UNITED STATES BANKRUPTCY COURT
EASTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION

In re: City of Detroit, Michigan, Debtor.	Bankruptcy Case No. 13-53846 Judge Thomas J. Tucker Chapter 9

CITY OF DETROIT'S MOTION TO ENFORCE PLAN OF ADJUSTMENT AND REQUIRE 30-YEAR AMORTIZATION OF THE UAAL IN THE POLICE AND FIRE RETIREMENT SYSTEM PENSION PLAN

The City of Detroit, Michigan ("City"), by its undersigned counsel, Miller, Canfield, Paddock and Stone, PLC, files this *Motion to Enforce Plan of Adjustment and Require 30-Year Amortization of the UAAL in the Police and Fire Retirement System Pension Plan*. In support of this Motion, the City relies on and incorporates herein the Brief attached to this Motion as Exhibit 3. The City sought consent to the relief requested in this Motion on August 1, 2022, but concurrence was denied.

[signature block on following page]

Dated: August 3, 2022

Respectfully submitted,

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UNITED STATES BANKRUPTCY COURT
EASTERN DISTRICT OF MICHIGAN
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In re: City of Detroit, Michigan, Debtor.	Bankruptcy Case No. 13-53846 Judge Thomas J. Tucker Chapter 9

EXHIBIT LIST

Exhibit 1	Proposed Order
Exhibit 2	Notice of Opportunity to Object
Exhibit 3	Brief
Exhibit 4	Certificate of Service
Exhibit 5	None
Exhibit 6	Exhibits to Brief (summarized below)

Ex. 1 — Declaration of Mayor Michael Duggan

Ex. 2 — Gabriel Roeder's March 4, 2021, PFRS funding policy

Ex. 3 — March 4, 2021, PFRS Board minutes approving 20-year amortization

Ex. 4 — Detroit CFO's July 21, 2021, memo objecting to 20-year amortization

Ex. 5 — Gabriel Roeder's August 2, 2021, supplemental funding report

Ex. 6 — October 1-14, 2021, emails between Ms. Brader and Mr. Raimi

Ex. 7 — October 18, 2021, PFRS IC minutes approving 20-year amortization

Ex. 8 — October 18, 2021, PFRS IC resolution approving 20-year amortization

Ex. 9 — November 18, 2021, PFRS Board minutes ratifying 20-year amortization

Ex. 10 — Stout report dated October 13, 2021

Ex. 11 — Michigan Tax Tribunal Order dated June 11, 2021

Ex. 12 — Cheiron report dated June 6, 2022

Ex. 13 — Gabriel Roeder's June 17, 2022, letter re Restoration Reserve Account

Ex. 14 — Excerpt from 40-year projection

EXHIBIT 1 – PROPOSED ORDER

UNITED STATES BANKRUPTCY COURT
EASTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION

In re: City of Detroit, Michigan, Debtor.	Bankruptcy Case No. 13-53846 Judge Thomas J. Tucker Chapter 9

ORDER GRANTING THE CITY OF DETROIT'S MOTION TO ENFORCE PLAN OF ADJUSTMENT AND REQUIRE 30-YEAR AMORTIZATION OF THE UAAL IN THE POLICE AND FIRE RETIREMENT SYSTEM PENSION PLAN

This matter, having come before the Court on the *Motion to Enforce Plan of Adjustment and Require 30-Year Amortization of the UAAL in the Police and Fire Retirement System Pension Plan* ("Motion"),[1] upon proper notice and a hearing, the Court being fully advised in the premises, and there being good cause to grant the relief requested,

THE COURT ORDERS THAT:

1. The Motion is granted.

2. The resolutions passed and the votes taken by Police and Fire Retirement System ("PFRS") and the Investment Committee which shortened the amortization period to 20 years are void and of no force or effect, and the PFRS and

[1] Capitalized terms used but not otherwise defined in this Order shall have the meanings given to them in the Motion.

the Investment Committee are enjoined and barred from shortening the 30-year amortization period.

3. The PFRS shall amortize the PFRS's plan's unfunded actuarial accrued liability that will exist as of June 30, 2023, over an additional 30 years commencing on June 30, 2023.

4. The Court shall retain jurisdiction over any and all matters arising from the interpretation or implementation of this Order.

<u>EXHIBIT 2 – NOTICE</u>

UNITED STATES BANKRUPTCY COURT
EASTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION

In re: City of Detroit, Michigan, Debtor.	Bankruptcy Case No. 13-53846 Judge Thomas J. Tucker Chapter 9

NOTICE OF OPPORTUNITY TO OBJECT TO CITY OF DETROIT'S MOTION TO ENFORCE PLAN OF ADJUSTMENT AND REQUIRE 30-YEAR AMORTIZATION OF THE UAAL IN THE POLICE AND FIRE RETIREMENT SYSTEM PENSION PLAN

The City of Detroit has filed the *Motion to Enforce Plan of Adjustment and Require 30-Year Amortization of the UAAL in the Police and Fire Retirement System Pension Plan*.

<u>Your rights may be affected.</u> You should read these papers carefully and discuss them with your attorney.

If you do not want the Court to enter an Order granting the *Motion to Enforce Plan of Adjustment and Require 30-Year Amortization of the UAAL in the Police and Fire Retirement System Pension Plan,* within 14 days, you or your attorney must:

1. File with the court a written response or an answer, explaining your position at:[2]

United States Bankruptcy Court
211 W. Fort St., Suite 1900
Detroit, Michigan 48226

If you mail your response to the court for filing, you must mail it early enough so that the court will **receive** it on or before the date stated above. You must also mail a copy to:

Miller, Canfield, Paddock & Stone, PLC
Attn: Marc N. Swanson
150 West Jefferson, Suite 2500
Detroit, Michigan 48226

2. If a response or answer is timely filed and served, the clerk will schedule a hearing on the motion and you will be served with a notice of the date, time, and location of that hearing.

If you or your attorney do not take these steps, the court may decide that you do not oppose the relief sought in the motion or objection and may enter an order granting that relief.

[2] Response or answer must comply with F. R. Civ. P. 8(b), (c) and (e).

MILLER, CANFIELD, PADDOCK AND STONE, P.L.C.

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Dated: August 3, 2022

EXHIBIT 3 – BRIEF

UNITED STATES BANKRUPTCY COURT
EASTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION

In re: City of Detroit, Michigan, Debtor.	Bankruptcy Case No. 13-53846 Judge Thomas J. Tucker Chapter 9

BRIEF IN SUPPORT OF CITY OF DETROIT'S MOTION TO ENFORCE PLAN OF ADJUSTMENT AND REQUIRE 30-YEAR AMORTIZATION OF THE UAAL IN THE POLICE AND FIRE RETIREMENT SYSTEM PENSION PLAN

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ATTORNEYS FOR THE CITY OF DETROIT

Dated: August 3, 2022

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ISSUES AND MOST APPROPRIATE AUTHORITY

1. The City of Detroit Police and Fire Retirement System (PFRS) recently adopted (over the City's objections) a resolution providing that the plan's unfunded actuarial accrued liability (UAAL) for retirement benefits, existing as of June 30, 2023, be amortized over 20 years. The Plan of Adjustment (POA) provides that the proper period is 30 years. 20-year amortization will require the City to pay additional hundreds of millions of dollars in front-loaded funding over the amounts that would be due under 30-year amortization (and under the original projections in the POA).

<u>The first issue in this case is</u>:

> Should the Court compel PFRS to amortize the PFRS' plan's UAAL that will exist as of June 30, 2023, over 30 years, rather than 20 years, where the POA provides that 30-years is the proper amortization period.
>
> City answers **yes**.

The Confirmation Order explicitly requires the UAAL to be amortized over 30 years. *In re City of Detroit, Mich.*, 524 B.R. 147, 231-32 (Bankr. E.D. Mich. 2014) ("<u>Confirmation Opinion</u>") *and see* Confirmation Order, ¶ G, p. 10 of 225, (incorporating the Confirmation Opinion). Consequently, the PFRS's attempt to change the 30-year amortization period is a violation of the Confirmation Order. Further, the governing pension plan documents (section 16.6) provide that "Nothing [in the PFRS pension plan documents] shall be interpreted as permitting the

Investment Committee or the Board to alter or depart from the requirements set forth in the Plan of Adjustment."

2. The City learned shortly after the POA was confirmed that, due to material actuarial mistakes in devising the POA, the accrued pension liabilities for the two legacy plans had been understated by some $500 million. To ensure the legacy plans would be properly funded, the City voluntarily created the Retiree Protection Trust Fund. By June of 2023, the City will have paid $445 million of general fund monies into the Trust Fund. As a result, and directly contrary to the POA, the City has been deprived of much of the benefit of the POA's ten-year "pension holiday" during which the City was to have made only nominal contributions to the legacy plans.

The second issue in this case is:

> Should the Court compel PFRS to amortize the PFRS' plan's UAAL that will exist as of June 30, 2023, over 30 years, rather than 20 years, where (i) 20-year amortization, together with (ii) the City's need to use $445 million from the Retiree Protection Trust Fund–depriving the City of much of the benefit of the POA's "pension holiday"–will threaten the City's ability to successfully implement the POA?
>
> City answers **yes**.

POA Article VII gives the Court broad authority to enter orders necessary for the successful implementation of the POA, including the order requested here.

I. FACTS

This factual recitation is supported by the declaration of Michael Duggan, Mayor of the City of Detroit, attached as exhibit 1, and other documents appended as exhibits.

A. Duggan's due diligence and testimony in support of the POA.

Duggan was first elected in November 2013 and then again in November 2017 and 2021. His prior jobs included Deputy County Executive of Wayne County, elected Wayne County Prosecutor, and Chief Executive Officer of the Detroit Medical Center. Ex. 1 ("Duggan Dec'l."), ¶ 1.

The City filed for Chapter 9 bankruptcy in July 2013 and was in bankruptcy when Duggan became Mayor effective January 1, 2014. Kevyn Orr was the state appointed emergency manager and supervised the bankruptcy activities. *Id.*, ¶ 3.

For much of Duggan's first year in office (2014), he was excluded from ongoing bankruptcy activities. However, as the Plan of Adjustment ("POA") was being negotiated, and it became clear to Mr. Orr and his team that Duggan would need to support the POA to secure its approval, Duggan was provided access to significant information about the bankruptcy. After extensive due diligence Duggan ultimately testified in support of the POA and its feasibility. *Id.*, ¶ 4.

Perhaps the most important and contentious issue in the bankruptcy, and one of Duggan's primary concerns about the POA and its feasibility, was the City's legacy retirement obligations. The City historically had two defined benefit pension plans for employees and retirees. The Police and Fire Retirement System ("PFRS") managed the plan for public safety employees and retirees. The General Retirement System ("GRS") managed the plan for all other City employees and retirees. Both plans were frozen in bankruptcy and, under the POA, covered only City retirees and employees who performed services for the City prior to July 1, 2014. *Id.*, ¶ 5.

Both plans were replaced going forward with hybrid plans that combined elements of both defined benefit and defined contribution plans. In the POA, the new hybrid plans are known as Component I plans, and the frozen plans are known as Component II plans.

At issue in this case is the PFRS Component II plan that was frozen in bankruptcy and now covers only public safety employees and retirees who provided services prior to July 1, 2014. *Id.*, ¶ 6. References in this brief to the PRFS plan are to the PFRS Component II plan that was frozen in bankruptcy. Because the plan was frozen and no new beneficiaries are being added, it is a "closed plan" and will terminate after all beneficiaries have died.

The eighth, final, and operative POA incorporated what became known as the "Grand Bargain." The Grand Bargain raised the equivalent of $816 million from the state of Michigan, the Detroit Institute of Arts, and various charities and, as a result:

- Pension cuts to retirees were minimized. The only cut to public safety pensions was a 55% reduction to the cost-of- living adjustment (COLA).

Other City employees' pensions were cut more but still far less than had been anticipated.

- The Detroit Institute of Arts' collection was protected.

- The POA gave the City a 10-year pension contribution "holiday" and, thereafter, the legacy plans' UAAL was to be amortized over a 30-year period. This was to allow the City to devote as many resources as reasonably possible to address ongoing issues that had substantially contributed to the bankruptcy, such as blight, public safety, loss of employment opportunities, etc.

Id., ¶ 7.

On November 12, 2014, this Court entered the Confirmation Order and found the POA to be feasible. To make this determination, the Court relied on the City's 40-year forecast. Confirmation Order, ¶ 11, pp. 41-42 of 225. The City has attached as Exhibit 14 an excerpt of one of the forecasts that it believes was referenced by the Court in paragraph 11(c) of the Confirmation Order. This 40-year forecast specifically provides for a 30-year amortization. The Court found the 40-year forecasts refenced in paragraph 11(c) of the Confirmation Order to be "reasonable, made in good faith, accurate and consistent with other financial projections made by the City and based upon assumptions that are reasonable when considered individually and collectively." Confirmation Order, ¶ 11, pp. 41-42 of 225.

On December 31, 2014, Bankruptcy Judge Steven Rhodes issued a supplemental opinion approving the Plan of Adjustment. *In re City of Detroit*, Mich., 524 B.R. 147 (Bankr. E.D. Mich. 2014), ("Supp Op").

As Judge Rhodes noted, the pension classes voted to accept the POA by 82% in class 10 (PFRS) and 73% in class 11 (GRS). Supp Op at 180. The Supplemental Opinion explains:

> Because of the outside money committed as part of the Grand Bargain, the City will have little responsibility for funding the GRS [General Retirement System] and the PFRS [Police/Fire Retirement System] through June 2023. During that time period, the PFRS will be funded exclusively from contributions from the DIA, the DIA Funders, the Foundation Funders and the State under the Grand Bargain, as described previously.

Id. at 179.

Judge Rhodes concluded that the pension settlement was "fair and equitable" and stated as follows:

> It is therefore a vast understatement to say that the pension settlement is reasonable. It borders on the miraculous. No one could have foreseen this result for the pension creditors when the City filed this case. Without the outside funding from the Grand Bargain, the City anticipated having to reduce pensions by as much as 27%. The pension reductions in the pension settlement are minor compared to any reasonably foreseeable outcome for these creditors without the pension settlement and the Grand Bargain.

Id. at 181.

At the time of the bankruptcy, both the public safety (PFRS) and general retirement (GRS) legacy (Component II) plans were underfunded. Under financial projections prepared for the POA, the plans were likewise projected to be underfunded at the end of the 10-year pension holiday. Actuaries identify the amount of such underfunding as the plan's "unfunded actuarial accrued liability," or "UAAL." Duggan Dec'l., ¶ 10.

In examining the feasibility of the POA, experts addressed how the Component II plans' UAAL would be amortized after the end of the 10-year pension holiday. Those projections showed that after the 10-year holiday, the then existing UAAL would be amortized over the following 30 years. The Supplemental Opinion confirmed in two separate places that the Component II Plans' UAAL at the end of the pension holiday were to be amortized over a thirty-year period:

> However, at the end of FY2023, the GRS and PFRS will remain significantly underfunded. Using the assumptions from the global pension settlement, including the 6.75% discount rate, the City projects that the PFRS will only achieve 78% funding, leaving a UAAL of $681 million. For the GRS, the City projects a 70% funded status by the end of FY2023, leaving a UAAL of $695 million. **The City will then amortize the remaining UAAL for both plans over the next thirty years at an interest rate of 6.75%.** Between FY2024 and FY2033, the City will receive an additional $68 million in Grand Bargain proceeds to pay toward the UAAL amortization for PFRS, and $188 million for GRS. The balance of the amortized UAAL will come from the City.
>
> The plan greatly reduces the City's pension obligations, thanks to the State Contribution Agreement, the Grand Bargain funding, and the modification of the City's obligations to its current retirees."

Supp Op at 231-32 (emphasis added and citations removed).

> As discussed in part III.F. above, the City's obligations to the GRS and the PFRS are fixed under the plan from FY2014-FY2023. During this time, as the City works to stabilize its finances and implement the RRIs, the majority of the City's contributions to the GRS and the PFRS will come from the DWSD, the State Contribution Agreement, and the

> Grand Bargain funding. However, after 2023, the City projects the retirement systems will remain somewhat underfunded. **The balance of the underfunding in 2023 will be amortized over a thirty year period of time.**

Supp Op at 230 n.23 (emphasis added and citations removed).

Despite the funding provided by the Grand Bargain, Judge Rhodes was extremely concerned about the feasibility of the POA. His opinion stated:

> In this case, examining the feasibility of the plan is difficult for a number of reasons. The City's debt is enormous and the City proposes to pay most of its creditors over a long period of time. As the Court discusses below, the City's revenue and expense projections extend forty years into the future [40 years is the 10-year pension holiday plus 30-year amortization].
>
> Second, the feasibility of the plan depends upon the City's ability to fix and maintain its broken governmental operations. This is significant because the chapter 9 feasibility inquiry requires an analysis of whether the City can reasonably provide sustainable municipal services, as the court found in *In re Mount Carbon*. It is also significant because the City's ability to repay its creditors pursuant to the plan depends upon the City's ability to increase its revenues from taxes and fees by improving the efficiency of City operations and by identifying and accessing untapped sources of revenue.
>
> The feasibility analysis is yet more complex because several key parts of the plan depend upon performance by parties who are completely beyond the City's control. For example, because the City's contributions to the retirement systems are fixed through FY2023, a risk remains that the pension plans will be significantly more underfunded than anticipated if one of the many organizations participating in the Grand Bargain fails to perform in the time or manner promised.
>
> As the City itself succinctly states in its pretrial brief in support of plan confirmation, "[T]he City was—and remains today—enmeshed in a financial crisis of unsurpassed proportions and complexity." Despite

> efforts from both the City and the State of Michigan, "the City is trapped in a vicious circle of cash crises, general fund deficits, crushing long-term liabilities and tumbling credit ratings exacerbated by the City's bureaucratic structure and frequent deviations from established budgets."

Supp Op at 220-21 (citations omitted, alterations in original).

Martha Kopacz, the Court's appointed feasibility expert, was likewise extremely concerned about the feasibility of the POA:

> I want to emphasize, however, that there is little space remaining on the continuum of [feasibility]. The recent settlements and corresponding amendments to the Plan of Adjustment have served the laudable goals of efficiently resolving disputes and garnering additional support for the Plan of Adjustment. Conversely, they have imposed additional financial obligations on the City. I have already expressed concerns regarding the level of contingency provided for in the Plan of Adjustment. The financial obligations associated with the recent settlements only intensify this concern."

Supp Op, at p. 219 (Court's quotation of expert, alterations in original).

Duggan worked closely with Ms. Kopacz and her staff, and major City departments, in examining the POA's feasibility. Ultimately, Duggan and Ms. Kopacz came to the same conclusion–that the POA was feasible but enormous work would be required and financially there was no room to spare. Critical to Duggan's support for the POA was that the City's legacy pension liabilities would be minimized for the initial ten years and then amortized over a 30-year period, thus providing the City as much funding as reasonably possible to address the City's problems by investing in what were called "RRIs," or recovery and reinvestment initiatives. As of the time of the confirmation hearing, Duggan believed the City was perhaps 10% of the way toward providing proper City services, and that many years of implementing major service improvements and job creation initiatives would be needed to successfully carry out the POA. Duggan Dec'l., ¶ 14.

In considering the feasibility of the POA, Duggan was aware that the POA provided an assumed rate of return of 6.75% for the legacy pension plans. During his due diligence, Duggan learned that a proposal had been made to raise the assumed rate of return to 7%. That would have allowed the actuaries to more easily "make the numbers work" for the feasibility analysis but would have put more funding stress on the City when it came time to resume funding the plans. Duggan advised the participants that if they raised the assumed rate of return to 7%, he would testify against the feasibility of the POA. *Id.*, ¶ 15.

B. Duggan learns the actuarial assumptions for the POA were grossly inaccurate and materially understated the plans' liabilities. The City responds by creating and placing hundreds of millions of dollars into a Retiree Protection Trust Fund, largely negating the POA's "pension holiday" for the City.

The POA was approved and then became effective in December 2014. Sometime in 2015, Duggan learned that the actuarial assumptions for the legacy pension plans were seriously flawed. Specifically, the plans' projected UAAL had been understated by roughly $500 million. That information was provided by Gabriel Roeder Smith & Company ("Gabriel Roeder"), the actuary for both legacy plans. Neither Gabriel Roeder, nor any of the other actuaries or experts who worked on the POA, ever explained how the error occurred. *Id.*, ¶ 16.

The City considered bringing a lawsuit. The City's investigation revealed serious concerns about the way in which the retirement liability issues were handled by the "experts" in the bankruptcy process. Those included use of outdated mortality tables. Duggan also learned that the "experts" were seemingly more concerned about the making the numbers work, *i.e.*, minimizing retiree pension cuts, than with the City's ability to successfully carry out the POA. Duggan spoke with Ms. Kopacz who advised she likewise had no idea that the retirement plan projections were materially incorrect, and that information would likely have changed her view on the feasibility of the POA. Duggan ultimately decided not to bring a lawsuit because the POA had broad exculpatory provisions. *Id.*, ¶ 17.

Thereafter, to further ensure proper funding of legacy pensions, Duggan's administration voluntarily put in place an irrevocable Retiree Protection Trust Fund to provide additional funding for the legacy plans after the end of the 10-year pension "holiday." To date, the City has deposited $355 million, and will be adding $90 million later this year. Accordingly, by the time City funding of the PFRS plan is to begin (FY 2024), the City will have funded the Retiree Protection Trust Fund with $445 million of general fund money. *Id.*, ¶ 18.

Under the POA, that $445 million should have been available for recovery and reinvestment initiatives such as blight remediation, public safety, job creation initiatives etc. It has instead irrevocably been set aside for the retirees' pension security. *Id.*, ¶ 19.

C. In November 2021 PFRS adopts a resolution which, contrary to the POA, shortened the amortization period for PFRS' UAAL from 30 to 20 years.

This litigation challenges PFRS' adoption of a funding resolution which provides for amortizing the UAAL that will exist after the expiration of the pension "holiday" (June 30, 2023) over 20 years – rather than the 30-years required by the POA. Section 16.6 of the governing plan documents makes crystal clear PFRS had no right to violate the POA. "Nothing herein [in the PFRS plan document] shall be interpreted as permitting the Investment Committee or the Board to alter or depart from the requirements set forth in the Plan of Adjustment."[1]

Relevant background to that action is discussed below.

1. PFRS' governance by its Board of Trustees and Investment Committee (IC).

In reaction to serious investment abuses in prior years, the POA materially changed the governance of the City's GRS and PFRS retiree legacy plans. Investment decisions were entrusted to newly created Investment Committees, or

[1] Doc. No. 8045-1, p. 519 of 809. Section 16.6 of the Component I plan also applies to Component II. Doc. No. 8045-1, pp. 597-98 of 809.

ICs. The PFRS IC has 9 members as follows: four public safety representatives and five independent members. The City and Mayor have no representation. The public safety members each have one-half vote. The independent members originally were appointed by Governor Snyder, typically based on their investment expertise.

PFRS has a 17-member Board of Trustees. Because the City and public safety representatives could never agree on an "independent" trustee, at all relevant times there have been 16 trustees. Five represent the Mayor's administration. One represents the City Council president. Eight directly represent public safety employee/retiree interests. Two trustees were appointed by the Mayor but the chosen individuals had to be retired public safety officers. As a result, public safety representatives control the Board, as evidenced by their votes adopting 20-year amortization, discussed below.

2. Events leading to PFRS' adoption of 20-year amortization.

August 20, 2020, City presentation. After learning that PFRS was considering accelerated amortization, the City's CFO and Deputy made a presentation to PFRS' Board and IC. The City opposed acceleration for reasons that included, *inter alia*, the POA expressly provides for 30-year amortization.

March 4, 2021, Gabriel Roeder's 20-year funding policy. At the urging of the PFRS' public safety representatives, Gabriel Roeder prepared an Actuarial Funding Policy providing for 20-year amortization. Ex. 2, p. 3, § 3(b)(a). Gabriel

Roeder gave no consideration whatsoever to the points made by the City in its prior presentation. PFRS' Board's public safety representatives, over the objections of the City, adopted the funding policy on March 4, 2021, with an 8-6 vote. Ex. 3, pp. 6-7. IC approval also was needed for a funding policy.

July 21, 2021, City continues to object. The IC had previously engaged the Stout Consulting Firm to prepare an analysis of the City's "ability to pay" using the proposed 20-year amortization funding. On July 21, 2021, the City provided to Stout and the IC's counsel documents and information requested by Stout to complete its analysis, together with a transmittal memorandum attached as Exhibit 4. The memorandum again reiterated the City's fundamental concerns with accelerated amortization. Ex. 4, pp. 1-3. The memo also asked the Board and IC to hear both from the City's Mayor, and the independent actuary the City had engaged (Cheiron) before taking any final action on the funding policy. Ex. 4, p. 3.

August 2, 2021, Gabriel Roeder's supplemental report. At the IC's request, Gabriel Roeder prepared a supplemental report that examined financial projections using 20- and 25-year amortizations under various assumptions of baseline or unfavorable investment results. Ex. 5. Six projections were considered. The worst-case scenario was "25-year amortization, Downside Level 2." Ex. 5, p. 11. Even under the worst case, the funded level percentage never dropped below

40%. Neither PFRS nor Gabriel Roeder has ever articulated any need to accelerate the POA's 30-year amortization.

October 1 – 14, 2021, email exchanges between counsel for the City and IC. On October 1, 2021, the City's deputy corporation counsel (Raimi) reminded the IC's counsel (Valerie Brader) of the City's prior request for the PFRS Board and IC to hear from the City's Mayor and actuarial expert prior to making a final decision of the funding policy. Ex. 6, pp. 5-6, Raimi email dated 10/1/21. Ms. Brader responded that the Stout report was not yet complete. Ex. 6, p. 5.

Ms. Brader advised on October 12 that the IC would be taking up the Stout report at its October 18 meeting and "would be happy to have the Mayor present." Ex. 6, p. 4. That timing was, of course, impossible. Raimi responded that the City had not even seen the Stout report and both the Mayor and the City's expert (Cheiron) would need reasonable time to review the report and prepare the presentations. Ex. 6, pp. 3-4. The Stout report was dated October 13, 2021, Exhibit 6, but the City did not receive a copy until sometime later.

Raimi questioned why the IC insisted on moving so quickly, and without input from the Mayor and Cheiron, since the funding policy would not take effect until July 2023. Ex. 6, p. 1. Ms. Brader responded that the IC was attempting to accommodate an earlier City request for guidance on the funding issue by the fall of 2021. *Id.* The City, obviously, was perfectly willing to push this back so the IC could be fully informed, but it clearly was not interested. Ms. Brader also advised that any action by the IC would also need Board ratification, *id.*, but it was perfectly clear that the public safety-controlled Board would again approve 20-year amortization. *Id.*[2]

October 18, 2021, IC adopts 20-year amortization. On October 18, Stout's Robert Roth presented to the IC his report addressing the City's ability to pay using 20-year amortization. Gabriel Roeder presented its supplemental analysis. Ex. 7, IC minutes. The IC adopted 20-year amortization, *id.*, and approved the appended resolution. Ex. 8.

There was never any doubt that the "independent" members of the IC would follow fiduciary law 101–which instructs fiduciaries that they generally cannot be criticized or sued if they act in accordance with their "expert's" (Gabriel Roeder's) advice. And here, the City had no representation on the IC to offer any contrary view.

November 18, 2021, PFRS Board ratifies 20-year amortization. At the November 18 PFRS Board meeting, trustee Conrad Mallett, the City's deputy

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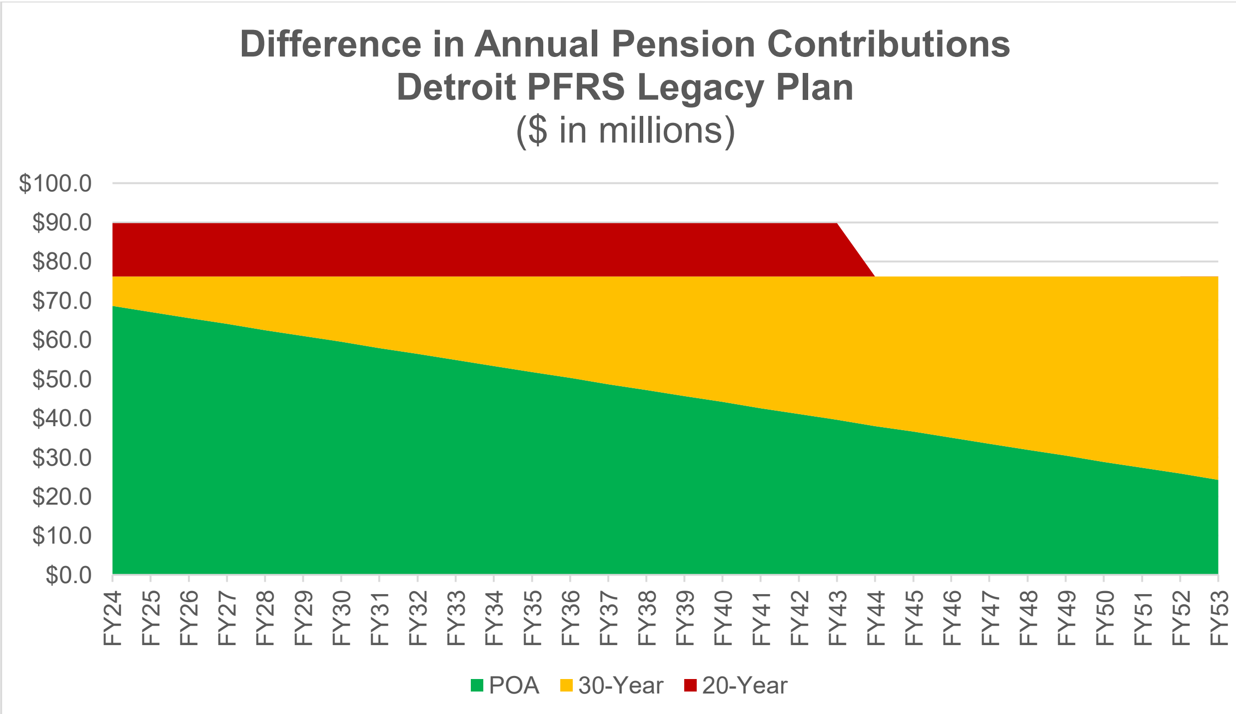
[2]Ms. Brader's October 1, 2021, email expressed her concerns about the so-called "pay-as-you-go" funding proposal which the City's CFO offered as one option in his August 2020 presentation. Ex. 6, p. 5. Raimi advised Ms. Brader that Cheiron would be offering a different and more focused approach. Ex. 6, p. 2. The City is not pursuing the "pay-as-you-go" approach, nor is it relevant because both Gabriel Roeder and Cheiron agree that there is no foreseeable danger that the City would not be able to pay benefits under 30-year amortization.

mayor, offered a resolution asking the Board to disaffirm its prior approval of 20-year funding and agree to mediation concerning the funding dispute. On the strength of the votes of the public safety representatives, that resolution was defeated and the Board affirmed 20-year amortization. Ex. 9, pp. 9-10.

D. The devastating impact to the City of 20-year amortization.

The critical importance of the amortization issue is illustrated by the following diagram which is addressed in Duggan's affidavit. Duggan Dec'l., ¶ 21. This shows (i) the City's funding obligation as originally estimated under the (POA) (in green), (ii) the City's increased funding obligation over the POA estimates, using 30-year amortization (green and yellow), and (iii) the City's increased funding obligation over the POA estimates, using 20-year (green, yellow, and red). The 20-year and 30-year amortization projections (yellow and red) are based on the most recently available data from PRFS's actuaries, which is as of June 30, 2021. (Gabriel Roeder's June 30, 2021, actuarial report was not released until March 24, 2022, and is the most recent data available. That data is used for the chart below and in the Cheiron expert report discussed below.)



Duggan Dec'l., ¶ 21.

The additional hundreds of millions of dollars of front-loaded payments under 20-year amortization would be devastating to the City's ability to fund critical programs needed to improve City services, attract employment opportunities, and otherwise continue to successfully implement the POA. Duggan Dec'l., ¶ 22.

Moreover, in addition to the PFRS frozen legacy plan, there is also the frozen legacy GRS pension plan for non-public safety employees. The Investment Committee for that plan is carefully following this funding dispute. If this Court were to allow PFRS to violate the POA and impose 20-year amortization, the City is justly apprehensive that GRS will feel compelled to do likewise. That would roughly double the additional upfront pension funding payments for the City. *Id.*, ¶ 39.

E. The Stout Report prepared for the IC lacks all credibility.

The Stout Report was prepared by Raymond Roth and is appended (without exhibits) as Exhibit 10. The report's stated purpose is to advise the IC "regarding the capability of Detroit to make specified levels of pension contributions [using 20-year amortization] beginning in 2024." Ex. 10, ¶ 12. The report concludes "Thus, it is my opinion that Detroit will have the ability to pay the additional amounts of PFRS Legacy Plan contributions under the scenarios projected by its actuaries." *Id.*, ¶ 84.

Mayor Duggan has carefully reviewed the Stout Report and concludes that it is meaningless to the amortization dispute for reasons including the following (Ex. 1, ¶¶ 29-38):

The report purports to compare Detroit to four allegedly "comparable" cities, namely, Indianapolis, Cleveland, Columbus, and Minneapolis. That is absurd on its face. Stout's own report shows (Ex. 10, p. 9) that in 2015, the year after Detroit exited from bankruptcy, Detroit's median income was roughly $25,000 per year, versus $43,000 for Indianapolis, $45,000 for Columbus, and $51,000 for Minneapolis. None of those cities are remotely "comparable" to Detroit. Although Cleveland's median income was similar to Detroit's, in 2015 some 40% of Detroit residents were below the poverty line versus 35% for Cleveland. Stout Report, Ex. 10, p. 11. And, of course, Cleveland never declared bankruptcy, nor has it ever faced problems such as those described in Judge Rhodes' Supplemental Opinion (describing his tour of the City):

> The primary impression that remains with the Court following the tour is that blight in Detroit is extensive. The statistics do not fully convey its extent or impact. In neighborhood after neighborhood, short and long stretches of streets have abandoned structures—they can no longer be called homes—that are intimidating hulks. Some are partially or mostly burned out. Some have gaping holes in their roofs or collapsed garages. Many have missing doors and windows, and broken front steps and porches. Some are strewn with illegal dumping. All are vivid statements of their former owners' emotional and financial struggles, and of community loss.
>
> These streets also have vacant lots, or collections of vacant lots, on which unmanaged and unsightly vegetation has taken over from the structures after their removal. On the commercial streets, block after block of abandoned, boarded up and graffiti-littered strip shopping centers far outnumbered the occasional small businesses that have survived.
>
> It is heartbreaking, maddening and sad. No one should have to endure, day in and day out, the damage to the human spirit that can result from living in those surroundings. City residents who live, work and play in these neighborhoods deserve better. Detroit deserves better."

Supp. Op. at 167. Ironically, the Stout Report (Ex. 10, ¶ 17) acknowledges the following:

> Detroit has experienced a remarkable transformation since its emergence from bankruptcy. The median income of its residents has risen, while the number of families living below poverty, unemployment, and crime has declined. In addition, blight has been reduced, street lighting improved, emergency medical services ("EMS") response times are down, and credit ratings have stabilized. However, Detroit's population remains at lower income levels, including higher concentrations of poverty and crime rates, than the Comparable Midwestern Cities."

Nevertheless, Mr. Roth inexplicably "concludes" that Detroit could "afford" the dramatically increased up-front payments under 20-year amortization. Roth argues that Detroit allegedly is spending too much of its budget on "central government." Duggan Dec'l., ¶ 32 (citing Stout report, Ex. 10, ¶¶ 54-67).

The City's review of Mr. Roth's report raises substantial questions whether the "central government" comparison properly analyzes each City's unique accounting policies and practices. But even if it does, Mr. Roth's "opinion" completely ignores the fact that the City's "remarkable transformation" was precisely the result of the Duggan administration's spending priorities including "central government." Duggan Dec'l., ¶ 33. The "central government" spending was critical to the City's job creation, housing initiatives, blight removal, neighborhood revitalization, revamping of City departments, and myriad other activities that produced the "remarkable transformation." Mr. Roth never asked to speak to the Mayor about this or any other aspect of his report. Nor did the PFRS Board of Trustees or its Investment Committee request the Mayor's input on the report or on the impact the 20-year amortization would have on the City. Duggan Dec'l., ¶ 33.

The Stout Report (Ex. 10, ¶¶ 54-55) notes that Detroit has lower levels of public safety spending as a percentage of general fund revenue than the "comparable cities." As explained in his declaration, Mayor Duggan did not need Mr. Roth's report to tell him that Detroit needs additional resources for public safety and many other priorities. The City's financial crisis and bankruptcy devastated all City departments and employee morale, and none more than public safety. Improving public safety recruiting, pay, benefits and performance has been a top priority to which Mayor Duggan and his administration have devoted enormous time and effort. Mr. Roth also ignores the fact that the City would have been able to spend more on public safety had it not been required to fund the $445 million Retiree Protection Trust Fund. Duggan Dec'l., ¶ 34.

It is extremely disturbing that Mr. Roth, after acknowledging the City's need for additional resources for public safety, would nevertheless conclude that the City can "afford" sharp increases in pension funding payments under 20-year amortization. It is quite evident that Mr. Roth has no understanding of the realities and complexities of managing the City of Detroit. Nor does his resume list anything that would qualify him to opine on these subjects. *Id.*, ¶ 35.

The Stout Report also speculates that the City may in the future gain additional revenues via internet gaming. What is known for certain is that the pandemic wreaked havoc on the City's finances, including income tax which is the City's largest revenue source. As a result of the pandemic, many thousands of employees who formerly worked in City offices are working from their homes in the suburbs.

As a result, they are not paying City income tax. City restaurants, businesses, etc. are adversely affected. *Id.*, ¶ 36.

To the extent the City does realize additional gaming tax from internet gaming, those have already been considered in the City's spending projections, so that would not be "additional revenues" available for pension funding. *Id.*, ¶ 37.

Wholly apart from the fact that Mr. Roth has no crystal ball to see into the future, the Bankruptcy Court, the Court appointed mediators, Ms. Kopacz, myriad interested parties and their advisors spent thousands of hours working out the POA. In addition to Gabriel Roeders, the national/international law firms and actuaries included:

- The Official Committee of Retirees engaged the Dentons law firm, the Segal Company financial/actuarial firm and the Lazard actuarial/financial firm.
- PFRS and GRS engaged Clark Hill and the financial/actuarial firm of Greenhill & Co.
- Kevyn Orr, the emergency manager, engaged multiple law firms including Jones Day and actuarial firm Milliman.

The advisors collectively charged tens of millions of dollars for their services. After all of that, the POA provided for a 30-year amortization period for the legacy plans' UAAL beginning with the 2024 fiscal year. The Mayor rightly points out that if PFRS had recently identified some compelling need to violate the POA to ensure proper funding, PFRS should have petitioned the Court for relief. But PFRS has never identified any such need and there is no reason for violating the POA with a 20-year amortization schedule. *Id.*, ¶ 38.

Finally, this Court should be aware of Stout firm's recent history with the City. For the last 7 years Raimi has been lead counsel in the City's defense of a property tax appeal by MGM Grand Detroit casino-hotel. MGM seeks past refunds and future reductions likely totaling more than $100 million. MGM engaged the Stout firm (Kevin Kernen) to issue a report supporting MGM's novel and, in the City's view untenable theory, supporting those reductions. The Tribunal, on June 11, 2021, issued a 100-page Order addressing the parties' dispositive motions. The Tribunal ruled in the City's favor (affirmed on reconsideration) and spent much of the decision attacking the Stout report in the harshest possible terms. For example:

> [The Tribunal] cannot draw a "uniform assessment" from Mr. Kernen's Report which relies on inaccurate information and, frankly, makes little sense. The methodology in the Report is not found in any appraisal textbook, treatise, scholarly article, case law or statute and appears to have been presented to Kernen by counsel for its client's own self-interest, not from any independent thought.

Ex. 11, p. 91-92. The current Stout report is as deeply flawed and incredible as the Kernen report.

F. The Cheiron report confirms there is no actuarial basis for 20-year amortization.

The most recent PFRS data available is Gabriel Roeder's June 30, 2021, actuarial report, which was not released until March 24, 2022. The Cheiron report, which is attached as Exhibit 12, used that data. The report was authored by Gene Kalwarski, whose impeccable credentials are discussed at page 7 of the report.

The report's key finding is that "The differences between a 20-year and 30-year amortization are negligible in terms of ensuring sufficient assets will be available to pay all future benefits under the plan." Ex. 12, p. 1, point 1. The balance of the report provides the supporting data for that statement. Likewise, even under Gabriel Roeder's worst-case scenario the plan's funded level percentage never dropped below 40%. Ex. 5, p. 11.

There is one major difference in Cheiron's analysis versus Gabriel's. Cheiron states "Because a 20-year amortization results in increased assets when compared to a 30-year amortization, this level of assets increases the exposure the City has to investment risk, without any offsetting benefit to taking such risk due to conclusion number 1 (quoted above)." Ex. 12, p. 1, point 3. In other words, if the City is compelled to front-load the funding, and the stock market falls, the accelerated amortization will impose even more financial stress on the City.

The City commissioned the Cheiron report to determine whether 30-year amortization posed any risk to retirees. It would not. Duggan's administration would never take any action to jeopardize pension benefits. Duggan Dec'l., ¶ 24. That is exactly why his administration voluntarily created the Retiree Protection Trust Fund and will soon have funded it with $445 million in general fund money. *Id.*

Finally, to alleviate any possible concerns, the Mayor would support, in connection with 30-year amortization, adoption of a "trigger" such that if the funded percentage of the plan fell below a certain agreed upon threshold, the City would be required to provide additional funding. But there is nothing to currently suggest that will ever be an issue. *Id.*, ¶ 28.

G. PFRS' most recent actions again confirm there is no need for 20-year amortization.

The POA contemplates that if the PFRS achieves a funded ratio in excess of 78%, PFRS can establish a "Restoration Reserve Account." The Account's purpose is to pay PFRS retirees' amounts they lost under the 55% COLA reduction in the POA. On June 17, 2022, Gabriel Roeders wrote to PFRS advising that $26+ million dollars could be placed in the Restoration Account. Ex. 13. Although minutes are not yet available, the IC approved creation of the account at its June 22, 2022, meeting. In short, the PFRS plan is so healthy that public safety retirees are seeking to recoup their minor pension reductions (55% of COLA) resulting from the POA.

II. ARGUMENT

A. The Court has jurisdiction over this dispute.

The Court has jurisdiction over this dispute under POA Article VII, paragraphs E, F, G, I, K, L, and Q.

B. The Court should order PFRS to amortize the PFRS' plan's UAAL that will exist as of June 30, 2023, over 30 years, rather than 20 years, because the POA provides that 30 years is the proper amortization period.

Judge Rhodes' Supplemental Opinion approving the POA confirmed in two separate places that the Component II Plans' liabilities at the end of the pension holiday were to be amortized over a thirty-year period. See excerpts of the Supplemental Opinion at p. 230, n. 23 and pages 231-232 quoted above.

Judge Rhodes' Supplemental Opinion was incorporated as part of the Confirmation Order. Confirmation Order, ¶ G, p. 10 of 225. In both instances in which Judge Rhodes discussed the 30-year amortization, he affirmatively stated that the balance "will" be amortized over a thirty-year period. Judge Rhodes' directives in the Confirmation Opinion should be treated as conclusions of law under the Confirmation Order. Indeed, the Confirmation Order states that "All findings of fact and conclusions of law announced by the Court on the record in connection with confirmation of the Plan or otherwise at the Confirmation Hearing or in the Confirmation Opinion are incorporated herein by reference." Confirmation Order, Section B, ¶ 4, p. 73-74 of 225. Because of this express incorporation, the

Confirmation Opinion is construed as part of the Confirmation Order. *See In re Terrell*, 637 B.R. 129, 135-38 (Bankr. E.D. Wisc. 2021) (discussing, in chapter 13 context, how courts construe plans, the orders confirming them, and "other documents expressly incorporated" into them); *Somerset Trust Co. v. Mostoller (In re Somerset Regional Water Res., LLC)*, 592 B.R. 38, 49-50 (Bankr. W.D. Pa. 2018) (similar, in chapter 11 setting).

Section 16.6 of the governing PFRS plan document provides that "Nothing herein shall be interpreted as permitting the Investment Committee or the Board to alter or depart from the requirements set forth in the Plan of Adjustment." Doc. No. 8045-1, p. 519 or 809, and see Doc. No. 8045-1, pp. 597-98 of 809 (Sec. 16.6 applies both to Component I and Component II plans).

Because the POA requires 30-year amortization, and PFRS has no legal right to change that, the POA enjoins the PFRS from changing the amortization period to 20 years because this action "does not conform to or comply with the provisions of the Plan or the settlements" and it is an action which "interfere[s] with the implementation or consummation of the Plan." POA, pp. 50-51, Art. III.D.5 and III.D.6. PFRS' proposed 20-year amortization is directly contrary to the POA and the governing PFRS plan documents. The Court should Order PFRS to continue with 30-year amortization.

C. The Court also should order 30-year amortization to carry out the intent of, and allow the City to successfully implement, the POA.

1. Governing law.

Article VII of the POA gives the Court broad powers to enter Orders necessary to the successful implementation of the POA:

> Pursuant to sections 105(c), 945 and 1142(b) of the Bankruptcy Code and notwithstanding entry of the Confirmation Order and the occurrence of the Effective Date, the Bankruptcy Court will retain exclusive jurisdiction over all matters arising out of, and related to, the Chapter 9 Case and the Plan to the fullest extent permitted by law, including, among other things, jurisdiction to: [. . .]
>
> F. Enter such orders as may be necessary or appropriate to implement or consummate the provisions of the Plan and all contracts, instruments, releases and other agreements or documents entered into or delivered in connection with the Plan, the Disclosure Statement or the Confirmation Order;
>
> G. Resolve any cases, controversies, suits or disputes that may arise in connection with the consummation, interpretation or enforcement of the Plan or any contract, instrument, release or other agreement or document that is entered into or delivered pursuant to the Plan or any Entity's rights arising from or obligations incurred in connection with the Plan or such documents;
>
> H. Approve any modification of the Plan or approve any modification of the Confirmation Order or any contract, instrument, release or other agreement or document created in connection with the Plan or the Confirmation Order, or remedy any defect or omission or reconcile any inconsistency in any order, the Plan, the Confirmation Order or any contract, instrument, release or other agreement or document created in connection with the Plan or the Confirmation Order, or enter any order in aid of confirmation pursuant to sections 945 and 1142(b) of the Bankruptcy Code, in such manner as may be necessary or appropriate to consummate the Plan;

> I. Issue injunctions, enforce the injunctions contained in the Plan and the Confirmation Order, enter and implement other orders or take such other actions as may be necessary or appropriate to restrain interference by any Entity with consummation, implementation or enforcement of the Plan or the Confirmation Order;
>
> [. . .]
>
> L. Determine any other matters that may arise in connection with or relate to the Plan, the Disclosure Statement, the Confirmation Order or any contract, instrument, release or other agreement or document entered into or delivered in connection with the Plan, the Disclosure Statement or the Confirmation Order [. . . .]"

POA, Art. VII. pp. 69-71.

2. The Court should order 30-year amortization to carry out the intent of, and allow the City to successfully implement, the POA.

An integral and critical component of the Court's finding that the POA was feasible was the POA's provision of a ten year "pension holiday" for the City, which was to be followed by 30-year amortization. The stated purpose was to provide the City with many millions of dollars to spend on initiatives to improve City services including public safety, create of new economic opportunities and deal with blight and other endemic City problems. Facts, Section I.A of this Brief, *supra*.

But the City learned shortly after the POA was confirmed that due to material actuarial mistakes in devising the POA, the UAAL for the two legacy plans had been understated by some $500 million. To ensure the legacy plans would be properly funded, the City voluntarily created the Retiree Protection Trust Fund. By June of

2023 the City will have paid $445 million of general fund monies into the Trust Fund. Facts, Section I.B, *supra*. As a result, and directly contrary to the POA, the City has been deprived of much of the benefit of the POA's pension holiday.

The deprivation of much of the benefits of the pension holiday, together with the greatly accelerated funding that would be required by the proposed 20-year amortization, seriously threaten the City's ability to continue to improve City services and thereby successfully implement the Plan of Adjustment. Facts, Section I.D, *supra*.

There are no countervailing facts supporting 20-year amortization. Gabriel Roeder's worst-case projection did not result in the PFRS' plan funding level dropping below 40%. Facts, Section I.C.2, *supra*. Cheiron found that "The differences between a 20-year and 30-year amortization are negligible in terms of ensuring sufficient assets will be available to pay all future benefits under the plan." Facts, Section I.F, *supra*. But Cheiron also pointed out that the increased up-front funding would expose the City to unnecessary investment risk if there is a drop in the stock market. *Id.*

Gabriel Roeders and PFRS' IC recently recognized that funding is so adequate that it can begin to set aside money to restore pension benefits to plan members. Facts, section G. And to avoid any possible concern, the City is prepared to agree to a reasonable "trigger" to increase payments if a problem arises in the future. *Id.*

Finally, the Stout report is utterly meaningless and has zero credibility. Facts, Section I.E, *supra*. It praises the City's comeback while criticizing its alleged failure to spend enough money on public safety. The report completely ignores the fact that the City was forced to divert some $445 million of general fund monies from public safety and other City priorities to fund the Retiree Protection Trust Fund. That shortfall was the result of Gabriel Roeders and other actuaries understating the legacy pension plans' liabilities by some $500 million in preparing the POA. That "mistake," in turn, allowed the public safety retirees to escape bankruptcy with *de minimis* cuts to their pensions – cuts they are now looking to restore at the City's expense.

III. Further proceedings.

The City's arguments are supported by the POA, Judge Rhodes' Supplemental Opinion, and other documents and facts that should be uncontested. However, to the extent the Court believes there are disputed questions of fact, the City respectfully seeks the opportunity for discovery and an evidentiary hearing.

IV. Conclusion and Relief

For the reasons stated, the City asks the Court to order PFRS to continue with 30-year amortization for Plan's UAAL that will exist as of June 30, 2023.

Dated: August 3, 2022

Respectfully submitted,

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ATTORNEYS FOR THE CITY OF DETROIT

EXHIBIT 4 – CERTIFICATE OF SERVICE

UNITED STATES BANKRUPTCY COURT
EASTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION

In re: City of Detroit, Michigan, Debtor.	Bankruptcy Case No. 13-53846 Judge Thomas J. Tucker Chapter 9

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on August 3, 2022, he served a copy of the foregoing *Motion to Enforce Plan of Adjustment and Require 30-Year Amortization of the UAAL in the Police and Fire Retirement System Pension Plan* via the Court's ECF system which will provide service to all registered parties and in the manner described below:

Via first class mail and email:

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DATED: August 3, 2022

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EXHIBIT 5 – NONE

EXHIBIT 6

Exhibits to Brief

Part 1

Ex. 1 — Declaration of Mayor Michael Duggan

Ex. 2 — Gabriel Roeder's March 4, 2021, PFRS funding policy

Ex. 3 — March 4, 2021, PFRS Board minutes approving 20-year amortization

Ex. 4 — Detroit CFO's July 21, 2021, memo objecting to 20-year amortization

Ex. 5 — Gabriel Roeder's August 2, 2021, supplemental funding report

Ex. 6 — October 1-14, 2021, emails between Ms. Brader and Mr. Raimi

Ex. 7 — October 18, 2021, PFRS IC minutes approving 20-year amortization

EXHIBIT 1

UNITED STATES BANKRUPTCY COURT
EASTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION

In re: City of Detroit, Michigan, Debtor.	Bankruptcy Case No. 13-53846 Judge Thomas J. Tucker Chapter 9

DECLARATION OF MICHAEL DUGGAN

Michael Duggan states as follows for his declaration:

1. I am the elected Mayor of the City of Detroit. I was first elected in November 2013 and then again in November 2017 and 2021. My prior jobs included Deputy County Executive of Wayne County, elected Wayne County Prosecutor, and Chief Executive Officer of the Detroit Medical Center.

2. This declaration is made on my personal knowledge or upon reliable records and information made known to me in the course of my duties as Mayor.

3. The City filed for Chapter 9 bankruptcy in July 2013 and was in bankruptcy when I became Mayor effective January 1, 2014. Kevyn Orr was the state appointed emergency manager and supervised the bankruptcy activities.

4. For much of my first year (2014) I was excluded from the ongoing bankruptcy activities. However, as the Plan of Adjustment ("POA") was being negotiated, and it became clear to Mr. Orr and his team that I would need to support the POA to secure its approval, I was provided access to significant information about the

bankruptcy. After extensive due diligence I ultimately testified in support of the POA and its feasibility.

5. Perhaps the most important and contentious issue in the bankruptcy, and one of my primary concerns about the POA and its feasibility, was the City's legacy retirement obligations. The City historically had two defined benefit pension plans for employees and retirees. The Police and Fire Retirement System ("PFRS") managed the plan for public safety employees and retirees. The General Retirement System ("GRS") managed the plan for all other City employees and retirees. Both plans were frozen in bankruptcy and, under the POA, covered only City retirees and employees who performed services for the City prior to July 1, 2014.

6. Both plans were replaced going forward with hybrid plans that combined elements of defined benefit and defined contribution plans. In the POA the new hybrid plans are known as Component I plans, and the frozen plans are known as Component II plans. At issue in this case is the PFRS Component II plan that was frozen in bankruptcy and now covers only public safety employees and retirees who provided services prior to July 1, 2014.

7. The eighth, final and operative POA incorporated what became known as the "Grand Bargain." The Grand Bargain raised the equivalent of $816 million from the state of Michigan, the Detroit Institute of Arts, and various charities and, as a result:

- Pension cuts to retirees were minimized. The only cut to public safety pensions was a 55% reduction to the cost of living adjustment (COLA); other City employees' pensions were cut more but far less than had been anticipated.
- The Detroit Institute of Arts' collection was protected.
- The POA gave the City a 10-year pension contribution "holiday" and, thereafter, the legacy plans' unfunded liabilities were to be amortized over a 30-year period. This was to allow the City to devote as many resources as reasonably possible to address ongoing issues that had substantially contributed to the bankruptcy such as blight, public safety, loss of employment opportunities, etc.

8. On December 31, 2014, Bankruptcy Judge Steven Rhodes issued a supplemental opinion approving the Plan of Adjustment. *In re City of Detroit*, 524 B.R. 147 (Bankr. E.D. Mich. 2014), ("Supp Op"). As Judge Rhodes noted, the pension classes voted to accept the POA by 82% in class 10 (PFRS) and 73% in class 11(GRS). Supp Op, at 180.

9. The Opinion explains:

> "Because of the outside money committed as part of the Grand Bargain, the City will have little responsibility for funding the GRS [General Retirement System] and the PFRS [Police/Fire Retirement System] through June 2023. During that time period, the PFRS will be funded exclusively from contributions from the DIA, the DIA Funders,

> the Foundation Funders and the State under the Grand Bargain, as described previously." Supp Op, at 179-80.

Judge Rhodes concluded that the pension settlement was "fair and equitable" and stated as follows:

> "It is therefore a vast understatement to say that the pension settlement is reasonable. It borders on the miraculous. No one could have foreseen this result for the pension creditors when the City filed this case. Without the outside funding from the Grand Bargain, the City anticipated having to reduce pensions by as much as 27%. The pension reductions in the pension settlement are minor compared to any reasonably foreseeable outcome for these creditors without the pension settlement and the Grand Bargain." Supp Op, at 181 (citation omitted).

10. At the time of the bankruptcy, both the public safety (PFRS) and general retirement (GRS) legacy (Component II) plans were underfunded. Under financial projections prepared for the POA, the plans were likewise projected to be underfunded at the end of the 10-year pension holiday. Actuaries identify the amount of such underfunding as the plan's unfunded actuarial accrued liability, or "UAAL."

11. In examining the feasibility of the POA, experts addressed how the Component II plans' UAAL would be amortized after the end of the 10-year pension holiday. Those projections showed that after the 10-year holiday, the then existing UAAL would be amortized over the following 30 years. Judge Rhode's Opinion approving the POA confirmed that the Component II Plans' UAAL at the end of the pension holiday were to be amortized over a thirty-year period:

"However, at the end of FY2023, the GRS and PFRS will remain significantly underfunded. Using the assumptions from the global pension settlement, including the 6.75% discount rate, the City projects that the PFRS will only achieve 78% funding, leaving a UAAL of $681 million. Ex. 793 at 2. For the GRS, the City projects a 70% funded status by the end of FY2023, leaving a UAAL of $695 million. *Id.* **The City will then amortize the remaining UAAL for both plans over the next thirty years at an interest rate of 6.75%.** *Id.* Between FY2024 and FY2033, the City will receive an additional $68 million in Grand Bargain proceeds to pay toward the UAAL amortization for PFRS, and $188 million for GRS. The balance of the amortized UAAL will come from the City. *Id.* at 5.

"The plan greatly reduces the City's pension obligations, thanks to the State Contribution Agreement, the Grand Bargain funding, and the modification of the City's obligations to its current retirees." Supp Op, at 231-32 (emphasis added).

12. Despite the funding provided by the Grand Bargain, Judge Rhodes was extremely concerned about the feasibility of the POA. His opinion stated:

"In this case, examining the feasibility of the plan is difficult for a number of reasons. The City's debt is enormous and the City proposes to pay most of its creditors over a long period of time. As the Court discusses below, the City's revenue and expense projections extend forty years into the future.

"Second, the feasibility of the plan depends upon the City's ability to fix and maintain its broken governmental operations. This is significant because the chapter 9 feasibility inquiry requires an analysis of whether the City can reasonably provide sustainable municipal services, as the court found in *In re Mount Carbon.* It is also significant because the City's ability to repay its creditors pursuant to the plan depends upon the City's ability to increase its revenues from taxes and fees by improving the efficiency of City operations and by identifying and accessing untapped sources of revenue.

"The feasibility analysis is yet more complex because several key parts of the plan depend upon performance by parties who are completely beyond the City's control. For example, because the City's contributions to the retirement systems are fixed through FY2023, a risk remains that the pension plans will be significantly more underfunded than anticipated if one of the many organizations participating in the Grand Bargain fails to perform in the time or manner promised.

"As the City itself succinctly states in its pretrial brief in support of plan confirmation, "[T]he City was—and remains today—enmeshed in a financial crisis of unsurpassed proportions and complexity." Despite efforts from both the City and the State of Michigan, "the City is trapped in a vicious circle of cash crises, general fund deficits, crushing long-term liabilities and tumbling credit ratings exacerbated by the City's bureaucratic structure and frequent deviations from established budgets."" Supp Op, at 220-21 (citations omitted).

13. Martha Kopacz, the Court's appointed feasibility expert, was likewise extremely concerned about the feasibility of the POA:

"I want to emphasize, however, that there is little space remaining on the continuum of [feasibility]. The recent settlements and corresponding amendments to the Plan of Adjustment have served the laudable goals of efficiently resolving disputes and garnering additional support for the Plan of Adjustment. Conversely, they have imposed additional financial obligations on the City. I have already expressed concerns regarding the level of contingency provided for in the Plan of Adjustment. The financial obligations associated with the recent settlements only intensify this concern." Supp Op, at p. 219 (Court's quotation of expert, alterations in original).

14. I worked closely with Ms. Kopacz and her staff, and major City departments, in examining the POA's feasibility. Ultimately, Ms. Kopacz and I came to the same conclusion – that the POA was feasible but enormous work would be required and financially there was no room to spare. Critical to my support for the POA was that the City's legacy pension liabilities would be minimized for the

initial ten years and then amortized over a 30-year period - providing the City as much funding as reasonably possible to address the City's problems by investing in what were called "RRIs," or recovery and reinvestment initiatives. As of the time of the confirmation hearing, I believed the City was perhaps 10% of the way toward providing proper City services, and that many years of implementing major service improvements and job creation initiatives would be needed to successfully carry out the POA.

15. In considering the feasibility of the POA, I was aware that the POA provided an assumed rate of return of 6.75% for the legacy pension plans. During my due diligence I learned that a proposal had been made to raise the assumed rate of return to 7%. That would have allowed the actuaries to more easily "make the numbers work" for the feasibility analysis but would have put more funding stress on the City when it came time to resume funding the plans. I advised the participants that if they raised the assumed rate of return to 7%, I would testify against the feasibility of the POA.

16. The POA was approved and then became effective in December 2014. Sometime in 2015 I learned that the actuarial assumptions for the legacy pension plans were seriously flawed. Specifically, the plans' projected unfunded liabilities had been understated by roughly $500 million. That information was provided by Gabriel Roeder Smith & Company, the actuary for both legacy plans. Neither

Gabriel Roeder, nor any of the other actuaries or experts who worked on the POA, ever explained how the error occurred.

17. The City considered bringing a lawsuit. The City's investigation revealed serious concerns about the way in which the retirement liability issues were handled by the attorneys and actuaries in the bankruptcy process. Those included use of outdated mortality tables. I also learned that the "experts" were seemingly more concerned about the making the numbers work, i.e., minimizing retiree pension cuts, than with the City's ability to successfully carry out the POA.. I spoke with Ms. Kopacz who advised she likewise had no idea that the retirement plan projections were materially incorrect, and that information would likely have changed her view on the feasibility of the POA. I ultimately decided not to bring a lawsuit because the POA had broad exculpatory provisions protecting the attorneys and experts from liability.

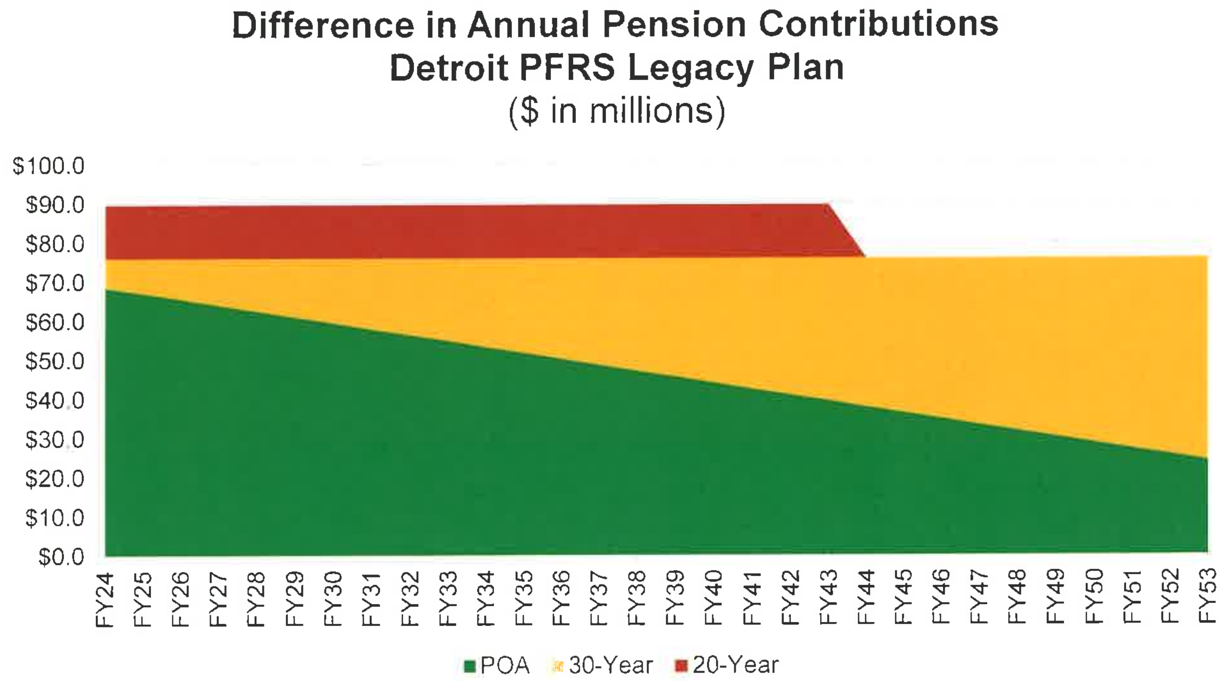
18. Thereafter, to further ensure proper funding of legacy pensions, my administration voluntarily put in place an irrevocable Retiree Protection Trust Fund to provide additional funding for the legacy plans after the end of the 10-year pension "holiday." To date the City has deposited $355 million, and will be adding $90 million later this year. Accordingly, by the time City funding of the PFRS plan is to begin (FY 2024), the City will have funded the Retiree Protection Trust Fund with $445 million of general fund money.

19. Under the POA, that $445 million should have been available for recovery and reinvestment initiatives such as blight remediation, public safety, job creation initiatives etc. It has instead irrevocably been set aside for the retirees' pension security.

20. The PFRS' Investment Committee and Board, on the recommendation of their actuary Gabriel Roeder, recently adopted a funding policy for amortizing the UAAL that will exist after the expiration of the pension "holiday." As confirmed by the above quotation from Judge Rhodes opinion confirming the POA, it provided for amortizing that liability over 30 years. The PFRS' Investment Committee and Board nevertheless adopted Gabriel Roeder's recommendation that the liability be amortized over 20 years – which would require enormous additional up-front funding by the City. The City has filed this legal action to reverse that action and require compliance with the POA's 30-year amortization schedule.

21. The critical importance of this issue to the City is illustrated by the following diagram. This shows (i) the City's funding obligation as originally estimated under the (POA) (in green), (ii) the City's increased funding obligation over the POA estimates, using 30-year amortization (green and yellow), and (iii) the City's increased funding obligation over the POA estimates, using 20-year (green, yellow and red). The 20-year and 30-year amortization projections (yellow and red) are

based on the most recently available data from PRFS's actuaries, which is as of June 30, 2021.



22. The additional hundreds of millions of dollars of front-loaded payments under 20-year amortization would be devastating to the City's ability to fund critical programs needed to improve City services, attract employment opportunities, and otherwise continue to successfully implement the POA.

23. To my knowledge, neither the PFRS Board nor its Investment Committee has ever explained why they believed they could violate the 30-year amortization schedule provided by the POA. I understand that Gabriel Roeder's recommendation for 20-year amortization was in reaction to pressure by the public safety unions' representatives on the PFRS board who wanted faster amortization to "better protect" their retirement benefits. But all such concerns – as well as countervailing concerns as to the POA's feasibility - were fully vetted in the development of the POA. The same public safety unions who, together with Gabriel Roeder, successfully argued for minimal pension cuts under the POA, also agreed to the POA's 30-year amortization schedule. Having locked in the minimal pension cuts, the unions and Gabriel Roeder now want to drastically increase the City's funding obligations. And Gabriel Roeder was responsible in whole or part for "underestimating" the legacy plans' liabilities – necessitating the City's use of $445 million for the Retiree Protection Trust Fund.

24. My administration would never take any action to jeopardize pension benefits. That is exactly why my administration voluntarily created the Retiree Protection Trust Fund and will soon have funded it with $445 million in general fund money.

25. I am aware that Gabriel Roeder, in recommending 20-year amortization, prepared a report that showed projections of the future funding level percentage of the plan assuming (i) City contributions using 20- or 25-year amortization and (ii)

different investment return scenarios including several in which future investment returns were significantly below the POA assumed rate of 6.5%. The report does not state or suggest that there is any foreseeable risk that the plan would be unable to pay the legacy retirement benefits. None of those projections resulted in the plan ever being less than 40% funded.

26. In this regard, the City has also received advice from Cheiron, a premier actuarial firm having extensive experience with governmental pension plans. Cheiron's report explains that "The differences between a 20-year and 30-year year amortization as of June 30, 2022 are negligible in terms of ensuring sufficient assets will be available to pay all future benefits under the Plan." The report provides extensive data supporting that conclusion. Gabriel Roeder's report recommending 20-year amortization provided nothing to suggest otherwise.

27. Cheiron's report likewise advises that front-loading the funding via 20-year amortization unnecessarily increases investment risk. If the City is compelled to front load the funding, and the stock market falls, the losses will impose even more funding stress on the City.

28. Moreover, to alleviate any possible concerns, I would support, in connection with 30-year amortization, adoption of a "trigger" such that if the funded percentage of the plan fell below a certain agreed upon threshold, the City would be required to

provide additional funding. But there is nothing to currently suggest that will ever be an issue.

29. I am aware that the Investment Committee engaged Raymond Roth of the Stout firm to prepare a report "regarding the capability of Detroit to make specified levels of pension contributions [using 20-year amortization] beginning in 2024." The report concludes "Thus, it is my opinion that Detroit will have the ability to pay the additional amounts of PFRS Legacy Plan contributions under the scenarios projected by its actuaries." I have carefully reviewed that report and conclude it is meaningless to the amortization dispute for reasons including the following.

30. The report purports to compare Detroit to four allegedly "comparable" cities, namely, Indianapolis, Cleveland, Columbus and Minneapolis. That is absurd on its face. Stout's own report shows (page 9) that in 2015, the year after Detroit exited from bankruptcy, Detroit's median income was roughly $25,000 per year, versus $43,000 for Indianapolis, $45,000 for Columbus and $51,000 for Minneapolis. None of those cities are remotely "comparable" to Detroit. Although Cleveland's median income was similar to Detroit's, in 2015 some 40% of Detroit residents were below the poverty line versus 35% for Cleveland. Stout report, p. 11. And, of course, Cleveland never declared bankruptcy. For example, Judge Rhodes' supplemental Opinion described his tour of the City as follows:

"The primary impression that remains with the Court following the tour is that blight in Detroit is extensive. The statistics do not fully convey its extent or impact. In neighborhood after neighborhood, short and long stretches of streets have abandoned structures—they can no longer be called homes—that are intimidating hulks. Some are partially or mostly burned out. Some have gaping holes in their roofs or collapsed garages. Many have missing doors and windows, and broken front steps and porches. Some are strewn with illegal dumping. All are vivid statements of their former owners' emotional and financial struggles, and of community loss.

"These streets also have vacant lots, or collections of vacant lots, on which unmanaged and unsightly vegetation has taken over from the structures after their removal. On the commercial streets, block after block of abandoned, boarded up and graffiti-littered strip shopping centers far outnumbered the occasional small businesses that have survived.

"It is heartbreaking, maddening and sad. No one should have to endure, day in and day out, the damage to the human spirit that can result from living in those surroundings. City residents who live, work and play in these neighborhoods deserve better. Detroit deserves better." Supp. Op. at 167.

31. The Stout report (¶17) acknowledges the following:

"Detroit has experienced a remarkable transformation since its emergence from bankruptcy. The median income of its residents has risen, while the number of families living below poverty, unemployment, and crime has declined. In addition, blight has been reduced, street lighting improved, emergency medical services ("EMS") response times are down, and credit ratings have stabilized. However, Detroit's population remains at lower income levels, including higher concentrations of poverty and crime rates, than the Comparable Midwestern Cities."

32. Nevertheless, Mr. Roth "concludes" that Detroit could "afford" the dramatically increased funding payments under 20-year amortization because

Detroit allegedly is spending too much of its budget on "central government." Stout report, ¶¶54 – 67.

33. The City's review of Mr. Roth's report raises substantial questions whether the "central government" comparison properly analyzes each City's unique accounting policies and practices. But even if it does, Mr. Roth's "opinion" completely ignores the fact that the City's "remarkable transformation" was precisely the result of my administration's spending priorities including "central government." The "central government" spending was critical to the City's job creation, housing initiatives, blight removal, neighborhood revitalization, revamping of City departments, and myriad other activities that produced the "remarkable transformation." Mr. Roth never asked to speak to me about this or any other aspect of his report. Nor did the PFRS Board of Trustees or its Investment Committee request my input on the report or on the impact the 20-year amortization would have on the City.

34. The Stout report (¶¶54 – 55) notes that Detroit has lower levels of public safety spending as a percentage of general fund revenue than the "comparable cities." I did not need Mr. Roth's report to tell me that Detroit needs additional resources for public safety and many other priorities. The City's financial crisis and bankruptcy devastated all City departments and employee morale, and none more than public safety. Improving public safety recruiting, pay, benefits and performance has been

a top priority to which my administration and I have devoted enormous time and effort. Mr. Roth also ignores the fact that the City would have been able to spend more on public safety had it not been required to fund the $445 million Retiree Protection Trust Fund.

35. It is extremely disturbing that Mr. Roth, after acknowledging the City's need for additional resources for public safety, would nevertheless conclude that the City can "afford" sharp increases in pension funding payments under 20-year amortization. It is quite evident that Mr. Roth has no understanding of the realities and complexities of managing the City of Detroit. Nor does his resume list anything that would qualify him to opine on these subjects.

36. The Stout report also speculates that the City may in the future gain additional revenues via internet gaming. What we know for certain is that the pandemic wreaked havoc on the City's finances including income tax which is the City's largest revenue source. As a result of the pandemic, many thousands of employees who formerly worked in City offices are working from their homes in the suburbs. As a result, they are not paying City income tax. City restaurants, businesses, etc. are adversely affected.

37. To the extent the City does realize additional gaming tax from internet gaming, those have already been considered in the City's spending projections, so that would not be "additional revenues" available for pension funding.

38. Wholly apart from the fact that Mr. Roth has no crystal ball to see into the future, the Bankruptcy Court, the Court appointed mediators, Ms. Kopacz, the parties and their attorneys and advisors, spent thousands of hours working out the POA. The POA provided for a 30-year amortization period for the legacy plans' unfunded liabilities beginning with the 2024 fiscal year. It seems to me that if PFRS had identified some compelling need to change the POA, PFRS should have petitioned the Court for relief. But PFRS has never identified any such need and there is no reason for violating the POA with a 20-year amortization schedule.

39. Finally, as mentioned, in addition to the PFRS legacy plan, there is a legacy pension plan for non-public safety employees known as the General Retirement System ("GRS") plan. The Investment Committee for that Plan has advised that it is carefully following this funding dispute. In the event this Court allows PFRS to violate the POA, the City is justly apprehensive that GRS will feel compelled to do likewise. That would roughly double the additional upfront pension funding payments for the City.

I declare under the penalty of perjury that the foregoing is true and correct.

Michael Duggan

Dated: 6/15/22

EXHIBIT 2

Gabriel Roeder March 4, 2021
Funding policy

Police and Fire Retirement System of the City of Detroit
Actuarial Funding Policy

EXHIBIT
2

Introduction

The purpose of this Actuarial Funding Policy is to record the funding objectives and policy set by the Board of Trustees (Board) for the Police and Fire Retirement System of the City of Detroit (the System). The Board establishes this Actuarial Funding Policy to help ensure the systematic funding of future benefit payments for members of the Plan.

In 2014, the Plan for the System was written and approved by the bankruptcy court as part of the City's Plan of Adjustment (POA). At that time, the original retirement plan was split into two Retirement Plans: Component I (Hybrid) and Component II (Legacy). In accordance with the POA, employer contributions and certain assumptions cannot be changed until fiscal year 2024. This Policy is intended to recognize those items as fixed until 2024 and establish a funding policy for the period beginning in fiscal year 2024, when employer contributions must be determined on an actuarial basis. Nothing in this Policy is intended to prevent the Board from altering the Policy prior to fiscal year 2024 as conditions change or additional information becomes available to the Board.

This Policy shall be regularly reviewed by the Board.

Funding Objectives

1. Provide benefit security to members of the System:
   a. For purposes of this policy, benefit security means having adequate liquidity to pay benefits when due.
2. Establish an appropriate employer contribution based on the following objectives:
   a. Fully funding the Legacy Plan liability no later than 2054;
   b. Keeping the Hybrid Plan fully funded; and
   c. Managing employer contribution volatility.
3. Provide a reasonable margin for adverse experience to help offset risks.
4. Measure and monitor funding status, post-2024 contribution estimates and risk.
   a. Perform annual valuations; and
   b. Include post-2024 contribution estimates (based on this Policy) in annual actuarial valuations.

The Plans will have annual actuarial valuations each June 30. Employer contributions will be determined for the fiscal year ending two years after the valuation date. For example, the actuarially determined employer contribution for the fiscal year ending June 30, 2024 will be determined by the June 30, 2022 annual actuarial valuation.

Annual actuarial valuations may or may not also serve other purposes such as Legacy Plan restoration, Hybrid plan Section 9.5 fiscal responsibility calculations, and/or Annuity Savings Fund excess interest transfers between components. Unless otherwise stated, those purposes are not subject to this Policy.

For all other funding purposes, annual actuarial valuations will include the following elements of the Actuarial Funding Policy:

1. **Actuarial Cost Method**
    a. Hybrid Plan: The Entry Age actuarial cost method shall be used in determining the Actuarial Accrued Liability (AAL) and Normal Cost with the entry age based on date of hire. Since this component was created in July 2014 and granted eligibility and vesting service prior to July 2014 (for members hired before that date), this Plan had an unfunded actuarial accrued liability on the effective date, known as the transition cost. As of June 30, 2017, the AAL (including the transition cost) in the Hybrid Plan was fully funded. This Plan could become less than fully funded in the future if experience is less favorable than assumed or there are changes in assumptions or Plan provisions.
    b. Legacy Plan: The Unit Credit Normal actuarial cost method shall be used in determining Actuarial Accrued Liability (AAL) and Normal Cost. Since this component is closed and accrued benefits are frozen as of June 30, 2014, this method results in no normal costs and an AAL that equals the Present Value of Accrued Benefits (PVAB) of each member.
2. **Asset Smoothing Method**
    a. For estimating contributions prior to June 30, 2023, the Funding Value of Assets (or actuarial value of assets) will be equal to the Market Value of Assets, as mandated by the Plan of Adjustment. For determining (or estimating) employer contributions on or after fiscal year 2024, the Funding Value of Assets will be based on a method that employs smoothing of market gains and losses over a closed period. The smoothing period for recognized market gains and losses (above or below the assumed rate of return) will be a 3-year period.
    b. The Funding Value of Assets shall not diverge from the Market Value of Assets by more than 15%.
    c. The annual actuarial valuation will calculate results on both the smoothed value of assets and the (non-smoothed) Market Value of Assets beginning with the June 30, 2019 valuation (the Funding Value of Assets will initially be set to the Market Value of Assets as of June 30, 2018 with smoothing beginning prospectively). The post-2024 contribution estimate will always be based on the smoothed value of assets. Other results (UAAL, Funded Status, etc.) will be based on the Market Value of Assets prior to 2024 and the smoothed value of assets after 2023.

3. Amortization Method

a. Hybrid Plan

a) A Level Percent of Payroll amortization method shall be used to systematically eliminate (pay off) the Unfunded Actuarial Accrued Liability (UAAL) over a closed 15-year period from the later of July 1, 2023 or the applicable fiscal year after the funded status falls below 100%.

b) If funded status is above 100%, the contribution requirements for the UAAL will be $0 (thereby creating a minimum employer contribution of employer normal cost).

c) Layered amortizations will be considered by the Board post-2024.

b. Legacy Plan

a) The Level Dollar amortization method shall be used to systematically eliminate (pay off) the Unfunded Actuarial Accrued Liability (UAAL) over a closed period of 20 years from July 1, 2023 for the UAAL as of July 30, 2022 (projected to July 1, 2023), and

b) Layered amortizations that use 20-year closed periods for gains and losses occurring after June 30, 2022 (each 20-year period starts with the first payment after the applicable gain or loss occurs).

4. Funding Target and Cash Flow Projections

a. The targeted funded ratio shall be 100%.

b. The Legacy Plan annual actuarial valuation shall include projections of estimated employer contributions, expected benefit payments and estimated funded status to the later of fiscal year 2054 or 30 years after the applicable employer contribution fiscal year.

c. Section 9.5 of the Plan details the actions to be taken if the 5-year projected funded status falls below 90% (Hybrid Plan, only).

5. Risk Management

a. Assumption Changes

a) The actuarial assumptions used shall be those last adopted by the Board based on the most recent experience study and upon the advice and recommendation of the actuary. In accordance with the City Ordinance, the actuary shall conduct an experience study at least every five years. The results of the study shall be the basis for the actuarial assumption changes recommended to the Board. However, the assumed rate of return and the actuarial value of assets are mandated by the City's POA and cannot be changed prior to June 30, 2023.

b) The actuarial assumptions may be updated at any time, as advised by the actuary, if significant Plan design changes or other significant events occur.

c) The next experience study will be performed after the 2020 actuarial valuation and will include both economic (investment return, inflation, etc.) and demographic (mortality, retirement, disability, etc.) assumptions. Even though the investment rate of return may not be changed for determining employer contributions until after June 30, 2023, the Board may elect to show valuation results under an alternative reasonable assumed rate of investment return prior to 2023.

b. Risk Measures

a) Risk measures will be included in the annual actuarial valuations. Below is a list of potential measures to be included. The measures may be changed over time as deemed appropriate.

(i) Classic measures currently determined

- Funded ratio (assets / liability) on both a market value and funding value (if funding value is not equal to market).
- UAAL amortization period (years required to pay down the UAAL based on current funding rates).
- Portfolio rate of return for the year on both the market value and funding value of assets.
- 5- and 10-year geometric average portfolio rate of return on both the market value and funding value of assets (developed prospectively beginning with the 2019 valuation).
- 5- and 10-year standard deviation of return on both the market value and funding value of assets (developed prospectively beginning with the 2019 valuation).

(ii) Duration of the Actuarial Accrued Liability

- Measures the sensitivity of the liability to a 1% change in assumed rate of return. A decrease in this measure indicates a decrease in assumed rate sensitivity and vice versa.

(iii) Total UAAL / Covered Payroll

- Measures the risk associated with contribution rates relative to the impact on the ability to fund the UAAL. A decrease in this measure indicates a decrease in UAAL contribution risk and vice versa.
- Consideration will be given to using total payroll or revenue source, if available.

(iv) Total Assets / Covered Payroll

- Measures the risk associated with the potential impact of asset experience on contributions. A decrease in this measure indicates a decrease in asset risk and vice versa.
- Consideration will be given to using total payroll or revenue source, if available.

(v) Total AAL / Covered Payroll

- Measures the risk associated with the potential impact of liability experience on contributions. A decrease in this measure indicates a decrease in experience risk and vice versa. This also provides a long-term measure of the asset risk where the System has a target funded ratio of 100%.
- Consideration will be given to using total payroll or revenue source, if available.

(vi) Non-Investment Cash flow / Beginning of year assets

- Measures depletion risk, sensitivity to annual investment gains and losses risk and the maturity of the plan. For a mature open plan, this may converged to the negative of the real rate of return assumption (investment return less wage inflation). A less negative number (or a positive number) indicates a less mature plan and/or a plan that is at lower risk of fund depletion and less sensitive to annual gains and losses. A more negative number indicates a more mature plan and/or a plan that is more at risk of fund depletion and more sensitive to annual gains and losses. For a super-mature closed plan such as the Legacy plan, this may become more negative over time as liquidity needs increase.

(vii) Market Value of Assets / Benefit Payments

– Measure depletion risk. A low value estimates the number of years to depletion disregarding future contributions and investment return.

(viii) Solvency Liability

– Measures the estimated cost of accrued benefits as a result of minimizing investment risk in the portfolio.

b) Risk Control: The Board shall carefully monitor the risk measures above and shall consider steps to mitigate risk, particularly as the Legacy Plan funded ratio increases. Examples of risk mitigating techniques include, but are not limited to:

(i) Reviewing investment risk in accordance with the Board's Investment Policy

(ii) Adding provisions for adverse deviation in the actuarial assumptions

(iii) Increasing employer contributions (through a change in methods, assumptions, or amortization period)

(iv) Other

Glossary

1. **Actuarial Accrued Liability (AAL):** The difference between (i) the actuarial present value of future plan benefits; and (ii) the actuarial present value of future normal cost. Sometimes referred to as "accrued liability" or "past service liability."
2. **Actuarial Assumptions:** Estimates of future plan experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. Decrement assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.
3. **Actuarial Cost Method:** A mathematical budgeting procedure for allocating the dollar amount of the "actuarial present value of future plan benefits" between the actuarial present value of future normal cost and the actuarial accrued liability. Sometimes referred to as the "actuarial funding method."
4. **Actuarial Gain (Loss):** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions during the period between two actuarial valuation dates, in accordance with the actuarial cost method being used. For example, if during a given year the assets earn more than the investment return assumption, the amount of earnings above the assumption will cause an unexpected reduction in UAAL, or "actuarial gain" as of the next valuation. These include contribution gains and losses that result from actual contributions made being greater or less than the level determined under the policy.
5. **Actuary:** A person who is trained in the applications of probability and compound interest to problems in business and finance that involve payment of money in the future, contingent upon the occurrence of future events. Most actuaries in the United States are Members of the American Academy of Actuaries (MAAA). The Society of Actuaries is an international research, education and membership organization for actuaries in the life and health insurance, employee benefits, and pension fields. It administers a series of examinations leading initially to Associateship and the designation ASA and ultimately to Fellowship with the designation FSA.
6. **Amortization:** Paying off an interest-bearing liability by means of periodic payments of interest and principal, as opposed to paying it off with a lump sum payment.
7. **Unit Credit Normal Actuarial Cost Method:** A funding method that calculates the Normal Cost as the present value of the change in accrued benefits for active members.
8. **Experience Study:** An actuarial investigation of demographic and economic experiences of the system during the period studied. The investigation was made for the purpose of updating the actuarial assumptions used in valuing the actuarial liabilities.
9. **Funding Value of Assets**: The value of current plan assets recognized for valuation purposes. Generally based on a phased-in recognition of all or a portion of market related investment return. Sometimes referred to as Actuarial Value of Assets or Smoothed value of Assets.
10. **Market Value of Assets:** The fair value of plan assets as reported in the plan's audited financial statements.
11. **Normal Cost (NC):** The annual cost assigned, under the actuarial funding method, to current and subsequent plan years. Sometimes referred to as "current service cost." Any payment toward the unfunded actuarial accrued liability is not part of the normal cost.
12. **Unfunded Actuarial Accrued Liability (UAAL):** The positive difference, if any, between the actuarial accrued liability and valuation assets. Sometimes referred to as "unfunded accrued liability."

EXHIBIT 3

PFRS Board Minutes March 4, 2021

EXHIBIT

Ex, 3

MEETING NO. **3279**
JOURNAL OF PROCEEDINGS
BOARD OF TRUSTEES OF THE POLICE AND FIRE RETIREMENT SYSTEM
OF THE CITY OF DETROIT
HELD **THURSDAY, MARCH 04, 2021**

9:00 A.M.
RETIREMENT SYSTEMS' CONFERENCE ROOM
ALLY DETROIT CENTER, 500 WOODWARD AVENUE; SUITE 3000
DETROIT, MICHIGAN 48226

TRUSTEES PRESENT

Douglas Baker	Ex/Officio Trustee/Corporation Counsel Alternate/Vice-Chairperson
Shawn Battle	Ex/Officio Trustee/Fire Prevention Chief/Mayoral Designee
Michael F. Berent	Elected Trustee/Fire/Chairperson
Matthew Gnatek	Elected Trustee/Police
Brenda Jones	Ex/Officio Trustee/City Council President
Angela R. James	Ex/Officio Retiree Trustee/Police/Mayoral Designee
Christa McLellan	Ex/Officio Trustee/Treasurer
John Naglick Jr.	Ex/Officio Trustee/Finance Director
George Orzech	Elected Retiree Trustee/Fire
Jeffrey Pegg	Elected Trustee/Fire
Dean Pincheck	Elected Trustee/Fire
John Serda	Elected Trustee/Police
Ronald Thomas	Elected Trustee/Police/Vice-Chairperson
Gregory Trozak	Elected Retiree Trustee/Police
Steven Watson	Ex/Officio Trustee/Budget Director

TRUSTEES EXCUSED

Portia Roberson	Ex/Officio/Mayor's Designee

ALSO PRESENT

David Cetlinski	Executive Director
Kelly Tapper	Assistant Executive Director
Ryan Bigelow	Chief Investment Officer
Marcella Brewer	Recording Secretary
Ronald King	General Counsel
Bruce Babiarz	Public Relations Advisor
Dr. Oscar King III	Board Lobbyist

STAFF EXCUSED

None

PUBLIC COMMENT

- **Trustee Jones joined the meeting at 9:40 am (Detroit, MI)**

The following persons spoke on behalf of the sale of Baldwin Hills Crenshaw Mall:

Veronica
Amber High
Donald Beyers
Elaine
Harold Huggins
Patrice Fisher

PUBLIC RELATIONS REPORT

- WXYZ TV Inquiry
- Draft Medicare Letter

Trustee Pegg asked that letters be sent. Trustee James asked that some details on how many members would be affected be added to the letter if possible.

Trustee Pegg also noted that Bruce Babiarz of our Public Relations team did a great job with the draft Medicare Letter.

LOBBYIST'S REPORT

- Medicare Act of 50
- Legislative Log

Trustee Naglick moved to table any decisions on adopting a Funding Policy. Trustee McLellan supported. A roll call vote was taken. The motion did not pass.

Yeas: Baker, James, Jones, McLellan, Naglick, Watson - 6

Nays: Battle, Gnatek, Orzech, Pegg, Pincheck, Serda, Thomas, Trozak and Chairperson Berent - 9

Re: Gabriel Roeder Smith & Co., Presentation

Representatives Judith Kermans and David Kausch discussed the following with the Board of Trustees:

- Funding Policy Projection

The system's actuary, GRS Consulting, presented information and scenarios with respect to the adoption of various actuarial assumptions for purposes of developing and finalizing a funding policy for PFRS. Following a detailed discussion related to this matter,

Trustee Pegg moved that the Board approve a funding policy which adopts layered amortization of any unfunded accrued liability using a 20-year amortization period and that the Funding Policy contained in Appendix II of the GRS March 3, 2020 Funding Policy Report presented to the Board be amended such that under Elements of Actuarial Funding Policy:

3. Amortization Method

b.

a) delete "to 25" and add at the end of the sentence, "using layered amortizations."

(i) delete

b) delete

Trustee Gnatek supported. A roll call vote was taken. The motion passed.

Yeas: Gnatek, Orzech, Pegg, Pincheck, Serda, Thomas, Trozak and Chairperson Berent – 8

Nays: Baker, James, Jones, McLellan, Naglick, Watson – 6

Abstain: Battle

Re: Wilshire Presentation

Representatives David Lindberg and Calvin Born discussed the following with the Board of Trustees:

- Asset Class Performance
- Actual Allocation v Policy Allocation
- Composite Performance Summary
- Plan Sponsor Peer Group Analysis – Multi Statistics
- Diversification Challenges
- Looking Forward
- Illustration of Risk – Examples
- Economic Factor Exposures
- Distribution of Returns (One Year)
- Drawdown Potential and Liquidity Considerations

Presentation materials provided.

EXHIBIT 4

Sent July 21, 2021

OFFICE OF THE
CHIEF FINANCIAL OFFICER

Coleman A. Young Municipal Center
2 Woodward Avenue, Suite 1100
Detroit, Michigan 48226

Phone 313•628•2535
Fax 313•224•2135
OCFO@detroitmi.gov
www.detroitmi.gov

City of Detroit – PFRS Ability to Pay Analysis

Introduction

In response to the list of questions and request for information to evaluate what is characterized as an "Ability to Pay Analysis" for the Police and Fire Retirement System, please find the following responses and attached information.

These responses must be considered in context of the City's recent financial history and the constraints, and requirements, of the Plan of Adjustment supervised by the Federal Bankruptcy Court and the Financial Review Commission.

Questions asked, such as what are "mandated" or "essential" departments or budget items, may have one definition in accounting or statutory terms, but have a much different meaning in the context of the service levels required and the $1.7 billion Plan of Adjustment ("POA") obligation upon the City to reduce blight, improve technology, reduce crime and recreate the City as a vibrant, solvent and sustainable community. These were essential factors assumed by the Court in determining the feasibility of the POA.

In the bankruptcy proceeding, Jones Day, its many attorneys and experts, and a laundry list of actuaries and other experts, spent thousands of hours and many millions of dollars devising the Plan of Adjustment. The POA made 40-year projections which included, after FYE June 30, 2023, a 30-year amortization of the frozen GRS and PFRS UAAL. In conjunction with those efforts, enormous time and money was spent on the question whether the POA was feasible.

Judge Rhoades found the POA "feasible," but just barely. That finding was based in part on the assumption that the City, based on the "Grand Bargain," would not have to make any meaningful contributions to the frozen pension plans until after FY 2023. Also on that basis, public safety retirees were relieved of any pension cuts other than a 55% reduction to scheduled cost of living increases. Even then the Court appointed independent expert, Martha Kopacz, expressed grave concerns about the POA's feasibility:

> "I want to emphasize, however, that there is little space remaining on the continuum of [feasibility]. The recent settlements and corresponding amendments to the Plan of Adjustment have served the laudable goals of efficiently resolving disputes and garnering additional support for the Plan of Adjustment. Conversely, they have imposed additional financial obligations on the City. I have already expressed concerns regarding the level of contingency provided for in the Plan of Adjustment. The financial obligations associated with the recent settlements only intensify this concern." *In re City of Detroit*, 524 B.R. 147, 219 (2014).

1

Your inquiry also seeks to determine, and presumably evaluate, the basis for revenue estimates for the City's Four-Year Financial Plan. It is important to understand that a Four-Year forecast, which is annually revised, is substantively different in both purpose and concept from the forecast used by the Court in reviewing the feasibility of the Plan of Adjustment. Revenue variances and pressures, and budgetary needs, can change dramatically on an annual basis, let alone on a 4 year or 30 year basis.

EXHIBIT
4

The City submits that there is no basis on which Stout, the Board or the Investment Committee (IC), could possibly make a better forecast or create a better plan than the POA. There, despite a 30-year amortization schedule, both the Court and its feasibility expert recognized the serious risks that the City would end up in bankruptcy again. It is inconceivable that conclusion be second-guessed now for shortening the POA's 30-year amortization schedule.

We ask you to consider just two of the major events that have happened in only 7+ years since the approval of the POA.

- It was only one year after the POA that PFRS' actuaries – who were intimately involved with the POA – "discovered" that due to a dreadful actuarial mistake, the frozen plans were underfunded by many more hundreds of millions of dollars than believed when the POA was devised.
- No one could have foreseen, at the time of the POA that a worldwide pandemic would hit in 2020. That pandemic, among other things, threatens all of the POA's assumptions about City revenues, particularly the income tax revenue.

In the relatively short time since the POA there have been two major disruptions to the assumptions underlying the POA, both of which are significantly detrimental to the City. Likewise, it is impossible to foresee the future including how the City's economy and tax base may change due to the pandemic and whether and when future recessions and other events may occur.

While the City has made significant progress since the bankruptcy, it is useful to remember what Judge Rhoades wrote in his Opinion after taking a tour of the City:

> "The primary impression that remains with the Court following the tour is that blight in Detroit is extensive. The statistics do not fully convey its extent or impact. In neighborhood after neighborhood, short and long stretches of streets have abandoned structures—they can no longer be called homes—that are intimidating hulks. Some are partially or mostly burned out. Some have gaping holes in their roofs or collapsed garages. Many have missing doors and windows, and broken front steps and porches. Some are strewn with illegal dumping. All are vivid statements of their former owners' emotional and financial struggles, and of community loss.
>
> "These streets also have vacant lots, or collections of vacant lots, on which unmanaged and unsightly vegetation has taken over from the structures after their removal. On the commercial streets, block after block of abandoned, boarded up and graffiti-littered strip shopping centers far outnumbered the occasional small businesses that have survived.
>
> "It is heartbreaking, maddening and sad. No one should have to endure, day in and day out, the damage to the human spirit that can result from living in those surroundings. City residents who live, work and play in these neighborhoods deserve better. Detroit deserves better."

2

The City, through extraordinary efforts, has thus far demolished some 21,000 blighted homes. However, approximately 17,500 remain standing. This is only the residential blight. Commercial and industrial blight continues to pervade the community. We suggest the IC take a similar tour of the City. Immense challenges remain as to blight, public safety, and endemic poverty.

Finally, before the IC and PFRS Board make any decisions on the amortization issue, the City believes it is critically important to hear from Mayor Mike Duggan and a representative of the City's expert actuarial firm, Cheiron. Certainly, in making a decision this important, the IC and Board should want to be fully informed to the extent possible. Mayor Duggan's knowledge and expertise about the City is unique, and has views that should be heard.

The City's expert has views that conflict with the actuaries advising the Board and IC. The City's expert believes that the fact this is a closed and frozen plan should be an important factor in the amortization discussion. The expert's opinion would mitigate market risk. These are views that should be heard.

The possibility of another City bankruptcy was a real concern when the POA was devised. Again, while progress has been made in mitigating that risk, enormous challenges remain. We look forward to a meaningful dialogue with you.

Questions & Responses

1. In the FY2022 to FY2025 Four-Year Financial Plan, what departments or budget items are considered to be "mandated" or "essential"?[1]
   a. How are "mandated and other essential programs and activities" determined?
   b. Are any different processes used to forecast "mandated and other essential programs and activities" from items that do not have this designation?

Response: The cited provision of the Home Rule City Act relates to our General Fund budget reserve (or "Rainy Day Fund"). The Home Rule City Act further requires the City maintain this reserve equal to at least 5% of all projected General Fund expenditures. As such, all approved budget expenditures are considered mandated or other essential programs to deliver City services to Detroiters.

The Adopted FY22-FY25 Four-Year Financial Plan restores the Rainy Day Fund to about 10% after the City utilized $50 million during FY21 due to pandemic-induced revenue losses. According to the Government Finance Officers Association's best practices, the City should be maintaining two months' worth of expenditures (17%). While our Rainy Day Fund exceeds the bare minimum today, we will need to add another $72 million to reach this best practice standard of 17%.

2. The February 2021 Revenue Estimating Conference Report includes an estimation for reduced levels of income tax due to remote work (see p. 13-14).
   a. How were these estimates developed?
   b. What data was used?
   c. Were any formal studies used in creating this forecast?

3

Response:

a. Estimates were developed by applying 3 year moving averages of employment and wage data to resident and non-resident income derived from total withholding in the most recently completed

[1] Section 4t(1)(b)(vi) of the Home Rule City Act includes states that the City's financial plan must include "measures to assure adequate reserves for mandated and other essential programs and activities in the event of an overestimation of revenue, an underestimation of expenditures, or both".

EXHIBIT 5

Aug 2, 2021 Gabriel report to PFRS

GRS

800.521.0498 | P: 248.799.9000 | www.grsconsulting.com

August 2, 2021

EXHIBIT
Ex. 5

CONFIDENTIAL

Police and Fire Retirement System
of the City of Detroit
One Detroit Center
500 Woodward Ave., Suite 3000
Detroit, Michigan 48226

Attention: Mr. David Cetlinski, Executive Director

Re: Alternate Funding Policy Projections for the Police and Fire Retirement System of the City of Detroit

Dear Mr. Cetlinski:

At the request of the Investment Committee (IC) of the Police and Fire Retirement System of the City of Detroit, we have prepared this supplemental report of alternate funding policy projections. The underlying projection tool that is used to develop this report has been updated to reflect June 30, 2020 valuation results. At the request of the IC, this report shows two funding policies: (1) initial 20-year period with separate 20-year amortization of each gain/loss; and (2) a single closed 25-year amortization period. We have been asked to show both policies under three possible investment return scenarios. We look forward to presenting this report. We will also have the tool available during that presentation, if additional scenarios are needed.

Sincerely,

Jamal Adora

Jamal Adora, ASA, EA, MAAA

JJA:sc
Enclosure

cc: Ryan Bigelow, City of Detroit Retirement Systems
Kelly Tapper, City of Detroit Retirement Systems
Gail Oxendine, City of Detroit Retirement Systems
Judith A. Kermans, GRS
David T. Kausch, GRS

Police and Fire Retirement System of the City of Detroit
Supplemental Actuarial Report as of June 30, 2020

Requested By:	Police and Fire Retirement System of the City of Detroit (PFRS)
Date:	August 2, 2021
Submitted By:	Jamal Adora, ASA, EA, MAAA David T. Kausch, FSA, EA, FCA, MAAA, PhD Judith A. Kermans, EA, FCA, MAAA Gabriel, Roeder, Smith & Company

This report contains:

- Results of actuarial projections and cash flow modeling under alternate scenarios requested by the Investment Committee;
- A discussion of considerations related to establishing a funding policy; and
- The current funding policy adopted by the PFRS Board (adopted on March 4, 2021).

The purpose of this report is to model how different post-2023 employer contribution determinations might affect projected cash flow and projected funded status under various possible scenarios.

David T. Kausch, Judith A. Kermans, and Jamal Adora are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

This report may be shared with other parties, but only in its entirety and only with the permission of the PFRS. Gabriel, Roeder, Smith & Company is not responsible for unauthorized use of this report. This report should not be used for any purpose other than the purpose stated above. The actuaries issuing this report are independent of the Plan and the Plan Sponsor.

The initial date of the projection was June 30, 2020. This means that the membership census was as of June 30, 2020 and the projected benefits came from an actuarial valuation as of June 30, 2020. All actuarial assumptions and methods are the same as those used in the June 30, 2020 actuarial valuation, except as described in the various scenarios. It is important to note that projections do **not** predict the result of future actuarial valuations. Rather, they indicate the relative changes or sensitivity to certain changes in parameters such as investment return and patterns of employer contributions.

For additional information on actuarial assumptions, please see the June 30, 2020 actuarial valuation of Component II. Actuarial assumptions are adopted by the Board and the Investment Committee (unless mandated by the Plan). Please note the following:

- The assumed rate of interest was 6.75% (as mandated by the Plan);
- Component II benefits were frozen as of June 30, 2014; and
- Employer contributions through 2023 are fixed by the Plan and/or the Plan of Adjustment (POA) approved by the Bankruptcy Court. The Board has not yet established a funding policy for post-2023 contributions.

As part of the City's Bankruptcy, the Courts approved the City's Plan of Adjustment (POA), which included a re-writing of the Plan document and certain mandated employer contributions. Our understanding is that while the Board is charged with setting actuarial assumptions for use in the valuation, the assumed rate of return used in the annual valuation cannot be changed until FY 2024. In addition, employer contributions are set forth in the POA. While the City has some discretion to accelerate the Component II (Legacy) Plan contributions, the Board has no discretion to adopt contribution requirements beyond what is provided for in the POA until FY 2024. On and after July 1, 2023 (FY 2024) the Board will establish the methods and assumptions to be used for computing the employer contributions to the Plan (See Article 9 of the Component I Plan and Article G of the Component II Plan). The FY 2024 contribution will be determined by the June 30, 2022 actuarial valuation.

Background

Gabriel, Roeder, Smith & Company has been working with the Trustees to assist them with the development of a funding policy over the last several years. On March 4, 2021, the PFRS Board adopted the Funding Policy shown in the Appendix of this report.

Since the adoption of a Funding Policy by the PFRS Board, we have been working with Retirement System staff to assist the IC with Funding Policy scenarios. We met with the IC Board on April 12, 2021 and again on June 14, 2021. During that meeting we were asked to update the funding policy tool and this report.

Discussion

In developing their funding policy, the Trustees were concerned with the following :

- The adequacy of the contributions coming into the fund; and
- The affordability of the computed employer contributions determined under the policy.

Taking the second issue first, GRS does not have the data nor the expertise to determine the employer's ability to pay any specific level of contributions. The employer does, however, have representation on the Board and IC. We defer this question to those representatives.

The first issue (the adequacy of the contributions) can be considered in more than one way. The adequacy of a funding policy (and the contributions produced by it) can certainly be confirmed if all of the promised benefits are able to be paid. However, waiting until that determination can be made is too late. Instead, a reasonable approach is to estimate the adequacy of the contributions by looking at the projected funded status of the Plan and whether or not the fund is projected to run out of money before all future estimated benefits are paid. In addition, by varying parameters that model future plan experience we can estimate how the funding policy reacts to different future potential experience. In general, the policy should not only work under the baseline (when all future experience is exactly as assumed under current valuation assumptions) but also under pessimistic scenarios (when future experience is less favorable than current valuation assumptions). The policy should "react" to future System losses to ensure continued funding progress as well as maintaining contribution levels that comply with Michigan State laws. If certain scenarios indicate that projected future funding status is likely to fall below a level that the Board views as reasonable or even result in a depletion of all plan assets, then a more aggressive policy should be considered.

The scenarios shown herein were requested by the IC. However, the illustrations come from our funding policy utility tool which we have modeled in live presentations many times for the Board and IC. If the IC members believe they need to see additional scenarios in order to evaluate a specific policy, we are happy to model those scenarios as well.

The Component II (Legacy Plan) illustrations we have included illustrate two funding methods (Method 1 and Method 2) under three investment return scenarios (Scenario A, Scenario B, and Scenario C):

Funding Method Description:

Method 1: 20-Year Level Dollar with 20-Year Layered Amortization

- 20-year level dollar financing beginning with the FY 2024 Employer Contribution. Gains and losses occurring after 2024 are amortized over separate 20-year closed layers. This is the amortization policy adopted by the PFRS Board.

Method 2: 25-Year Level Dollar

- 25-year level dollar financing beginning with the FY 2024 Employer Contribution. For purposes of these illustrations there is a single, closed 25-year amortization period throughout the projection for all gains and losses.

Investment Return Scenario:

Scenario A: Baseline (slightly different than the 6.75% valuation assumption)

- Fiscal Year 2021: 23.50% investment return based on the market return reported near the end of the fiscal year
- Fiscal Year 2022 to 2031: 6.00%
- Fiscal Year 2032 to 2041: 7.00%
- Fiscal Year 2042+: 6.75%
- No asset smoothing

Scenario B: Downside Level 1

- Fiscal Year 2021: 23.50% investment return based on market return reported near the end of the fiscal year
- Fiscal Year 2022 to 2031: 4.50%
- Fiscal Year 2032 to 2041: 6.00%
- Fiscal Year 2042+: 6.75%
- No asset smoothing

Scenario C: Downside Level 2

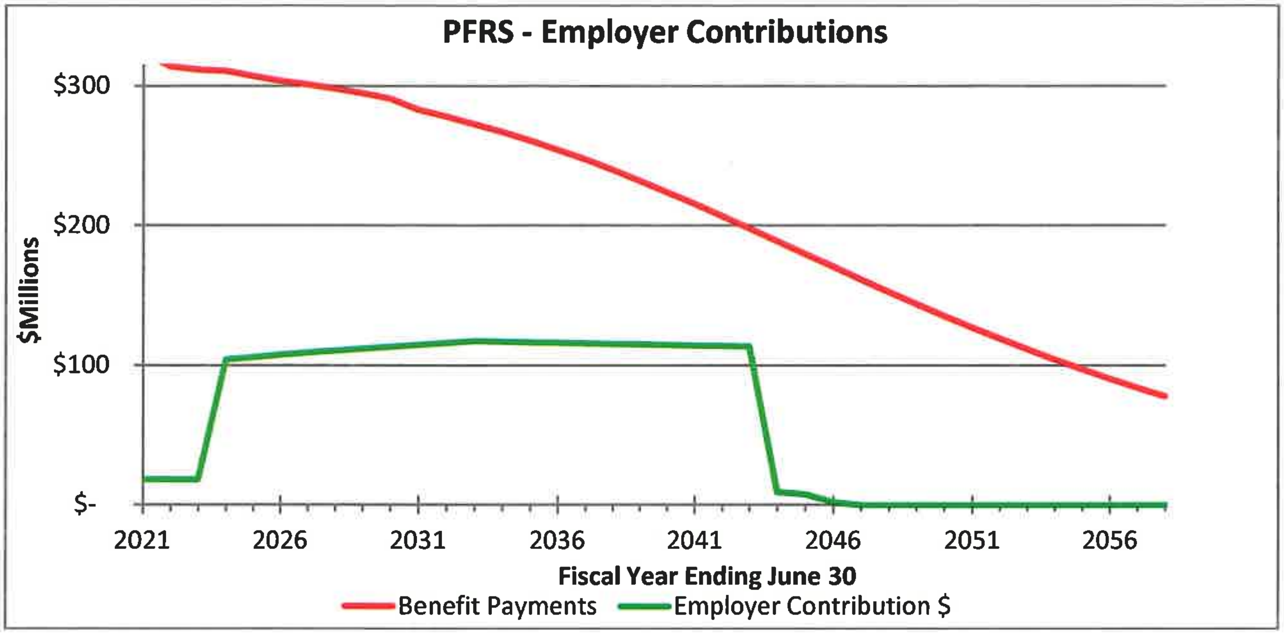
- Fiscal Year 2021: 23.50% investment return based on market return reported near the end of the fiscal year
- Fiscal Year 2022 to 2031: 3.50%
- Fiscal Year 2032 to 2041: 5.50%
- Fiscal Year 2042+: 6.75%
- No asset smoothing

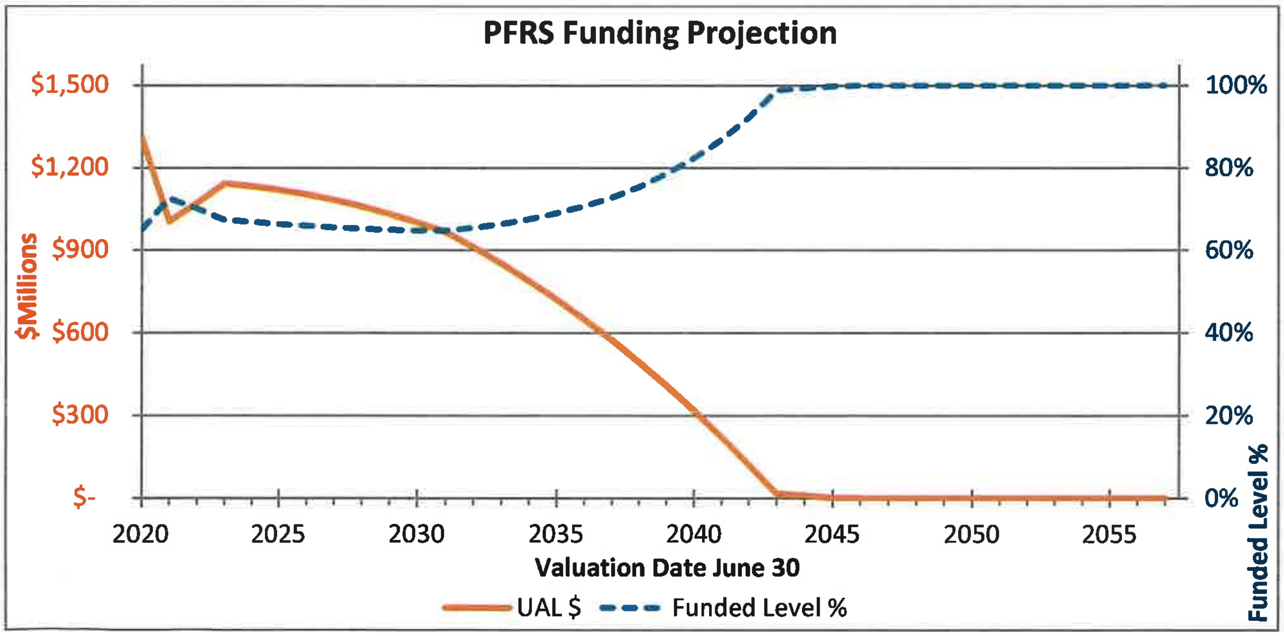
We have parameters in the tool that also model:

- Rate of investment earned in each future year
  - Input in each future year
  - Randomly generated based on a lognormal distribution with entered mean and standard deviation
- Asset Smoothing of 1 to 5 years on and after the June 30, 2023 actuarial valuation
- Layered closed amortizations for future gains and losses based on an initial period parameter
- Adding/Simplifying the displays of different possible results

The Appendix includes the current Funding Policy approved by the PFRS Board on March 4, 2021.

Funding Method 1: 20-Year Level Dollar with 20-Year Layered Amortization
Investment Return Scenario A: Baseline



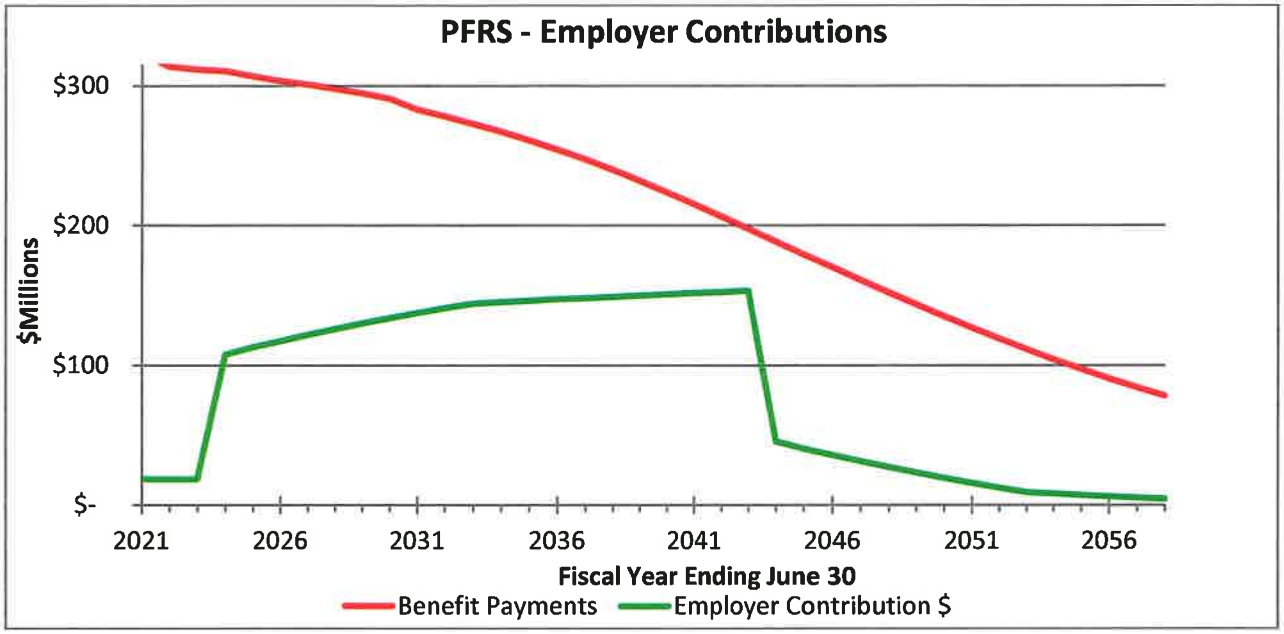


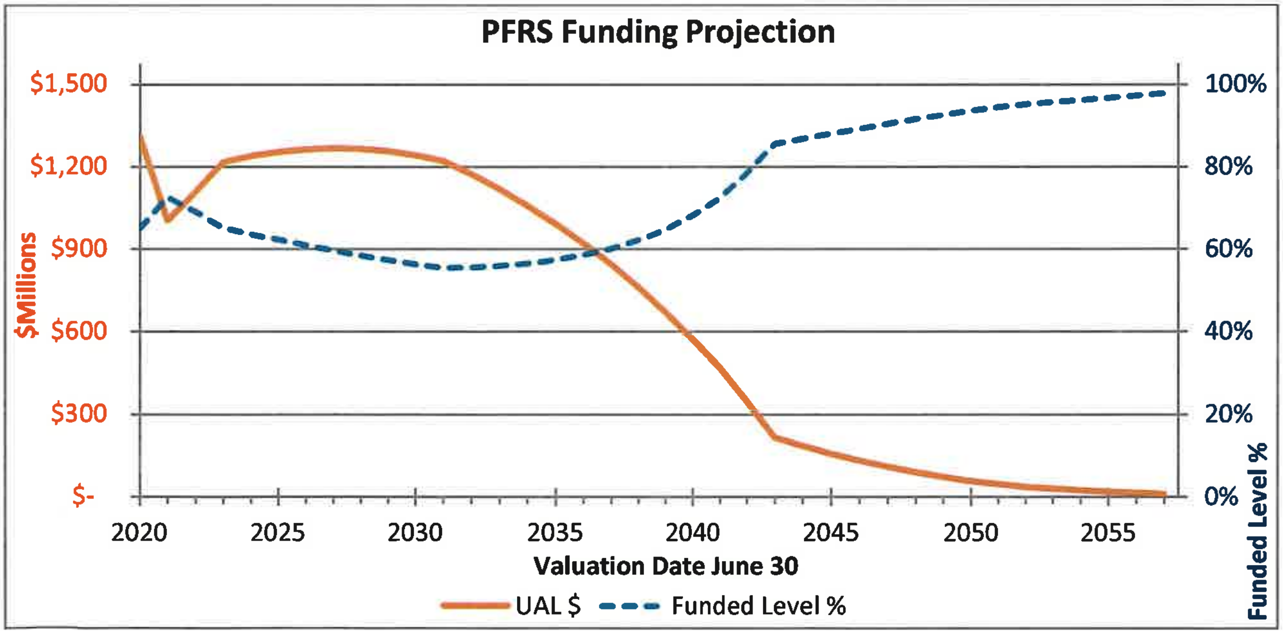
Employer Contributions for FYE June 30, ($ Millions)

2021	2024	2026	2031	2036	2041	2043	2044	2046	2048	2049	2051	2056	2057
18.3	104.1	107.4	114.7	116.1	114.3	113.6	9.5	2.2	0.0	0.0	0.0	0.0	0.0

Note: Contributions remain relatively stable and the funded status remains above 64%.

Funding Method 1: 20-Year Level Dollar with 20-Year Layered Amortization
Investment Return Scenario B: Downside Level 1



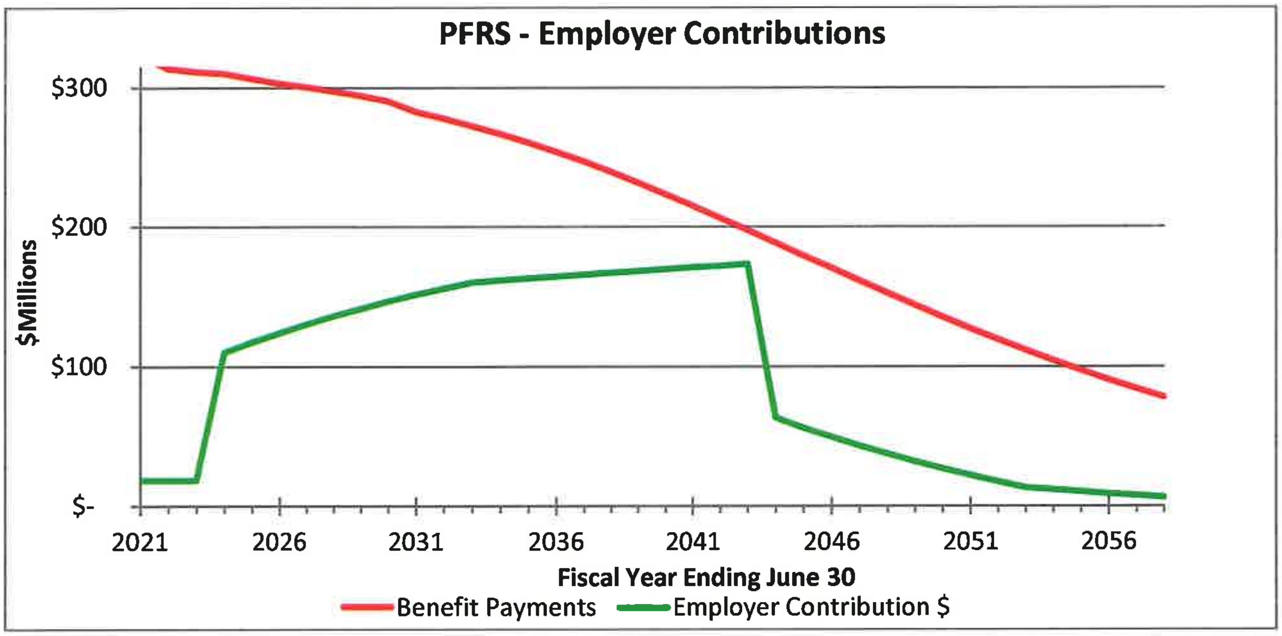


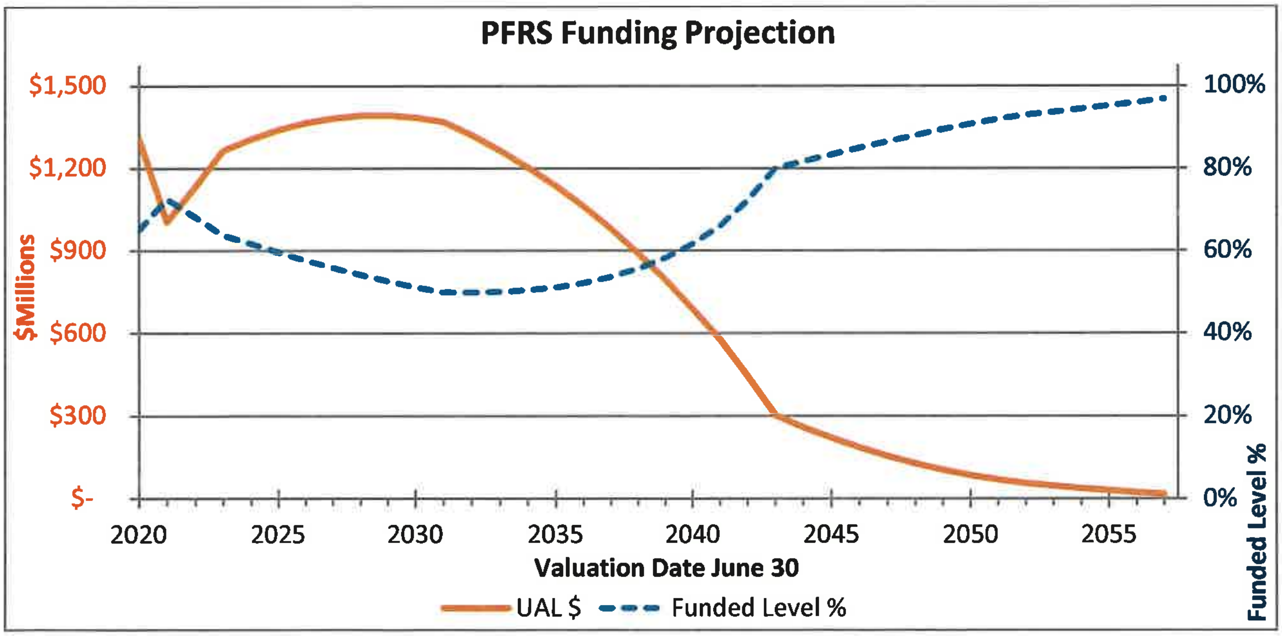
Employer Contributions for FYE June 30, ($ Millions)

2021	2024	2026	2031	2036	2041	2043	2044	2046	2048	2049	2051	2056	2057
18.3	107.7	117.5	137.6	147.2	151.6	153.3	45.6	35.8	27.1	23.1	15.7	6.0	5.1

Note: Contributions increase each year until 2044 when the initial 20-year amortization period ends. After 2044, amortization layers resulting from investment losses begin to expire and the contribution requirement continues to go down. The funded level stays above 55% and becomes 100% funded in 2062.

Funding Method 1: 20-Year Level Dollar with 20-Year Layered Amortization
Investment Return Scenario C: Downside Level 2



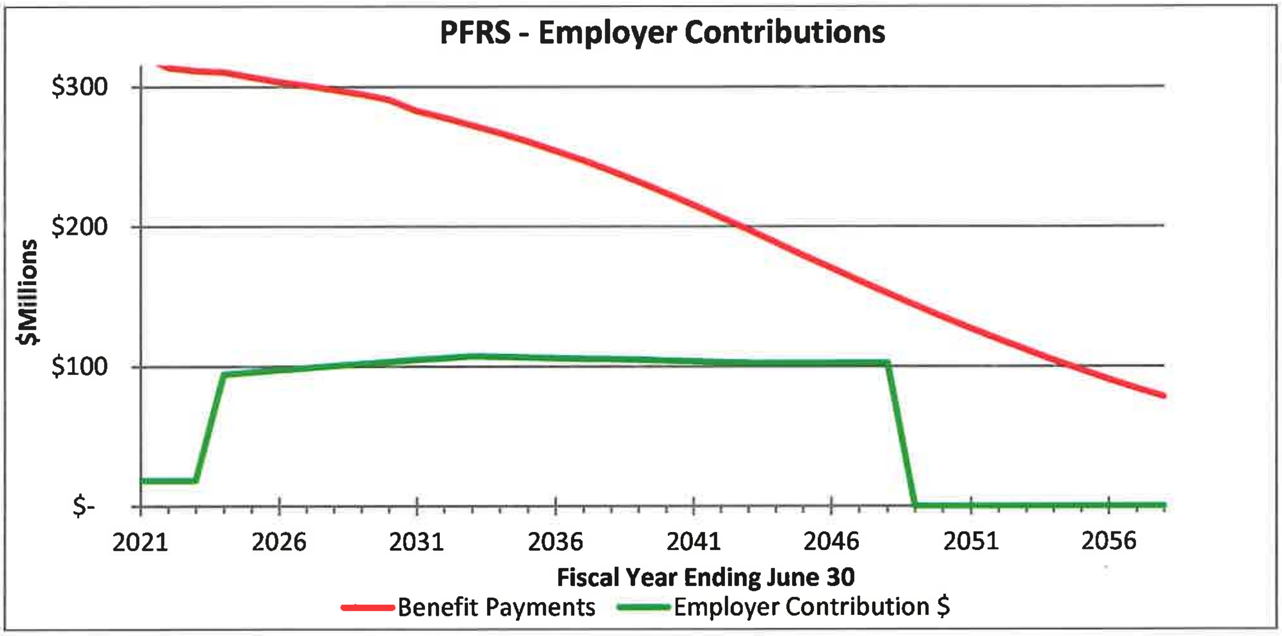


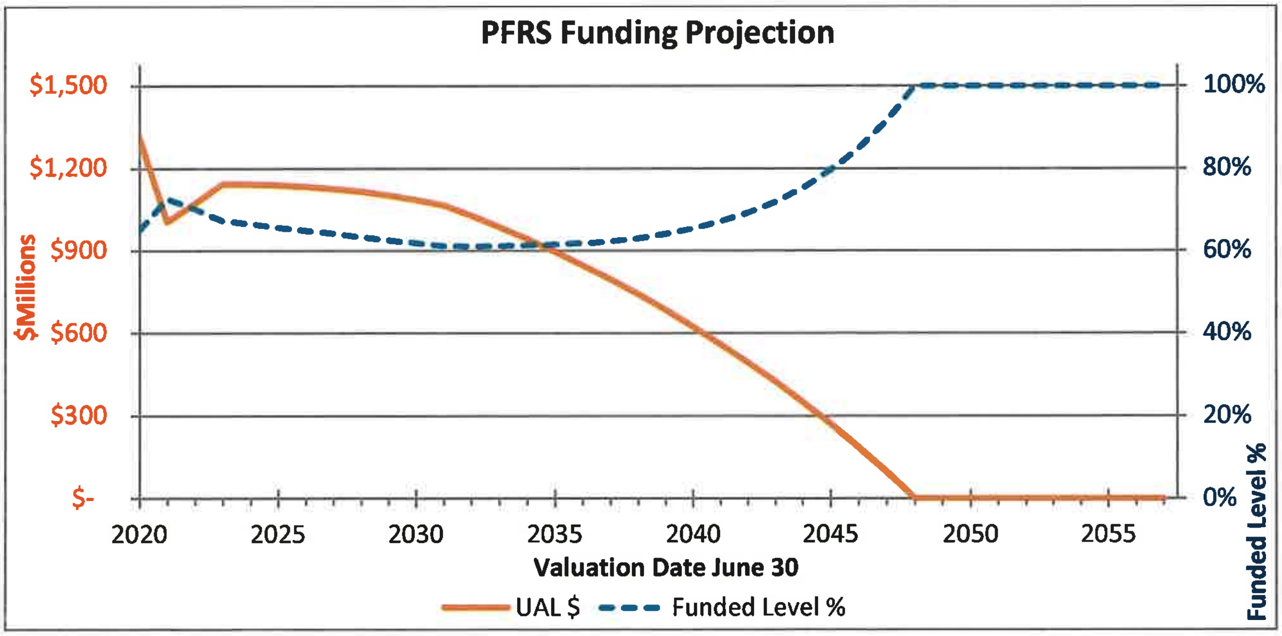
Employer Contributions for FYE June 30, ($ Millions)

2021	2024	2026	2031	2036	2041	2043	2044	2046	2048	2049	2051	2056	2057
18.3	110.2	124.0	151.5	164.6	171.0	173.5	63.4	49.5	37.5	32.0	22.0	8.9	7.6

Note: Contributions increase each year until 2044 when the initial 20-year amortization period ends. After 2044, amortization layers resulting from investment losses begin to expire and the contribution requirement continues to go down. The funded level stays above 49% and becomes 100% funded in 2062.

Funding Method 2: 25-Year Level Dollar Contribution
Investment Return Scenario A: Baseline



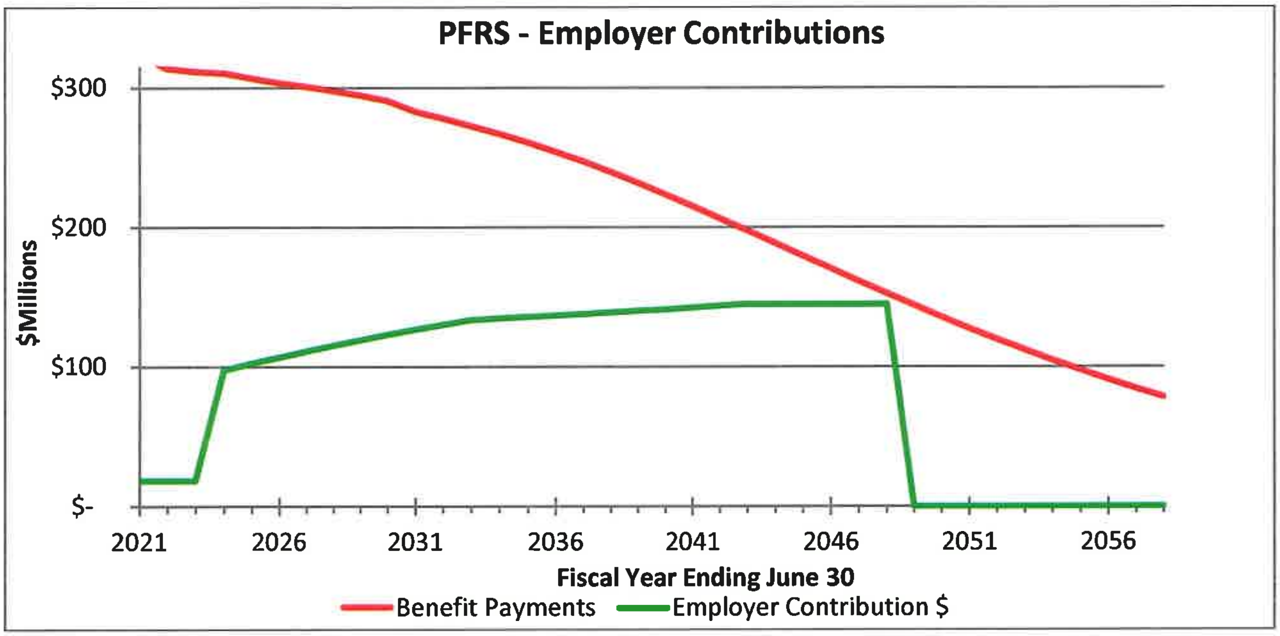


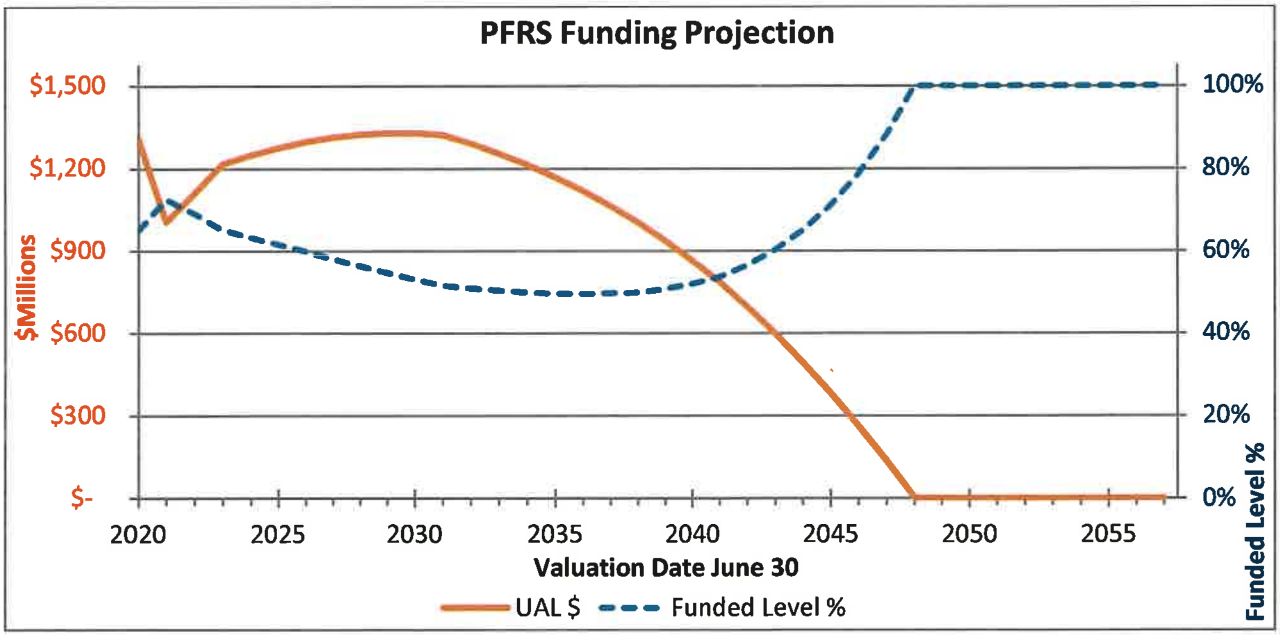
Employer Contributions for FYE June 30, ($ Millions)

2021	2024	2026	2031	2036	2041	2043	2044	2046	2048	2049	2051	2056	2057
18.3	94.3	97.4	104.6	106.0	103.6	102.5	102.5	102.5	102.5	0.0	0.0	0.0	0.0

Note: Contributions are generally stable, funded level stabilizes around 60% for several year before increasing to 100% in 2048.

Funding Method 2: 25-Year Level Dollar Contribution
Investment Return Scenario B: Downside Level 1



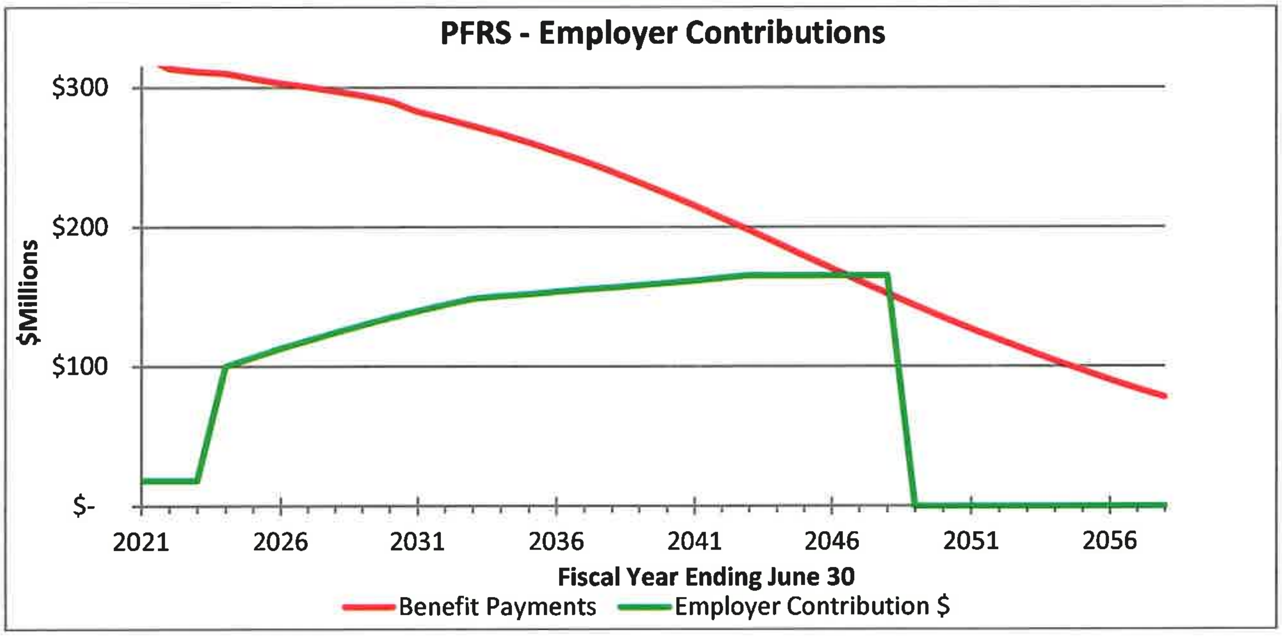


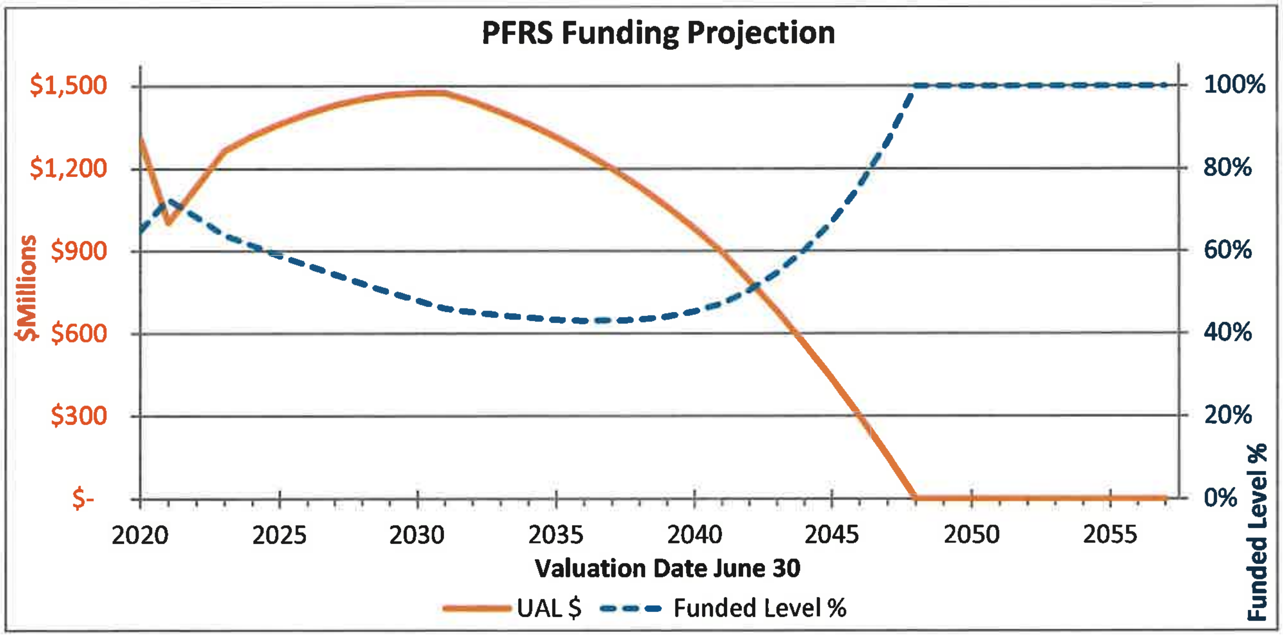
Employer Contributions for FYE June 30, ($ Millions)

2021	2024	2026	2031	2036	2041	2043	2044	2046	2048	2049	2051	2056	2057
18.3	97.6	106.7	126.4	136.7	142.3	144.9	144.9	144.9	144.9	0.0	0.0	0.0	0.0

Note: Contributions increase each year in reaction to asset losses, funded level bottoms out near 50% in 2036 then increases to 100% in 2048.

Funding Method 2: 25-Year Level Dollar Contribution
Investment Return Scenario C: Downside Level 2





Employer Contributions for FYE June 30, ($ Millions)

2021	2024	2026	2031	2036	2041	2043	2044	2046	2048	2049	2051	2056	2057
18.3	99.8	112.7	139.6	153.5	161.4	165.2	165.2	165.2	165.2	0.0	0.0	0.0	0.0

Note: Contributions increase each year in reaction to asset losses, funded level bottoms out near 43% around 2036 then increases to 100% in 2048.

Comments

Comment 1 — It is our understanding that the first actuarially determined employer contribution for Fiscal Year 2024 will be determined by the June 30, 2022 actuarial valuation.

Comment 2 — The projections included herein are provided at the Investment Committee's request and are intended to illustrate possible future trends in funding, given the specific input parameters. These results are not intended to detail the full range of results. This report is designed to be used in connection with a projection tool to allow for the varying of certain parameters in order to assist the IC in the evaluation of various funding scenarios. The projection tool used for this report has been modified from the version presented on June 14, 2021 to adjust for expected contributions between the valuation date and applicable fiscal year for determining the employer contribution. Results may differ from those shown in the presentation on June 14th.

Comment 3 — For the purposes of these illustrations, the prescribed economic assumptions of modeled future investment return for the three scenarios are reasonable to use for testing the downside investment risk of different funding policies. However, other alternatives exist and can be modeled with this tool. Assessing the reasonableness of the assumed rate of return for discounting plan liabilities in future valuations is a separate project independent of this report.

Comment 4 — This report was prepared using our proprietary valuation model, funding policy tool and related software which, in our professional judgment, have the capability to provide results that are consistent with the purposes of the request and have no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

Comment 5 — We believe the amortization period used for financing unfunded liabilities must be at or below 30 years. A maximum 30-year period is set by Michigan Public Act 314 of 1965, as amended. New reporting requirements as detailed in Michigan Public Act 202 of 2017 and may result in the additional reporting of computed contributions based on a 20-year or shorter period if a longer period is used in the funding policy.

Comment 6 — These projections do not reflect any potential benefit changes under restoration or asset transfers to the Component I (Hybrid Plan). In particular if the FY 2021 returns equal 23.50% (as modeled), then the Legacy Plan will actually see a smaller investment return in that year due to the excess investment return transfer to the Hybrid Plan that is called for under the Plan provisions.

Comment 7 — Once an initial funding policy is developed, it should be monitored, reviewed and updated as needed.

Comment 8 — The calculations are based upon assumptions regarding future events, which may or may not materialize. If you have reason to believe that the assumptions that were used are unreasonable, that the Plan provisions are incorrectly described, that important Plan aspects relevant to the projections are not included, or that conditions have changed since the calculations were made, you should contact the authors of this report prior to relying on information in the report.

Comments

Comment 9 — If you have reason to believe that the information provided in this report is inaccurate, or is in any way incomplete, or if you need further information in order to make an informed decision on the subject matter of this report, please contact the authors of the report prior to making such decision.

Comment 10 — Projections are not predictions. The reader of this report should keep in mind that actuarial calculations are mathematical estimates based on current data and assumptions about future events (which may or may not materialize). Please note that actuarial calculations can and do vary from one valuation year to the next.

Comment 11 — A determination of the plan sponsor's ability to make contributions when due (before and/or after the illustrated funding policies modeled) was outside our scope of expertise and was not performed.

APPENDIX

FUNDING POLICY

Police and Fire Retirement System of the City of Detroit
Actuarial Funding Policy

Introduction

The purpose of this Actuarial Funding Policy is to record the funding objectives and policy set by the Board of Trustees (Board) for the Police and Fire Retirement System of the City of Detroit (the System). The Board establishes this Actuarial Funding Policy to help ensure the systematic funding of future benefit payments for members of the Plan.

In 2014, the Plan for the System was written and approved by the bankruptcy court as part of the City's Plan of Adjustment (POA). At that time, the original retirement plan was split into two Retirement Plans: Component I (Hybrid) and Component II (Legacy). In accordance with the POA, employer contributions and certain assumptions cannot be changed until fiscal year 2024. This Policy is intended to recognize those items as fixed until 2024 and establish a funding policy for the period beginning in fiscal year 2024, when employer contributions must be determined on an actuarial basis. Nothing in this Policy is intended to prevent the Board from altering the Policy prior to fiscal year 2024 as conditions change or additional information becomes available to the Board.

This Policy shall be regularly reviewed by the Board.

Funding Objectives

1. Provide benefit security to members of the System:
    a. For purposes of this policy, benefit security means having adequate liquidity to pay benefits when due.
2. Establish an appropriate employer contribution based on the following objectives:
    a. Fully funding the Legacy Plan liability no later than 2054;
    b. Keeping the Hybrid Plan fully funded; and
    c. Managing employer contribution volatility.
3. Provide a reasonable margin for adverse experience to help offset risks.
4. Measure and monitor funding status, post-2024 contribution estimates and risk.
    a. Perform annual valuations; and
    b. Include post-2024 contribution estimates (based on this Policy) in annual actuarial valuations.

Elements of Actuarial Funding Policy

The Plans will have annual actuarial valuations each June 30. Employer contributions will be determined for the fiscal year ending two years after the valuation date. For example, the actuarially determined employer contribution for the fiscal year ending June 30, 2024 will be determined by the June 30, 2022 annual actuarial valuation.

Annual actuarial valuations may or may not also serve other purposes such as Legacy Plan restoration, Hybrid plan Section 9.5 fiscal responsibility calculations, and/or Annuity Savings Fund excess interest transfers between components. Unless otherwise stated, those purposes are not subject to this Policy.

For all other funding purposes, annual actuarial valuations will include the following elements of the Actuarial Funding Policy:

1. Actuarial Cost Method

a. Hybrid Plan: The Entry Age actuarial cost method shall be used in determining the Actuarial Accrued Liability (AAL) and Normal Cost with the entry age based on date of hire. Since this component was created in July 2014 and granted eligibility and vesting service prior to July 2014 (for members hired before that date), this Plan had an unfunded actuarial accrued liability on the effective date, known as the transition cost. As of June 30, 2017, the AAL (including the transition cost) in the Hybrid Plan was fully funded. This Plan could become less than fully funded in the future if experience is less favorable than assumed or there are changes in assumptions or Plan provisions.

b. Legacy Plan: The Unit Credit Normal actuarial cost method shall be used in determining Actuarial Accrued Liability (AAL) and Normal Cost. Since this component is closed and accrued benefits are frozen as of June 30, 2014, this method results in no normal costs and an AAL that equals the Present Value of Accrued Benefits (PVAB) of each member.

2. Asset Smoothing Method

a. For estimating contributions prior to June 30, 2023, the Funding Value of Assets (or actuarial value of assets) will be equal to the Market Value of Assets, as mandated by the Plan of Adjustment. For determining (or estimating) employer contributions on or after fiscal year 2024, the Funding Value of Assets will be based on a method that employs smoothing of market gains and losses over a closed period. The smoothing period for recognize market gains and losses (above or below the assumed rate of return) will be a 3-year period.

b. The Funding Value of Assets shall not diverge from the Market Value of Assets by more than 15%.

c. The annual actuarial valuation will calculate results on both the smoothed value of assets and the (non-smoothed) Market Value of Assets beginning with the June 30, 2019 valuation (the Funding Value of Assets will initially be set to the Market Value of Assets as of June 30, 2018 with smoothing beginning prospectively). The post-2024 contribution estimate will always be based on the smoothed value of assets. Other results (UAAL, Funded Status, etc.) will be based on the Market Value of Assets prior to 2024 and the smoothed value of assets after 2023.

3. Amortization Method

a. Hybrid Plan

a) A Level Percent of Payroll amortization method shall be used to systematically eliminate (pay off) the Unfunded Actuarial Accrued Liability (UAAL) over a closed 15-year period from the later of July 1, 2023 or the applicable fiscal year after the funded status falls below 100%.

b) If funded status is above 100%, the contribution requirements for the UAAL will be $0 (thereby creating a minimum employer contribution of employer normal cost).

c) Layered amortizations will be considered by the Board post-2024.

b. Legacy Plan

a) The Level Dollar amortization method shall be used to systematically eliminate (pay off) the Unfunded Actuarial Accrued Liability (UAAL) over a closed period of 20 years from July 1, 2023 for the UAAL as of July 30, 2022 (projected to July 1, 2023), and

b) Layered amortizations that use 20-year closed periods for gains and losses occurring after June 30, 2022 (each 20-year period starts with the first payment after the applicable gain or loss occurs).

4. Funding Target and Cash Flow Projections

a. The targeted funded ratio shall be 100%.

b. The Legacy Plan annual actuarial valuation shall include projections of estimated employer contributions, expected benefit payments and estimated funded status to the later of fiscal year 2054 or 30 years after the applicable employer contribution fiscal year.

c. Section 9.5 of the Plan details the actions to be taken if the 5-year projected funded status falls below 90% (Hybrid Plan, only).

5. Risk Management

a. Assumption Changes

a) The actuarial assumptions used shall be those last adopted by the Board based on the most recent experience study and upon the advice and recommendation of the actuary. In accordance with the City Ordinance, the actuary shall conduct an experience study at least every five years. The results of the study shall be the basis for the actuarial assumption changes recommended to the Board. However, the assumed rate of return and the actuarial value of assets are mandated by the City's POA and cannot be changed prior to June 30, 2023.

b) The actuarial assumptions may be updated at any time, as advised by the actuary, if significant Plan design changes or other significant events occur.

c) The next experience study will be performed after the 2020 actuarial valuation and will include both economic (investment return, inflation, etc.) and demographic (mortality, retirement, disability, etc.) assumptions. Even though the investment rate of return may not be changed for determining employer contributions until after June 30, 2023, the Board may elect to show valuation results under an alternative reasonable assumed rate of investment return prior to 2023.

b. Risk Measures

a) Risk measures will be included in the annual actuarial valuations. Below is a list of potential measures to be included. The measures may be changed over time as deemed appropriate.

(i) Classic measures currently determined

- Funded ratio (assets / liability) on both a market value and funding value (if funding value is not equal to market).
- UAAL amortization period (years required to pay down the UAAL based on current funding rates).
- Portfolio rate of return for the year on both the market value and funding value of assets.
- 5- and 10-year geometric average portfolio rate of return on both the market value and funding value of assets (developed prospectively beginning with the 2019 valuation).
- 5- and 10-year standard deviation of return on both the market value and funding value of assets (developed prospectively beginning with the 2019 valuation).

(ii) Duration of the Actuarial Accrued Liability

- Measures the sensitivity of the liability to a 1% change in assumed rate of return. A decrease in this measure indicates a decrease in assumed rate sensitivity and vice versa.

(iii) Total UAAL / Covered Payroll

- Measures the risk associated with contribution rates relative to the impact on the ability to fund the UAAL. A decrease in this measure indicates a decrease in UAAL contribution risk and vice versa.
- Consideration will be given to using total payroll or revenue source, if available.

(iv) Total Assets / Covered Payroll

- Measures the risk associated with the potential impact of asset experience on contributions. A decrease in this measure indicates a decrease in asset risk and vice versa.
- Consideration will be given to using total payroll or revenue source, if available.

(v) Total AAL / Covered Payroll

- Measures the risk associated with the potential impact of liability experience on contributions. A decrease in this measure indicates a decrease in experience risk and vice versa. This also provides a long-term measure of the asset risk where the System has a target funded ratio of 100%.
- Consideration will be given to using total payroll or revenue source, if available.

(vi) Non-Investment Cash flow / Beginning of year assets

- Measures depletion risk, sensitivity to annual investment gains and losses risk and the maturity of the plan. For a mature open plan, this may converged to the negative of the real rate of return assumption (investment return less wage inflation). A less negative number (or a positive number) indicates a less mature plan and/or a plan that is at lower risk of fund depletion and less sensitive to annual gains and losses. A more negative number indicates a more mature plan and/or a plan that is more at risk of fund depletion and more sensitive to annual gains and losses. For a super-mature closed plan such as the Legacy plan, this may become more negative over time as liquidity needs increase.

(vii) Market Value of Assets / Benefit Payments

– Measure depletion risk. A low value estimates the number of years to depletion disregarding future contributions and investment return.

(viii) Solvency Liability

– Measures the estimated cost of accrued benefits as a result of minimizing investment risk in the portfolio.

b) Risk Control: The Board shall carefully monitor the risk measures above and shall consider steps to mitigate risk, particularly as the Legacy Plan funded ratio increases. Examples of risk mitigating techniques include, but are not limited to:

(i) Reviewing investment risk in accordance with the Board's Investment Policy

(ii) Adding provisions for adverse deviation in the actuarial assumptions

(iii) Increasing employer contributions (through a change in methods, assumptions, or amortization period)

(iv) Other

Glossary

1. **Actuarial Accrued Liability (AAL):** The difference between (i) the actuarial present value of future plan benefits; and (ii) the actuarial present value of future normal cost. Sometimes referred to as "accrued liability" or "past service liability."
2. **Actuarial Assumptions:** Estimates of future plan experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. Decrement assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.
3. **Actuarial Cost Method:** A mathematical budgeting procedure for allocating the dollar amount of the "actuarial present value of future plan benefits" between the actuarial present value of future normal cost and the actuarial accrued liability. Sometimes referred to as the "actuarial funding method."
4. **Actuarial Gain (Loss):** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions during the period between two actuarial valuation dates, in accordance with the actuarial cost method being used. For example, if during a given year the assets earn more than the investment return assumption, the amount of earnings above the assumption will cause an unexpected reduction in UAAL, or "actuarial gain" as of the next valuation. These include contribution gains and losses that result from actual contributions made being greater or less than the level determined under the policy.
5. **Actuary:** A person who is trained in the applications of probability and compound interest to problems in business and finance that involve payment of money in the future, contingent upon the occurrence of future events. Most actuaries in the United States are Members of the American Academy of Actuaries (MAAA). The Society of Actuaries is an international research, education and membership organization for actuaries in the life and health insurance, employee benefits, and pension fields. It administers a series of examinations leading initially to Associateship and the designation ASA and ultimately to Fellowship with the designation FSA.
6. **Amortization:** Paying off an interest-bearing liability by means of periodic payments of interest and principal, as opposed to paying it off with a lump sum payment.
7. **Unit Credit Normal Actuarial Cost Method:** A funding method that calculates the Normal Cost as the present value of the change in accrued benefits for active members.
8. **Experience Study:** An actuarial investigation of demographic and economic experiences of the system during the period studied. The investigation was made for the purpose of updating the actuarial assumptions used in valuing the actuarial liabilities.
9. **Funding Value of Assets**: The value of current plan assets recognized for valuation purposes. Generally based on a phased-in recognition of all or a portion of market related investment return. Sometimes referred to as Actuarial Value of Assets or Smoothed value of Assets.
10. **Market Value of Assets:** The fair value of plan assets as reported in the plan's audited financial statements.
11. **Normal Cost (NC):** The annual cost assigned, under the actuarial funding method, to current and subsequent plan years. Sometimes referred to as "current service cost." Any payment toward the unfunded actuarial accrued liability is not part of the normal cost.
12. **Unfunded Actuarial Accrued Liability (UAAL):** The positive difference, if any, between the actuarial accrued liability and valuation assets. Sometimes referred to as "unfunded accrued liability."

EXHIBIT 6

Oct 1-14, 2021
emails V. Brader + C. Raimi

Charles Raimi

From: Valerie Brader <valerie@rivenoaklaw.com>
Sent: Thursday, October 14, 2021 5:46 PM
To: Charles Raimi
Cc: Jeanet Kulcsar; Steven Watson; Tanya Stoudemire; Jay Rising; John Naglick
Subject: [EXTERNAL]Re: PFRS - Stout report and funding issue

Hi Chuck,

I think our committee has shown a consistent willingness to have the City's input. The schedule we have is in line with what we were asked to do by the City when we began looking at this issue in the spring, and is intended to allow the budget forecasts (the 3 year look) done this year could be more clear regarding the policy. As you note, any contributions that are required by the policy would not begin until the middle of 2024, and as I noted in my prior e-mail, nothing that is adopted now could not be changed, especially if new information is received. But in order to allow a funding policy to guide the City's three-year budget, the Committee would need to act at this meeting.

I will also note that under my reading of the Plan of Adjustment, all these discussions must begin at the IC level, then go to the Board, and then if there is a disagreement come back to the IC (See Section 16.1). Thus, whatever the IC's action tomorrow, it would not result in the PFRS policy being formally adopted until the Board acts on any recommendation the Committee may make.

Best,
Valerie

On Thu, Oct 14, 2021 at 5:32 PM Charles Raimi <raimic@detroitmi.gov> wrote:

Thanks Valerie.

My understanding is that from the City's perspective, the funding policy need not be adopted until October of next year, which coincides with the timeframe that the City will begin work on the FY 2024 budget. So, we are surprised at the rush to adopt something given that the City has only received the Stout report today and before the PFRS Investment Committee can hear from the Mayor and our expert. It suggests your client is not interested in receiving meaningful input from the City on an issue that is of critical importance to it. While we understand any funding policy can be changed next year, hasty adoption of a policy now significantly changes the dynamics.

1

EXHIBIT
Ex. 6

Further, under Jay Rising's leadership we have asked the City's expert, Cheiron to prepare a report that we believe will be extremely important for your client to consider. It will provide a different and more focused perspective than Dave Massaron's presentation.

Chuck Raimi

Deputy corporation counsel

313 237 5037

From: Valerie Brader <valerie@rivenoaklaw.com>
Sent: Tuesday, October 12, 2021 1:20 PM
To: Charles Raimi <raimic@detroitmi.gov>
Cc: John Naglick <naglickj@detroitmi.gov>; Jay Rising <Jay.Rising@detroitmi.gov>; Jeanet Kulcsar <kulcsarj@detroitmi.gov>; Steven Watson <WatsonSt@detroitmi.gov>; Tanya Stoudemire <tanya@detroitmi.gov>; David Cetlinski <dcetlinski@rscd.org>; Ryan Bigelow <rbigelow@rscd.org>
Subject: [EXTERNAL]Re: [EXTERNAL]Re: [EXTERNAL]Re: PFRS - Stout report and funding issue

Chuck -- Understood re the Mayor's schedule. This is the last scheduled meeting prior to the next budgeting cycle, which the prior input from the City had stressed for us was very important to meet. I expect the Committee will take up the funding policy at the upcoming meeting. (The next scheduled meeting is Dec. 13.) Obviously, the funding policy is not engraved in stone for all time upon adoption, so we can certainly continue the dialogue regardless.

Best,

Valerie

On Tue, Oct 12, 2021 at 12:29 PM Charles Raimi <raimic@detroitmi.gov> wrote:

Thanks Valerie - Given the Mayor's extremely busy schedule, we will need his appearance to be several weeks after receiving the report.

2

We will be talking with our expert this week and I will get back with you after that discussion.

Chuck Raimi

Deputy corporation counsel

313 237 5037

From: Valerie Brader <valerie@rivenoaklaw.com>
Sent: Tuesday, October 12, 2021 11:35 AM
To: Charles Raimi <raimic@detroitmi.gov>
Cc: John Naglick <naglickj@detroitmi.gov>; Jay Rising <Jay.Rising@detroitmi.gov>; Jeanet Kulcsar <kulcsarj@detroitmi.gov>; Steven Watson <WatsonSt@detroitmi.gov>; Tanya Stoudemire <tanya@detroitmi.gov>; David Cetlinski <dcetlinski@rscd.org>; Ryan Bigelow <rbigelow@rscd.org>
Subject: [EXTERNAL]Re: [EXTERNAL]Re: PFRS - Stout report and funding issue

Hi Chuck -- I don't have the final report yet, but expect to in the next day. It will be supplied to you this week. As you know we had several data delays that have pushed this later than planned and that I would have liked. Please let me know if you would still like the Mayor to address the Committee on Monday given that timing.

Regarding the City's actuary, I renew my query as to whether they would simply be re-presenting the material Mr. Massaron ably shared with the IC earlier this year and which the Committee has previously discussed or have a new proposal/information they would like to give. If the latter, it would help to know so we can adjust the presentation time.

Best,

Valerie

3

On Tue, Oct 12, 2021 at 11:16 AM Charles Raimi <raimic@detroitmi.gov> wrote:

Valerie – You have not responded to my request for a copy of the Stout report. We will need the report, and reasonable time, before the Mayor can address the Committee.

Also, we are in touch with the City's expert and would like them to have reasonable time to prepare and then address the Committee on this issue that is of critical importance to the City.

Chuck Raimi

Deputy corporation counsel

313 237 5037

From: Valerie Brader <valerie@rivenoaklaw.com>
Sent: Tuesday, October 12, 2021 10:56 AM
To: Charles Raimi <raimic@detroitmi.gov>
Cc: John Naglick <naglickj@detroitmi.gov>; Jay Rising <Jay.Rising@detroitmi.gov>; Jeanet Kulcsar <kulcsarj@detroitmi.gov>; Steven Watson <WatsonSt@detroitmi.gov>; Tanya Stoudemire <tanya@detroitmi.gov>; David Cetlinski <dcetlinski@rscd.org>; Ryan Bigelow <rbigelow@rscd.org>
Subject: [EXTERNAL]Re: PFRS - Stout report and funding issue

Dear Chuck,

I was able to confirm we will be taking up the Stout report and the funding policy at the meeting on Monday. We would be happy to have the Mayor present at the committee, if he would still like to do so. The meeting is scheduled from 10-noon, and will be virtual in conformance with the health orders. We would be happy to shift this item to accommodate his schedule. Please feel free to call me if you have any questions, if something just before or just after our window would work better, or just let me know what time during the meeting would be preferred for his schedule.

4

Best,

Valerie

On Fri, Oct 1, 2021 at 2:49 PM Valerie Brader <valerie@rivenoaklaw.com> wrote:

Thanks for reaching out. I do recall the request, and it has been on my mind, so thanks for this opportunity to quickly touch base on this. I expect to be able to confer with folks on the request very soon and be back on that. I did want to confirm whether you are requesting a meeting with Stout, or more to confer with the IC. I was taking it as the latter, and assuming therefore that we would need to look at having this at a public meeting, but if I am missing something I am happy to discuss further. I also wanted to touch base on the request-- is the idea to have the actuary present the same analysis/approach as the City's CFO presented to the IC previously? Or if it would be a new analysis? Just wanting to understand how much time such a presentation would be likely to take so I can bring that to folks as we do hone in on the agenda.

Also, as I know I shared with you by phone, I have significant concerns with the legality of the approach the City previously presented, as I believe state law is pretty much designed to prevent pension funds from deliberately getting into a pay-as-you-go situation. It also sounds like the examples that were presented of folks who have used this were all of entities that are prevented by federal law from going bankrupt (i.e. states, territoires), thus eliminating any risk to pensioners of not having their pensions paid in such a situation. I know at the time you said you didn't have a formal memo or any materials beyond the powerpoint on the legality of the approach the City is advocating. If you have any legal memoranda or other materials that have been developed since this was first presented, I would be very happy to review them.

As you are probably aware the next meeting of the IC is on October 18 but the agenda has not been set yet; it would certainly be my hope and expectation that the Stout report would be on the agenda but I can't say for sure yet. I still don't have a draft of the report, which was postponed based on certain information the CFO's office was providing recently; I learned yesterday the CFO's office was likely sending additional information to Stout even today. I am hoping to see a draft very shortly so I can look at where we are heading into the October meeting.

Thanks for all the work on the City's side to get us the requested information.

Best,

Valerie

On Fri, Oct 1, 2021 at 2:32 PM Charles Raimi <raimic@detroitmi.gov> wrote:

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EXHIBIT 7

Oct. 18, 2021
PFRS IC
minutes

POLICE AND FIRE
INVESTMENT COMMITTEE
OF THE
CITY OF DETROIT

500 WOODWARD AVE STE 3000
DETROIT, MICHIGAN 48226
PHONE 313 • 224 • 3362
TOLL FREE 800 • 339 • 8344
FAX 313 • 224 • 3522

MINUTES
Meeting No. 062
Police and Fire Retirement System Investment Committee
October 18, 2021

A meeting of the Investment Committee of the Police and Fire Retirement System of the City of Detroit was held on **Monday, October 18, 2021**. In conformance with public health orders from the Director of the Michigan Department of Health and Human Services, the meeting was held electronically, and members of the Committee and the public participated by telephonic and electronic means. Joseph Bogdahn, Chairperson, called the meeting to order at 10:01 a.m.

EXHIBIT
Ex. 7

A quorum was present.

ROLL CALL:

Attendance was taken by the Committee's Administrative Assistant with the following Committee Members present Joseph Bogdahn (*Chairperson) (Winter Haven, Polk County, FL)*, Matthew Gnatek (*Detroit, Wayne County, MI*) Orim Graves (*Philadelphia, Philadelphia County, PA*), Jerry Mingione (*Detroit, Wayne County, MI*)), George Orzech (*West Bloomfield*, *Oakland County, MI*), Jeff Pegg (*Denver, Denver County, CO*), Robert Skandalaris (*Bloomfield Hills, Oakland County, MI*), Gregory Trozak (*Macomb Township, Macomb County, MI*), and Woodrow Tyler (*Dexter Township, Washtenaw County, MI*).

Staff Present: David Cetlinski *(Executive Director),* Kelly Tapper *(Assistant Executive Director)*, Ryan Bigelow (*Chief Investment Officer*),and Valerie Brader (*General Counsel – Rivenoak Law Group, P.C.*).

Committee Members Excused: None

Staff Excused: Ryan Bigelow (*Note, Mr. Bigelow was able to join for a portion of the meeting)*

Approval of Agenda

Motion #01: Woodrow Tyler moved to approve the agenda dated **Monday, October 18, 2021.** Matthew Gnatek supported. The motion passed unanimously.

Approval of Minutes

Motion #02: Orim Graves moved to approve the Minutes of Meetings No. **059**, held on **Monday, June 14, 2021,** No. **060,** held on **Monday, August 9, 2021,** and No. 0**61**, held on **Wednesday, September 1, 2021.** Woodrow Tyler supported. The motion passed unanimously, with Matthew Gnatek abstaining as to the Minutes of Meeting No. 060.

Funding Policy – Stout Risius Ross

Representative Raymond Roth discussed the following with the Committee:

- Ability to Pay
- Public Protection
- Lower Spending
- Central Government Spending
- Detroit Employee Headcount

Ryan Bigelow joined the meeting at 10:11 am

- Salaries, Wages and Benefits
- 2022 Municipal Income Tax Revenue
- Payroll Jobs
- Municipal Income Tax
- Summary of Opportunities for Cost Savings

Presentation materials provided.

The System Actuary also made a presentation regarding the funding policy.

Motion #03: Jeff Pegg moved to approve a resolution setting a 20-year amortization funding policy. Matthew Gnatek supported. The motion passed unanimously.

- ➢ **Joseph Bogdahn left the meeting at 10:52 am. Robert Skandalaris assumed the Chair.**

Consultant RFP – Status Update/Timeline – North Pier

Representatives Gregory Metzger and Jim Scheinberg discussed the following with the Committee:

- Investment Program Review
- Organizations Bidding
- Proposal Options
    - Public Markets Only
    - All Asset Classes
- Fee Ranges
- Next Steps
- Finalist Interviews

Presentation materials provided.

- **Joseph Bogdahn rejoined the meeting at 11:20 am and resumed as Chair.**

Investment Committee Topics - Investment Consultant – Wilshire

Representatives David Lindberg, Calvin Born and Joanna Bewick discussed the following with the Committee:

- **Capital Market Return**
    - Summary Changes
    - Fixed Income
    - Equity Markets
    - Real Assets

- **Capital Market Assumptions**
    - Current Policy
    - Real Assets

- **Monthly Performance Summary – 8/2021**
    - Monthly Dashboard
    - Market Yields & Breakeven Inflation
    - Actual Allocations vs Policy
    - Total Fund Attribution
    - Asset Allocation and Performance
    - Background and Overview

- **Risk Assessment Framework**
    - Why should I care about Inflation
    - Catalysts of Inflation
    - Rationale for Real Assets
    - Correlation to Inflation
    - Midstream Energy Infrastructure
    - Midstream Energy – Merits and Challenges
    - Real Asset Investments

Presentation materials were provided

- **Ryan Bigelow left the meeting at 11:59 am**
- **Valerie Brader left the meeting at 12:05 pm**

General Counsel – Engagement/Review Invoice

Motion #04: Robert Skandalaris moved to extend the contract of Rivenoak Law Group (Valerie Brader) as general counsel for an additional 12 months. Orim Graves supported. The motion passed.

Yeas – Gnatek, Graves, Mingione, Orzech, Skandalaris, Trozak, Tyler, and Chairperson Bogdahn – 6 ½

Nays – Pegg – ½

- **Valerie Brader rejoined the meeting at 12:15 pm**

Ethics Policy

The Committee requested that adjustments be made and sent to the Committee and bring back policy at the next meeting.

Legal Report

Robert Skandalaris term will be ending early in 2022. He stated he will not be seeking reappointment. The replacement will have to be a resident of the State of Michigan. Committee members were encouraged to offer names of individuals to contact regarding their interest.

Public/Member Comments

None

IC Member Comments

None

ADJOURNMENT

Woodrow Tyler moved to adjourn Meeting #062. Orim Graves supported.

There being no further business before the Investment Committee, the meeting was adjourned at 12:23 p.m. The Investment Committee's next meeting is scheduled for **Monday, December 13, 2021,** at 10:00 a.m.

RESPECTFULLY SUBMITTED,

____
VALERIE BRADER
GENERAL COUNSEL

Administrative Assistant: Marcella Brewer

EXHIBIT 6

Exhibits to Brief

Part 2

Ex. 8 — October 18, 2021, PFRS IC resolution approving 20-year amortization

Ex. 9 — November 18, 2021, PFRS Board minutes ratifying 20-year amortization

Ex. 10 — Stout report dated October 13, 2021

Ex. 11 — Michigan Tax Tribunal Order dated June 11, 2021

Ex. 12 — Cheiron report dated June 6, 2022

Ex. 13 — Gabriel Roeder's June 17, 2022, letter re Restoration Reserve Account

Ex. 14 — Excerpt from 40-year projection

EXHIBIT 8

PFRS IC Reso October 18, 2021

EXHIBIT
Ex. 8

Resolution Regarding the Adoption of a Funding Policy for the Police and Fire Retirement System of the City of Detroit For Contributions Beginning in 2024

October 18, 2021

WHEREAS, the Investment Committee members are fiduciaries for the Police and Fire Retirement System of the City of Detroit ("PFRS") and have a duty to take action on certain investment decisions including actuarial assumptions affecting the large sponsored system's funding levels, including its funding policy; and

WHEREAS, under the Plan of Adjustment, beginning in 2024 the City of Detroit is required to resume making contributions to PFRS, and the Investment Committee has certain duties regarding the actuarial assumptions that underlie the determination of those required contributions;

WHEREAS, the Investment Committee has considered a report from the System actuary, Gabriel Roeder Smith ("GRS"), that evaluates certain funding policies based on assumptions including the expected investment returns and system liabilities to project the required contributions of the City under such policies; and

WHEREAS, the Investment Committee has considered information from GRS estimating payments that might be required under 20 and 25 year layered amortization policies in scenarios that assume lower-than-anticipated investment returns over the 2022-2041 period (essentially testing the policies in more challenging economic conditions); and

WHEREAS, the Investment Committee has considered a report from Stout Risius Ross regarding the ability of the City to afford contributions in the scenarios that involve higher contribution levels due to lower-than-anticipated investment returns; and

WHEREAS, the Investment Committee has considered presentations from GRS and Stout Risius Ross, as well as from the Chief Financial Officer of the City of Detroit regarding the funding policy; and

WHEREAS, the Board of Trustees has also communicated with the Investment Committee regarding the funding policy; and

THEREFORE, the Investment Committee of the PFRS recommends that:

1. **The reports of the System actuary regarding the funding policy, including the calculations, actuarial assumptions, and assessments underlying the annual funding levels and amortization of funding levels, and recommended**

contributions to the large sponsored system under the potential funding policies, are accepted.

2. **The IC recommends a funding policy, as approved by the PFRS Board, which includes the following:**

    a. **For the unfunded accrued liability measured in 2024, a 20-year, level dollar, layered amortization period.**
    b. **The gains or losses of the system shall be re-amortized yearly.**

EXHIBIT 9

November 18, 2021
PFRS Board
Minutes

MEETING NO. **3296**
JOURNAL OF PROCEEDINGS
BOARD OF TRUSTEES OF THE POLICE AND FIRE RETIREMENT SYSTEM
OF THE CITY OF DETROIT
HELD **THURSDAY, NOVEMBER 18, 2021**

9:00 A.M.
RETIREMENT SYSTEMS' CONFERENCE ROOM
ALLY DETROIT CENTER, 500 WOODWARD AVENUE; SUITE 3000
DETROIT, MICHIGAN 48226

EXHIBIT
Ex. 9

TRUSTEES PRESENT

Douglas Baker	Ex/Officio Trustee/Corporation Counsel Alternate
Shawn Battle	Ex/Officio Trustee/Fire Prevention Chief/Mayoral Designee
Michael F. Berent	Elected Trustee/Fire
Matthew Gnatek	Elected Trustee/Police
Angela R. James	Ex/Officio Retiree Trustee/Police/Mayoral Designee
Brenda Jones	Ex/Officio Trustee/City Council President
Conrad Mallett	Ex/Officio/Mayor's Designee
Christa McLellan	Ex/Officio Trustee/Treasurer
John Naglick Jr.	Ex/Officio Trustee/Finance Director
George Orzech	Elected Retiree Trustee/Fire
Jeffrey Pegg	Elected Trustee/Fire
Dean Pincheck	Elected Trustee/Fire/Vice-Chairperson
John Serda	Elected Trustee/Police
Ronald Thomas	Elected Trustee/Police/Chairperson
Gregory Trozak	Elected Retiree Trustee/Police
Steven Watson	Ex/Officio Trustee/Budget Director

TRUSTEES EXCUSED

None

ALSO PRESENT

David Cetlinski	Executive Director
Kelly Tapper	Assistant Executive Director
Ryan Bigelow	Chief Investment Officer
Ronald King	General Counsel
Marcella Brewer	Recording Secretary
Dr. Oscar King III	Board Lobbyist
Bruce Babiarz	Public Relations Advisor

STAFF EXCUSED

None

"Declaration of Continued Emergency Due to Covid-19 To Allow Public Meetings of Governmental Bodies To Be Held Remotely Under Public Act 228 of 2020 Extended From September 1, 2021 to December 31, 2021."- Detroit, MI.

CHAIRPERSON

Ronald Thomas

A verbal Roll Call commenced at 9:08 a.m. and Chairperson Thomas called the meeting to order.

Present at Roll Call: Baker (Detroit, MI), Battle (Detroit, MI), Berent (Detroit, MI), Gnatek (Detroit, MI), James (Detroit, MI), Jones (Detroit, MI), McLellan (Livonia, MI), Naglick (Detroit, MI), Orzech (Clarkston, MI), Pegg (Detroit, MI), Pincheck (Northville, MI), Serda (Detroit, MI), Trozak (Macomb County, MI), Watson (Detroit, MI) and Thomas – Chairperson (Detroit, MI)

Re: Approval of November 18, 2021 Agenda

Trustee Berent moved to approve the agenda dated Thursday, November 18, 2021. Trustee Gnatek supported. The motion passed unanimously.

Re: Approval of RETIREMENT Applications

Trustee Berent moved to approve the RETIREMENT applications as listed below. Trustee Gnatek supported. The motion passed unanimously.

NAME, TITLE, DEPARTMENT	Roland C. Brown – Police Detective - Police
RETIREMENT TYPE-PLAN	Hybrid - Vested
SERVICE CREDIT-EFFECTIVE DATE	06 10 00 – 09 20 21
NAME, TITLE, DEPARTMENT	Kerry R. Byars – Police Lieutenant -Police
RETIREMENT TYPE-PLAN	Hybrid – Drop
SERVICE CREDIT-EFFECTIVE DATE	07 05 00 – 10 15 21
NAME, TITLE, DEPARTMENT	Terrence D. Childress – Fire Engine Operator - Fire
RETIREMENT TYPE-PLAN	Service - New
SERVICE CREDIT-EFFECTIVE DATE	14 11 09 – 11 15 21

PRESENTATION – Deputy Mayor Conrad Mallett

Trustee Mallett made a presentation to the Board regarding the PFRS Funding Policy and the recommendation from the PFRS IC with respect to adoption of the Funding Policy. Trustee Mallett provided a resolution for consideration by the Board. At the conclusion of his presentation a motion was made to adopt the proposed resolution.

Motion By: Trustee Mallett – Supported By: Trustee Naglick

WHEREAS, the Police and Fire Retirement System Investment Committee (PFRS IC) on October 18, 2021 recommended a funding policy, as previously approved by the PFRS Board, which includes the following:

1. For the unfunded accrued liability measured in FY 2024, a 20-year, level dollar, layered amortization period.
2. The gains and losses of the system shall be re-amortized yearly.

WHEREAS, Sec 16.1 of the Combined Plan for the Police and Fire Retirement System contained in the City's Bankruptcy Plan of Adjustment (POA) provides that all actions and recommendations of the Investment Committee shall be forwarded to the Board for consideration and are subject to Board approval.

WHEREAS, Sec 16.1 of the Combined Plan further provides that if the Board fails to approve or disapprove an investment management decision that has been recommended by an affirmative vote of the Investment Committee, and such failure continues for forty-five days after the date that the recommendation was made to the Board, or the Board disapproves an investment management decision within such forty-five day period but fails to provide to the Investment Committee within such forty-five day period a detailed written response outlining the reasons for such disapproval, then the Investment Committee and the chief investment officer are authorized to implement the decision.

WHEREAS, the POA used a 30-year amortization period for amortization of the Unfunded Actuarial Accrued Liability from the Component II plan beginning in Fiscal Year 2024 and the resulting City contributions using the 30-year amortization period were used in establishing the feasibility of the POA.

WHEREAS, on July 21, 2021, the City's Office of the Chief Financial Officer (OCFO) sent to legal counsel for the PFRS IC a memo explaining the fundamental reasons why it would be improper for the PFRS IC to approve a shorter funding plan than the POA's 30-year plan and asked that the PFRS IC hear from both Mayor Duggan and the City's actuarial expert before the PFRS IC and PFRS Board made any decisions on the funding policy.

THEREFORE, the PFRS Board disaffirms the action taken by the PFRS IC at its October 18, 2021 meeting because the PFRS IC acted without first hearing from Mayor Duggan and the City's OCFO actuarial expert. The PFRS Board of Trustees recognizing the fundamental difference between the PFRS IC and the City of Detroit's OCFO and rather than spend hundreds of thousands of dollars on legal fees the PFRS Board of Trustees directs its legal counsel to contact the City of Detroit's OCFO and agree to participate in non-binding mediation to develop a funding policy upon which both parties can agree. It is expected both parties will have available to them necessary experts. Mediation shall commence the second Monday in January 2022. The parties shall agree to complete their work and present back to the Board the final work product no later than third Thursday in April 2022.

Yeas: Baker, James, Jones, Mallett, McLellan, Naglick, Serda, Watson – 8

Nays: Battle, Berent, Gnatek, Orzech, Pegg, Pincheck, Trozak, and Chairperson Thomas – 8

The motion failed.

- **Trustee Mallett left the meeting at 10:56 am**

After discussion, Trustee Pegg moved to un-table the motion by Trustee Berent from October 21, 2021 acknowledging and affirming the recommendation of the PFRS IC of adopting the Funding Policy including the 20-year amortization of the unfunded accrued liability. Trustee Berent supported.

Yeas: Battle, Berent, Gnatek, Orzech, Pegg, Pincheck, Trozak, Chairperson Thomas – 8

Nays: Baker, James, Jones, McLellan, Naglick, Serda, Watson – 7

The motion passed.

Trustee Pegg moved to affirm the resolution from the PFRS Investment Committee regarding the adoption of the 20-year Funding Policy dated October 18, 2021. Trustee Berent supported.

Yeas: Battle, Berent, Gnatek, Orzech, Pegg, Pincheck, Trozak, Chairperson Thomas – 8

Nays: Baker, James, Jones, McLellan, Naglick, Serda, Watson – 7

The motion passed.

ADJOURNMENT

Trustee Gnatek moved to adjourn meeting #3296. Trustee Pegg supported.

Chairperson Thomas adjourned the meeting at 11:05 AM. The Board's next meeting is scheduled for Thursday, December 2, 2021 at 9:00 a.m. via Go to Meeting. Please see the news tab on our website for meeting login instructions.

RESPECTFULLY SUBMITTED,

Kelly Tapper, Assistant Executive Director

EXHIBIT 10

EXPERT REPORT OF
Raymond A. Roth III, CPA, CFE

October 13, 2021

Presented in:

<u>The Investment Committee of the Detroit Police & Fire Retirement System v. City of Detroit</u>

STOUT

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The Investment Committee of the Detroit Police & Fire Retirement System v. City of Detroit

Expert Report of Raymond A. Roth, III, CPA, CFE

October 13, 2021

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Exhibits

I. Scope of Analysis and Disclosures

1. This report presents my opinions regarding the ability of the City of Detroit ("Detroit") to make annual pension contributions to the Detroit Police & Fire Retirement System ("PFRS") beginning in 2024 under the funding scenarios provided by PFRS actuaries. In addition, this report contains a summary of the information I considered in the development of my opinions and a statement of my qualifications. My opinions, detailed herein, are based on the data available to me as summarized in this report.

2. Detroit has represented it will fund the General Retirement System of Detroit ("GRS") Legacy plan at $102.4 million per annum. In preparing my analyses included in this report, I did not consider any additional funding requests or scenarios related to the ("GRS").

3. A detailed list of the sources of information considered is presented in ***Exhibit A***.

4. My curriculum vitae, which includes lists of publications and relevant presentations, is presented in ***Exhibit B***.

5. Stout Risius Ross, LLC ("Stout") was compensated at a fixed fee of $100,000 for the preparation of this report.

II. Qualifications

6. I am a Director in the Disputes, Compliance & Investigations Group at Stout. Stout is a financial and operational advisory services firm serving a variety of businesses in numerous industries and countries. Stout focuses its services in the areas of Investment Banking; Valuation Advisory; Transaction Advisory; and Dispute Consulting. Stout has over 500 professionals located in offices worldwide.

7. I am a licensed Certified Public Accountant ("CPA") in the State of Michigan and a Certified Fraud Examiner ("CFE"), with 15 years of experience providing a wide range of professional consulting services.

8. I have consulted with lawyers and their clients, boards of directors, and municipalities regarding business, economic, and financial issues related to litigation, business disputes, and financial investigations. These assignments have been across a wide array of industries.

9. I received a Bachelor of Business Administration, with a focus in Accounting, degree from Cleveland State University in 2005.

10. I am a member of the American Institute of Certified Public Accountants ("AICPA"), Association of Certified Fraud Examiners ("ACFE"), and the immediate past Chairman of the Michigan Association of Certified Public Accountants ("MICPA") Fraud Task Force.

11. With the aforementioned education, training, and experience, I am well qualified to present the information contained herein.

III. Background

12. I was engaged by legal counsel of the Investment Committee to PFRS to evaluate financial data of Detroit and prepare a report regarding the capability of Detroit to make specified levels of pension contributions beginning in 2024.

13. The Investment Committee provided me with two potential contribution scenarios that simulated the required contribution by Detroit to PFRS Component Two Plan ("Legacy Plan") required if an economic downtown were to result in lower investment returns from 2024-2034.These scenarios assumed the following contribution schedules:

	Fiscal Year	Scenario C: Downside Level 2 Investment Return	20-Year Level Dollar With 20-Year Layers ($ Millions)	25-Year Level Dollar With 25-Year Layers ($ Millions)
1	2020	1.00%	$ 18.3	$ 18.3
2	2021	19.00%	18.3	18.3
3	2022	3.50%	18.3	18.3
4	2023	3.50%	18.3	18.3
5	2024	3.50%	134.8	122.1
6	2025	3.50%	140.5	127.4
7	2026	3.50%	146.0	132.3
8	2027	3.50%	151.1	136.8
9	2028	3.50%	155.9	141.1
10	2029	3.50%	160.5	145.1
11	2030	3.50%	164.7	148.7
12	2031	3.50%	168.7	152.1
13	2032	5.50%	172.5	155.2
14	2033	5.50%	173.9	156.3
15	2034	5.50%	175.2	157.4
16	2035	5.50%	176.5	158.3
17	2036	5.50%	177.7	159.2
18	2037	5.50%	179.0	160.1
19	2038	5.50%	180.2	160.9
20	2039	5.50%	181.3	161.6
21	2040	5.50%	182.5	162.4
22	2041	5.50%	183.7	163.0
23	2042	6.75%	184.9	163.7
24	2043	6.75%	184.9	163.7
25	2044	6.75%	50.1	163.7
26	2045	6.75%	44.4	163.7
27	2046	6.75%	38.9	163.7
28	2047	6.75%	33.8	163.7
29	2048	6.75%	29.0	163.7
30	2049	6.75%	24.5	41.6
31	2050	6.75%	20.2	36.3
32	2051	6.75%	16.2	31.4
33	2052	6.75%	12.4	26.9
34	2053	6.75%	11.0	22.6
35	2054	6.75%	9.7	18.6
36	2055	6.75%	8.4	15.0
37	2056	6.75%	7.2	11.6
38	2057	6.75%	2.6	8.5
39	2058	6.75%	-	7.4
		Total	$ 3,756	$ 4,139

14. It should also be noted that if Detroit cannot make the pension contributions detailed above, and it were to exhaust the Legacy Plan funding prior to expiration of its obligations, the contributions required by Detroit to the Legacy Plan may greatly exceed the amounts projected in the above funding policies. Therefore, these scenarios carry less than the funding policy budgeted by Detroit as the funding ratio will never fall below 60%.

IV. Use of Benchmarks

15. In analyzing Detroit's finances and other relevant metrics, I identified other Midwestern cities ("Comparable Midwestern Cities") to use as comparable benchmarks throughout my analysis. The use of financial and other benchmarks provides for a means of comparison to objectively assess the populations that comprise the cities, the level of revenue collected, and how that revenue is used.

16. Comparable cities identified included Cleveland, Columbus, Minneapolis, and Indianapolis. These cities were chosen based on characteristics such as population size, square mileage, and cost of living index. These metrics are presented in Figure 1 below.

Figure 1

	City	Total Population [1]	Square Mileage [2]	Cost of Living Index [3]
1	Detroit	674,841	138.8	87.6
2	Indianapolis	864,447	361.4	83.5
3	Cleveland	385,282	77.7	72.6
4	Columbus	878,553	217.2	85.5
5	Minneapolis	420,324	53.9	106.5

[1] Source: 2015-2019 ACS 5-year estimates.
[2] Source: Census QuickFacts
[3] Source: bestplaces.net. Indexed against national average (National Average = 100).

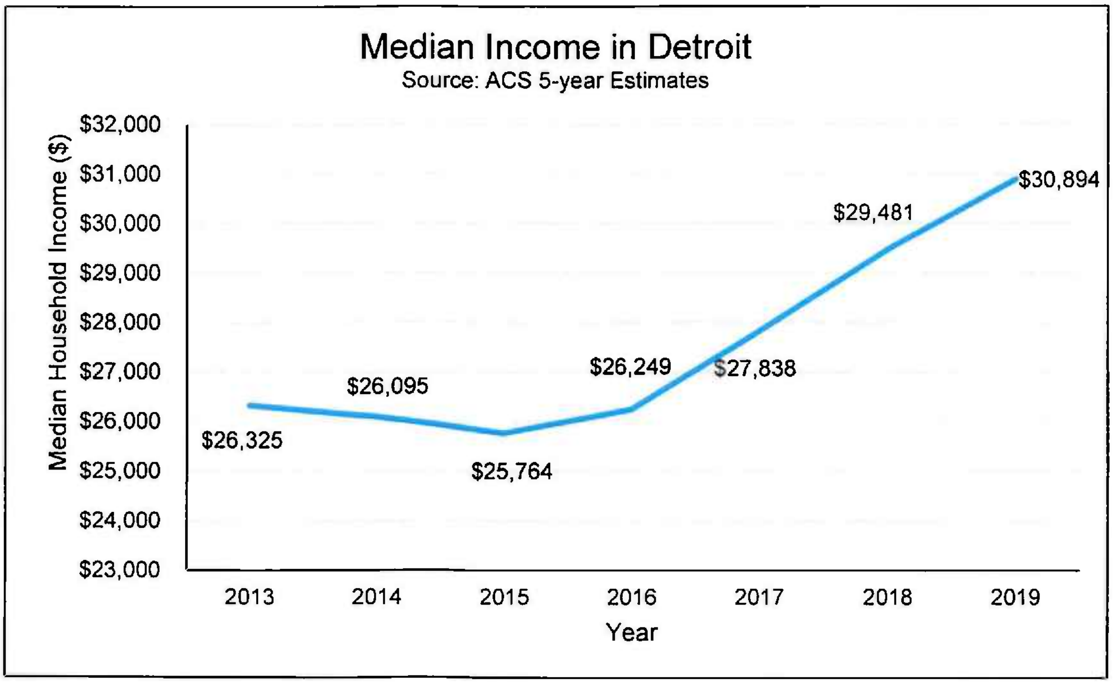
V. Demographic Analysis

17. Detroit has experienced a remarkable transformation since its emergence from bankruptcy. The median income of its residents has risen, while the number of families living below poverty, unemployment, and crime has declined. In addition, blight has been reduced, street lighting improved, emergency medical services ("EMS") response times are down, and credit ratings have stabilized. However, Detroit's population remains at lower income levels, including higher concentrations of poverty and crime rates, than the Comparable Midwestern Cities.

Median Income

18. Figure 2 below shows the increase in median income in Detroit from approximately $26,000 in 2014 per household to nearly $31,000 in 2019, a 17% increase.

Figure 2



19. Figure 3 below shows that the annual percentage growth in median income of Detroit residents has generally outpaced that of the Comparable Midwestern Cities. Detroit is represented by the solid blue line at the bottom of Figure 3 and had a median income decline of more than 2% in 2013, which improved to 6% annual growth in 2017 and 2018 surpassing all other Comparable Midwestern Cities before falling to 4.8% growth in 2019.

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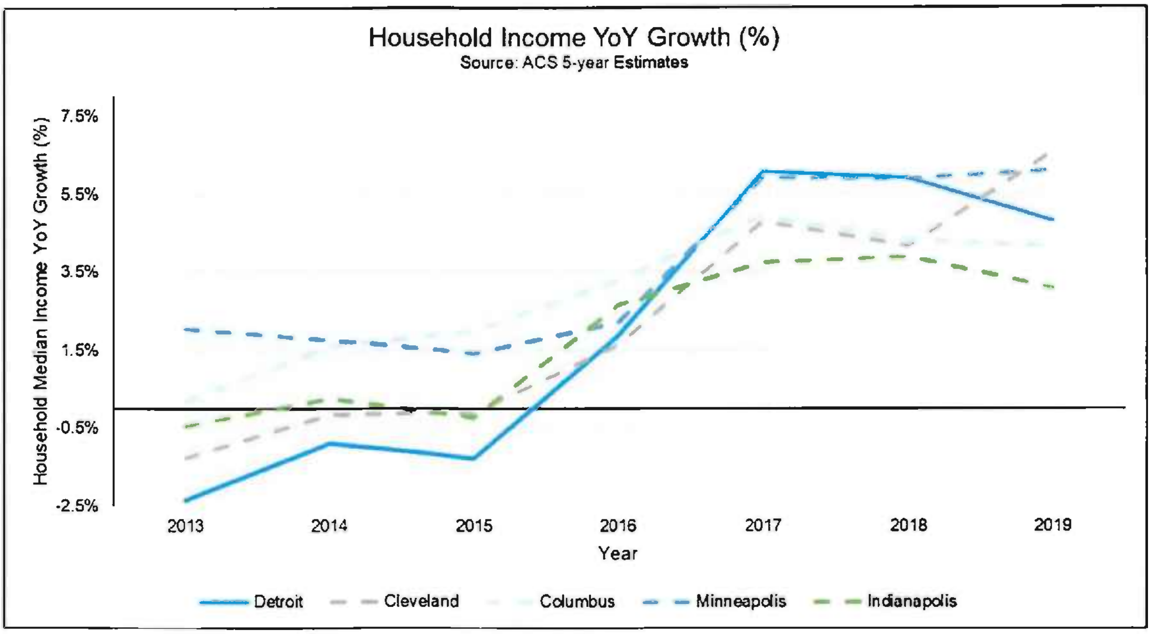
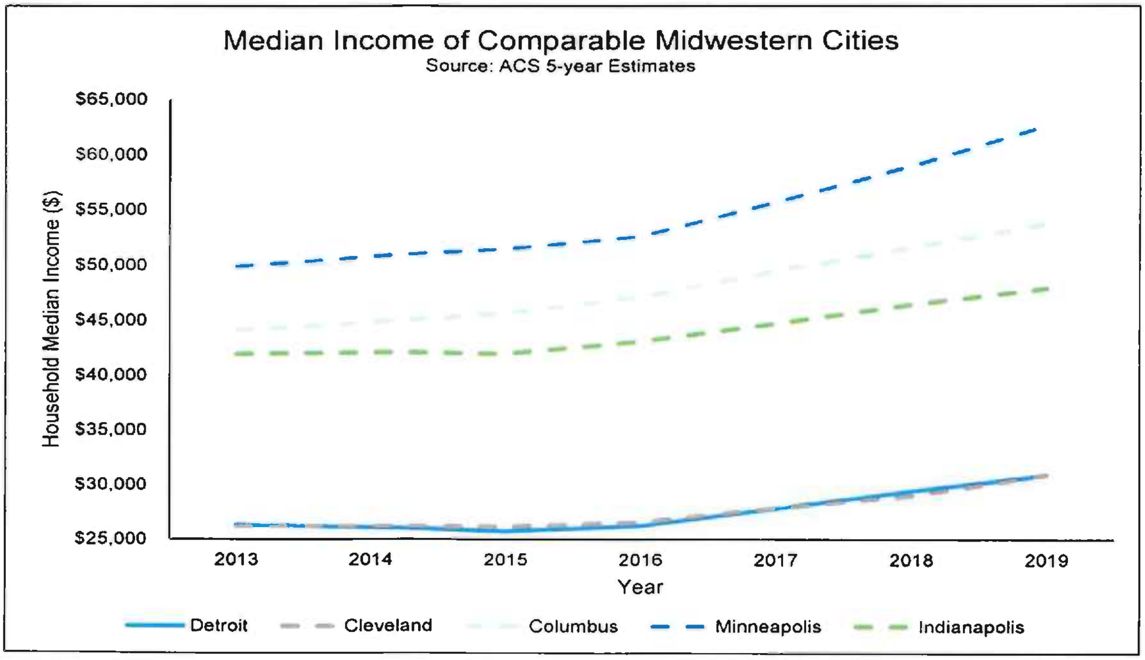
Figure 3



20. Figure 4 below shows that despite the growth in Detroit residents' median income since 2013, the median household income in Detroit remains lower than most of the Comparable Midwestern Cities.

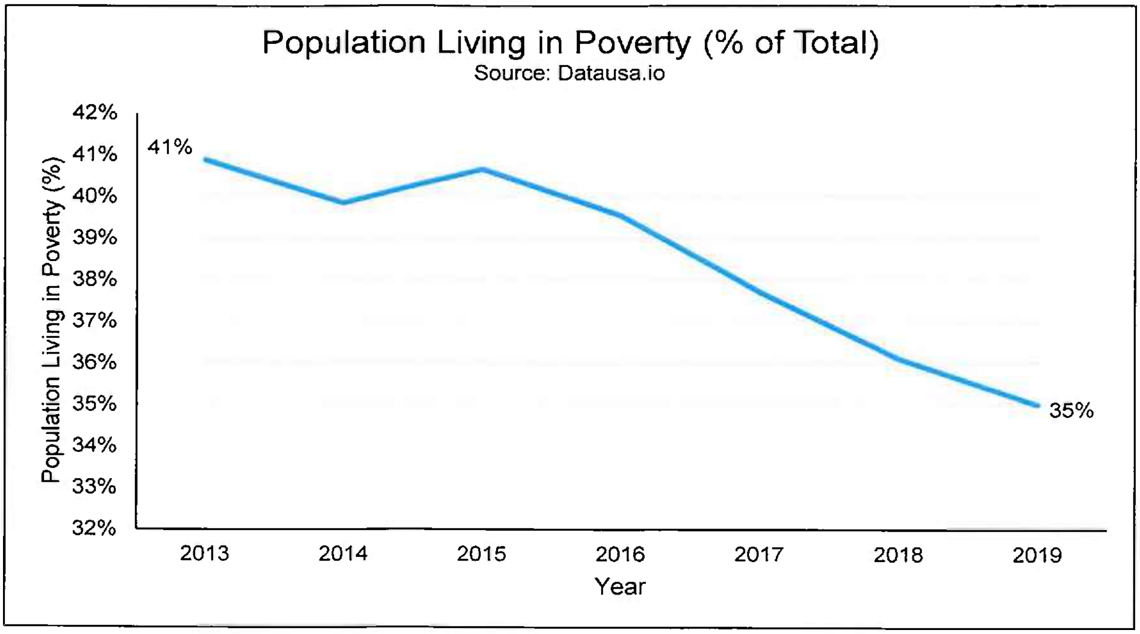
Figure 4



Poverty Rate

21. Figure 5 below shows that Detroit's poverty rate has declined from 41% in 2013 to 35% in 2019, representing a 15% improvement over the illustrated period.

Figure 5



22. Despite the reduction in poverty in Detroit, Figure 6 below shows that the poverty rate in Detroit remains higher than the Comparable Midwestern Cities.

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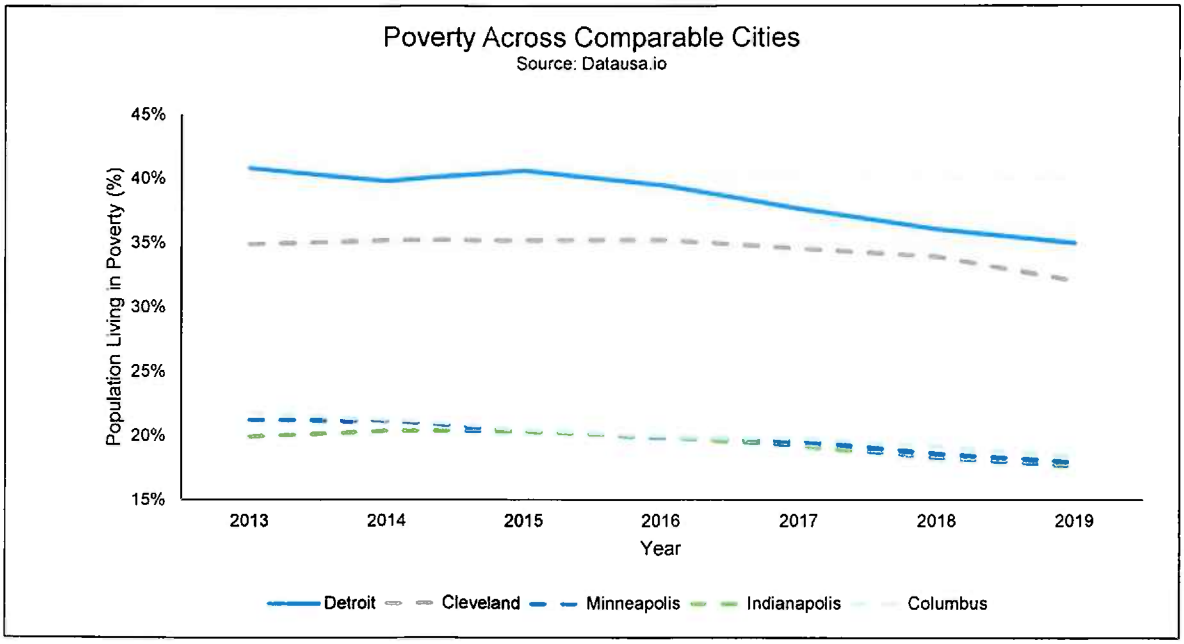
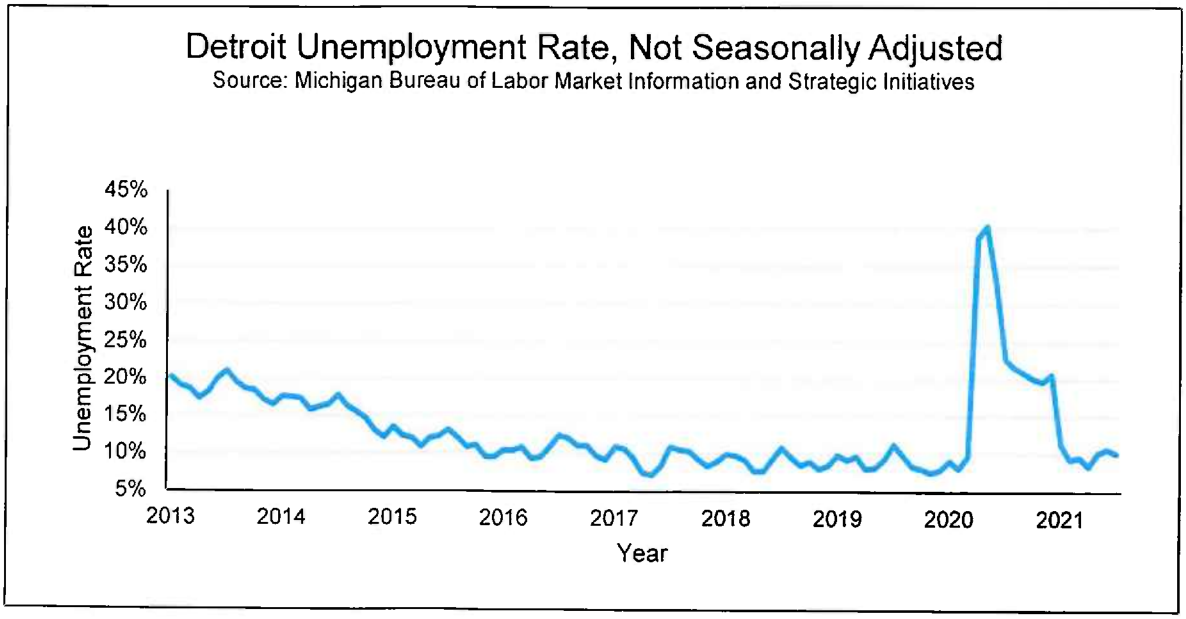
Figure 6



Unemployment

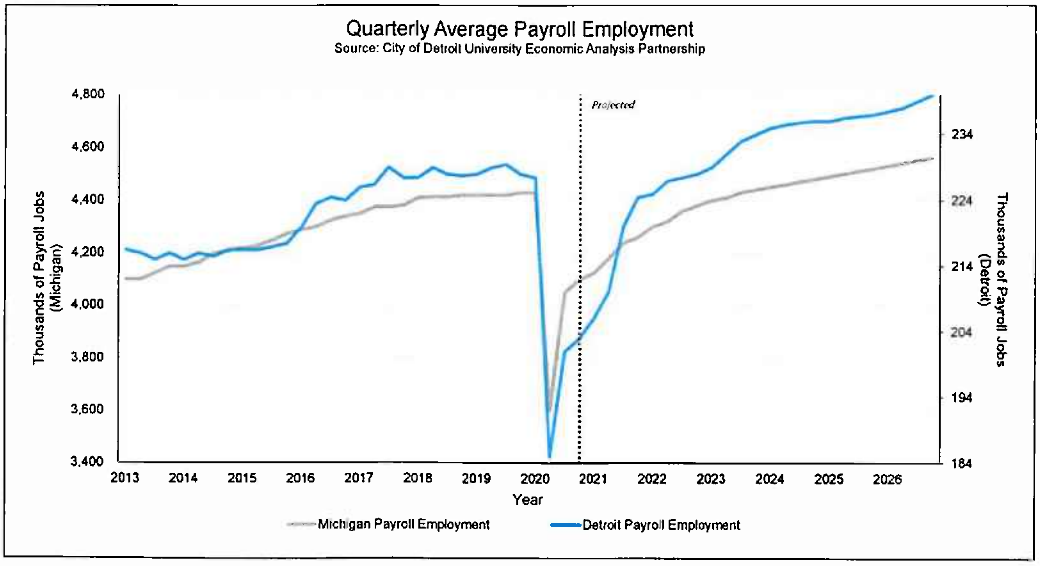
23. Figure 7 below shows a decline in the unemployment rate in Detroit of 50% since 2013 from over 20% to approximately 10% in 2021 and has nearly returned to pre-pandemic levels.

Figure 7



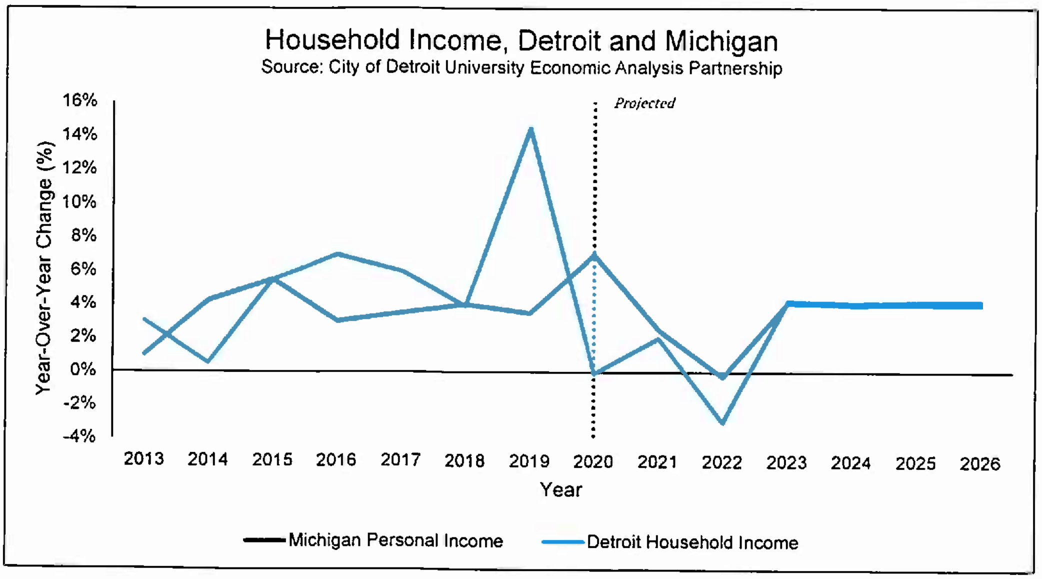
24. Figure 8 below shows that the expected growth in Detroit's payroll jobs is expected to increase faster than that of the State of Michigan. This is represented by the separation between the blue and gray lines in Figure 8. Figure 8 also projects payroll employment in Detroit to return to pre-pandemic levels by 2022.

Figure 8



25. Figure 9 below shows that Detroit household income is to return to levels commensurate with the rest of the State of Michigan by 2023.

Figure 9



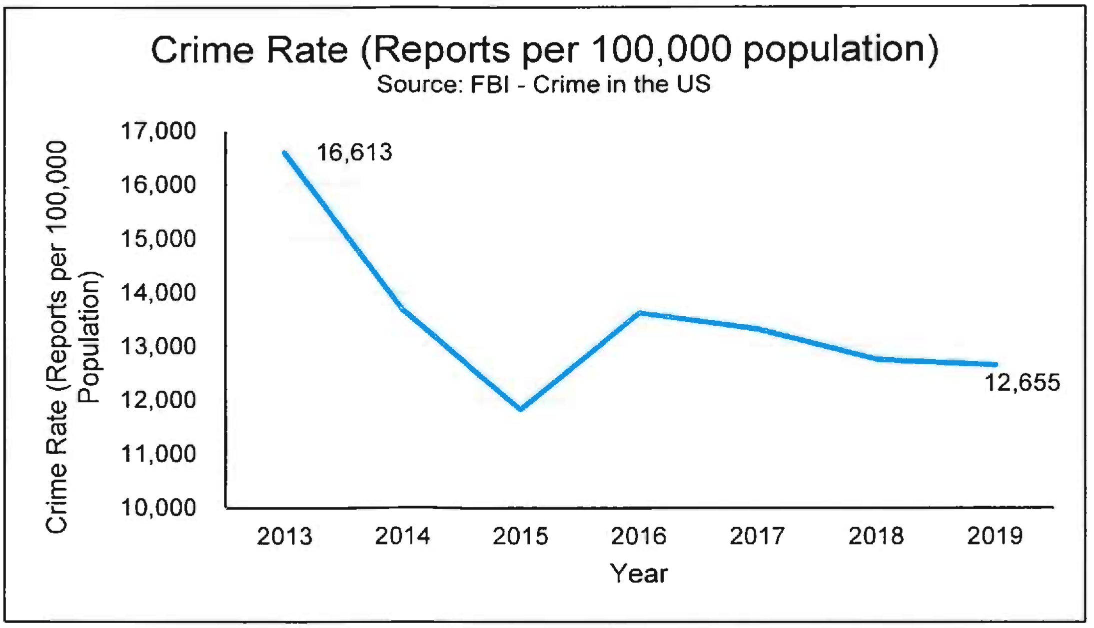
26. The growth in payroll jobs and increase in income can be directly attributed to major job creation investments in Detroit. The opening of Stellantis' Mack Avenue assembly complex this year and additional projects under construction or planned for the near future including the Gordie Howe International Bridge, Ford's conversion of Michigan Central Station, Bedrock's Hudson's site, General Motors' Factory Zero, and a new Amazon distribution center at the old Michigan State Fairgrounds.[1]

[1] City of Detroit Economic Outlook: 2020 – 2026. August 2021.

Crime Rate

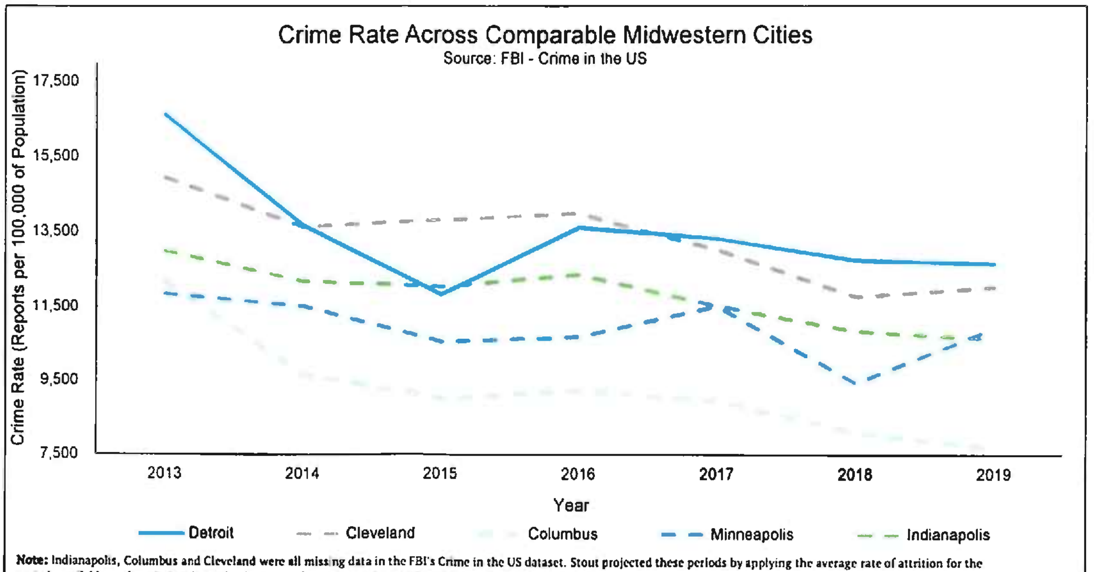
27. Figure 10 below shows a decline in the crime rate by almost 24% between 2013 at 16,613 reports per 100,000 of population to 2019 at 12,655 reports per 100,000 of population.

Figure 10



28. Figure 11 below shows that the crime rate in Detroit remains higher than in the other Comparable Midwestern Cities.

Figure 11



Note: Indianapolis, Columbus and Cleveland were all missing data in the FBI's Crime in the US dataset. Stout projected these periods by applying the average rate of attrition for the periods available to the missing data. The data point for Cleveland in 2015 is an average of the 2014 and 2016 figure.

Other

29. In addition to the aforementioned metrics, Detroit has made concerted efforts to reduce blight, increase street lighting, and decrease EMS response times.

30. Since 2014, Detroit has demolished over 21,000 unoccupiable homes, rehabbed approximately 8,200 homes, and sold over 15,000 side lots.[2] Detroit has added 65,000 street lights since 2013 when it was estimated that 40% of City street lights were not working.[3]

31. In 2014, the average EMS response time was 18 minutes,[4] which was reduced to eight minutes and 30 seconds by 2016[5] through the addition of 31 new emergency medical technicians and the acquisition of 15 new ambulances.[6]

Conclusion

32. Since its emergence from bankruptcy, Detroit has become a cleaner, safer, and more vibrant place to live, which is reflected in the aforementioned facts and figures. In addition, the Detroit Riverwalk was rated the best river walk in the U.S. in 2021[7] exemplifying the transformation experienced by Detroit.

33. Detroit has attracted major investment from large employers that has, and is expected to continue the, increased level of employment in Detroit.

34. Detroit, however, remains behind Comparable Midwestern Cities in terms of income earned by its residents and the crime rate experienced. Detroit's ability to grow future revenues will be largely predicated on its ability to increase employment, attract higher income residents, and increase City-wide property values.

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[2] "Detroit Demolition Department." The City of Detroit.
[3] "Construction Schedule." Public Lighting Authority. August 28, 2015.
[4] "In Detroit, EMS response times must improve." The Detroit News. September 25, 2014.
[5] Neavling, Steve "How Detroit's EMS response times went from miserable to above average." Motor City Muckraker. April 3, 2017.
[6] "New paramedics to help Detroit improve 911 response time." Detroit Free Press. January 23, 2015.
[7] "Best Riverwalk (2021)." USA TODAY – 10Best.

VI. Financial Analysis

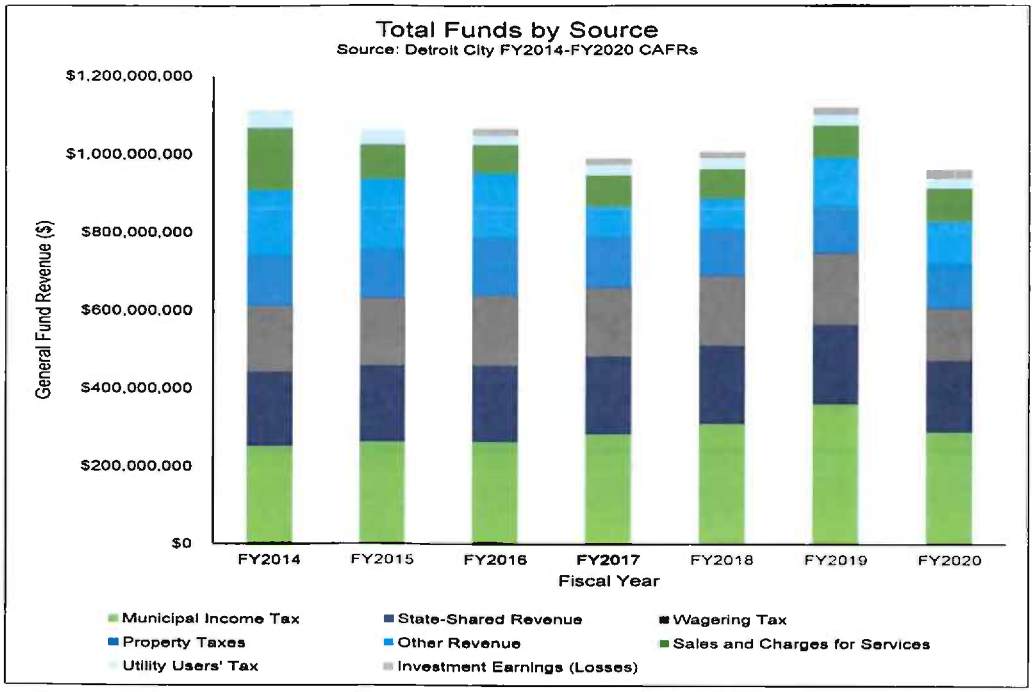
35. I focused my financial analysis on Detroit's General Fund where retirement contributions have been made. In addition, I consider fiscal year 2020 to be an outlier year because of the Covid-19 pandemic ("Pandemic") and did not incorporate that year into my review and analysis.[8] Review of Detroit's audited financial statements found that both General Fund Revenues and Expenditures have been generally consistent year-over-year with few exceptions. I also identified concentrations in certain categories in Detroit's General Fund Revenues and Expenditures.

36. In benchmarking Detroit's historical General Fund financial activity to other Comparable Midwestern Cities, I identified deviations in the amount of normalized General Fund Revenue collected and how those revenues are spent. A more detailed overview of my financial analysis is presented below.

Revenue Analysis

37. Figure 12 below shows that Detroit generates most of its General Fund Revenue from four main sources: Municipal Income Tax, State-Shared Revenue, Wagering Taxes, and Property Taxes. In 2019, these four items combined for more than 75% of General Fund Revenues.

Figure 12



[8] Detroit's Office of the Chief Financial Officer also cautioned me that 2020 was unrepresentative of other years and certain financial activity normally accounted for in the General Fund was accounted in other funds.

38. The components of each of these revenue sources are further explained below.

a. **Municipal Income Taxes** are collected from both residents (2.4% of income), non-residents (1.2% of income) and corporations (2% of income).[9]

b. **State-Shared Revenue** is based on the sharing by the State of Michigan of 15% of state sales tax collected.[10] Michigan shares this revenue with each of its municipalities based on census determined population.[11]

c. **Wagering Taxes** are collected at 11.9% of the adjusted gross receipts of the three casinos operating within Detroit.[12] In addition, these casinos pay a supplemental 1% tax if their gross receipts exceed $400 million and a municipal service fee also based upon adjusted gross receipts, assessed at the greater of 1.25% or $4 million.[13] Beginning in 2021, casinos will remit an effective tax of 4.62% related to retail sports betting to Detroit.[14]

d. **Property taxes** are levied each year on July 1 to non-exempt properties based on the taxable value of each property multiplied by the applicable millage rate.[15] The City currently levies 19.952 mills for general operating purposes.[16]

39. Figure 13 below shows that between 2014 and 2019, State Shared Revenue and Wagering Taxes have been consistent year-over-year and Property Taxes have fluctuated but are generally decreasing. Municipal Income Tax on the other hand experienced a 42% revenue increase over this time period.

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[9] City of Detroit, February 2021 Revenue Estimating Conference Report, p. 13.
[10] Ibid p. 14.
[11] Ibid.
[12] Ibid p. 15.
[13] Ibid.
[14] City of Detroit, Wagering and Tax Information, https://www.michigan.gov/mgcb/0,4620,7-351-79127_82898-244408--,00.html
[15] City of Detroit, February 2021 Revenue Estimating Conference Report, p. 16
[16] Ibid.

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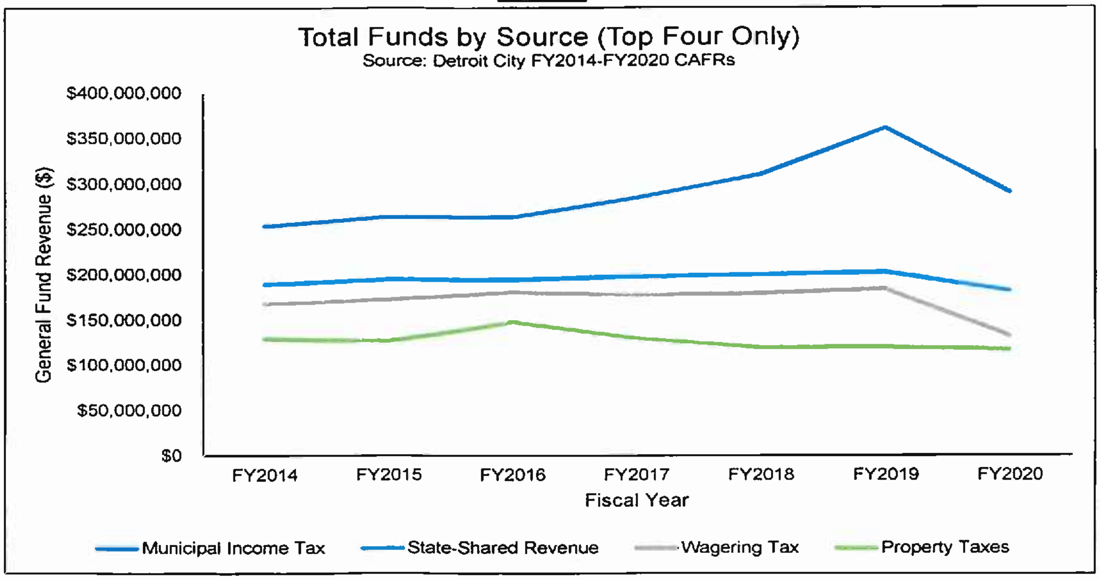
Figure 13



40. The revenue growth in Municipal Income Tax prior to the Pandemic is reflective of the positive demographic shifts Detroit has experienced post-bankruptcy. Detroit has attributed this growth to a four-prong approach: (1) the creation of jobs through business attraction and expansion; (2) leading land development efforts that unlock economic growth City-wide; (3) supporting small and large businesses to locate and grow in Detroit; and (4) activating industrial and commercial spaces that support neighborhood employment growth.[17] Detroit identified the growth of Rock Ventures, which includes Rocket Mortgage, the new headquarters of TCF Bank, the opening of regional offices by major technology companies such as Google, Microsoft, and LinkedIn, and other organizations such as the DIA, Wayne State University, Detroit Medical Center, and the Henry Ford Health System as contributing to the growth in employment.[18] Between 2018 and 2019 alone, $4.6 billion worth of private investment was recently completed or under construction leading to the announcement of 13,425 new jobs.[19]

41. In addition, the opening of Stellantis' Mack Avenue assembly complex this year and additional projects planned for the near future including the Gordie Howe International Bridge, Ford's conversion of Michigan Central Station, Bedrock's Hudson's site, General Motors' Factory Zero, and a new Amazon distribution center at the old Michigan State Fairgrounds are also expected to have positive effects on Detroit area employment, which will lead to increased income tax opportunities for Detroit.[20] However, the Pandemic and the shift to remote work has significantly impacted this revenue stream as many employees that work in Detroit do not live in Detroit. As a result, Detroit realized a decline in Municipal Income Tax in 2020 from both the

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[17] City of Detroit Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2019.
[18] Ibid.
[19] Ibid.
[20] City of Detroit Economic Outlook: 2020 – 2026. August 2021.

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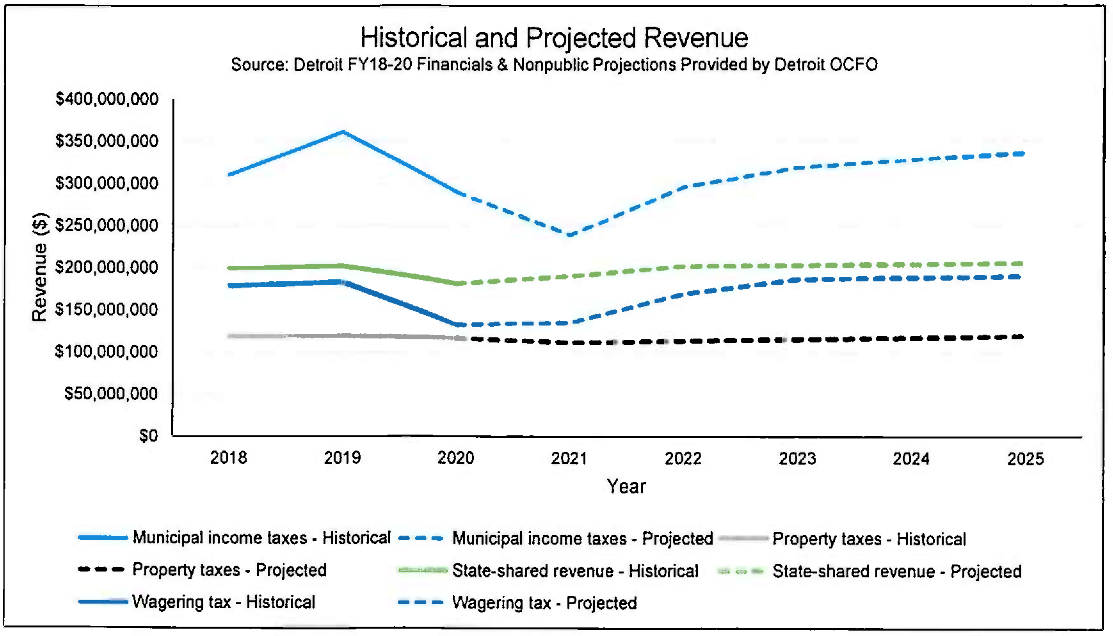
loss of employment caused by the Pandemic as well as from employees who had previously commuted into Detroit but have since been working remotely.

42. Figure 14 below shows Detroit's past experience and future expectations of its four major General Fund Revenue sources. Detroit's projections show all but its largest revenue source, Municipal Income Tax, returning to pre-Pandemic levels by 2022.

Figure 14

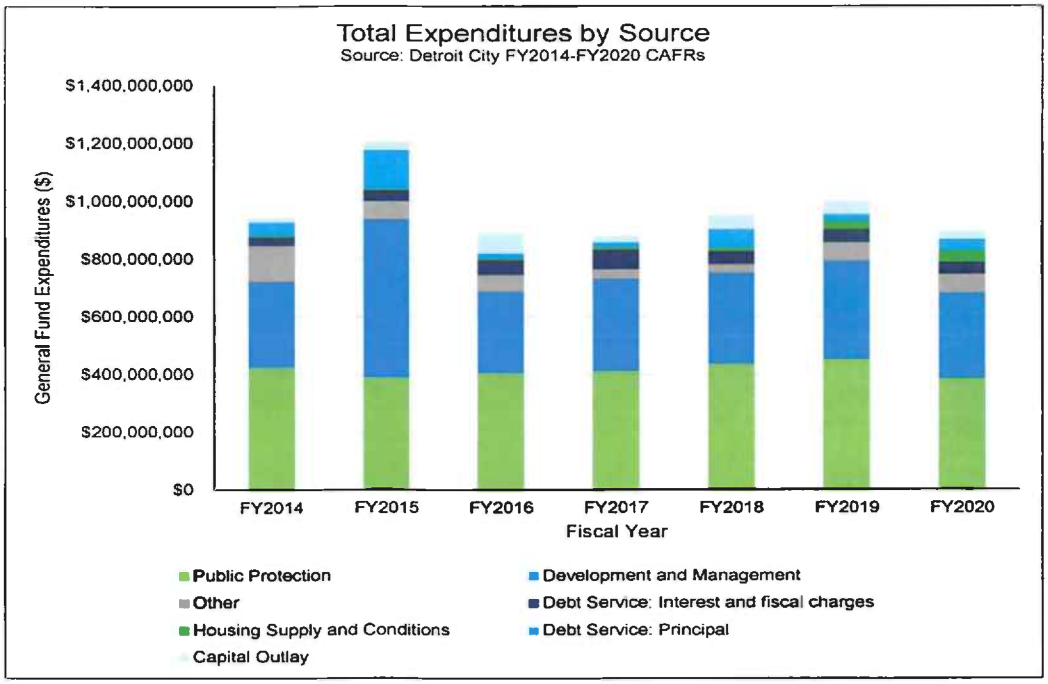


Expense Analysis

43. Figure 15 below shows that most of Detroit's expenses are concentrated in Public Protection and Development and Management whereby these two

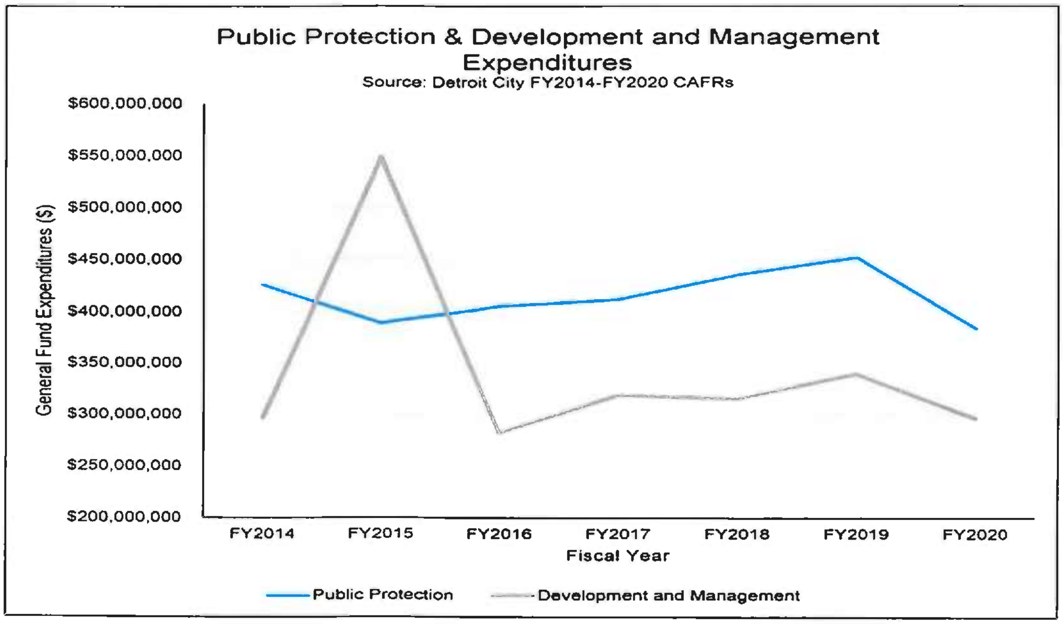
expense categories combined for approximately 80% of all General Fund Expenditures in 2019.

Figure 15



44. Figure 16 below shows that Public Protection spending increased 6% and Development and Management spending increased 14% between 2014 and 2019.

Figure 16



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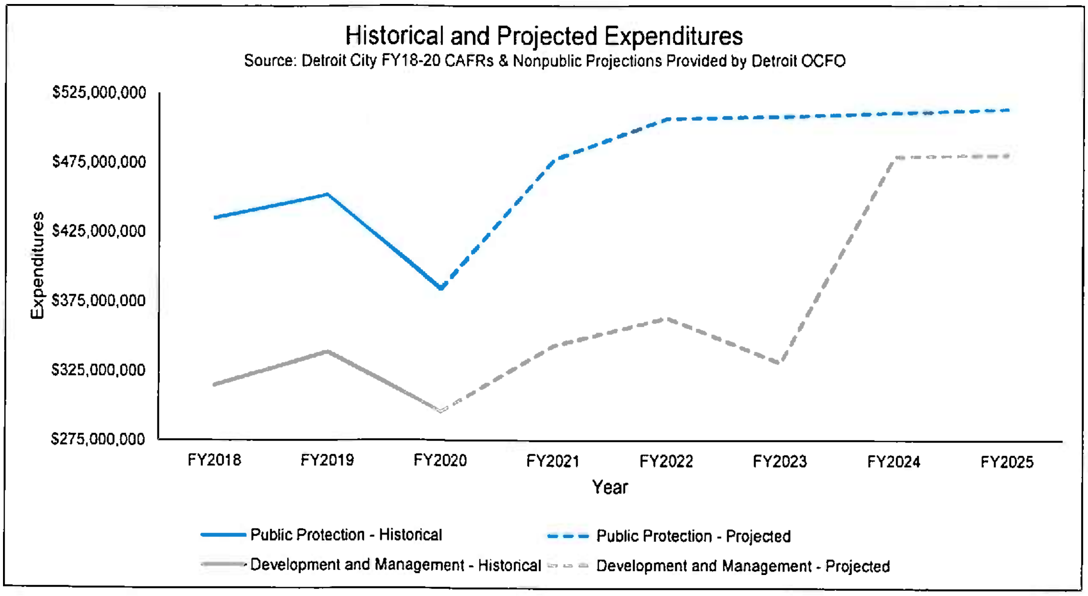
45. Figure 17 below shows Detroit's past experience and future expectations of its two major General Fund Expenditures. Public Protection costs are expected to increase to over $477 million from approximately $452 million in 2019 and grow modestly thereafter. Development and Management expenses are also expected to grow in future periods with the increase in 2024 and 2025 related to the planned retirement contributions.

Figure 17

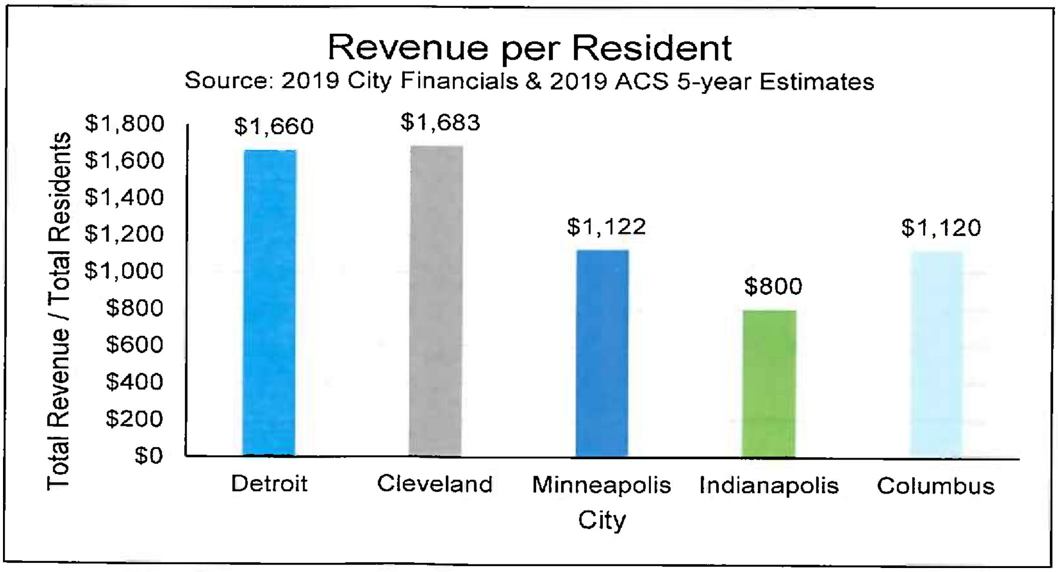


Financial Benchmarks

46. I benchmarked financial metrics of Detroit to those of the Comparable Midwestern Cities. To make valid comparisons, I normalized revenues by population and square miles and expenditures as a percentage of revenue. I also made adjustments to certain items within Detroit's Development and Management expense category for greater comparability to the Comparable Midwestern Cities, which will be further explained in the following paragraphs. Expenditures were grouped into five basic categories: Public Protection, Central Government, Health, Economic Development, and Other. See ***Exhibit C*** for a financial benchmark analysis between Detroit and the Comparable Midwestern Cities.

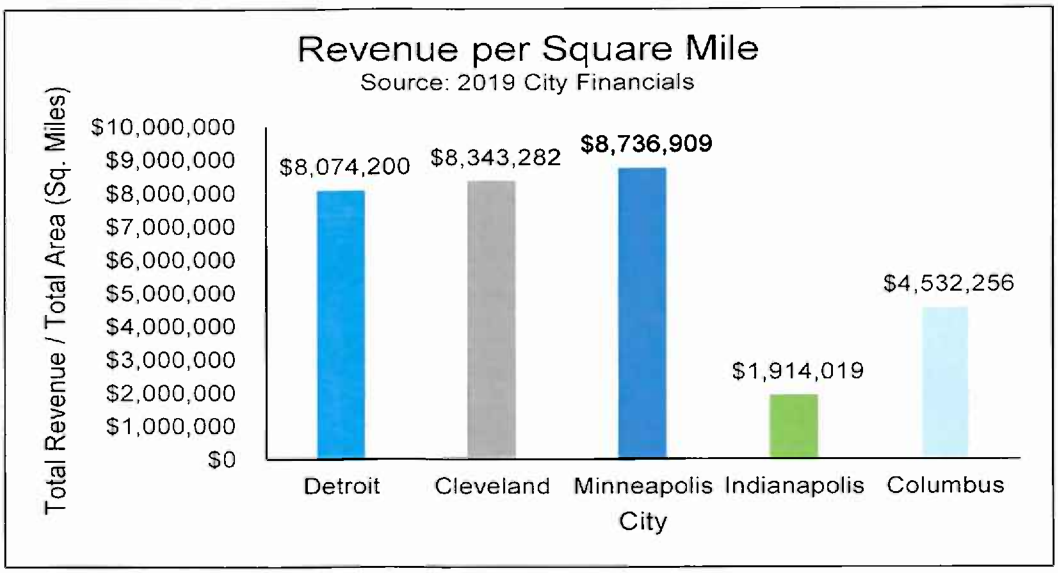
47. Figure 18 below shows that Detroit's General Fund Revenue per capita is more than that of Minneapolis, Indianapolis, and Columbus, and slightly below that of Cleveland.

Figure 18



48. Figure 19 below shows that Detroit's General Fund Revenue per square mile are commensurate with that of Cleveland, slightly below Minneapolis, and higher than that of Indianapolis, and Columbus.

Figure 19



49. These comparisons demonstrate that Detroit reports generally as much, or more than, General Fund Revenues of the Comparable Midwestern Cities on a relative basis. However, Detroit spends this collected revenue differently than the Comparable Midwestern Cities. I focused expenditure benchmarking on Public Protection and Development and Management spending in making these comparisons. I renamed what Detroit refers to as Development and Management to Central Government for purposes of comparison to similar expenditures of the Comparable Midwestern Cities. The expense categories reported by each city that combine into these categories are presented in ***Exhibit C***.

50. I also reviewed additional detailed financial information from Detroit regarding the sub-accounts and cost centers that comprised the line items presented on its audited financial statements. I reviewed this financial detail to identify any expense line items that might be unique to Detroit or where other adjustments might be relevant for an applicable comparison.

51. In 2019, I identified 149 separate accounts, across 124 cost centers for Public Protection and 194 sub-accounts across 182 cost centers for Central Government. See ***Exhibits D*** and ***E*** for sub-accounts and cost-centers related to Public Protection and ***Exhibits F*** and ***G*** for the sub-accounts and cost-centers related to Central Government. From this review, I identified certain expenditures classified as Central Government activities that might not be relevant to the Comparable Midwestern Cities and made adjustments to the analysis to account for these items.

52. Within the expenses recorded as Central Government in 2019, I identified several items related to demolition, Police and Fire, and pension related payments where further consideration is warranted.

Demolition / Blight Related Expenses

a. I identified $14 million under cost center 350014 – Detroit Land Bank Authority.

b. I identified $12,945,934 in Demolition and Excavation Expenses under cost centers 350310 Detroit Building Authority and 350011 – Blight Remediation.

c. I identified $103,352 in cost center 160020 – Residential Demolition.

Police and Fire Related Expenses

d. I identified $21,360,133 in litigation, workers compensation, and miscellaneous claims related to police and fire under cost center 350890 – Risk Management.

e. I identified $2,677,820 under cost center 310220 – Public Safety.

f. I identified $1,209,462 under cost center 230201 – ODFS – Public Safety – Police.

g. I identified $899,821 under cost center 230211 – ODFS – Public Safety – Fire.

h. I identified $467,406 under cost center 310210 – DoIT Public Safety and Cyber Security.

i. I identified $152,566 under cost center 370020 – Office of the Chief.

j. I identified $60,246 for contract services – Fire Department under cost center 470115 – 36th District Court Madison Center, 230070 – Treasury, 330010 – Office of the Mayor,450010 – DAH Administration, and 710010 – Elections Administration.

Pension Related Expense

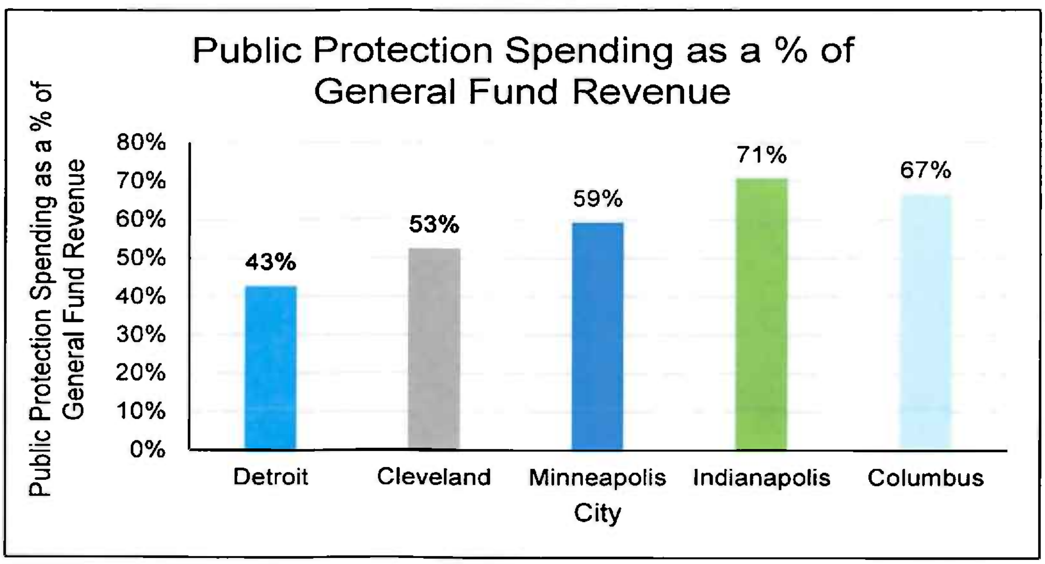
k. I identified $20,000,000 in Non-Actuarial Pension expenses under cost center 351026 – Retirement Systems.

l. I identified $18,582,863 in Non-Actuarial Pension expenses under cost center 351020 – Retirement Systems.

53. Of the aforementioned expense items classified as Central Government expenses, I removed the Demolition / Blight Related Expenses from the analysis as other cities are not likely to incur similar costs as Detroit. The Police and Fire Related Expenses have been reclassified from Central Government expenses to Public Protection expenses to ensure that all Police and Fire expenses are included within the Public Protection categorization. I also removed Pension Related Expenses of Detroit from the analysis.[21]

54. Figure 20 below shows that in 2019, Detroit spent considerably less of its revenue on Public Protection than the Comparable Midwestern Cities. Detroit's 2019 reported Public Protection spending was 40% of General Fund Revenue, compared to 53% for Cleveland, 59% for Minneapolis, 71% for Indianapolis, and 67% for Columbus.

Figure 20

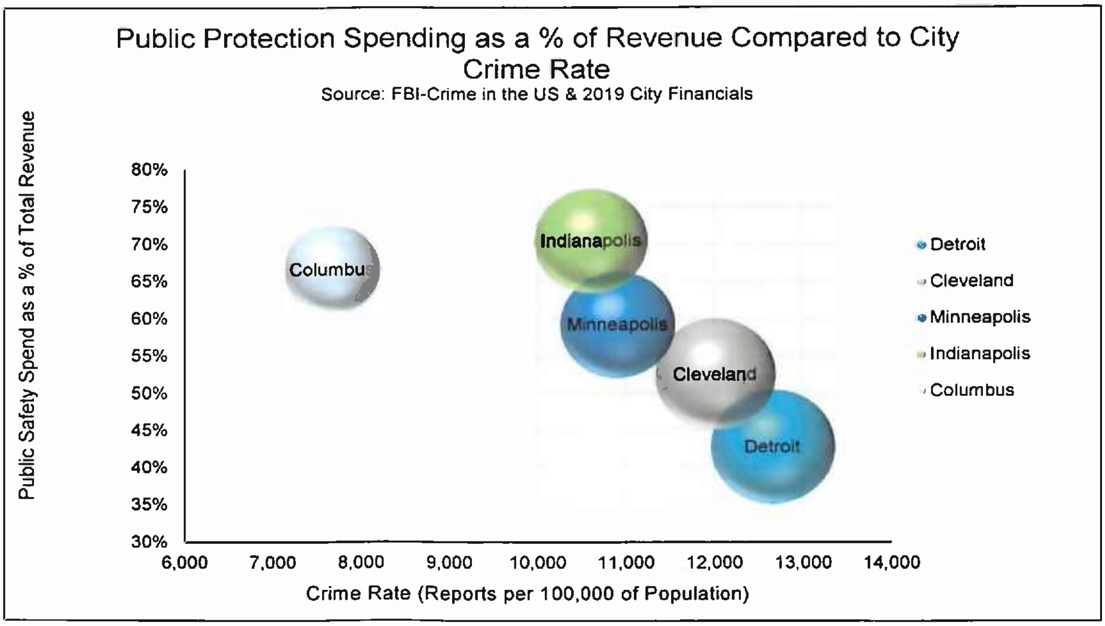


55. Figure 21 below shows that the amount of Public Protection spending is generally inversely related to each city's crime rate in 2019. The cities that

[21] I identified the amount of pension contributions from the Comparable Midwestern Cities but it is unclear from which funds these contributions are made and the financial statement line items. Because Detroit's pension expenditures have been removed from my analysis, Detroit's costs may be understated in comparison to Comparable Midwestern Cities, which has a conservative effect in this analysis.

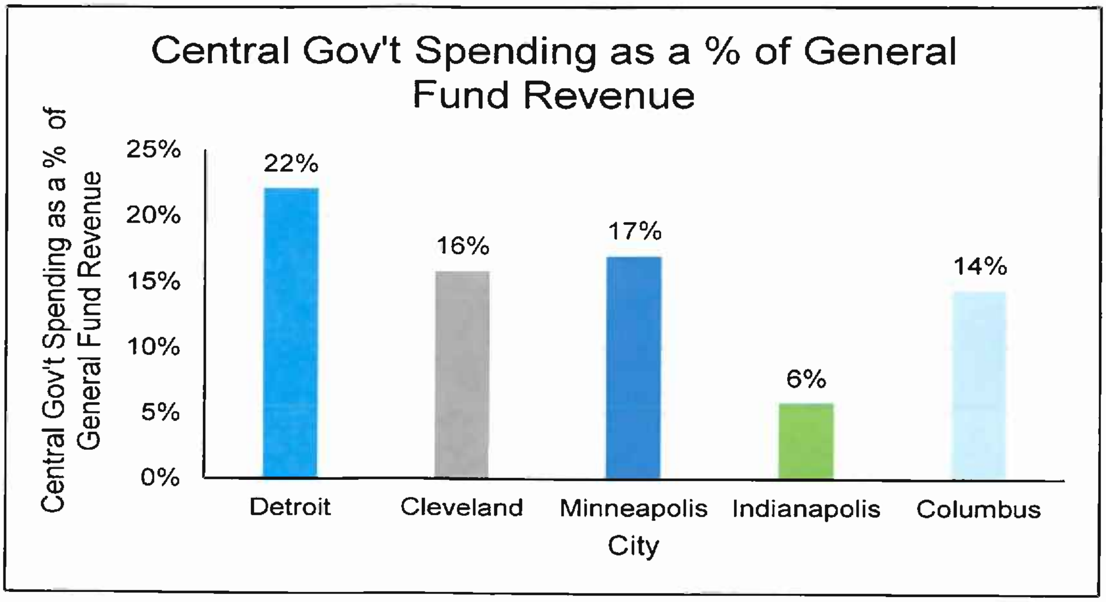
spent more on Public Protection generally have lower crime rates than the cities that spent less.

Figure 21



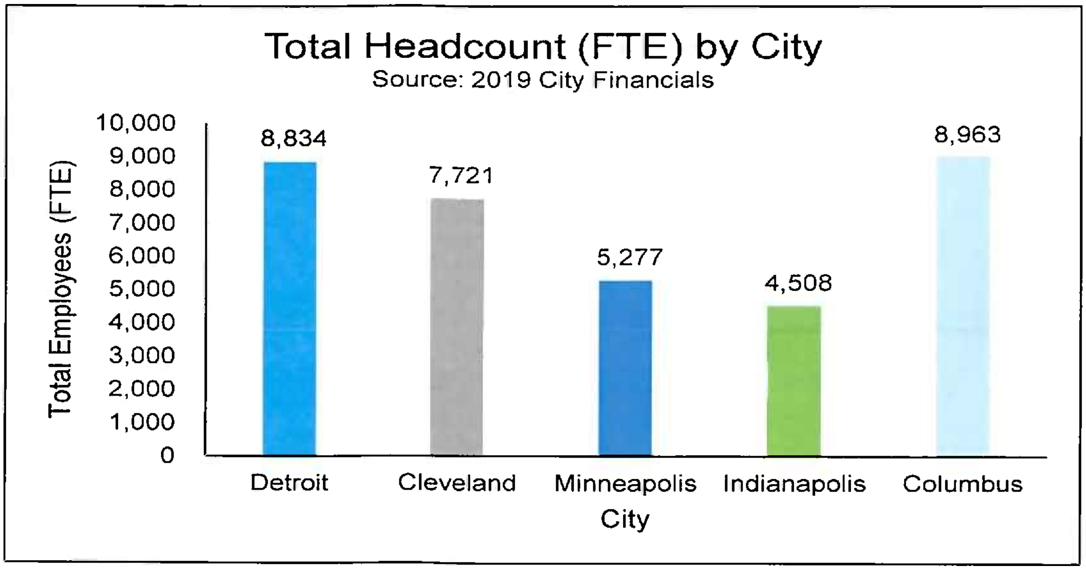
56. Figure 22 below shows that Detroit spent a larger proportion of its General Fund Revenues on Central Government, after adjustments, than all of the Comparable Midwestern Cities in 2019. Detroit's adjusted Central Government spending comprised 22% of General Fund Revenue in 2019, after the aforementioned expense adjustments, while Cleveland spent 16%, Minneapolis 17%, Indianapolis 6%, and Columbus 15%.

Figure 22



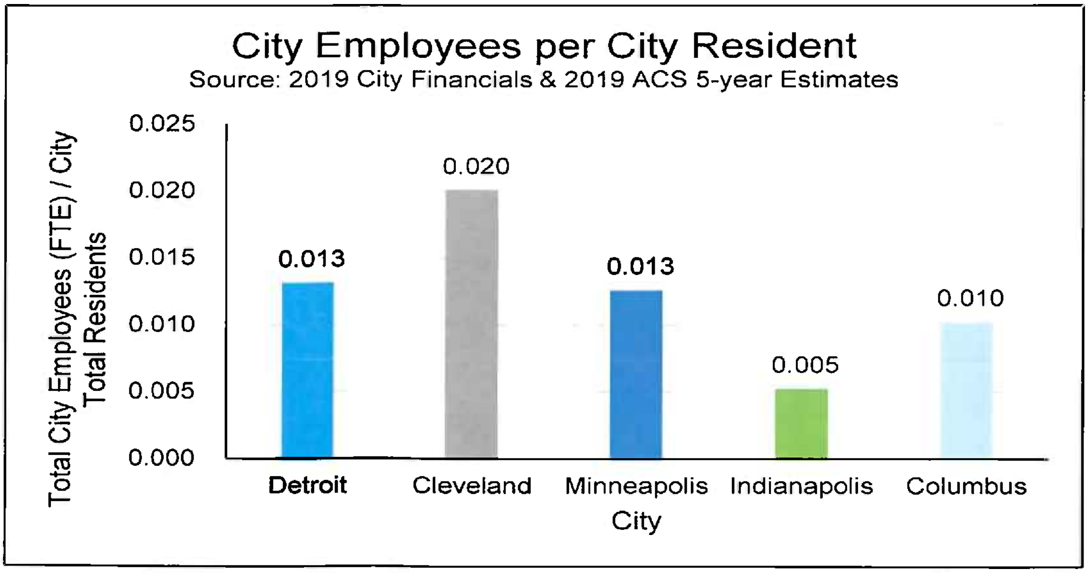
57. Figure 23 below shows that Detroit's total employee headcount in 2019, measured on a full-time equivalent ("FTE") basis, is higher than Cleveland, Minneapolis, and Indianapolis, and slightly lower than Columbus. Employee compensation and benefit costs represent the highest categories of spending in both Public Protection and Central Government for Detroit. Detroit's lower Public Protection spending than the Comparable Midwestern Cites and higher spending in Central Government suggests that the additional FTEs employed by Detroit are Central Government employees.

Figure 23



58. Figure 24 below compares the total headcount of Detroit and the Comparable Midwestern Cities normalized on a per capita basis. This normalization reflects a metric of how many employees are available per city resident. Based on this metric, Detroit has a lower city employment rate than Cleveland, but higher than Minneapolis, Indianapolis, and Columbus.

Figure 24


City Employees per City Resident
Source: 2019 City Financials & 2019 ACS 5-year Estimates
Total City Employees (FTE) / City Total Residents
0.025
0.020
0.015
0.010
0.005
0.000
0.013
0.020
0.013
0.005
0.010
Detroit
Cleveland
Minneapolis
Indianapolis
Columbus
City

The Investment Committee of the Detroit Police & Fire Retirement System v. City of Detroit

Expert Report of Raymond A. Roth, III, CPA, CFE

October 13, 2021

59. Detroit anticipates making annual contributions to the PFRS Legacy Plan of $130 million annually beginning in 2024 which represents approximately 13% of its general fund budget.[22] The scenarios specified for my evaluation by the Investment Committee involved different levels of funding needs based on two separate analyses.

a. Under a 20-Year Level Dollar with 20-Year Layers ("20 Year Scenario") and investment returns between 3.5% and 6.75% between 2024 and 2043, (with the lower returns assumed in the earlier years and a return to 6.75% in later years) PRFS actuaries project that contributions between $135 and $185 million per annum are needed to fund the PFRS Legacy Plan. The average annual contribution of the 20 Year Scenario is $169 million over the 20-year time period and is at $156 million after year 2028, five years after contributions will have begun. Under this scenario, PFRS's actuarially developed contributions are between $5 million and $55 million higher than Detroit's anticipated contribution with an average annual contribution $39 million higher than Detroit's anticipated contribution and $26 million higher after five years of funding.

b. PFRS actuaries prepared an additional scenario where a 25-Year Level Dollar with 25-Year Layers ("25 Year Scenario") is used to project required PFRS Legacy Plan contributions. This scenario projects PFRS Legacy Plan contributions between $122 million and $164 million per annum using the same investment return assumptions as the 20 Year Scenario. The average annual contribution of the 25 Year plan is $154 million over the 25 year time period and is at $141 million after year 2028, five years after contributions will have begun. Under the 25 Year Scenario, PFRS's actuarially developed contributions are between $8 million under Detroit's planned contribution and $34 million higher than Detroit's anticipated contribution with an average annual contribution $24 million higher than Detroit's anticipated contribution and $11 million higher after five years of funding.

c. See ***Exhibit H*** for PFRS actuarially computed amounts to its Legacy Plans.

60. Based on the aforementioned average differences of $39 million and $24 million, the difference in contribution amounts represent between approximately 2.4% and 3.9% of Detroit's annual average General Fund Revenues from 2014 to 2025. With these additional amounts, the PFRS Legacy Plan would account for between 15.4% to 16.9% of General Fund Revenue on average and 14.1% to 15.6% after five years of funding.[23]

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[22] OCFO Document Response to PFRS 7.22.2021.

[23] When adding an additional $71.2 million, net of DIA, Library and DWSD/GLWA contributions, for the General Retirement System Legacy Plan the combined Legacy Plan

61. Detroit's current General Fund Four-Year Financial Plan for 2022 through 2025 currently projects expenditures at the same level of revenue. Thus, for Detroit to increase its PFRS Legacy Plan contribution amounts, it will need to cut its anticipated levels of spending or realize revenue in addition to its current projections.

Expense Reductions

62. In order for Detroit to realize the savings needed to fund additional PFRS Legacy Plan contributions, it would most likely need to reduce its spending in either Public Protection or Central Government. All other expenditure line items in 2019 were between .24% and 3.92% of General Fund Revenue. Incorporating spending reductions from these categories, while not impossible, would necessitate essentially eliminating spending in some categories. Other amounts such as debt service, which represented a combined 5.97% of 2019 General Fund Revenues, have little flexibility for cost reduction.

63. Public Protection represents the largest category of Detroit General Fund Expenditures. However, Detroit's Public Protection spending is already lower than that of Comparable Midwestern Cities in proportion to revenue and its crime rate is higher. Further cuts in this expenditure might dissuade further investment in Detroit and compromise future revenues.

64. Central Government expenditures however represent an area where Detroit has historically spent proportionately more than Comparable Midwestern Cities, even after Demolition, Police and Fire, and Pension Related Expenses have been removed for comparative purposes.

65. In 2019, Detroit spent 22% of its General Fund Revenue on Central Government expenditures, after my adjustments, compared to 6% to 17% for the Comparable Midwestern Cities. However, it is not just one single comparison alone that suggests Detroit's Central Government spending is relatively higher than the Comparable Midwestern Cities. Instead, it is a confluence of factors, taken in totality, that triangulate this conclusion.

   a. First, Detroit is generally collecting as much, or more, revenue than the Comparable Midwestern Cities on a relative basis. Therefore, the difference in Central Government spending cannot be explained by a lack of revenue.

   b. Second, Detroit spends less on Public Protection than the Comparable Midwestern Cities. The lower amount of Public Protection spending allows for higher spending in other expenditure categories.

   c. Third, Detroit generally has a larger workforce than the Comparable Midwestern Cities. The biggest costs in both Public Protection and Central Government are employment related costs. With

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Contributions would represent between 22.8% of General Fund Revenues after five years of funding and 24.1% on average under the more costly 20 Year Scenario.

proportionately lower spending in Public Protection and higher spending in Central Government suggests the excess employees reside in Central Government roles.

66. Looking ahead to 2024 and 2025, Detroit is budgeting approximately 23% of its General Fund Revenues to Central Government after making adjustments for Demolition/Blight, Police and Fire, and Pension Related Expenses. If this amount is reduced to the 17% of revenue spent by the next highest of the Comparable Midwestern Cities on Central Government, then Detroit would realize approximately $65 million and $64 million in cost savings for 2024 and 2025, respectively. See ***Exhibit I*** for the cost savings available to Detroit if it realized Central Government efficiencies reported by the Comparable Midwestern Cities.

67. The higher Central Government spending by Detroit is highlighted in its own projections of Salaries, Wages, and Benefits amounts compared to its own historical costs. In 2019, Detroit spent 50% of its General Fund Revenues on Salaries, Wages, and Benefits after removal of payments related to the Retiree Protection Fund ("RPF"). In 2022 and 2023, these expenditures increase to 63% and 58% of General Fund Revenues, respectively, after removal of RPF payments. If Detroit were to maintain its Salary, Wages, and Benefits amounts at 50% of its General Fund Revenue in 2022 and 2023, it would realize savings of $128 million and $82 million, respectively, which could be used for future pension contributions. Similarly, in 2024 and 2025, Salaries, Wages, and Benefits are projected to be approximately 57% of General Fund Revenues, after removal of $220 million in pension contributions. If these amounts are reduced to the 50% of General Fund Revenues spent in 2019, then $80 million and $77 million, respectively, could be available for PFRS Legacy Plan contributions.[24] These changes in the proportion of employment related costs identify that Detroit is not managing its employment related costs with changes in revenues. See ***Exhibit J*** for the cost savings available to Detroit if it maintained the same proportion of Salaries, Wages, and Benefits expenditures in 2022 through 2025 that it had achieved in 2019.

Additional Sources of Revenue

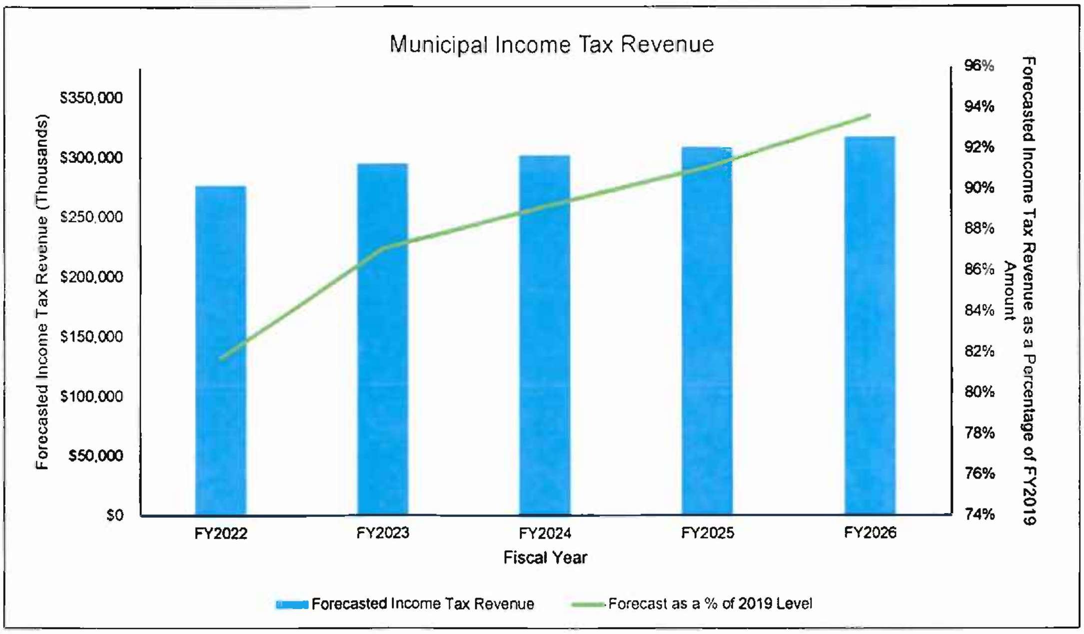
68. My analysis of Detroit's historical revenues found that Municipal Income Tax Revenue increased by 42% between 2014 and 2019. However, the Pandemic and the resulting trend of remote work has significantly impacted this revenue source as remote work outside of Detroit is currently not taxable by Detroit even if the employer is domiciled in Detroit.

69. As such, Municipal Income Tax is the only major revenue category that Detroit does not project to return to pre-Pandemic levels. Figure 25 below shows the projected levels of Municipal Income Tax Revenue Detroit is expecting for years 2021 through 2026, as developed in the September

[24] It is important to note that cost savings from Salaries, Wages, and Benefits are not additive to the aforementioned Central Government savings as Salaries, Wages, and Benefit amounts are partially included in Central Government expenditures.

2021 Revenue Estimating Conference, in the blue bars and the percent of 2019 revenue this represents in the green line.[25]

Figure 25



70. In preparing its projections for years 2022 and thereafter, Detroit assumed a loss in Municipal Income Tax Revenue because of remote work between 13.8% and 15.9%.[26] However, if the gross Municipal Income Tax Revenue is reviewed, prior to a remote work loss discount, its 2022 Municipal Income Tax Revenue remains below the Municipal Income Tax Revenue reported in 2019. With all of the aforementioned past and future investment in projects that have been made in Detroit, the assumption that Municipal Income Tax Revenue would decline absent any remote work considerations is conservative (i.e., a low estimation of future revenue). All of the aforementioned investments related to workforce and employment opportunities within Detroit support a higher estimation of revenue projected by Detroit prior to the consideration of any discounts for remote work. A joint study conducted by the University of Michigan and Michigan State and Wayne State Universities project the total number of payroll jobs in Detroit to return to pre-Pandemic levels by 2022.[27]

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[25] It is my understanding that the revenue forecast developed at the September 2021 Revenue Estimating Conference now represents Detroit's official economic forecast of anticipated City revenues. Stout did not update other sections based on this revenue as expenditures around these anticipated revenues has not yet been determined.
[26] Office of the Chief Financial Officer. Revenue Estimating Conference. 2021 September 15. P8.
[27] City of Detroit Economic Outlook: 2020 – 2026. August 2021.

71. If Detroit were to use the same level of Municipal Income Tax Revenue reported in 2019, discounted for remote work, as the projection for Municipal Income Tax Revenue in 2022, it could expect an additional $8 million in revenue. If the same growth rates are assumed that are used for Detroit's current projection, combined with the remote work discount, an additional $8.5 million, $8.8 million, $9 million and $9 million would be expected in years 2023 through 2026, respectively. If the remote work loss is removed from the projections and the 2019 Municipal Income Tax Revenue is substituted for 2022 and grown at the rates within the current projection, then Detroit could expect an additional $61.6 million in Municipal Income Tax Revenue in 2022 increasing to $62.8 million by 2026. See ***Exhibit K*** for a comparison of Detroit's Municipal Income Tax Revenue projections.

72. The uncertainty in Municipal Income Tax Revenue caused by the Pandemic presents a material challenge in determining the amount of revenue lost due to remote work. With rapid changes in both employee and employer preferences it is impossible to predict the level of remote work that will occur in 2024 and beyond. However, available data and information related to employment in Detroit, regardless of whether it is performed remotely or physically within a Detroit workplace, suggests a return to 2019 levels by 2022.[28]

73. On January 22, 2021, the State of Michigan legalized online sports betting.[29] However, Detroit did not forecast this revenue in its Four-Year Financial Plan for fiscal years 2022-2025.[30] In the September 2021 Revenue Estimating Conference, Detroit now estimates iGaming/Sports Betting in excess of $75 million annually in fiscal years 2024 – 2026.[31]

74. My review and analysis of Detroit's other major revenue sources: State-Shared Revenue and Property Taxes found that Detroit has not had significant increases to these revenues despite the growth and investments being made in Detroit. I therefore find Detroit's projections of these amounts as generally returning to 2019 levels to be reasonable.

<u>Economic Downturns</u>

75. The Legacy Plan funding scenarios developed by the PFRS actuaries intentionally use lower investment returns in their analysis to identify contributions necessary if investment returns are not met. Future economic downturns can be one reason why investment returns are not met. As such, I considered how such downturns might affect Detroit's ability to fund contributions to the Legacy Plan.

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[28] City of Detroit Economic Outlook: 2020 – 2026. August 2021.
[29] Haddad, Ken "Online sports betting to begin in Michigan on Jan. 22." Click on Detroit. January 19, 2021.
[30] City of Detroit Four-Year Financial Plan: FY 2022 – 2025, A16.
[31] Office of the Chief Financial Officer. Revenue Estimating Conference. 2021 September 15. P10.

76. In the event of an economic downturn, then Detroit will have more control in managing its expenses than protecting certain revenue streams. If Detroit's forecasted revenue declined by 10%, then it would have $59.5 million and $58.7 million in fiscal years 2024 and 2024, respectively, available for Legacy Plan contributions from reducing its Central Government spending to 17% of General Fund Revenue. Similarly, cost savings from managing its employee compensation related expenses at 50% of General Fund Revenue would make available $80 million and $77 million in fiscal years 2024 and 2025, respectively, for Legacy Plan contributions.[32]

77. However, in the event of a future economic downturn that results in a loss of employment, a decline in employee compensation or other events related to Detroit's ability tax the earnings of its residents and/or workers that commute into the city then the additional revenue identified from Municipal Income tax might not be available.

78. The additional revenue identified by Detroit from iGaming / Sports Betting may also be at risk during an economic downturn, however, studies have mixed opinions. For example, in the last recession beginning in 2007, the Detroit casinos did not experience revenue declines.[33] However, other studies have found casino revenues to be negatively affected during economic downturns.[34]

[32] Cost savings from Central Government efficiencies and employee compensation are not additive.
[33] "Bottom Line: Are Casinos Recession Proof?" NPR. 2008 May 5.
[34] Duggan, Wayne. "Casinos Among the Hardest-Hit Businesses During Economic Downturns." Yahoo. 2019 January 12.

VIII. Conclusion

79. Detroit has experienced growth and prosperity since its bankruptcy, which is apparent in many quantifiable measures. The median income of its residents has increased and the number of residents living in poverty, unemployment, and crime has decreased. Problems such as blight, street lighting, and EMS response times have all significantly improved. Significant investments by major employers such as Stellantis, Ford, GM, Google, Microsoft, LinkedIn and Waymo have or are committed to be made in Detroit.

80. When benchmarking the historical levels of General Fund Revenue reported by Detroit to the Comparable Midwestern Cities, Detroit generally collects as much or more revenue on a normalized basis. Therefore, any budgetary constraints realized by Detroit is not because of a lack of revenue, but rather how it uses that revenue for the benefit of its residents. When benchmarking Detroit's Central Government expenditures to those of Comparable Midwestern Cities, I identified significant opportunity for continued improvements for efficiency in service delivery.

81. When comparing Detroit only to itself for past employee compensation amounts and future projections of those same amounts, Detroit's projections do not manage this expense in relation to its anticipated revenues. This results in fluctuations in the proportion of these costs between its past and anticipated revenues.

82. It is my opinion that Detroit is taking a conservative approach to forecasting Municipal Income Tax Revenue, notwithstanding its discount for remote work loss. Certain data suggests that Detroit could expect more revenue from this source than it is currently projecting that could be used for additional contributions to the Plan. Detroit also now anticipates significant revenue from iGaming and Sports Betting that it was not projecting earlier this year.

83. The cost savings and additional revenues identified in this report are summarized in ***Exhibit L***, as well as presented below. When preparing this combined summary, care was taken to not double count the effects of the different scenarios previously discussed. First, it is important to separate the cost savings from Central Government efficiencies from more effectively managing employee compensation expenses which forms the basis for two separate scenarios. When projecting cost savings available, I also considered the effects of the increased revenue on these calculations. In the first scenario, it is reasonable that Detroit could expect an additional $148 million by 2025 above its current projections, which already includes $130 million in PFRS Legacy Plan contributions, to fund extra Legacy Plan Contributions. In the second scenario, Detroit could expect an additional $119 million by 2025 above its current projections, which already includes $130 million in PFRS Legacy Plan contributions, to fund extra Legacy Plan Contributions.

		FY2022	FY2023	FY2024	FY2025
	Scenario 1:				
1	Detroit Cost Savings From Central Government Efficiencies	$ 69,260,228	$ 61,527,717	$ 64,974,392	$ 63,929,739
2	Additional Detroit Municipal Income Tax Above Projected Amount	8,026,446	8,549,152	8,755,331	8,941,182
3	Additional Revenue from Retail Sports Betting	66,400,000	73,800,000	75,400,000	75,400,000
4	**Total Scenario 1 Savings**	**$ 143,686,674**	**$ 143,876,869**	**$ 149,129,723**	**$ 148,270,921**
	Scenario 2:				
5	Detroit Cost Savings From Salaries, Wages, and Benefits with Additional Revenue Projections	91,453,667	41,328,062	38,110,439	34,961,676
6	Additional Detroit Municipal Income Tax Above Projected Amount	8,026,446	8,549,152	8,755,331	8,941,182
7	Additional Revenue from Retail Sports Betting	66,400,000	73,800,000	75,400,000	75,400,000
8	**Total Scenario 2 Savings**	**$ 165,880,112**	**$ 123,677,214**	**$ 122,265,769**	**$ 119,302,858**

84. Detroit's current projections of $130 million for PFRS Legacy Plan contributions are between $11 million and $26 million lower than the funding scenarios projected by PFRS actuaries after five years of funding by 2028. On average, Detroit's PFRS Legacy Plan projected contributions are between $24 million and $39 million lower than the PFRS actuary projections. The combined cost savings and additional revenue of $119 - $148 million, as presented in this report and the table above, exceed the projected shortfalls in PFRS Legacy Plan contributions. Thus, it is my opinion that Detroit will have the ability to pay the additional amounts of PFRS Legacy Plan contributions under the scenarios projected by its actuaries.

STOUT
Dispute Consulting

The Investment Committee of the Detroit Police & Fire Retirement System v. City of Detroit

Expert Report of Raymond A. Roth, III, CPA, CFE

October 13, 2021

IX. Assumptions and Limiting Conditions

85. My conclusions are based on the information received to date. I reserve the right to change those conclusions should additional information be provided.

86. No one that worked on this engagement has any known financial interest in the Defendant or the Plaintiff or the outcome of the analysis. Further, Stout Risius Ross, LLC's compensation is neither based nor contingent on the results of the analysis.

87. My conclusions are applicable for the stated date and purpose only and may not be appropriate for any other date or purpose. This report is solely for use in the cited dispute, for the purpose stated herein, and is not to be referred to or distributed, in whole or in part, without prior written consent.

Raymond A. Roth, III, CPA, CFE
Director
Stout Risius Ross, LLC

EXHIBIT 11

Excerpts of June 11, 2021
Tax Tribunal Order

STATE OF MICHIGAN
DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS
LANSING

GRETCHEN WHITMER
GOVERNOR

ORLENE HAWKS
DIRECTOR

MGM Grand Detroit LLC,
Petitioner,

v

City of Detroit,
Respondent, and
Michigan Department of Treasury,
Intervenor-Respondent.

MICHIGAN TAX TRIBUNAL

MOAHR Docket No. 15-002842

Presiding Judge
Preeti P. Gadola

ORDER DENYING PETITIONER'S MOTION FOR PARTIAL SUMMARY DISPOSITION

ORDER GRANTING RESPONDENT'S MOTION FOR SUMMARY DISPOSITION WITH RESPECT TO PETITIONER'S UNIFORMITY CLAIMS AS SET FORTH IN THE STOUT "UNIFORMITY REPORT"

ORDER PARTIALLY GRANTING INTERVENOR-RESPONDENT'S MOTION FOR SUMMARY DISPOSITION AS TO UNIFORMITY AND RELATED CONSTITUTIONAL CLAIMS

ORDER OF PARTIAL DISMISSAL

INTRODUCTION

This case commenced on May 28, 2015, for tax year 2015 and now includes tax years 2016, 2017, and 2018.[1] A deadline for dispositive motions was set and revised at several points but ultimately was established for July 20, 2020. A deadline for responses to dispositive motions was also modified and ultimately was set for September 18, 2020. Oral arguments on the motions and responses occurred on November 17, 2020.

EXHIBIT
Ex. 11

[1] Subsequent tax years were severed by order of the Tribunal on August 21, 2019.

with the question to be determined, "[w]hat is the average level of assessment of all real and personal property within the City of Livonia?" [364] The Court found,

> The Michigan Constitution of 1908, controlling here, provided:
>
> "The legislature shall provide by law a uniform rule of taxation, except on property paying specific taxes, and taxes shall be levied on such property as shall be prescribed by law." Article X, §3.
>
> *"All assessments hereafter authorized shall be on property at its cash value."* Article X, § 7.
>
> The constitutional mandates were implemented by the General Property Tax Act (PA 1893, No 206, as amended [C.L. 1948 and C.L.S 1961, § 211.1 et seq., as amended by PA 1963, No 66, (Stat. Ann. 1960 Rev. and Stat. Ann. 1963 Cum. Supp. § 7.1 et seq.)]). *The Act* provides *for the uniform assessment and taxation of all taxable property, both real and personal other than intangibles, at the standard of true cash value* (C.L. 1948, § 211.1, C.L.S. 1961, § 211.24, as amended by PA 1963, No 66, § 211.27 [Stat. Ann. 1960 *378 Rev. § 7.1, Stat. Ann. 1963 Cum. Supp. § 7.24, Stat. Ann. 1960 Rev. § 7.27]).[365]

The matter before us has little to do with the average level of assessment determined by the State Tax Commission with regard to all real and personal property, included in one category, in the city of Detroit.[366] Here, Petitioner is requesting the Tribunal consider the uniformity in assessment of three Casino Facilities. However, the Tribunal, again, has no jurisdiction over the assessments of Greektown and MotorCity and it cannot draw a "uniform assessment" from Mr. Kernen's Report which relies on inaccurate information and frankly, makes little sense. The methodology in the Report is not found in any appraisal textbook, treatise, scholarly article, case law or statute and appears to have been presented to Kernen by counsel for its client's own self-interest,

[364] *Appeal of General Motors*, *supra* at 381.
[365] *Appeal of General Motors*, *supra* at 377-378 (emphasis supplied and added).
[366] *Appeal of General Motors* predates the current statutory formula of true cash value equalized by class. See MCL 211.34 and 211.34c

not from any independent thought. When an "appraisal" is performed for the Tax Tribunal by a qualified appraiser, the Tribunal confirms its purpose is to independently determine the true cash value of the property, not based on any client coercion, instruction, or self-interest.[367] Further, Mr. Kernen attempts to manipulate assessments on the tax roll, without any assessor qualifications. Finally, as noted above, the Court in General Motors found, "[t]he act provides for the uniform assessment and taxation of all taxable property, both real and personal other than intangibles*, at the standard of true cash value*."[368]

Petitioner also cites *Edward Rose Building Co. v Independence Township,*[369] to support its contention that uniformity in the mode and method of assessment is still required, twenty-five years after the holding in *Titus.* In *Rose Building Co*, the property consisted of 100 residential lots. Petitioner only sold single lots developed with houses, it did not sell multiple lots to other developers or builders. Lot sales slumped and the valuation experts valued the lots as if each were of equal value. However, Petitioner's appraiser concluded that no market for individual lots existed so it based its valuation on multi-lot sales to builders. The Tribunal rejected Petitioner's multi-lot sales comparables and accepted Respondent's value per lot; however, the Tribunal discounted the value per lot, "'to allow an 18% mark up for the influence of development costs during the holding period of liquidation.' Thus the Tribunal essentially took the 'wholesale'

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[367] Uniform Standards of Professional Appraisal Practice, Ethics Rules state, "An appraiser:" "must not perform an assignment with bias;" "must not advocate the cause or interest of any party or issue." Appraisal Foundation, *Uniform Standards of Professional Appraisal Practice* (Appraisal Foundation, 2020- 2021 ed, 2020) p. 7. Mr. Kernen, to his credit, he does fully disclose that he created the Uniformity Report, per specific client instruction.
[368] *Appeal of General Motors*, *supra* at 377. (emphasis supplied and added).
[369] *Rose Bldg. Co., supra at* 639–40.

EXHIBIT 12

June 6, 2022

Mr. Charles Raimi
Deputy Corporation Counsel
City of Detroit Law Department
2 Woodward Avenue
Detroit, Michigan 48226

Re: Police and Fire Retirement System of the City of Detroit – Recommended Amortization Period

Dear Mr. Raimi:

The purpose of this letter is to provide Cheiron's independent assessment of 20 versus 30 year funding periods for amortizing the unfunded actuarial liability of the Police and Fire Retirement System of the City of Detroit (PFRS).

Summary

The most recent actuarial valuation report for PFRS was prepared as of June 30, 2021 by Gabriel, Roeder, Smith & Company (GRS). As recommended by GRS, the PFRS Board and Investment Committee adopted a funding policy that amortizes the initial unfunded actuarial liability (UAL) over 20 years, determined as of June 30, 2022 with payments commencing in fiscal year 2024.

Based on our analysis which is detailed in this report, Cheiron's primary conclusions are as follows;

1. The differences between a 20-year and 30-year amortization as of June 30, 2022 are negligible in terms of ensuring sufficient assets will be available to pay all future benefits under the Plan.

2. The increase in annual City contributions to the Plan under a 20-year amortization period are significantly greater than those determined under a 30-year amortization period.

3. Because a 20-year amortization results in increased assets when compared to a 30-year amortization, this level of assets increases the exposure the City has to investment risk, without any offsetting benefit to taking such risk due to conclusion number 1.

Detailed Analysis

An amortization policy is a part of the overall pension plan funding policy. There are three primary principles to be followed in selection of a contribution policy:

1. The primary principle for funding is that the contribution policy should result in the plan accumulating assets adequate to make all future benefit payments when due.

2. The contribution policy should result in contributions which are affordable for the plan sponsor, i.e., the City of Detroit.

3. Under any contribution policy that results in sufficient assets to pay future benefits when due, the level of investment risk should be minimized.

The amortization policy recommended by GRS would meet the first principle above.

Whether it meets the second principle is an important consideration for all stakeholders. The Bankruptcy Plan of Adjustment provided for a 10-year "pension holiday" for City contributions to the PFRS plan. It also provided that the resulting UAL would be amortized over the subsequent 30 years. Cheiron understands that those provisions of the POA were integral to the Court's feasibility analysis of the POA, which recognized the City's need to minimize pension contributions while the City used general fund dollars to address critical needs in other areas. To the extent the POA provides guidance on what is "affordable," the contribution policy should be consistent with the POA.

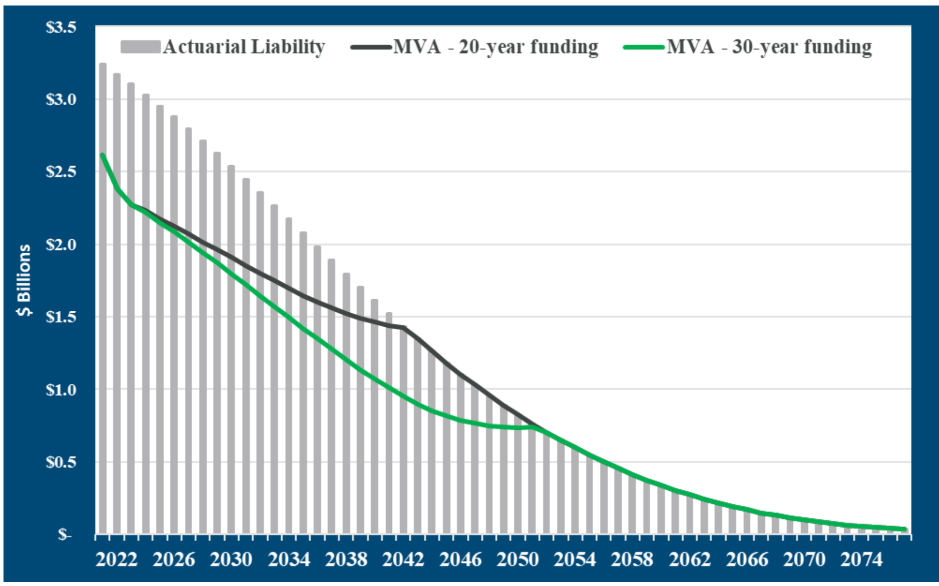
To the extent contributions are front-loaded, the investment risk is increased for the system. The 20-year amortization policy requires increased contributions in the early years. In the event of a market downturn, because assets are higher, the losses will be more significant and the requirement for contributions would increase.

It is our opinion that a longer initial amortization period of 30 years would still meet the first principle of accumulating adequate assets, and also result in contributions which are more affordable for the City. Finally, given that both a 20-year and 30-year amortization period meet the first principle, and that a 20-year amortization results in a greater asset build-up, a 20-year amortization period has increased investment risk and therefore does not meet principle three.

In arriving at our conclusions, we relied on the most recent information available, including the June 30, 2021 GRS actuarial valuation of the PFRS supplemented by GRS cash flow projections provided in the June 30, 2021 GASB 67/68 report.

In the graph shown below is a projection of the actuarial liability and plan assets through 2077. Plan assets are represented by the lines in the chart and are shown assuming 20-year (grey line) and 30-year (green line) funding of the June 30, 2022 unfunded actuarial liability. These projections assume that the fund earns 1% for the plan year ending June 30, 2022 and then the assumed rate of return of 6.75% each year thereafter with no further actuarial gains or losses. The grey bars represent the actuarial liability as of each actuarial valuation date.

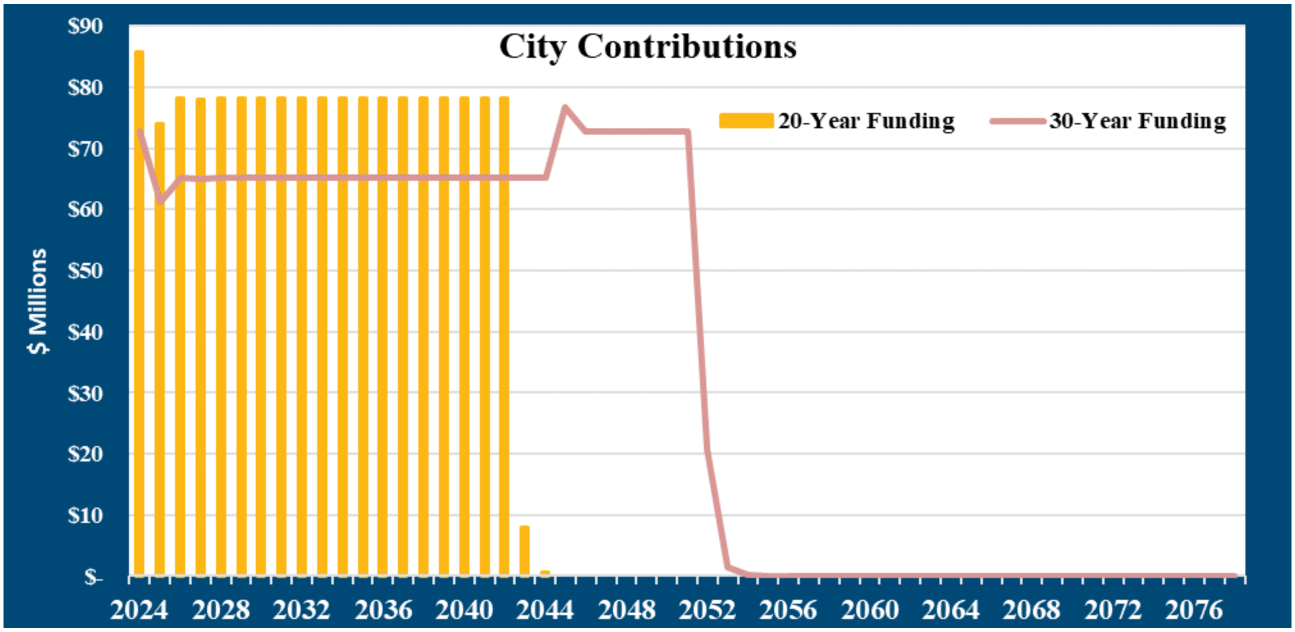
As can be seen in the chart, both the 20-year and 30-year funding ultimately reach 100% funding. Also, under 30-year funding the plan is never less than 66% funded.



Funded Ratios

	20-yr	30-yr
2022	75%	75%
2024	74%	73%
2026	74%	72%
2028	74%	72%
2030	75%	71%
2032	76%	70%
2034	78%	69%
2036	81%	68%
2038	85%	67%
2040	91%	67%
2042	99%	66%
2044	100%	67%
2046	100%	71%
2048	100%	78%
2050	100%	89%
2052	100%	100%
2054	100%	100%

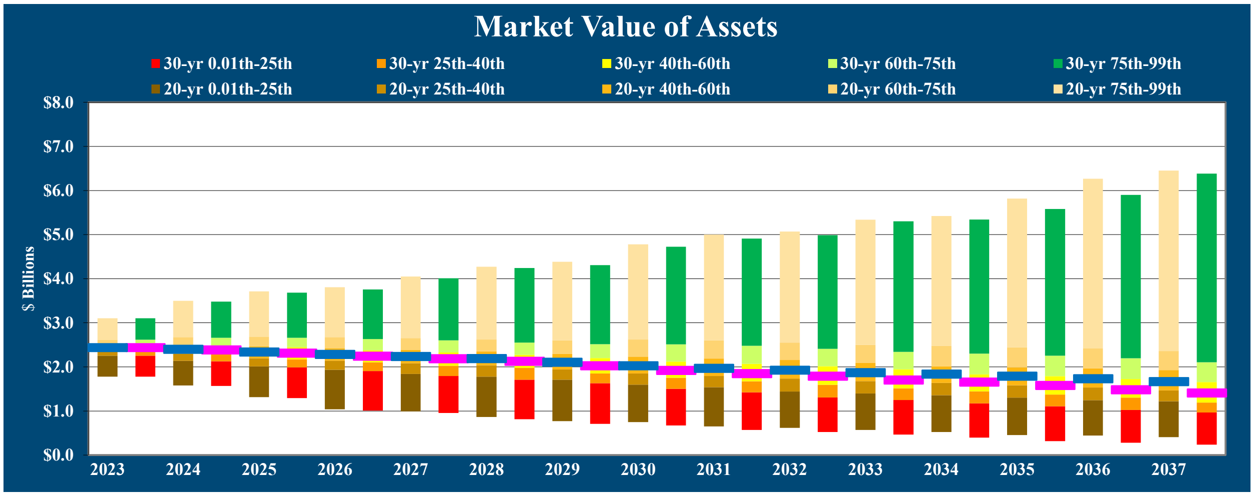
The next graph shows the projections of the City's contributions to the plan starting in 2024 under both 20-year and 30-year funding of the June 30, 2022 unfunded actuarial liability. This graph shows that the City contribution for the first 20 years are 20% greater under 20-year funding than under 30-year funding. Under the 30-year funding, even though the City contributions are much greater in years 21 through 30 (i.e. 2043-2052), those additional contributions are all less than the contribution levels for the first twenty years under 20-year funding, and are much more affordable at that time than having to pay 20% higher contributions in the first twenty years.



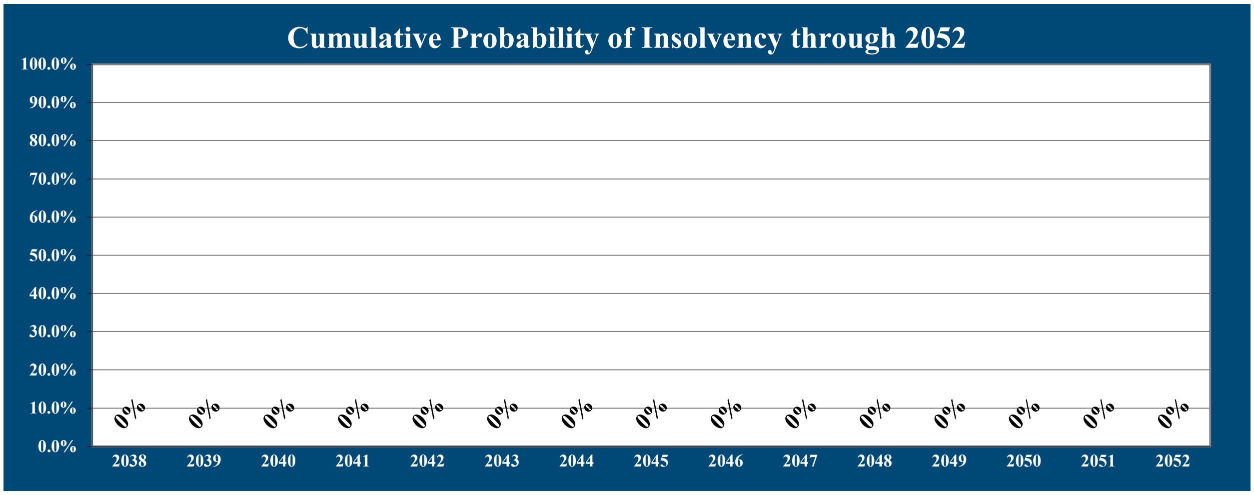
These projections are helpful to see the expected funding results when all actuarial assumptions are met each year into the future. However, there is a significant level of uncertainty in any projections into the future. The largest source of uncertainty is the projection of investment returns. In order to reflect this uncertainty, we have also included a stochastic projection of plan assets. The stochastic projections, based on assumptions provided by PFRS's investment consultant Wilshire, assume a geometric return of 6.88% and a standard deviation of 10.8%. The stochastic projection contains 1,000 trials over the projection period.

The first stochastic graph below shows projections of the market value of assets from 2023 to 2037. The results are shown within percentiles, with the least favorable in the 0.01 percentile at the bottom of the red bars for the 30-year funding scenario, and the bottom of the dark brown for the 20-year funding scenario. The bottom of both bars are never less than $200 million meaning there is a 0% probability of insolvency during these years, which assures all benefits can be paid.

Just for informational purposes, the top of the bright green bars (for 30-year funding), and light brown bars (for 20-year funding) represent the most favorable results at the 99th percentile. Finally, the pink (30-year funding) and blue (20-year funding) dashes represent the 50th percentile result in each scenario. In both the most favorable results and the expected results for each year, the difference between 20-year and 30-year funding is, in our opinion, negligible.



The next stochastic chart shows the cumulative probability of plan insolvency through 2052 under 30-year funding, based on the 6.88% expected return and 10.8% standard deviation described earlier. It shows again, a 0% chance of insolvency.



GRS has stated that the current asset allocation may have to be de-risked over time in order to pay benefits and as such, the expected return can't be assumed to be the same over the long-term projection. To acknowledge and address this concern, we ran the same scenario as above, but assuming a 0% expected return over the projection period. Even under this scenario, our stochastic results produced a 0% chance of insolvency. This result addresses and eliminates this concern expressed by GRS. **Because of the 20-year amortization of future gains and losses, any de-risking of the portfolio would result in the plan being able to pay all benefits under a 30-year amortization funding policy.**

Finally, given that under a 30-year funding policy, the plan is not expected to become insolvent, there is no need for the City to absorb the additional investment risk that arises under the 20-year funding policy due to more assets in the trust over a longer period.

Disclosures

The calculations in this letter are based upon the data, assumptions, methods, and plan provisions as outlined in the June 30, 2021 Actuarial Valuation Report prepared by Gabriel, Roeder, Smith & Company (GRS). We have accepted these assumptions for purposes this letter.

The results of this letter rely on future plan experience conforming to the underlying assumptions and methods outlined in the June 30, 2021 Actuarial Valuation Report. To the extent that the actual plan experience deviates from the underlying assumptions and methods, or there are any changes in plan provisions or applicable laws, the results would vary accordingly.

This letter includes projections of future contributions, assets, and funded status for the purpose of assisting the City and PFRS with the management of the Fund. We have used Cheiron's R-Scan model to develop these projections. The R-Scan projection uses projected benefit payments for current members based upon information included in the June 30, 2021 GASB 67/68 report produced by GRS. The stochastic projections of investment returns are based on the assumption that each future year's investment return is independent from all other years and is identically distributed according to a lognormal distribution. This assumption may result in an unrealistically wide range of compound investment returns over longer periods of time. The standard deviation used in the stochastic projection of investment returns was provided by Wilshire Associates.

This letter has been prepared exclusively for the City of Detroit for the purpose described herein. This analysis is not intended to benefit any third party, and Cheiron assumes no duty or liability to any such party.

Finally, this letter has been prepared in accordance with generally recognized and accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board as well as applicable laws and regulations. Furthermore, as a credentialed actuary, I meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this report.

If you have any questions or need additional information, please let us know.

Sincerely,
Cheiron

Gene Kalwarski
Principal Consulting Actuary, FSA, MAAA, EA

Gene Kalwarski, FSA, MAAA, EA

Chief Executive Officer / Principal Consulting Actuary

Gene Kalwarski is CEO and co-founder of Cheiron Inc., and one of the most well regarded pension actuaries in the nation.

For nearly four decades he has advised many of the nation's largest public pension funds. He is often hired as an expert to help financially troubled funds. He popularized the use of interactive projection modeling, and was one of the first actuaries to encourage plans to conduct stress testing to manage risk. He also designed Cheiron's proprietary interactive pension projection tool, *P-Scan.* He has testified before Congress, and often addresses state legislatures and Boards of Trustees on behalf of state pension funds.

His roster of clients has included:

- California State Teachers Retirement System
- New York State Teachers' Retirement System
- State Teachers Retirement System of Ohio
- Maine Public Employees Retirement System
- Connecticut State Employees Retirement System
- Delaware Public Employees Retirement System
- Maryland State Retirement and Pension System
- Florida Retirement System
- Kansas Public Employees Retirement System
- Vermont Municipal Employees' Retirement System
- Arlington County Employees Retirement System
- Fairfax County Employees Retirement System
- Montgomery Employees Retirement System
- San Diego City Employees' Retirement System
- San José Federated and Police and Fire Department Retirement Plans

Before co-founding Cheiron, he worked for more than two decades at Milliman Inc., where he established the firm's Washington office. In 1984 he became the firm's youngest Equity Principal and by 1990 he was the youngest Equity Principal to serve on the firm's Board of Directors. He is a Fellow in the Society of Actuaries, an Enrolled Actuary under ERISA, and a Member of the American Academy of Actuaries.

EXHIBIT 13

GRS

800.521.0498 | P: 248.799.9000 | www.grsconsulting.com

EXHIBIT
Ex. 13

June 17, 2022

CONFIDENTIAL

The Police and Fire Retirement System
of the City of Detroit
One Detroit Center
500 Woodward Ave., Suite 3000
Detroit, Michigan 48226

Attention: Mr. David Cetlinski, Executive Director

Re: **June 30, 2021 Restoration Reserve Account for Component II of the Police and Fire Retirement System of the City of Detroit**

Dear Mr. Cetlinski:

In accordance with Section K-3(2)a, of Exhibit E (see excerpt below) of the City of Detroit's Plan of Adjustment:

> *"For purposes of restoration of benefits through June 30, 2023, the Funding Target will be a 75% funded ratio, and the Restoration Target will be a 78% funded ratio, both projected to June 30, 2023. For purposes of calculating the funded ratio, the assets in the Restoration Reserve Account will be excluded. Each year, if the Plan Actuary projects that the Funded Level as of 2023 (excluding Restoration Reserve Account assets to avoid double counting) exceeds the Restoration Target (i.e., exceeds 78%), a credit of assets for bookkeeping purposes will be made into a new notional Restoration Reserve Account. The notional credit will be an amount equal to the excess of assets above the amount projected to be needed to satisfy the Restoration Target."*

You have requested that we calculate a potential credit of assets to be made into the Restoration Reserve Account as of June 30, 2021.

Our calculations are based on the results of the June 30, 2021 valuation, using the assumptions outlined in Section K-3(2)a, including use of the market value of assets and a 6.75% assumed rate of investment return net of administrative and investment expenses, and assuming no future ASF transfers due to future investment gains. The assumptions and methods to be used were agreed upon by the legal counsels of the Police and Fire Retirement Board and the Investment Committee.

Please note that we are not attorneys and nothing in this letter is intended to provide legal advice. We suggest that your attorney and/or the IC's legal counsel review this letter to ensure that we have correctly interpreted Section K-3.

In accordance with Section K-3(2)a, the Actuarial Accrued Liability (AAL) and the Market Value of Assets (MVA) are projected to June 30, 2023. The projection is based on estimates of benefit payments and refunds of member contributions. **The projection is illustrated below:**

	($ Millions) Actuarial Accrued Liability (AAL) (A)	($ Millions) Market Value of Assets (MVA) (B)
(1) Value on June 30, 2021	$ 3,374.9	$ 2,749.1
(2) Contributions - Fiscal Year (FY) 2022	N/A	18.3
(3) Expected Benefit Payments and Refunds - FY 2022	(299.3)	(299.3)
(4) Interest - FY 2022*	217.9	175.6
(5) Value on June 30, 2022 (1)+(2)+(3)+(4)	$ 3,293.5	$ 2,643.7
(6) Contributions - FY 2023	N/A	18.3
(7) Expected Benefit Payments and Refunds - FY 2023	(298.5)	(298.5)
(8) Interest - FY 2023*	212.4	168.5
(9) Value on June 30, 2023 (5)+(6)+(7)+(8)	$ 3,207.3	$ 2,531.9

** Employer contributions are assumed to occur at the end of the year. Expected benefit payments and refunds are assumed to occur mid-year.*

The 78% Restoration Target is applied to the projected June 30, 2023 AAL in order to determine whether the projected June 30, 2023 MVA exceeds that amount. Since the credit of assets to be made into the Restoration Reserve Account is as of June 30, 2021, the excess of the June 30, 2023 MVA over the target is discounted back to June 30, 2021 using an annual discount rate of 6.75%.

Calculation of notional credit needed to satisfy the Restoration Target

	($ Millions)
(1) June 30, 2023 Restoration Target	78%
(2) June 30, 2023 AAL	$ 3,207.3
(3) June 30, 2023 Projected Target MVA (1)x(2)	$ 2,501.7
(4) June 30, 2023 Projected MVA	2,531.9
(5) Projected MVA excess over target (4)-(1)	$ 30.2
(6) Discount factor to June 30, 2021	0.8775
(7) June 30, 2021 value of excess (5)x(6)	**$ 26.5**

The end result is an amount of **$26,526,870** as a credit of assets to be made into the Restoration Reserve Account as of June 30, 2021.

Additional Notes:

- This information should be considered in conjunction with the June 30, 2021 actuarial valuation of the Police and Fire Retirement System of the City of Detroit of Component II, which we issued on March 16, 2022 (the 2021 valuation report).
- Future valuations will likely be affected by the Restoration Reserve Account. We expect to issue a memo with additional requests for guidance from the legal counsels (Board and Investment Committee) on the appropriate treatment.
- Upon request, we are prepared to provide an estimate as to whether there are sufficient funds in the newly established Restoration Reserve Account to restore any COLA benefits under the POA as of June 30, 2021. The calculation of the COLA will likely depend on the answers to some of the questions in the memo described above.
- We recommend the System adopt administrative procedures for this account (crediting of interest, treatment of gains/losses, and credits and debits to the reserve as called for in the plan document).

If you have any questions regarding this information, please call. We would be happy to meet with the Board or Investment Committee to discuss this information.

David T. Kausch, Judith A. Kermans, and Jamal Adora are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Sincerely,
Gabriel, Roeder, Smith & Company

David T Kausch

David T. Kausch, FSA, EA, FCA, MAAA, PhD

Judith A. Kermans

Judith A. Kermans, EA, FCA, MAAA

Jamal Adora

Jamal Adora, ASA, EA, MAAA

JA:ah

GRS

Valerie – I am attaching the OCFO's response to Stout's information requests that was provided to you and Stout some time ago. The response (page 3) asks that the IC hear from Mayor Duggan and the City's actuarial expert in conjunction with its consideration of the funding issue.

We would be grateful if you would confirm that will be arranged before the IC begins deliberations on the funding issue.

Also, we would be grateful if you would send us a copy of the Stout report.

Thanks.

Chuck Raimi

Deputy corporation counsel

313 237 5037

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Valerie Brader

Rivenoak Law Group

valerie@rivenoaklaw.com

Cell: 734-478-0165

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EXHIBIT 14

City of Detroit

Plan of Adjustment - 40 year projections

Plan of Adjustment - 40 year projections
Assumptions
($ in millions)

Plan of Adjustment - 40 year projections		
General Fund Cash Flows	GF 40yr cash flows	$4.3b funds available for unsecured claims
	DIP financing	Quality of Life ($120m @ 3.5% assumed to be refinanced as part of exit facility)
	Exit financing	$300m note @ 6.0% maturing in FY26
	Swap treatment	$85m settlement
	Contingency	Reflects 1.0% of total revenues
Revenue stream from DWSD	Pension	$429m for pension in the first 10 years
	OPEB	12.1% of OPEB - current retirees payments
	POC	11.5% of total POC payments
Reimbursement from other funds	Reimbursements from Parking (non-GF) and Library	
Hypothetical art proceeds (a)	Foundations	$366m over 20 years
	DIA	$100m over 20 years
Hypothetical State settlement (a)	Contributions to pension	$195m in FY15
Hypothetical claims treatment		
PFRS		
Pension	Contributions (years 1-10)	Estimated to be $261m from foundations / State settlement
	Contributions (years 11-40)	UAAL as of June 30, 2023 estimated to be ~$681m (b) amortized over 30yr, including contributions in second decade from DIA and foundations
	Discount rate	6.75%
	Targeted funded status as of 2023	78%
GRS		
Pension	Contributions (years 1-10)	Estimated to be $99m from State settlement; $429m from DWSD; $45m from DIA; $146m from GF & other funds
	Contributions (years 11-40)	UAAL as of June 30, 2023 estimated to be ~$695m (b) amortized over 30yr, including contributions in second decade from DIA and foundations
	Discount rate	6.75%
	Targeted funded status as of 2023	70%
UTGO	Hypothetical Note A1	$287.5m note funded with pass-through UTGO millage
LTGO	Hypothetical Note A2	$55m settlement note
Other unsecured	Hypothetical Notes B	$632m note paid over 30 years - $450m OPEB, $162m POC, $4m notes/loans and $16m other

Footnotes:

(a) Hypothetical art and State settlement proceeds are subject to a consensual agreement with respect to the treatment of pension-related claims.

(b) Estimated pension contributions to retirement systems and unfunded pension liabilities as of June 30, 2023 are subject to change.