



October 5, 2020

Mr. Daniel C. Horn  
Section Manager  
Michigan Department of Treasury  
Via email: [LocalRetirementReporting@michigan.gov](mailto:LocalRetirementReporting@michigan.gov)

**Re: Public Act 202: Selection of the Uniform Assumptions for Fiscal Year 2021**

Dear Dan:

Thank you for the opportunity to comment on the uniform assumptions for Public Act 202 of 2017 (PA 202) for fiscal year 2021 (FY 2021). Our comments are in response to the September 8, 2020 letter you shared from Rachael Eubanks, State Treasurer, addressed to the State of Michigan Local Governments with the same subject as this letter (FY 2021 Uniform Assumptions Letter). In addition to our comments, we are including some data on our Michigan pension clients' 2019 actuarial valuation assumptions. This information is not confidential. We intend on making a copy of this letter available to our Michigan clients, to MAPERS members, and posting it on our website.

We hope that this information is helpful to you and the Michigan Department of Treasury. Please let us know if you have any questions.

This communication shall not be construed to provide tax advice, legal advice or investment advice.

Sincerely,

A handwritten signature in black ink that reads "David T. Kausch". The signature is written in a cursive, flowing style.

David T. Kausch, FSA, EA, FCA, MAAA, PhD  
Senior Consultant and Chief Actuary

DTK:dj  
Enclosures

cc: Judith A. Kermans, GRS President

## Background

In our June 8, 2018 letter, we provided you with background information on the Actuarial Standards of Practice (ASOPs) regarding the selection of actuarial assumptions for pension and OPEB valuations. In general, the ASOPs require actuarial assumptions to be reasonable for the purpose of the measurement. If assumptions are prescribed by another party, such as the Department of Treasury, the actuary may use those assumptions for reporting under PA 202. If, in the actuary's professional opinion, the prescribed assumptions set by the Department of Treasury significantly conflict with what would be reasonable for the purpose of the measurement, the actuary must disclose that opinion.

The purpose, as described in the FY 2021 Uniform Assumptions Letter, is to allow the citizens of Michigan to compare local retirement systems on a standard basis. That letter also includes some aggregate statistics on the differences between FY 2019 audited financial statement data and uniform assumption data for key pension and OPEB data points, repeated below:

<b>FY 2019 Pension Reporting</b>		
	<b>Funded Ratio</b>	<b>ADC/Governmental Revenues</b>
<b>FY 2019 Audited Financial Statement Data</b>	73.3%	6.0%
<b>FY 2019 Uniform Assumption Data</b>	70.9%	8.6%

<b>FY 2019 Retiree Health Care (OPEB) Reporting</b>		
	<b>Funded Ratio</b>	<b>ADC/Governmental Revenues</b>
<b>FY 2019 Audited Financial Statement Data</b>	49.0%	5.3%
<b>FY 2019 Uniform Assumption Data</b>	49.3%	5.3%

We note, as did the Treasurer, that the OPEB systems have statistics that are the same or improved using uniform assumption calculations as compared to the local government's audited financial statements. Pension system statistics had observable differences, but from the perspective of the citizens of Michigan we ask whether the differences are material. Materiality may mean different things to different parties. From the perspective of the ASOPs, an item or combination of related items is material if its omission or misstatement could influence a decision of an intended user<sup>1</sup>.

We may rely on the Treasury to determine what is or is not reasonable for this purpose, but we request that the Treasury consider that inflexible uniform assumptions will require additional calculations and incur additional fees by the system or the local unit of government thus increasing the fiscal burden. We offer some suggestions on allowing more latitude in selecting uniform assumptions so that systems or local units of government – especially OPEB plans – may use their own actuarial assumptions, reduce fees, and continue to satisfy the intent of PA 202.

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<sup>1</sup> ASOP No. 1, Section 2.6 Materiality

## **Suggestions on Assumptions**

Our suggestions for consideration on the uniform actuarial assumptions listed under MCL Section 38.2805 Section 5 (1) are as follows:

### **Economic Assumptions**

Other than the 7.00% maximum assumed rate of investment return, the FY 2021 uniform assumptions have been lowered since last year. The rationale provided includes the continued decrease in future price inflation expectations as well as other recent trends. In general, we concur that price inflation and other assumptions continue to decline. The uniform assumptions permit some latitude on the rate of investment return and salary increase assumptions, but not on the discount rate and health care inflation.

We request some additional latitude on the discount rate. In the FY 2021 Uniform Assumption Letter, the discount rate for periods in which projected plan assets are not sufficient to make projected benefit payments is stipulated to be 2.2%. From the perspective of the GASB Accounting Standards, this rate fluctuates considerably and there are different sources for this information. A source that we show in our monthly GRS Interest Rates Update is the Fidelity General Obligation AA Index. Rates for this index have fluctuated between 1.81% and 2.92% during 2020 as shown in our most recent update attached in the Appendix. We suggest that rather than stipulate a specific rate for this purpose, the uniform assumptions allow the use of a tax-exempt, high-quality municipal bond rate consistent with the parameters of GASB Statement Nos. 68 and 75 from the audited financial statements. This will allow systems (OPEB in particular) to use one set of assumptions.

With regard to the health care trend assumptions, again we request that the uniform assumptions allow the use of the same assumptions on the audited financial statements. The uniform assumptions as drafted are somewhat higher than what we see in the industry and are very prescriptive.

We have provided additional supportive documentation and context on each of the economic assumptions in the Appendix.

### **Demographic Assumptions**

The uniform assumption for base mortality of a version of the Pub-2010 mortality tables (or based on an actuarial experience study conducted within the last five years) are unchanged this year. In general, we support the use of a version of the Pub-2010 mortality tables. The majority of our clients continue to use a version of the RP-2014 tables (consistent with the FY 2019 uniform assumptions). We request that plans be allowed to use a version of RP-2014 or Pub-2010.

Regarding mortality improvement, our clients generally do not update the mortality improvement scale each year. We suggest that Treasury could allow some latitude by allowing the use of MP-2018 (first introduced in FY 2020 Uniform Assumptions) or a later dated version.

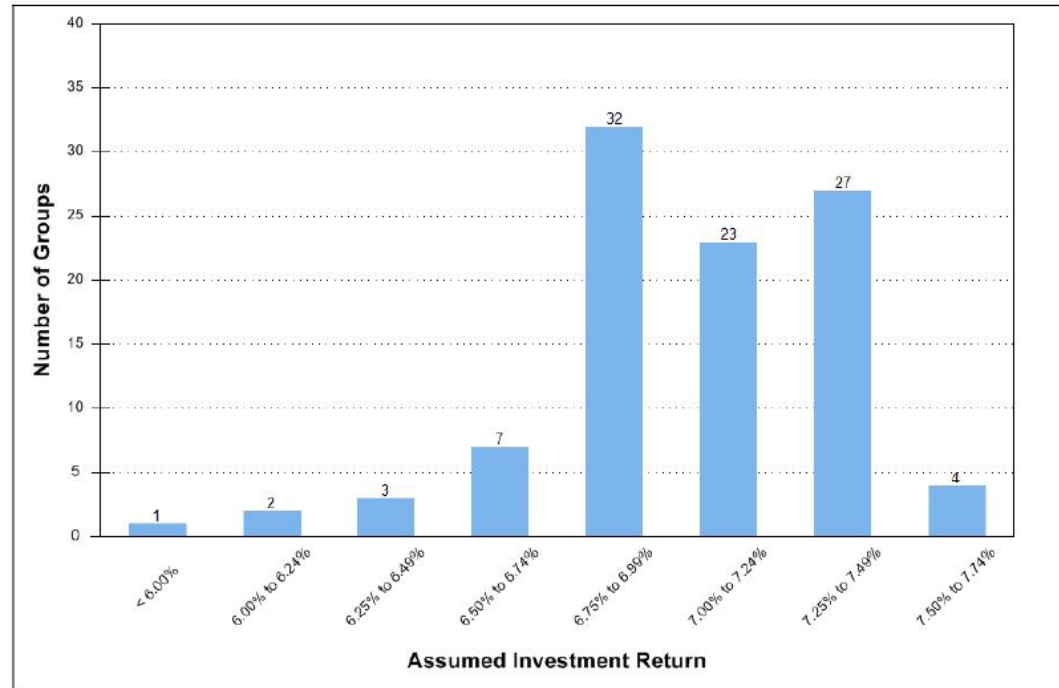
## Appendix – Industry Trends in Economic Assumptions

### Investment Return Assumptions

This chart shows the distribution of assumed rates of investment return for GRS (non-state) clients in Michigan. Note that the groups included on the vertical axis are all contribution rate groups within plans. These assumptions are from the 2019 actuarial valuations.

The median and average assumed rate of return for these groups are 7.00% and 6.92% per year, respectively.

Distribution of Assumed Investment Returns



This exhibit was generated using the following criteria: Valuation Date: 06/30/2019, 09/30/2019, 12/31/2019; Type of Employees: General, Public Safety, Teachers, Legislative/Judicial, Other (Mixed); Amount of Assets: < \$100 Million, \$100 to \$999.9 Million, \$1.0 to \$9.9 Billion, \$10.0+ Billion; Number of Members (Active and Retired): < 1,000, 1,000 to 49,999, 50,000 to 99,999, 100,000+; Group Status: Open, Closed; State: Michigan; Level of Government: City, County, Other, State.

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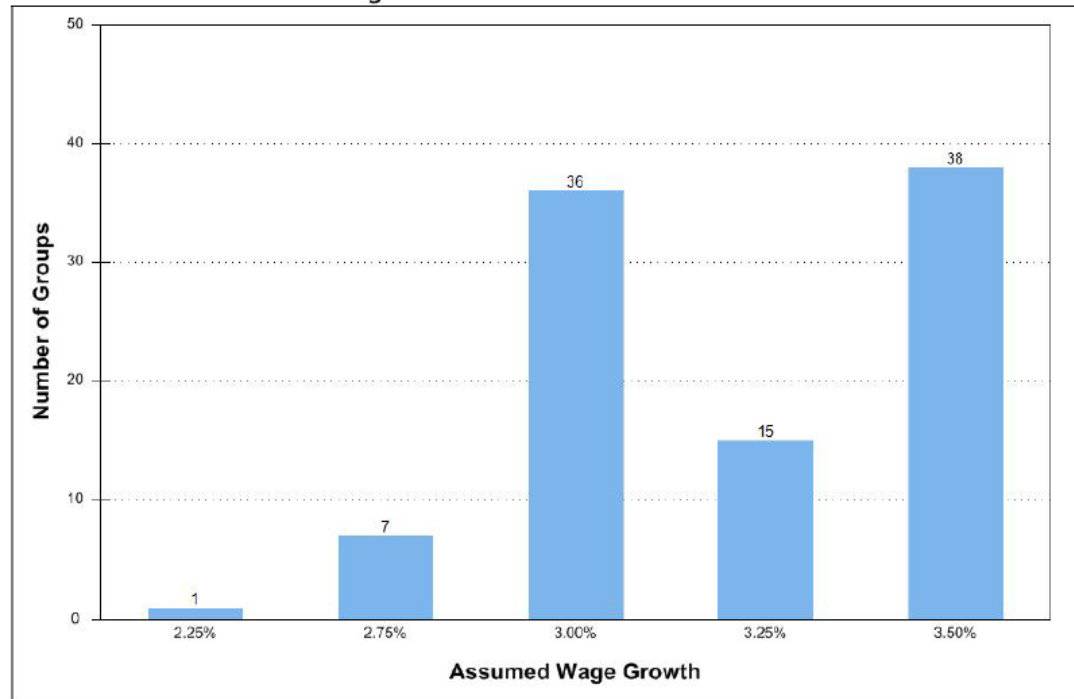
## Appendix – Industry Trends in Economic Assumptions

### Wage Inflation Assumptions

This chart shows the distribution of assumed rates of wage inflation for GRS (non-state) clients in Michigan. Note that the groups included on the vertical axis are all contribution rate groups within plans. These assumptions are from the 2019 actuarial valuations.

The median and average assumed wage inflation for these groups are 3.25% and 3.21% per year, respectively.

Distribution of Assumed Wage Growth



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## Appendix – Industry Trends in Economic Assumptions

### Discount Rates

The GASB Compliant Fidelity General Obligation AA Index Rates fluctuated between 1.81% and 2.92% during 2020.

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
IRS 30-Year Treasury Securities Rate (GATT) (a)	1.97	1.46	1.27	1.38	1.49	1.31	1.36	NA
10-Year Treasury Bonds (a)	1.50	0.87	0.66	0.67	0.73	0.62	0.65	NA
State and Local Bonds (b)	NA	NA	NA	NA	NA	NA	NA	NA
Fidelity General Obligation AA (c)	1.81	2.48	2.92	2.48	2.45	2.12	2.33	NA
PBGC Immediate Lump Sum Rate (d)	0.25	0.00	0.00	0.50	0.00	0.00	0.00	0.00
PBGC Variable Rate Premium 1 <sup>st</sup> Segment (e)	1.91	1.73	2.22	1.58	1.08	0.74	0.59	NA
PBGC Variable Rate Premium 2 <sup>nd</sup> Segment (e)	2.93	2.72	3.08	2.88	2.78	2.57	2.25	NA
PBGC Variable Rate Premium 3 <sup>rd</sup> Segment (e)	3.54	3.35	3.73	3.24	3.47	3.32	3.01	NA
PBGC Termination Annuity Rate (Select Rate) (f)	2.12	2.12	2.11	2.11	2.11	1.98	1.98	1.98
PBGC Termination Annuity Rate (After 20 Yrs) (f)	2.26	2.26	1.92	1.92	1.92	1.57	1.57	1.57
Merrill Lynch Corp/Govt Master Bond Index (g)	1.67	NA	NA	NA	NA	NA	NA	NA
120% Mid-term Applicable Federal Rate (AFR) (h)	2.10	1.83	1.19	0.70	0.52	0.54	0.49	0.42
Minimum Present Value Segment Rates (i)								
1 <sup>st</sup> Segment (first 60 months)	1.73	2.22	1.58	1.08	0.74	0.59	0.52	NA
2 <sup>nd</sup> Segment (months 61 – 240)	2.72	3.08	2.88	2.78	2.57	2.25	2.22	NA
3 <sup>rd</sup> Segment (months 241+)	3.35	3.73	3.24	3.47	3.32	3.01	3.03	NA

## Appendix – Industry Trends in Economic Assumptions

### Health Care Inflation

The first-year health care inflation for OPEB valuations nationally has been declining in recent years. This information is from publicly available survey information from nationally recognized benefits consulting firms.

The median and average assumed first-year trend for these groups are 6.73% and 6.85% per year, respectively.

