contributions are made to cover benefits accruing on behalf of all active members in the upcoming year. The second contribution component involves the payment of any current shortfall in the Fund which is referred to as unfunded actuarial accrued liability. ERS's unfunded actuarial accrued liability is incorporated in the annual contribution amounts. Systematic payments are established to pay ERS's unfunded actuarial accrued liability over a certain period. As long as the annual contributions are paid as requested, ERS's unfunded actuarial accrued liability should be paid over a relatively short period of time. Mr. Langer stated the current assets in the Fund, combined with the annual contributions, are projected to cover benefits for all retirees and active members in the Fund.

In response to a question from an attendee regarding the cost-effectiveness of utilizing POBs, Mr. Langer first explained that Milwaukee County issued the POBs in 2009 and deposited the resulting $400 million in proceeds directly into the Pension Fund. In short, Milwaukee County borrowed money from investors to strengthen the financial well-being of the Pension Fund. Mr. Langer explained there is a great deal of commentary as to whether utilizing POBs is a sound investment tactic, but noted that the timing of the deposit of POB proceeds is an essential factor in terms of cost-effectiveness. POB proceeds deposited directly before a market downturn will not be as cost-effective. Milwaukee County officials engaged in a great deal of analysis with Buck Associates, the Pension Board, ERS staff and other stakeholders before deciding to issue the POBs. Mr. Langer explained the decision to issue the POBs in 2009 was made at a very opportune time, as markets reached a bottom trough in 2009 and have generally risen since that time. Ultimately, issuing the POBs in 2009 was a very cost-effective investment tactic for Milwaukee County.

In response to a question from an attendee regarding any social investment policies maintained by ERS, Mr. Christenson answered that ERS has no guidelines in its investment policy relative to social investing. Religious-based or hospital-based organizations may engage in social investing. For example, such organizations may avoid investing in companies that manufacture guns or ammunition, but those types of companies are limited. Some smaller Far Eastern companies might engage in sweatshop practices, but such companies are also limited. While most investment managers do not typically have specific guidelines in place to screen out such companies, those factors would come into play once a manager reviews potential investments in publicly-traded companies. Mr. Christenson observed that ERS's infrastructure portfolio is attractive from a social investing standpoint, because some of those investments are in alternative energy sources such as solar and wind farms.

Retiree John Baumgartner introduced himself and thanked the Pension Board members for their expertise and hard work on behalf of all ERS members. Mr. Baumgartner then inquired about the effect of currency fluctuations on the Fund's assets. Mr. Christenson first explained that currency movement in any country will affect the value of stocks. Approximately 20% of the Pension Fund is invested in non-U.S. stocks. The value of non-U.S. stocks in the Fund's international portfolio will decrease relative to the strengthening of the U.S. dollar. Conversely, if the U.S. dollar weakens and the value of foreign currency increases, the value of the Fund's international portfolio increases. The value of the Fund's international portfolio increased in the first three months of 2016 after experiencing several years of negative currency effect. Mr. Christenson noted, however, that the effect of currency fluctuation is short-term and eventually balances out over the long-term.

In response to a question from an attendee regarding the reason ERS utilizes fund-of-funds managers to manage certain assets, Mr. Christenson first explained that the majority of ERS's assets are in direct investments. The Fund's fixed income, U.S. and international equity, real estate, and infrastructure assets are all directly managed. Private equity and hedged equity are the only two asset classes that utilize fund-of-funds managers resulting in two layers of fees. The private equity and hedged equity investments in the Fund comprise approximately 20% of ERS's total portfolio. Mr. Christenson noted that private equity and hedged equity are complex areas of investing and it is extremely difficult to gain direct access to premier funds. The only way to gain access to these premier funds is to employ a specialty manager with deep connections to these premier funds. Without the fund-of-funds managers, ERS could not achieve the proper diversification in private equity and hedged equity. Private equity and hedged equity are two attractive asset classes that can produce favorable returns with relatively low risk to the Fund.

In response to a question from an attendee regarding the recent reduction to the Fund's assumed rate of return and the resulting impact on retirees, Mr. Langer stated reducing the Fund's assumed rate of return would not impact retirees. Mr. Langer explained that the Pension Board decided at its meeting last month to reduce the Fund's assumed rate of return from 8% to 7.5%. Reducing the Fund's assumed rate of return will increase contributions for the County and active members, but those figures cannot be finalized until Buck completes its annual valuation for 2016. Certain other administrative factors may also change as a result but those factors will also require further analysis during the valuation process.

In response to a question from an attendee regarding ERS's funded status, Mr. Langer stated that ERS's market value assets and actuarial value of assets were relatively close as of the 2015 valuation. Mr. Langer reported that both figures stood around 80% as of the January 1, 2015 valuation. Mr. Langer anticipates ERS's funded percentage will fall below 80% in 2016 because the Fund's annual return for 2015 was approximately 2.5%.

In response to a follow-up question from the same attendee regarding 2015 reports of an actuarial error, Mr. Langer confirmed that Buck determined it had understated ERS's 2013 and 2014 contributions by approximately 7% during a routine examination of its January 1, 2015 valuation results. Contributions were understated in 2013 and 2014 by approximately $10 million for each year. The resulting shortfall in contributions for those two years will be systemically paid with future contribution amounts.

A retiree expressed concern regarding the length of time it is taking ERS to recalculate his pension benefit which became effective in 2010. In response to a question from Ms. Ninneman, the retiree confirmed that he is a District Council 48 ("DC 48") member retiree. Ms. Ninneman explained that the Retirement Office has contracted additional staff to complete the court-ordered DC 48 benefit recalculations and they are near completion. Ms. Ninneman explained to the retiree that she anticipates his recalculation should be completed within the next two months. In response to a follow-up question from the same retiree, Ms. Ninneman confirmed that his recalculated benefit will be retroactive to 2010 with interest.

A retiree then praised the Pension Board for their watchful oversight of the Fund, noting that he is proud to be a former Milwaukee County employee and member of ERS. The retiree remarked that he hoped the success of ERS would serve as a model public pension fund for the rest of the United States.

Retiree Marilyn Mayr next asked how the Pension Board can justify reducing the Fund's investment return assumption to 7.5% when annual returns are projected to still fall below 7.5% in 2016. Mr. Langer explained that actuarial standards of practice dictate that several factors should be considered when advising funds relative to investment return assumptions. One factor involves the time horizon in which fund's benefits will be paid out. For example, if all benefits were to cease accruing in ERS today, Buck anticipates benefits would continue to be paid out of ERS until 2110. However, with benefits still accruing in ERS, benefits will continue to be paid far beyond 2110. That long-term benefit horizon instructs the actuary to take a longer-term perspective of 10 to 30 years relative to a fund's investment return assumption. Another underlying factor to consider when establishing the investment return assumption is how a fund's assets are allocated. Returns are projected for each individual asset class. The individual projected returns for each asset class are combined to anticipate whether a specific annual return is achievable. A third factor involves the stakeholders in a fund and what ratio they are comfortable with in terms of meeting a specified investment return annually. Some stakeholders may be comfortable adopting an investment return assumption that has a 50% chance of being achieved over the long-term. Buck projects that ERS has a better than 50% chance of achieving the 7.5% investment return assumption over the long-term. Mr. Langer noted that projected returns can never be made with absolute certainty and the Fund could also exceed the 7.5% return over the long-term. Mr. Langer explained that the Board engaged a prudent review process with Buck before establishing the Fund's investment 7.5% return assumption.

Ms. Braun concluded the meeting by stating the Pension Board made a very important and careful decision last month to reduce the Fund's investment return assumption from 8% to 7.5%. Ms. Braun explained the Pension Board relied on advice and modeling provided by the Fund's consultants that projected ERS would not achieve an 8% return over the next ten years. While lowering the investment returns assumption will increase contributions in the short-term, it will improve the overall financial health of the Fund over the long-term by reducing the incurrence of future debt. After thorough analysis and thoughtful discussion with the Fund's consultants, the Board's decision to lower the investment return assumption to 7.5% was unanimous, with one abstention. Ms. Braun thanked the attendees for coming to the Pension Board's annual meeting and taking an interest in the status of the Fund.

8. <u>Adjournment</u>

The meeting adjourned at 11:45 a.m.

Submitted by Steven D. Huff,
Secretary of the Pension Board