



Questions & Answers

[The Pension Plan Amendments and the Decision-Making Process](#)

Q1: What are the amendments to the Pension Plan that were approved on December 1, 2016?

A1: The first two amendments below, as described in prior communications, were approved to take effect on September 1, 2017. The duration of the second amendment has been changed. The third amendment is new.

- 1. Change the pension benefit formula to 80% of the current formula beginning September 1, 2017.** This change to the Plan will adjust the future annual retirement pension earned from **50%** of total employee contributions to **40%** of total employee contributions. The change will not affect pensions earned for service up to August 31, 2017. It will not affect pensions being paid to current retirees and surviving spouses. The December newsletter provides examples.
- 2. Introduce a contribution add-on that is equal to 50% of the school's 2016-2017 plan level for a period of two years beginning September 1, 2017,** with additional years to be considered pending the results of the task force study. (This was originally proposed to be for 10 years.)

The contribution add-on is not anticipated to be permanent. The need for this amendment will be reconsidered in two years when the report of the independent task force has been reviewed. The contribution add-on does not increase the benefit earned. The amount applied to an employee's contribution account will remain at the rate based on the school's selected plan level. The December newsletter provides examples.

- 3. Permit schools to reduce one or two plan levels. Schools can make this change effective September 1, 2017, or effective any subsequent plan year.** This third amendment is in response to requests from schools to make the contribution add-on more affordable for school budgets and/ or to give schools a method to phase in the contribution add-on. For many schools, this amendment was the most important factor to keep the changes manageable and for some it was financially essential.

Q2: What is the role of the independent task force?

A2: In response to feedback received from schools, the CSI Board acted on a recommendation from the US Pension Board to appoint an independent task force, which will evaluate these three amendments (and those amendments passed in August). This task force will provide an interim report by October 2017 and final report by February 2018. The CSI Board has set this schedule to ensure that there is enough time to find individuals with the appropriate skills and experience to sit on the task force, as well as enough time for the task force to produce a complete and accurate assessment of the facts.

Q3: Is there a deadline by which schools can "drop down" by one or two plan levels?

A3: No, there is no deadline. The earliest a school can make the choice to drop down a plan level is September 1, 2017. At that time, a school can choose to drop down by one plan level or two plan levels (subject to the lowest plan level remaining at 2 percent).

If the option to drop down is not used on September 1, 2017, it remains an option at the start of any future plan year. Schools can move up a plan level at any time.

For example, consider a school that is participating in the 6 percent plan now. This school could move to the 5 percent plan or the 4 percent plan on September 1, 2017. If they decide on the 5 percent plan, they could subsequently drop down to the 4 percent plan at the start of a future plan year.

Q4: If our school chooses to reduce our participation by one or two plan levels, does that change the percentage of the contribution add-on?

A4: No, the contribution add-on does not change. The 50 percent contribution add-on is based on a school's 2016/2017 contribution level.

For example, consider a school that is participating in the 6 percent plan now and is in the Employer Contribution Plan, in which the employer pays all contributions. The school is therefore paying 12 percent to the Pension Plan. The contribution add-on will be 6 percent, for a total contribution of 18 percent.

If the school changes to the 4 percent plan on September 1, 2017, the school's contribution add-on will still be 6 percent. However, their total contribution will be 14 percent starting on September 1, 2017, which is 8 percent for participating in the 4 percent plan level, plus the 6 percent contribution add-on.

Q5: Why didn't anybody see this coming sooner?

A5: We know this is a reasonable question to ask, considering the nature of the proposed amendments.

We have shared with you that the Plan is facing several challenges, including:

- a) Very low interest rates over an unusually long period and lower than expected investment returns;
- b) Unpredictable, rapidly increasing "pension insurance" premiums from the government Pension Benefit Guaranty Corporation (PBGC); and
- c) Increasing life expectancy.

These pressures have reduced the over-funding surplus very quickly. Let's look at each one in turn.

Very low interest rates over an unusually long period: A low interest rate environment affects some investments in the fund. For one, it makes bonds less attractive – when this asset class was a logical investment focus for pension plans for a long time. As well, low interest rates impact the methodology the government PBGC uses to set a portion of the premiums the Plan must pay.

We are currently experiencing the longest peacetime period of sustained low interest rates since before the First World War. Depending on which economic forecaster one believes, this environment will either continue forever... or is just about to have a major reversal. To be conservative, we have to assume that there may be change, but it will likely be gradual.

Lower than expected investment returns: The target return that the Plan needs to achieve to keep the assets and liabilities in balance is 7.5%. The following table shows the investment returns for the fund *only 17 months ago*.

Total Fund Performance (for periods ended June 30, 2015)					
Time Period	3 months	1 year	3 years	5 years	10 years
Percentage Return	0.2%	2.6%	10.2%	9.1%	4.4%

These returns were not cause for concern at that time. Even though the 10-year return shows the impact of the financial crisis of 2008–2009, as you can see, the five-year and three-year returns were above the target return of 7.5%. It looked very much like returns were on the rebound. There were differences of opinion about where the markets were headed.

Only one year later, at June 30, 2016, the returns had not recovered as expected, although the long-term investment return for the Plan remained above the target return.

Total Fund Performance (for periods ended June 30, 2016)						
Time Period	3 months	1 year	3 years	5 years	10 years	Since 1987
Percentage Return	1.5%	-1.8%	5.7%	5.1%	4.4%	7.6%

Looking at year-by-year returns since 1987, you can see the wide ranging fluctuations, which provide context for the lack of concern at June 30, 2015, of experiencing below target returns that had persisted over only 15 months.

Annual Pension Fund Returns (net of fees) 2015–2006

2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
-1.39%	5.19%	14.44%	11.12%	-2.32%	10.03%	21.01%	- 24.57%	5.70%	12.57%

Annual Pension Fund Returns (net of fees) 2005–1996

2005	2004	2003	2002	2001	2000	1999	1998	1997	1996
5.86%	11.42%	22.10%	-7.63%	-0.07%	5.14%	8.61%	9.08%	18.47%	15.89%

Annual Pension Fund Returns (net of fees) 1995–1987

1995	1994	1993	1992	1991	1990	1989	1988	1987
20.69%	-0.26%	13.01%	6.12%	20.01%	1.54%	16.69%	9.71%	7.51%

Unpredictable, rapidly increasing “pension insurance” premiums: While some growth in premiums charged by the government PBGC might be predictable (e.g., inflationary increases), the speed and magnitude of the increases are unprecedented. Knowing that part of the government PBGC’s mandate is to “keep pension insurance premiums at the *lowest level necessary* to carry out its operations,” the most reasonable expectation is that the growth in premiums would slow down or stop. It was also reasonable to expect – 17 months ago – that some premium relief might have been achieved by now through legislation. However, to manage risk prudently, we need to assume that some increases could continue and it may take a while to achieve legislative relief.

Increasing life expectancy: While it is true that life expectancy has been increasing over time and it has impacted the Plan's funding before, there is a new type of mortality table that the Plan is required to use. The table is based on new principles that assume *ongoing increases in life expectancy*, which have a big impact. Previously, when a new mortality table was adopted, it meant a 1% to 2% jump in the liabilities of the Plan. Now, this new table results in an 8% jump in the Plan liabilities.

The 20-year projection study: In addition to the multiple pressures described above, by the spring of 2016, we also had the benefit of a new asset-liability study to evaluate. The thousands of comparisons it provided allowed us to consider many future scenarios and make decisions based on a balance of probabilities.

So, in answer to the question, "Why didn't anyone see this coming?" – the short answer is that pressures on the Plan have been sudden and combined. But precisely because of these impacts, the current volatility of investment markets, and the valuable data available in the recent 20-year projection study, we are looking ahead to what the future *could* hold for the Plan, and the possibilities for negative impacts have resulted in our recent recommendations for changes to the Plan.

Q6: Why implement these changes now?

A7: Currently, we expect that when the actuarial valuation for the plan year 2015–2016 is completed and officially filed (expected for July 2017), that it will show that the Plan is 100% funded on an actuarial basis, meaning that the actuarial value of assets equals the actuarial value of liabilities, following legislative requirements for our type of plan.

If that balance shifts so that liabilities exceed assets, even by a small amount, it will result in a much higher IRS minimum contribution requirement than would be required at the 100% funded level, because amortization of a credit balance will be required. It's almost as if the Plan will be penalized for being \$1 underfunded – although these are not penalties precisely.

As a result, it is important to take action now. If we do not act, we expect that in future years, schools may ask the future Trustees, "Why didn't you see this coming?"

Q7: Would it be possible for schools to set aside the 50% contribution add-on but not actually submit it until it is known for certain how much money is needed to maintain 100% funding?

A7: Please see the Q&A above. In order to avoid the "trigger" that requires the different calculation methodology, the assets actually have to be in the Plan fund. They cannot be added after the fact.

Updated Q8: Do the Trustees really believe that lobbying efforts to reduce government PBGC premiums will be successful? Why?

A8: We are working to reduce the PBGC premiums through legislation. We were successful in obtaining a multiple employer category for *Pension Protection Act* (PPA) regulations through legislation and we believe having a multiple employer category for PBGC premiums is appropriate and has a good chance of being approved.

Earlier this year, a Bill passed through the Senate Finance Committee that included the necessary language to reduce PBGC premiums for Cooperative and Small Employer Charity (CSEC) plans, which is a special category of the Pension Protection Act (PPA), under which the CSI Pension Plan operates. Unfortunately, Congress decided to consider this Bill in 2017.

However, we will continue with these efforts to seek approval for this legislative change that will help the Plan.

We are working with other similar plans to achieve a legislative solution. Our intent is to keep at it until the legislation is approved. While the Senate Finance Committee was debating the recent Bill, early indicators showed support in Congress for this change. The new government may have different views. We have a plan to achieve a solution in the coming year. We are cautiously optimistic that we will be successful.

Approved Amendments

Q9: Why were the first two amendments approved in August without any consultation? (One amendment requires a “withdrawal liability payment” to be paid by any school that wishes to terminate participation in the Plan, and the other amendment prevents schools from reducing their current plan level.)

A9: As your Trustees, we were aware that the changes proposed to the Plan would be challenging – such as the 50% contribution add-on (which has now been approved). We also realized that there was a strong possibility that some schools might react to this difficult news by leaving the Plan. They might make this decision without being aware of the negative impact their actions could have on the schools remaining in the Plan – and also for their own school community.

If enough schools were to leave the Plan suddenly, the government PBGC could potentially declare an *involuntary termination* of the Plan. This PBGC-initiated termination could have significant consequences for all participating schools and any schools that had participated in the Plan in any of the five years preceding the termination date. The implications of this type of termination are explained fully in the October 25 webinar.

The impact of all schools choosing to decrease their plan level – for example, if all schools changed to the 2% plan – is not quite the same as the risk posed by many schools leaving the Plan. However, a sudden decrease in contributions into the Plan could potentially expose schools to the risk of an involuntary termination. That is why an amendment was passed in August to prevent schools from changing their plan level.

Since August, further research has been completed, showing that the risk posed by schools reducing their participation by one or two plan levels is manageable and reasonable when balanced against the need for schools to be able to manage their budgets. That is why a new amendment was passed on December 1 permitting a school to reduce or “drop down” one or two plan levels, effective on September 1, 2017, or the start of any subsequent plan year. The minimum plan level remains 2%, so schools that participate at the 2% plan level must remain there and schools that participate at the 3% plan level may drop down to the 2% plan level.

Our preference is to always have a consultative process, so there was a lot of prayerful consideration and discussion before approving these amendments. However, this was a situation where the most prudent course of action appeared to be immediate action.

Options to Discontinue the Plan or “Freeze” It

Q10: If the Plan is fully funded now, why would it cost anything to terminate it?

A10: The Plan is fully funded on an actuarial basis as an *ongoing plan* – which assumes that contributions continue to be made, and the Plan fund continues to grow with investment returns over time. Our type of plan is designed to continue forever. In contrast, to terminate the Plan, the fund must have all the money now that it will ever need – even, for example, for benefits that will not actually become payable for another 40 years in the future. There would be a requirement to buy annuities for all pension benefits – both those in pay status now and those that will become payable in the future – and annuities are very expensive right now.

The current estimate is that a voluntary termination of the Plan would require participating schools as a group to pay more than \$500 million to fully fund all accrued benefits. (The cost would be shared by all participating schools because the schools collectively are the “plan sponsor.”) This cost can change over time, because the cost is determined by economic forces; i.e., market interest rates, estimates of life expectancy, supply and demand for annuities, etc. For more detail about various types of plan terminations, please view the replay of the webinar: “An Overview of the Government PBGC.”

Q11: Can the Plan, be “frozen” completely or could existing participants be “grandfathered”?

A11: This is topic that Mercer will be studying in more depth at the request of the Board of Trustees.

Many DB plans have been “frozen” in recent years. A “freeze” means that current participants stop earning new service and no new participants can join as of the “freeze” date. Alternatively, a plan that does not accept new participants, can decide to “grandfather” participants who joined before that date so those existing participants continue to earn pension benefits.

A termination is a one-time influx of cash to wrap up the Plan, while a freeze is an ongoing obligation to keep the Plan operating, but with no further benefits accruing. Therefore, a plan freeze would not eliminate the need to fund the Plan. The fund must be maintained so that benefits already accrued can be paid. The Plan would still require regular valuations according to pension regulations and if it were found to be underfunded, the plan sponsors would be required to eliminate any deficit. These payments would likely fluctuate year to year and this unpredictability would be challenging for school budgets.

If no new participants joined the Plan but existing participants continued to earn benefits, the impact of such a decision would be that the benefit formula for the DB plan would have to be reduced on a sliding scale, so it would continue to drop lower than the current 40% benefit formula – at least if contributions were to remain the same. Why? Well, the annual contributions from schools are used to pay what is called the “normal cost” of the Plan, which is equal to the actuarial cost of new benefits earned in one year by all the current active participants. Right now, the average age of all active participants is age 44.9, because there is a normal distribution – from young new hires to people who are very close to retirement and everyone in between. The normal cost for a younger participant is lower than their contributions, so these subsidize the older participant’s contributions, which are typically less than their normal cost. If the Plan is closed to new participants, that “subsidy” from younger participants is lost, so there are not enough dollars coming in to support the benefits being earned. To keep everything in balance and maintain steady, stable contributions, the only solution would be to continue to decrease the Plan’s benefit formula.

Types of Retirement Plans and Sustainability

Q12: DB pension plans have had problems for many years, so many have closed or been frozen. Why didn't we follow their lead?

A12: We have heard feedback from schools that other defined benefit pension plans have made big changes years ago, often by terminating their plans or freezing service, and that these should have been “lessons” we should have followed as your Trustees.

It would not be good governance to make decisions for our Plan based on the experience of other plans. While other DB plans may *seem* directly comparable, our Plan is rather unique – operating under rules for Cooperative and Small Employer Charity (CSEC) plans that apply to only about 20 plans in the US (This is also the reason that many of the assumptions offered in your feedback, which apply to other DB plans, do not apply to ours, such as discount rates, for example.)

Many of the DB plans that have been terminated had been underfunded on an actuarial basis for many years before they closed. Others are run by for-profit corporations that made the decision to close their plans in order to make other strategic investments elsewhere or simply to focus on balance sheets rather than employee benefits. Some are impacted by union activities or are in sectors that have suffered significantly from changing markets. These are some of the reasons that we cannot make decisions for the CSI Plan based on the actions other DB plans have taken.

Q13: A defined contribution (DC) plan seems like a viable option, given the individual access to investment advice and it is an option chosen by many organizations and businesses. Why not change to a DC plan?

A13: It is true that a DC plan may be a viable option as a savings vehicle. However, it is important to assess whether a DC plan would result in equal or better outcomes for the same level of contributions as the current CSI Plan. In other words, to provide the same benefit currently being earned, schools would have had to contribute much more to a DC plan than their historical contributions to the CSI Pension Plan. In addition, DC plans can also result in benefit inequities between participants with the same service and earnings, depending on how a participant invests his/her monies and when a participant chooses to retire. As the premise of the current Plan is to provide for the community in an equitable and adequate manner, a DC plan, while viable for many organizations, does not support the equitable and adequate community model that has been the main tenet of the CSI Plan since its inception.

As additional information, please review the comparison of defined benefit (DB) pension plans to DC plans (the latter which do not provide a lifetime pension), which is available in the September newsletter. In addition, you may want to review a recent study that compares the economic efficiencies of DB and DC plans. Here is a link to that study:

<http://www.nirsonline.org/index.php?option=content&task=view&id=871>

It is true that the persistent low interest rates of the past decade or so have resulted in higher contribution requirements for many DB plans, so rather than pay these contributions, many profit-making corporations have switched to DC plans. They have not made the switch because the DC plan was an equally “viable”

option, but often because they did not put a priority on providing secure retirement benefits to their employees if doing so had too negative an impact on profits and shareholder value.

Another issue that must be considered with moving to a DC plan is that the legacy DB plan still exists. CSI schools that have sponsored the Plan and have employees or former employees with benefits in the Plan are responsible for ensuring that the Plan remains fully funded. While DB benefits may stop growing, and future contributions may be made to a new DC plan, the DB plan will require ongoing additional contributions.

Q14: Aren't there overwhelming examples of the risks implicit in defined benefit pension plans – poor fund management, reduced benefits, and insolvency?

A14: Yes, there are certainly well-publicized examples of the risks faced by defined benefit pension plans, including low investment returns and low interest rates. In some situations, these risks as well as other factors (e.g., economic recession) have resulted in the reduction of benefits provided by these plans. However, while some organizations have decided to move away from defined benefit pension plans, other organizations continue to sponsor them. For example, in 2015, 20% of Fortune 500 companies offered a defined benefit pension plan to current employees as well as to new hires.

Finally, with regard to insolvency, pension benefits in private-sector defined benefit pension plans are protected by pension insurance, up to specified limits, from the Pension Benefit Guaranty Corporation (PBGC), a federal agency created for this sole purpose.

Q15: After these proposed changes, is the CSI Pension Plan sustainable?

A15: We will answer that question in two parts: By considering new benefits earned in one year and then examining the benefits already earned.

As we explained in the answer to Question 11, the cost to fund the new benefits earned in one year by all active participants is called the "normal cost." A financially healthy defined benefit pension plan has to have enough contributions coming in to cover the normal cost plus the plan's expenses (i.e., premiums to the government PBGC, investment management fees, and other administrative costs).

Right now, the Plan is in good shape by this measure. Although the contributions don't quite cover the recently-inflated PBGC premiums, this will be corrected if the Plan is granted the legislative relief we are seeking.

Secondly, the Plan has to be financially healthy enough to continue to fund benefits already earned. The key to achieving this is re-assessing the benefits based on the new longevity table and then earning at least the 7.5% target return on the Plan assets. Standard economic forecasting models predict that the new asset mix is expected to return more than the target return. Therefore, the benefits already earned should be adequately covered if these returns are realized. The contribution add-on should create an over-funding surplus, which will allow for some fluctuation in these returns over time.

Q16: If the proposed changes are made to the Plan, is there any guarantee that further changes will be avoided?

A16: As explained in the answer to Question 15 above, the Plan appears to be sustainable based on the best available information we have now. The key to avoiding future changes to the Plan will be achieving the target investment return of 7.5%, which currently seems achievable.

By building up an over-funding surplus using the contribution add-on, the Plan will also be well-positioned to withstand future periods when returns may temporarily fall below the 7.5% target return.

20-Year Projection Study

Q17: Can you provide an executive summary of the stochastic projections completed by Mercer, the Plan's investment advisors?

A17: The 20-year projection study involved the development of stochastic projections over 20 years of the cash contributions required under IRS rules. Results indicated a strong likelihood that scheduled contributions from participating schools would not meet those required by the IRS, as early as 2021 at median results. Various investment strategies, PBGC premium structures, and plan designs (benefit level and/or contribution amounts) were considered.

These stochastic projections utilize assumptions that are developed by Mercer Investment Consulting each quarter. This "Capital Market Outlook" provides the expected returns, risk, and correlations across asset classes that are used by Mercer in work with their clients. These assumptions are then fed into Mercer's Capital Markets Simulator (CMS) which produce the simulated results. The CMS is not a mean-variance model but rather relies on a set of serially correlated equations and mean reversion to create multiple time series or trials. Mean variance models fail to capture extreme events that occur in the markets. Many of these models produce results that are similar to a normal or bell-shaped distribution. Mercer's CMS utilizes regime switching: switching between various economic conditions including recession, depression, credit crunch, stagflation, high inflation, recovery, and low inflation/economic boom. The CMS is more likely to capture "black swan" type of events that occur in the market.

Q18: Is every five years frequent enough to complete these stochastic projections?

A18: The Trustees monitor the Plan's ongoing financial trends through regular analysis of the actuarial valuation report, the Plan's funded status, and the demographic makeup of the Plan to ensure the contributions and normal cost are in balance, and use projections of the constantly-escalating PBGC premiums. The reviews are conducted at least annually, or as often as quarterly in regards to the Plan's funded status. The Finance Committee meets monthly, and usually interviews one of the investment managers at each meeting. They also carry out on-site visits at the investment managers as part of their due diligence in monitoring investment managers' performance.

Over the last few years there have been regulatory changes that added further complexities that needed the Trustees' attention. If the Plan had been subject to the *Pension Protection Act* (PPA), funding issues would have been an immediate problem. There was uncertainty around attaining Church Plan status, and even that came with significant litigation risk. Additional focus was needed to manage the short-term



regulatory issues to ensure the Plan could operate past 2017. By obtaining status as a CSEC plan (Cooperative and Small Employer Charity Plan), the Plan was granted a new set of rules in a sub-category of the PPA under which to operate.

In a stable regulatory environment, the regular process – reviewing valuations, reviewing funded status trends, monitoring normal costs/contributions and taking steps to manage PBGC premiums – should provide enough directional guidance to help communicate issues to the CSI school community. This would be considered the “typical” process for a Plan structured like the CSI Pension Plan.

Mercer advises that more frequent asset/liability studies (“stochastic projections”) may not be the answer. It will take a few years for the benefits of any plan design changes to affect the projections, so more frequent studies may not provide much “new” information.

Investments

Q19: Can you provide a history of the investment management fees charged to the pension fund on a year-by-year basis for the past 10 years?

A19: The following table shows the investment management fees (for all investment managers combined) from 2005 to 2015.

Year	Manager Fees (Actual)
2015	\$5,295,373
2014	\$4,647,939
2013	\$4,264,075
2012	\$3,015,473
2011	\$2,598,718
2010	\$2,502,877
2009	\$2,384,994
2008	\$1,977,156
Year	Manager Fees (Estimated*)
2007	\$1,336,612
2006	\$1,618,978
2005	\$1,473,073

** Estimated fees are calculated by taking the difference between net and gross annual performance, multiplied by the ending market value.*

The Finance Committee reviews fees on a regular basis to determine reasonableness and competitiveness. The overall fees reflect both the specific managers that have been hired as well as the asset classes being utilized. In 2012, we implemented a new asset allocation which resulted in allocations to higher cost asset

classes. The Finance Committee closely monitors both gross and net of fee results to confirm that the Plan is receiving value for each investment strategy.

Updated Q20: The target investment return of 7.5% seems high. Are the Trustees engaging in wishful thinking regarding projected investment returns over the next decade?

A20: The target rate of return is not an assumption related solely to investments and it is not an assumption made by the investment managers. Rather, the Plan is designed in such a way that in order to keep the funding in balance (i.e., at 100% funding or better), the net investment returns need to be 7.5% or higher, after contributions from the schools are taken into account.

Under the rules applicable to Cooperative and Small Employer Charity (CSEC) pension plans – which apply to our Pension Plan – the Plan must establish an expected rate of return on the fund. During each actuarial valuation, the actuary for the Plan assesses if this 7.5% expected return is reasonable and also examines and reports to the US Pension Board about the likely impact on the Plan’s funding if this expected return is changed. At the most recent assessment, the Trustees determined that the most prudent course of action was to maintain the expected return at 7.5%.

The Finance Committee worked with Mercer to review alternative portfolio asset allocations with the goal of identifying an asset mix that was appropriate for the Plan. The portfolio adopted in August 2016 had a target (expected) return of 7.8% with volatility (standard deviation) of 13.4%.

Historical returns vary depending on the specific period being reviewed. The most recent history of investment returns has indeed been below longer run averages.

Mercer develops Capital Market Assumptions which are reviewed quarterly and adjusted based upon capital market changes. The assumptions utilize the professional judgment of experienced investment consultants and economists and rely on historical experience, economic theory, and Mercer’s assessment of future developments in the capital markets.

Mercer’s process for setting asset class expected returns begins with developing an estimate of the long-term normal level of economic growth and inflation. From these two key assumptions, Mercer develops an estimate for corporate earnings growth and the natural level of interest rates. From these values, the expected long-term return of the core asset classes, equity and government bonds can be determined. Mercer combines current valuations with our expectations for long-term normal valuations and incorporate a reversion to normal valuations over a period of up to five years. Volatility and correlation assumptions are based more directly on historical experience except in cases in which the market environment has clearly changed.

Mercer models real interest rates, nominal interest rates, default spreads, dividend yields, and earnings yields (the inverse of price/earnings ratios). Thus, if interest rates rise due to inflation, Mercer utilizes the same rise in inflation and interest rates in order to calculate returns on bonds and to determine if the discount rate is reasonable.

Mercer utilizes an equilibrium process incorporating reversion to fair value. The process relies on the development of estimates of long-term equilibrium values for key economic and financial market drivers, starting with projected long-term inflation, population growth, productivity and capital growth. From these fundamental drivers, long-term equilibrium levels of real interest rates, profit growth, dividend payout

ratios, etc. can be estimated. Mercer converts these equilibrium levels into normal valuation measures of capital market assets, such as yield-to-maturity and earnings yield. Finally, calculations are performed of the return of various asset classes if each moves from its current valuation toward equilibrium over a period of time.

While return expectations, as derived from this process, are inherently mainly forward-looking (albeit influenced by starting point valuations relative to long-term equilibrium), Mercer’s volatility and correlation assumptions are based more directly on historical experience, except in cases where the market environment has clearly changed. Consideration is given to the insights into volatility and correlation assumptions revealed through pricing of publicly traded and private options. However, the options market is not liquid enough for long-dated options for this to be a primary source of information for setting forward-looking, long-term volatility and correlation assumptions.

Q21: Is an allocation that is 25% high risk (i.e., real estate, distressed debt senior/leveraged loans and private equity) really prudent? Do the Plan investment advisors have the depth of research bench to truly monitor this type of investments?

A21: The measure of risk typically used for an investment portfolio is investment returns risk as measured by estimated standard deviation of returns. As shown in the next table, the standard deviation of the current mix is 13.0% versus 13.7% for the new target mix. Given the 0.70% increase in return for the new mix, Mercer believes that the Plan is being appropriately compensated for the slight increase standard deviation. Further, the Sharpe Ratio increases from 0.51 to 0.53, which means that the return earned per unit of risk (measured by standard deviation) will go up. (Sharpe Ratio is a risk-adjusted return calculated by subtracting the risk-free rate from the return and dividing by the standard deviation.)

Other measures of risk to be considered:

Asset Class Diversification: Lack of diversification is the risk that the Plan would rely too heavily on a single asset class. By moving some assets (in the current asset mix) from public market equities to private markets, diversification will increase.

Administrative Complexity: With the introduction of new asset classes and managers, the administrative complexity will increase which could increase the risk. The Finance Committee is currently reviewing ways to ensure proper oversight and administration of the Plan to support the needs of the new asset mix.

Illiquidity Risk: Some of the new asset classes introduced to the Plan, including distressed debt, real estate, and private equity, increase the illiquidity profile of the Plan. Mercer has worked with the Finance Committee to evaluate this risk and the conclusion is that the level of illiquidity risk is reasonable. Mercer believes that the Plan will be compensated via higher returns for taking on this illiquidity.

Asset Classes	Current	Target
Global Defensive Equity	3.8	12.5
Hedge Funds	12.0*	0
US Large Cap Equity	18.8	11.5
US Small Cap Equity	6.5	7
Non-US Developed Large Cap Equity	15	7

Asset Classes	Current	Target
Non-US Developed Small Cap Equity	4.8	4
Emerging Markets Equity	15	10
US Aggregate FI	17	18
Unconstrained Bond	8	0
Private Equity	0	10
Distressed Debt	0	8
US Real Estate – Opportunistic	0	5
US Senior/Leveraged Loans	0	7
Total	100	100
Geometric Return (%)	6.9	7.6
Standard Deviation (%)	13.0	13.7
Sharpe Ratio	0.51	0.53

Appropriateness of Distressed Debt, Private Equity, and Senior/Leveraged Loans in the CSI Pension Plans

The Plan is designed in such a manner that it requires an investment return of 7.5%. As expectations of returns for public markets have continued to decline, plan sponsors of pension plans have had to balance the impact of asset allocation, plan costs, and plan benefits.

As it pertains to the CSI Pension Plan, Mercer’s advice is that in order to achieve a target rate of return of 7.5% through investments, an allocation to private markets is appropriate and reasonable. The Plan is prudently and thoughtfully constructing a portfolio that diversifies across the private markets.

The risks and benefits of this asset allocation have been thoroughly reviewed by Mercer and the Finance Committee.

Note that these types of investments are common among open DB plans of the size of the CSI Plan.

Communication

Q22: Why didn’t the Board of Trustees communicate the status of the Pension Plan more fully and frequently over the past months and years?

A22: Once a year an *Annual Funding Notice* that reports on the status of the Plan, is sent to all schools and participants. This Notice reports the assets and liabilities of the Plan, an overview of the funding and investment policies, the current asset allocation, and many other details required by law. The Notice contains information on how schools and participants can request a copy of the full annual report of the Plan (called a “Form 5500”). Schools and participants also have access to more detailed information about the Plan upon request.

Annually, the Trustees have provided information on the results of the annual actuarial valuation.

Some key factors have materially changed, so they are being reported promptly to you. It is precisely because the Trustees are being proactive and looking ahead to a combination of multiple factors affecting the Plan, and foreseeing the risks that may be inherent in those combined factors, that they have provided additional communication at this time.

Trustee Selection Process

Q23: How are the Trustees of the CSI Pension Plan and Trust selected?

A23: Section 9.2 of the Plan document addresses this as follows:

Appointment of Trustees: There shall be a minimum of nine Trustees who shall be appointed by the Board of Directors. Each Trustee shall be appointed for a term of three years with a limit of three reappointments for a total of four terms, counting as one term any partial term resulting from an appointment to complete the unexpired term of another Trustee. If any Trustee dies, resigns, or otherwise fails to serve the Trustee's full term, the Board of Directors shall appoint a successor, who shall hold office until the end of the predecessor's term. The Board of Directors may, at any time, remove any Trustee and appoint a successor to complete the Trustee's term. One-half of the Trustees must be board members or former board members of Christian school societies that are Participating Employers under the Plan or must be other nonemployee individuals that have been actively involved in the administration of a Participating Employer or its educational function. The remaining Trustees must be Participants in the Plan. Notwithstanding the foregoing, the Board of Directors may appoint one Trustee that does not meet the qualification requirements of either of the preceding two sentences in lieu of one member of either category.

Q24: It appears the Board of Trustees is comprised of some individuals that do not have any background in investments or fund management. What are the qualifications of each Trustee to serve on the CSI Pension Plan and Trust Board?

A24: The answer to Question 23 answers part of this question. As noted there, the mandate is for one half of the Trustees to be participants in the Plan. The role of the Trustees is much more than investing the assets of the Plan. The Trustees are the fiduciary of the Plan, so in addition to investing the assets, they deal with all aspects of the Plan, including plan design, administering the benefits, communications with schools, etc.

The Trustees do some of their work via committees. There is a Finance Committee that handles the investment of the Plan assets. No participant Trustees sit on the Finance Committee.

Advisory Services

Q25: Who is the legal counsel for the Pension Plan? How was this counsel chosen?

A25: Currently, the Trustees legal counsel is Heidi Lyon, of the firm Warner, Norcross and Judd. This legal counsel was selected in a formal RFP process in 2015. From time to time, Ms. Lyon seeks advice from other law firms when specialized experience is required. For example, she recently conferred with a firm of

lawyers who used to work for the government PBGC in decision-making roles in order to gather advice about how the PBGC might operate in the case of a distressed or involuntary termination of a plan such as the Plan, as there is often no precedent to rely on, given that most pension plans are run by profit-making corporations and CSI schools are not-for-profit entities. For more details about her commentary about the PBGC, please review the replay of the webinar, “An Overview of the Government PBGC,” which is available on the CSI website.

Q26: Is the Pension Plan subject to an external audit? If so, who completes that audit and where are the results for review of the pension participants?

A26: Yes the Plan is subject to an annual external audit. The auditor for the most recent audit was Plante Moran. A copy of the audited financial can be provided on request.

Q27: When is the last time a Request for Proposal has been sent to qualified investment advisors to determine the best fit and pricing for the Plan?

A27: The last formal Request for Proposal (RFP) was in 2010. The next formal process is scheduled for 2017. In between the formal RFP time periods, the Trustees prepare informal assessments to determine if they want to move up the timetable of the formal RFP process.

Q28: Mercer is a well-recognized, leading consulting house. However, the quality of the services provided will vary by the lead consultant. Can you provide information on the lead consultant that headed the CSI Pension Plan project?

A28: Mercer is an extremely large, global organization that brings highly experienced consultants to their clients with specific expertise based on the project being delivered. As such, there was not just one lead consultant for this project – there is a diverse team composed of pension actuaries, investment advisors, researchers, legal specialists, communication strategists, and analysts who all contribute to the quality and delivery of the direction and information presented to the Trustees. In addition, all advice is subject to peer review by another consultant who also has the required expertise for the portion of the project being reviewed; so in fact, CSI always has the best advice of many Mercer consultants. The biographies of the Mercer consultants on the team are appended to this response.

Q29: Who are the investment advisors for the Pension Plan?

A29: The Trustees receive advice from consultants in Mercer's investments advisory practice, who provide advice on asset allocation and risk-return strategies for the Fund. These consultants also help with investment manager searches. This team has credentials and expertise specific to investing pension and endowment funds.

Mercer is one of the global leaders in investment consulting with over 40+ years in the investments business and 20+ years in Outsource-Chief Investment Officer (OCIO) management. Recent awards and recognition include 2015 Greenwich Quality Leader in Overall US Investment Consulting, 2013 and 2014 recipient of the Top Due Diligence in Manager Research by *Fundfire*, 2016 #1 Outsource-Chief Investment Officer (OCIO) assets under management according to *Chief Investment Officer*. As it pertains to capabilities in monitoring the asset classes recommended for the CSI Plan, Mercer has one of the largest Manager Research Groups in the world with over 120 manager researchers spread across the globe who are solely



dedicated to finding and monitoring the best investment managers in each asset classes. Since inception, Mercer's manager research has resulted in 1.4% per annum average value added.

In addition, Mercer has dedicated experts for each client responsible for the regular monitoring of all investments in clients' portfolios.

Appendix: Mercer Consulting Team Biographies:

Glenn Ayers

Glenn Ayers is a Partner and senior retirement consultant in Mercer's Nashville office. He works with clients primarily in the areas of design and financial management of retirement programs, including defined benefit, defined contribution, retiree medical, and executive benefit plans. In addition to his client responsibilities, Glenn is the leader of Mercer's Retirement business in Tennessee and Kentucky.

In over 20 years of consulting, he has worked with clients in a variety of industries, including manufacturing, financial services, education, and healthcare. Prior to joining Mercer in 2005, Glenn worked for other global human resource consulting firms.

Glenn holds a Bachelor's degree in mathematics from Memphis State University and a Master's of actuarial science from Georgia State University. He is an Associate of the Society of Actuaries and an Enrolled Actuary under ERISA.

Richard Dabrowski

Richard P. Dabrowski is the Central Market Business Leader of Mercer's Investments business. He has 27 years of consulting and investment management experience assisting corporate and public pension funds, endowments/foundations and family offices in achieving their investment objectives.

Rich started his career with Mercer Investments where he held a number of senior leadership roles. As Midwest Practice Head, he had responsibility for overseeing the Chicago office of the Investment Consulting Practice. As Director of Research and Chair of the Manager Search Committee, he had responsibility for overseeing the firm's manager research in the US. He also served on the Research and Policy Committee which was responsible for overseeing asset class and portfolio construction research.

Prior to rejoining Mercer, Rich was a Senior Vice President at Strategic Investment Solutions where he was responsible for working with institutional clients on asset allocation (including asset/liability modeling), strategy implementation and manager selection and monitoring and was a member of the Investment Policy Committee.

Rich has an MBA in finance and business policy from the University of Chicago, Graduate School of Business and a BS in economics and finance from Elmhurst College. Rich is a CFA charterholder and a member of the CFA Institute. He is also a member of the CFA Society of Chicago.

Jamie Eckert

Jamie Eckert is a Principal in Mercer's Chicago office. She works with defined contribution and defined benefit clients in the development of asset allocation and investment policies, investment manager selection and monitoring, and performance measurement. Jamie consults to 10 clients with assets ranging



in size from \$50 million to \$165 billion and is a member of the Fixed Income Strategic Research Team, an internal group tasked with developing focused research and intellectual content to help frame the firm's consulting positions. In March 2016, *Consulting Magazine* named Jamie as one of the top 35 Under 35 Rising Stars of the Profession.

As the Director of Client Consulting in the Central Market, Jamie is responsible for assuring the ongoing development and enhancement of Mercer's investment value proposition and market position across the spectrum. This includes developing Mercer's service offerings and service model and developing stronger relationships across Mercer's lines of business.

Jamie came to Mercer in March 2012 from Goldman Sachs where she was a Regional Consultant in the Investment Management Division. Prior to that, she was an Associate at Merrill Lynch in the Institutional Research Sales Group.

Jamie holds a Bachelor of Arts degree from the University of Wisconsin and a Master of Business Administration at the University of Chicago where she also sits on the Admissions Committee.

Marc Madias

Marc Madias is an actuary, Principal and the Retirement Business Leader for Mercer's Michigan business. He has 30 years of consulting experience with defined benefit, defined contribution, and retiree welfare plans, partnering with clients throughout the state but with primary focus stretching from West Michigan to metro Detroit.

Marc consults with organizations from a wide range of industries, including healthcare, not-for-profits, professional services and manufacturing. He works with his clients in all areas of retirement program design, funding, accounting, and administration. He has been involved in a wide variety of consulting assignments including developing employee benefits strategies, mergers and acquisitions, asset/liability management, dynamic de-risking, executive benefit design and financing, and strategic communications. Marc also has extensive experience coordinating retirement consulting with DB administration support for his clients.

Marc holds a Bachelor of Science degree in statistics from the University of Michigan in Ann Arbor. He is a Member of the American Academy of Actuaries and an Enrolled Actuary under ERISA.

Linda McGuire

Linda McGuire is a Principal in the Communication practice of the Talent business in Mercer's Toronto, Ontario office. She has joined the US CSI Pension Plan consulting team because of her experience providing communication advisory services to CSI about the CSI Canadian Pension Plan.

In her 17 years with Mercer, Linda has applied her skills in strategy development, writing, editing, and project management and her in-depth technical expertise to the development and delivery of communication campaigns covering pension, benefits, compensation, and investor education. She focuses on bringing plain language clarity to complex financial information.

Linda has also worked as a manager in Policy, Operations, and Pension Communications for OMERS – a major pension plan for Ontario's municipal sector with CAD\$71 billion of assets under management.



Linda holds Bachelor of Journalism from Carleton University with a specialization in economics. She is a Certified Employee Benefits Specialist (CEBS) and a member of both the International Association of Business Communicators and the Editors' Association of Canada. Linda's work at Mercer and OMERS has been honored by seven international, national, and local awards for outstanding communication programming and publications.

Scott Striegel

Scott Striegel is a Senior Associate in the Retirement Risk and Finance (RRF) practice, working in Mercer's Minneapolis office. He is a consulting actuary with over 10 years of domestic and international experience, including accounting, funding, projections, plan design and global benefit coordination work. From 2008 to 2011, Scott worked in the international retirement business for Mercer Sweden in Stockholm. Scott currently serves as the project manager and signing actuary on a variety of traditional RRF clients.

Scott holds a B.A. in Mathematics/Statistics from Luther College in Decorah, Iowa. He is a Fellow of the Society of Actuaries, an Enrolled Actuary under ERISA and a Member of the American Academy of Actuaries.

Guyle Wilson

Guyle Wilson is a Principal in Mercer's New York office and is a member of Mercer's Financial Strategy Group (FSG). He is responsible for strategic asset allocation/risk budgeting, asset/liability modeling, funding, and accounting policy diagnostics for domestic and multinational corporate clients seeking integrated financial risk management advice for their pension plans. He is a member of Mercer's liability-driven investment committee.

Guyle has 26 years of experience, including 18 years with Mercer and also six years in the UK (with a risk management firm and Mercer). Prior to joining the FSG, Guyle worked in the Retirement, Risk & Finance business at Mercer in London and Seattle. He has extensive experience consulting on a variety of issues related to defined benefit pension plans including investment strategy, plan design, and risk transfers.

Guyle received a MS in Statistics and a BS in Mathematics from the University of Washington. He is a Fellow of the Society of Actuaries, a Fellow of the Institute of Actuaries (UK), an Enrolled Actuary under ERISA, a Member of the American Academy of Actuaries and a Financial Risk Manager (FRM) with the Global Association of Risk Professionals. He also holds a Life Insurance and Annuity license.

This online collection of frequently asked questions (FAQs) and answers includes some information about the *Christian School Pension Plan & Trust Fund* ("the CSI Pension Plan" or "the Plan"). It does not contain all the details about the Plan. The official Plan documents will govern if there is any discrepancy between those documents and this FAQs document.