FOSTER & FOSTER
ACTUARIES AND CONSULTANTS

November 14, 2017

Mr. Erik Hallgren
City of Naperville
Naperville, IL 60540

Re: City of Naperville Funding Policy Discussion

Dear Erik:

As requested, the information below outlines the differences between the statutory minimum contribution requirement as set forth in the Illinois Pension Code and the current funding policy for the City of Naperville Police and Fire Pension Plans and describes an alternative funding policy.

Currently, the City amortizes 100% of the entry age normal unfunded liability and reflects a closed amortization period ending in 2032. Whereas the methodology per the Illinois Pension Code amortizes an unfunded liability equal to 90% of the projected unit credit actuarial accrued liability less actuarial value of assets. Both methods produce volatile contribution patterns as the target funding year gets closer. However, the statutory method also produces a back-loaded payment stream that dramatically increases the City's contributions over the long-term. We do not believe that funding your pension plan on the statutory basis is in the best interests of the City.

Using the statutory minimum funding approach versus the City's current approach delays the pay-down of the current unfunded liability and increases interest costs to the plans. For example, as of January 1, 2017, the City of Naperville Police and Fire Pension Plans have a combined $115,478,332 in unfunded liability. Based on the 7% interest rate that each plan uses, the unfunded liability accrues $8,083,483 in interest each year. The current annual amortization payment (before interest) using the City's funding policy is $8,566,643. As a result, we expect the unfunded liability to be paid down by $483,160 this year assuming everything goes according to plan. If the City was using the statutory minimum approach, the combined amortization payment (before interest) would only be $2,852,045. In this case, your unfunded liability would increase by $5,231,438 rather than being paid down. This produces a difference of $5,714,598 in your expected unfunded liability as of January 1, 2018. That additional unfunded liability accrues an annual 7% in compound interest that the City will eventually have to pay off. The longer the payment is deferred, the larger the payment that will be required.

The main issue with the current funding policy is that funding to an arbitrary date is not sustainable. As we get closer to 2032, the contribution requirements will become too volatile. We recommend an approach where you amortize your unfunded liability over a consistent period. The simplest way to accomplish this to adopt an open amortization approach. In an open amortization, the amortization period always remains the same. For example, the payment in an open 15-year amortization is always calculated based on 15 years rather than stepping down from 15 years to 14 years to 13 years and so on. This eliminates the volatility that would arise as you get closer to zero years remaining.

The key to an open amortization is setting the appropriate amortization period. We believe that 15 years is the maximum period to use since the payments are large enough to pay down your unfunded liability. A period longer than 15 could produce insufficient payments that allow the unfunded liability to grow much like the statutory example outlined above. The open amortization approach reflects that the unfunded liability is a moving target and there is no need to eliminate it by 2032, 2040 or any other arbitrary date. The IMRF pension fund has adopted the 15-year open amortization approach so there is some movement towards this approach in the State of Illinois.

We applaud the City of Naperville for electing not to extend the amortization period to 2040 when the Illinois Pension Code was changed at the end of 2010. This has put you on a much more sustainable path. We think it is necessary for your funding policy to evolve over time but we strongly discourage you from taking a major step backwards and adopting the statutory minimum approach to funding. The State of Illinois has chosen this approach for several decades to the detriment of Illinois funds.

If there are any questions, concerns, or comments about any of the items contained in this report, please contact us at 630-620-0200.

Respectfully submitted,

Jason L. Franken