John Morrow, CIO of STRS Ohio, reported that recession risks are lower compared to previous months due to the tariff wars subsiding. Our investors feel that there is only about 15% chance of a recession in the next 12-18 months. Global growth will decelerate near term largely due to China and restrictions imposed to control the coronavirus. They also feel that the economy should improve moderately moving into 2021. The total fund return for December was +1.9% and the fiscal 2020 return through the first six months was +6.5%. The total return for calendar year 2019 was 18.39%. However, the total return for January investments was -0.2%. The total fund assets, as of the end of December, was approximately \$82 billion but by the end of January it was down to \$81.5 billion.

Callan is our investment consultant. Callan reported that for the first five years ending December 31, 2019, STRS Ohio posted an annualized return of 8.36% relative to the 7.98% return on the total fund target. STRS Ohio achieved a return that ranked at the 9th percentile during the last five years, while exhibiting less risk than the median of the Callan Public Fund Sponsor Database.

Paul Snyder, STRS Ohio Chief Financial Officer, reported on our Enterprise Risk Management Structure. In 2019 our funded ratio for the system improved to 76.1%. Investment uncertainty creates more volatility; tariffs, Brexit and the impact of the coronavirus cause increased market uncertainty. Mr. Snyder also reported that over the last 20 years STRS Ohio has reduced the number of associates from 720 to 535. Much of this reduction is due to automation and how much can now be done online. Paul Snyder will be retiring at the end of February after 29 years of service to STRS Ohio. He will be replaced by Lynn Hoover who has been with STRS Ohio for several years.

Mr. Nehf reported that effective Jan. 1, 2020 the signing of the SECURE Act (HR 1865) changed the age for required minimum distributions (RMD's) to age 72 from age 70-1/2. The SECURE legislation stands for "Setting Every Community Up for Retirement Enhancement," and this new federal tax law requires members who are no longer working to begin receiving benefits or withdraw their account by April 1 of the year following the year in which they turn age 72. Under the prior law, RMD's were required when the member turned age 70-1/2. STRS Ohio members who turned 70-1/2 in 2019 will still be required to withdraw or begin benefit payments by April 1, 2020.

Member Education staff introduced the new retiree series "Fundamentals of Revers Mortgages" in January in Canton, Westlake and Columbus for 110 attendees. During the year, this program will be offered at 12 locations around the state. The program offers information pertaining to typical uses for reverse mortgages, related costs, consumer protections and how to evaluate if a reverse mortgage is a good fit. Keith Turner, a reverse mortgage advisor, is the presenter for the STRS Ohio sponsored program.

Mr. Saperstein from Saperstein Associates reported that his company had conducted two independent telephone surveys. One surveyed 301 retirees between October 15 and 30. The average length of the survey call was 16 minutes. Between October 23 and November 3 there were 301 active members of STRS Ohio called. The average length of that call was 15 minutes. All participants were randomly selected. The overall results of the 2019 survey are quite positive. They are as follows: \*Vast majority of members have positive overall impressions of STRS Ohio \*Most retirees see the amount of their contributions relative to the benefits they receive as an excellent or good value \*Similar to last year, about two out of three enrolled retirees consider their health care coverage a good or excellent value \*Most members feel that STRS Ohio keeps them well informed about pension and retirement related issues and that STRS Ohio is open and honest in its communications \*About three quarters of actives are setting aside additional savings for retirement \*Nearly nine out of ten retirees have at least one source of income in addition to STRS Ohio; more than 70% have at least two additional sources \*More than eight of ten retirees feel more financially secure about the same as a year ago.

Gary Russell, Director of Member Benefits for STRS Ohio, provided an interesting report comparing STRS Ohio benefits with the other nonsocial security states. There are only 13 states in which teachers do not pay into social security. They are as follows: Alaska, California, Colorado, Connecticut, Illinois, Kentucky, Louisiana, Maine, Massachusetts, Missouri, Nevada, Ohio and Texas. Statewide plans have been modified in 32 states since 2010 following the great recession. Typically those states increased years of service and/or age for retirement eligibility, increased the number of years used in the final average salary calculation and modified the COLA. According to the findings no system is best in all categories. Contributions plus investment earnings equal benefits and expenses. Illinois has the top rated COLA; however its contribution rate exceeds 56% and is only funded at 40.5%. Texas has the lowest contribution rate but also has the lowest rated inflation protection.

STRS Ohio compares well among the 13 non-Social Security systems. Our total contribution rate of 28% is the fourth lowest of 14 rates in the lowest quartile of all state systems. STRS Ohio retirees purchasing power retention is above 100% for a 20 year retiree and above the average for a member retired for 10 or 15 years. STRS Ohio is one of seven systems providing subsidized health care. Six billion dollars has been contributed to health care in STRS Ohio, this represents \$38 billion pension asset value. STRS Ohio's funded ratio is the 4th highest at 76.1% behind Missouri (82.5% and no health care), Maine (81.8% and no health care) and Texas (76.4%).

Cost-of- Living (COLA) calculation and eligibility in non-Social Security systems \*Lifetime COLA's in Missouri cannot exceed 80% of the member's original benefit (total COLA's for 6,000 STRS Ohio retirees exceed 80% currently) \*Louisiana COLA is tied to investment return and funding status and must be approved by two-thirds vote in legislature \*Illinois, Maine, Nevada and STRS Ohio delay COLA beyond first anniversary \*In the following states COLA is only applied to first: \$60,000 in Louisiana, to the first \$22,451 in Maine and to the first \$13,000 in Massachusetts STRS Ohio total contribution rate is 14th lowest of the 61 rates in all states. Of the non-Social Security states, Texas is the lowest with 19.5% and Illinois is the highest with 56.25%. STRS Ohio member contribution rate is 45th highest of the 61 rates. STRS Ohio employer contribution rate is sixth lowest of 61 rates. The impact of additional contributions are as follows: \*Additional 1% of payroll would reduce the funding period by 1.3 years \*Increasing the total contribution rate to 32% - approximately equal to the average of non-Social Security states - would reduce the funding period between four and five years \*To restore the 2% COLA, the

employer contribution rate would need to be 26.40% of payroll \*STRS Ohio's total contribution rate would be 40.40% which would be the second highest rate for non-Social Security plans and in the top ten of all plans.

Over the next few months the STRS Ohio Board will be considering Health Care Plan changes that would help enrollees but not jeopardize the funding status of the Health Care Program.

I apologize for the length of the report. We haven't had a Board meeting since mid-December and there was much important information covered at this meeting. The Executive Director's Search Committee did spend two days in January interviewing 8 potential candidates. The committee narrowed its search to 5 candidates. The Board will be interviewing those five candidates in March.