

# Automotive Industries Pension Plan

## Actuarial Valuation and Review as of January 1, 2021



This report has been prepared at the request of the Board of Trustees to assist in administering the Fund and meeting filing requirements of federal government agencies. This valuation report may not otherwise be copied or reproduced in any form without the consent of the Board of Trustees and may only be provided to other parties in its entirety. The measurements shown in this actuarial valuation may not be applicable for other purposes.

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November 23, 2021

Board of Trustees  
Automotive Industries Pension Plan  
Dublin, California

Dear Trustees:

We are pleased to submit the Actuarial Valuation and Review as of January 1, 2021. It establishes the funding requirements for the current year and analyzes the preceding year's experience. It also summarizes the actuarial data and includes the actuarial information that is required to be filed with Form 5500 to federal government agencies.

The census information upon which our calculations were based was prepared by the Fund Office, under the direction of Charles W. Besocke. That assistance is gratefully acknowledged. The actuarial calculations were completed under the supervision of Paul C. Poon, ASA, MAAA, Enrolled Actuary.

We look forward to reviewing this report with you at your next meeting and to answering any questions you may have.

Sincerely,

Segal

By: Frederick C. K. Herberich  
Frederick C. K. Herberich  
Senior Vice President & Benefits Consultant

TK/hy

cc: Charles W. Besocke      David Haumesser      Kara Dantono  
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# Table of Contents

|  |    |
|--|----|
| Section 1: Trustee Summary .....   | 8  |
| Section 2: Actuarial Valuation Results .....                                     | 13 |
| Participant information.....   | 13 |
| Financial information .....  | 20 |
| Actuarial experience .....   | 24 |
| Plan funding.....  | 27 |
| Projections.....   | 30 |
| Risk.....  | 32 |
| Summary of PPA'06 zone status rules .....  | 34 |
| Section 3: Certificate of Actuarial Valuation .....                              | 36 |
| Exhibit A: Table of Plan Coverage.....   | 37 |
| Exhibit B: Actuarial Factors for Minimum Funding.....                            | 38 |
| Exhibit C: Summary Statement of Income and Expenses on a Market Value Basis..... | 39 |
| Exhibit D: Information on Plan Status as of January 1, 2021 .....                | 40 |
| Exhibit E: Schedule of Projection of Expected Benefit Payments .....             | 41 |
| Exhibit F: Schedule of Active Participant Data .....                             | 42 |
| Exhibit G: Funding Standard Account .....  | 43 |
| Exhibit H: Maximum Deductible Contribution .....                                 | 46 |
| Exhibit I: Current Liability.....  | 47 |
| Exhibit J: Actuarial Present Value of Accumulated Plan Benefits .....            | 48 |
| Exhibit K: Statement of Actuarial Assumptions, Methods and Models .....          | 49 |
| Exhibit L: Summary of Plan Provisions.....                                       | 56 |
| Section 4: General Background.....   | 59 |
| Changes in Benefit Amounts and Average Contribution Rate.....                    | 59 |
| Other Developments.....  | 61 |

# Introduction

There are several ways of evaluating funding adequacy for a pension plan. In monitoring the Plan's financial position, the Trustees should keep in mind all of these concepts.



## **Funding Standard Account**

The ERISA Funding Standard Account (FSA) measures the cumulative difference between actual contributions and the minimum required contributions. If actual contributions exceed the minimum required contributions, the excess is called the credit balance. If actual contributions fall short of the minimum required contributions, a funding deficiency occurs.



## **Zone Information**

The Pension Protection Act of 2006 (PPA'06) called on plan sponsors to actively monitor the projected FSA credit balance, the funded percentage (the ratio of the actuarial value of assets to the present value of benefits earned to date) and cash flow sufficiency. Based on these measures, plans are then categorized as critical (*Red Zone*), endangered (*Yellow Zone*), or neither (*Green Zone*). The Multiemployer Pension Reform Act of 2014 (MPRA), among other things, made the zone provisions permanent.



## **Solvency Projections**

Pension plan funding anticipates that, over the long term, both contributions and investment earnings will be needed to cover benefit payments and expenses. To the extent that contributions are less than benefit payments, investment earnings and fund assets will be needed to cover the shortfall. In some situations, a plan may be faced with insufficient assets to cover its current obligations and may need assistance from the Pension Benefit Guaranty Corporation (PBGC). MPRA provides options for some plans facing insolvency.



## **Scheduled Cost**

The Scheduled Cost is an annual amount based on benefit levels and assets that allows a comparison to current contribution levels, given the expectation of a continuing plan. Due to the Plan's projected insolvency, this valuation does not include a Scheduled Cost.







## **Withdrawal Liability**

ERISA provides for assessment of withdrawal liability to employers who withdraw from a multiemployer plan based on unfunded vested benefit liabilities. A separate report is available.

## Important information about actuarial valuations

An actuarial valuation is a budgeting tool with respect to the financing of future uncertain obligations of a pension plan. As such, it will never forecast the precise future contribution requirements or the precise future stream of benefit payments. In any event, the actual cost of a plan will be determined by the benefits and expenses paid, not by the actuarial valuation.

In order to prepare a valuation, Segal relies on a number of input items. These include:

|   |                                |   |
|---|--------------------------------|---|
|    | <b>Plan Provisions</b>         | Plan provisions define the rules that will be used to determine benefit payments, and those rules, or the interpretation of them, may change over time. Even where they appear precise, outside factors may change how they operate. It is important for the Trustees to keep Segal informed with respect to plan provisions and administrative procedures, and to review the plan summary included in our report to confirm that Segal has correctly interpreted the plan of benefits.   |
|    | <b>Participant Information</b> | An actuarial valuation for a plan is based on data provided to the actuary by the plan. Segal does not audit such data for completeness or accuracy, other than reviewing it for obvious inconsistencies compared to prior data and other information that appears unreasonable. For most plans, it is not possible nor desirable to take a snapshot of the actual workforce on the valuation date. It is not necessary to have perfect data for an actuarial valuation. The uncertainties in other factors are such that even perfect data does not produce a “perfect” result. Notwithstanding the above, it is important for Segal to receive the best possible data and to be informed about any known incomplete or inaccurate data.   |
|    | <b>Financial Information</b>   | Part of the cost of a plan will be paid from existing assets – the balance will need to come from future contributions and investment income. The valuation is based on the asset values as of the valuation date, typically reported by the auditor. A snapshot as of a single date may not be an appropriate value for determining a single year’s contribution requirement, especially in volatile markets. Plan sponsors often use an “actuarial value of assets” that differs from market value to gradually reflect year-to-year changes in the market value of assets in determining the contribution requirements.  |
|  | <b>Actuarial Assumptions</b>   | In preparing an actuarial valuation, Segal starts by developing a forecast of the benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. This requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of participants in each year, as well as forecasts of the plan’s benefits for each of those events. The forecasted benefits are then discounted to a present value, typically based on an estimate of the rate of return that will be achieved on the plan’s assets. All of these factors are uncertain and unknowable. Thus, there will be a range of reasonable assumptions, and the results may vary materially based on which assumptions the actuary selects within that range. That is, there is no right answer (except with hindsight). It is important for any user of an actuarial valuation to understand and accept this constraint. The actuarial model may use approximations and estimates that will have an immaterial impact on our results. In addition, the actuarial assumptions may change over time, and while this can have a significant impact on the reported results, it does not mean that the previous assumptions or results were unreasonable or wrong. |

Given the above, the user of Segal's actuarial valuation (or other actuarial calculations) needs to keep the following in mind:

The actuarial valuation is prepared for use by the Trustees. It includes information for compliance with federal filing requirements and for the Plan's auditor. Segal is not responsible for the use or misuse of its report, particularly by any other party.

An actuarial valuation is a measurement at a specific date — it is not a prediction of a plan's future financial condition. Accordingly, Segal did not perform an analysis of the potential range of financial measurements, except where otherwise noted.

Critical events for a plan include, but are not limited to, decisions about changes in benefits and contributions. The basis for such decisions needs to consider many factors such as the risk of changes in employment levels and investment losses, not just the current valuation results.

ERISA requires a plan's enrolled actuary to provide a statement in the plan's annual report disclosing any event or trend that the actuary has not taken into account, if, to the best of the actuary's knowledge, such an event or trend may require a material increase in plan costs or required contribution rates. If the Trustees are aware of any event that was not considered in this valuation and that may materially increase the cost of the Plan, they must advise Segal, so that an appropriate statement can be included.

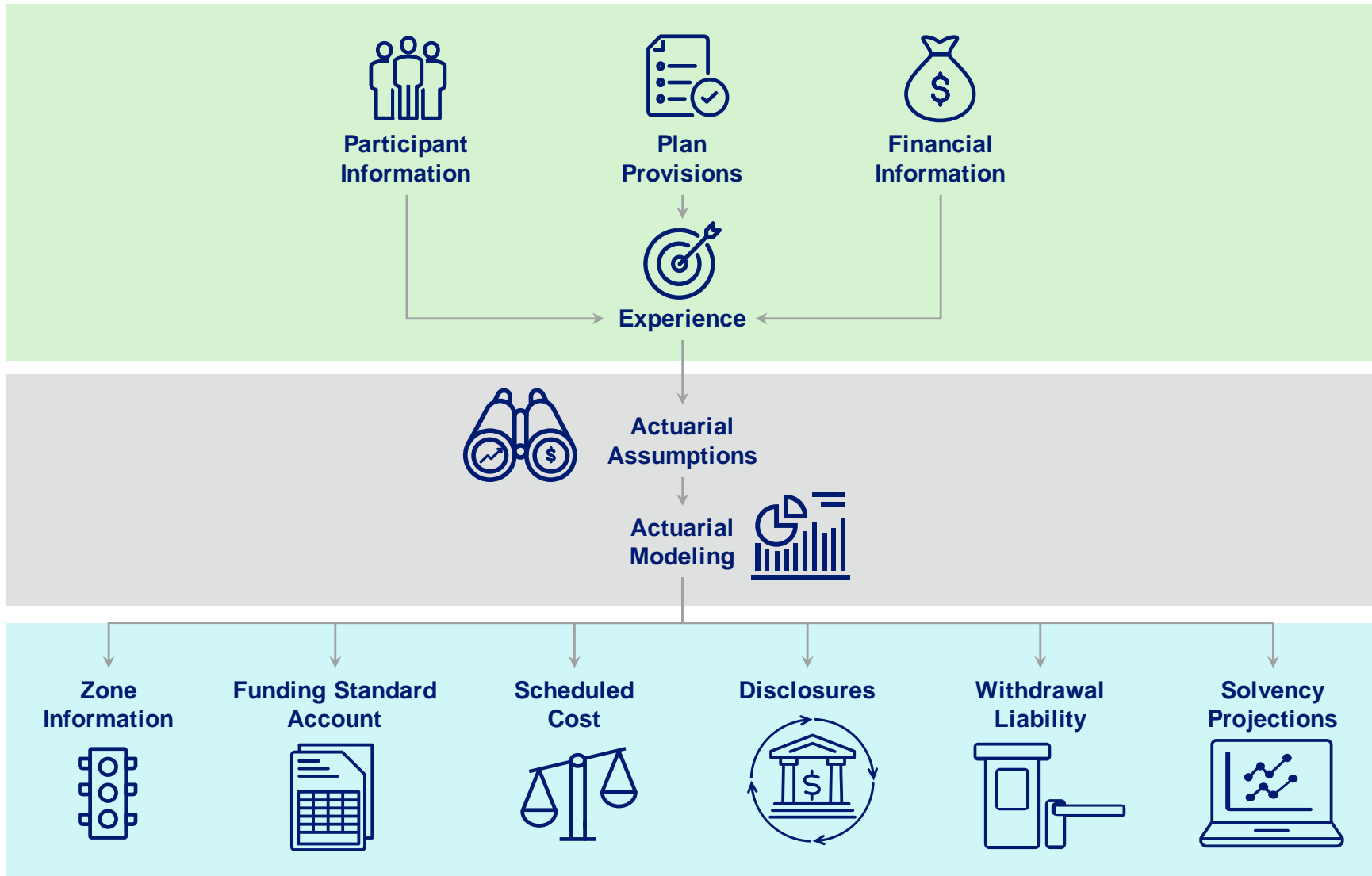
Segal does not provide investment, legal, accounting, or tax advice. This valuation is based on Segal's understanding of applicable guidance in these areas and of the Plan's provisions, but they may be subject to alternative interpretations. The Trustees should look to their other advisors for expertise in these areas.

While Segal maintains extensive quality assurance procedures, an actuarial valuation involves complex computer models and numerous inputs. In the event that an inaccuracy is discovered after presentation of Segal's valuation, Segal may revise that valuation or make an appropriate adjustment in the next valuation.

Segal's report shall be deemed to be final and accepted by the Trustees upon delivery and review. Trustees should notify Segal immediately of any questions or concerns about the final content.

As Segal has no discretionary authority with respect to the management of assets of the Plan, it is not a fiduciary in its capacity as actuaries and consultants with respect to the Plan.

# Actuarial valuation overview



# Section 1: Trustee Summary

## Summary of key valuation results

| Plan Year Beginning          |   | January 1, 2020  | January 1, 2021   |
|------------------------------|---|--|---|
| <b>Certified Zone Status</b> |   | <i>Critical and declining</i>  | <i>Critical and declining</i>   |
| <b>Demographic Data:</b>     | <ul style="list-style-type: none"> <li>• Number of active participants</li> <li>• Number of inactive participants with vested rights</li> <li>• Number of retired participants and beneficiaries</li> <li>• Total number of participants</li> <li>• Participant ratio: non-active to actives</li> </ul> | <p>3,801</p> <p>9,435</p> <p>11,394</p> <p>24,630</p> <p>5.48</p>  | <p>3,394</p> <p>9,289</p> <p>11,474</p> <p>24,157</p> <p>6.12</p>   |
| <b>Assets:</b>               | <ul style="list-style-type: none"> <li>• Market value of assets (MVA)</li> <li>• Actuarial value of assets (AVA)</li> <li>• Market value net investment return, prior year</li> <li>• Actuarial value net investment return, prior year</li> </ul>  | <p>\$1,153,928,489</p> <p>1,153,928,489</p> <p>18.49%</p> <p>18.49%</p>  | <p>\$1,172,977,684</p> <p>1,172,977,684</p> <p>11.61%</p> <p>11.61%</p>   |
| <b>Cash Flow:</b>            | <ul style="list-style-type: none"> <li>• Contributions</li> <li>• Withdrawal liability payments</li> <li>• Benefit payments</li> <li>• Administrative expenses</li> <li>• Net cash flow</li> <li>• Cash flow as a percentage of MVA</li> </ul>  | <p><b>Actual 2020</b></p> <p>\$24,772,422</p> <p>10,551,629</p> <p>-140,110,679</p> <p>-3,868,842</p> <hr/> <p>-\$108,655,470</p> <p>-9.4%</p> | <p><b>Projected 2021</b></p> <p>\$23,270,052<sup>1</sup></p> <p>1,434,666</p> <p>-144,018,204</p> <p>-3,750,000</p> <hr/> <p>-\$123,063,486</p> <p>-10.5%</p> |

<sup>1</sup> Based on the employment level assumption from the 2021 zone certification of 3,325 active participants.



## Section 1: Trustee Summary

### Summary of key valuation results

| Plan Year Beginning                                |  | January 1, 2020 | January 1, 2021  |
|--|--|-----------------|------------------|
| <b>Actuarial Liabilities based on Unit Credit:</b> | • Valuation interest rate                                | 6.00%           | 6.00%            |
|  | • Normal cost, including administrative expenses         | \$10,704,821    | \$10,442,864     |
|  | • Actuarial accrued liability                            | 2,264,467,746   | 2,258,488,490    |
|  | • Unfunded actuarial accrued liability                   | 1,110,539,257   | 1,085,510,806    |
| <b>Funded Percentages:</b>                         | • Actuarial accrued liabilities under unit credit method | \$2,264,467,746 | \$2,258,488,490  |
|  | • MVA funded percentage                                  | 51.0%           | 51.9%            |
|  | • AVA funded percentage (PPA basis)                      | 51.0%           | 51.9%            |
| <b>Statutory Funding Information:</b>              | • Funding deficiency at the end of prior Plan Year       | -\$969,138,991  | -\$1,102,798,478 |
|  | • Minimum required contribution                          | 1,139,182,250   | 1,174,969,051    |
|  | • Maximum deductible contribution                        | 3,586,608,320   | 3,822,623,486    |

## Section 1: Trustee Summary

This January 1, 2021 actuarial valuation report is based on financial and demographic information as of that date. The Plan's actuarial status does not reflect short-term fluctuations of the financial markets or employment levels, but rather is based on the market value of assets on the last day of the preceding Plan Year. Future changes in economic conditions are uncertain, and Segal is available to prepare projections of potential outcomes upon request.

This report does not reflect elections that the Trustees may make under the American Rescue Plan Act of 2021 (ARPA), which became law on March 11, 2021. Specifically, ARPA authorizes the Pension Benefit Guaranty Corporation (PBGC) to provide special financial assistance (SFA) to plans with solvency issues that meet certain eligibility requirements. ARPA also provides plans without solvency issues the option to take temporary funding relief, which could affect zone status and minimum funding requirements. Any elections the Trustees make under ARPA that affect the Plan's status or funding requirements for the current Plan Year will be reflected in a revised report or a future actuarial valuation.

### A. Developments since last valuation

The following are developments since the last valuation, from January 1, 2020 to January 1, 2021.

1. *Participant demographics:* The number of active participants decreased 10.7% from 3,801 to 3,394. The ratio of non-active to active participants, which is one measure of plan maturity, increased from 5.48 to 6.12.
2. *Plan assets:* The net investment return on the actuarial/market value of assets was 11.61%. For comparison, the assumed rate of return on plan assets is 6.00%. The change in the assets over the last two Plan Years can be found in Section 3.
3. *Cash flows:* Cash inflow includes contributions and withdrawal liability payments, and cash outflow includes benefits paid to participants and administrative expenses. In the Plan Year ending December 31, 2020, the Plan had a net cash outflow of \$108.7 million, or about -9.4% of assets on a market value basis and is expected to be -10.5% for the current year.
4. *Assumption changes:* Based on past experience and future expectations, the assumption for the annual administrative expenses was increased from \$3.5 million to \$3.75 million. This change did not affect the plan's projected insolvency year.
5. *Contribution rates:* As a result of collective bargaining and demographic changes, the average contribution rate for the Plan increased from \$581.96 per month to \$603.32 per month.
6. *Rehabilitation Plan:* All collective bargaining agreements have been negotiated to implement the Default Schedule of the Trustees' most recent Rehabilitation Plan. This Default Schedule includes various benefit reductions, including the removal of all early retirement subsidies, joint and survivor subsidies, disability pensions, the 36-payment pre-retirement death benefit and all benefit options besides the single life annuity, QJSA and QOSA. The Default Schedule also calls for 7 annual supplemental off-benefit contribution rate increases of 5% each year, beginning January 1, 2013.



## Section 1: Trustee Summary

### B. Actuarial valuation results

The following commentary applies to various funding measures for the current Plan Year.

1. *Zone status:* The Plan was certified to be in critical and declining status under the Pension Protection Act of 2006 (PPA) for the current Plan Year. In other words, the Plan is in the “red zone.” This certification result is due to the Plan having a projected FSA deficiency within 1 year and a projected insolvency within 15 years. Please refer to the actuarial certification dated March 31, 2021 for more information.
2. *Funded percentages:* During the last Plan Year, the funded percentage that will be reported on the Plan’s annual funding notice increased from 51.0% to 51.9%. Please note that there are different measurements of funded percentage for different purposes. More information can be found in Section 2.
3. *Funding Standard Account:* During the last Plan Year, the funding deficiency increased from \$969,138,991 to \$1,102,798,478. The increase in the funding deficiency was due to the fact that contributions fell short of the net charges in the FSA for the Plan Year. For the current Plan Year, the minimum required contribution is \$1,174,969,051, compared with \$23,270,052 in expected contributions.
4. *Funding concerns:* The projected inability to pay benefits must continue to be monitored. The actions already taken to address this issue include the Trustees’ Rehabilitation Plan that was updated to forestall insolvency, and the Trustees’ application for a MPRA suspension.



## Section 1: Trustee Summary

### C. Projections and risk

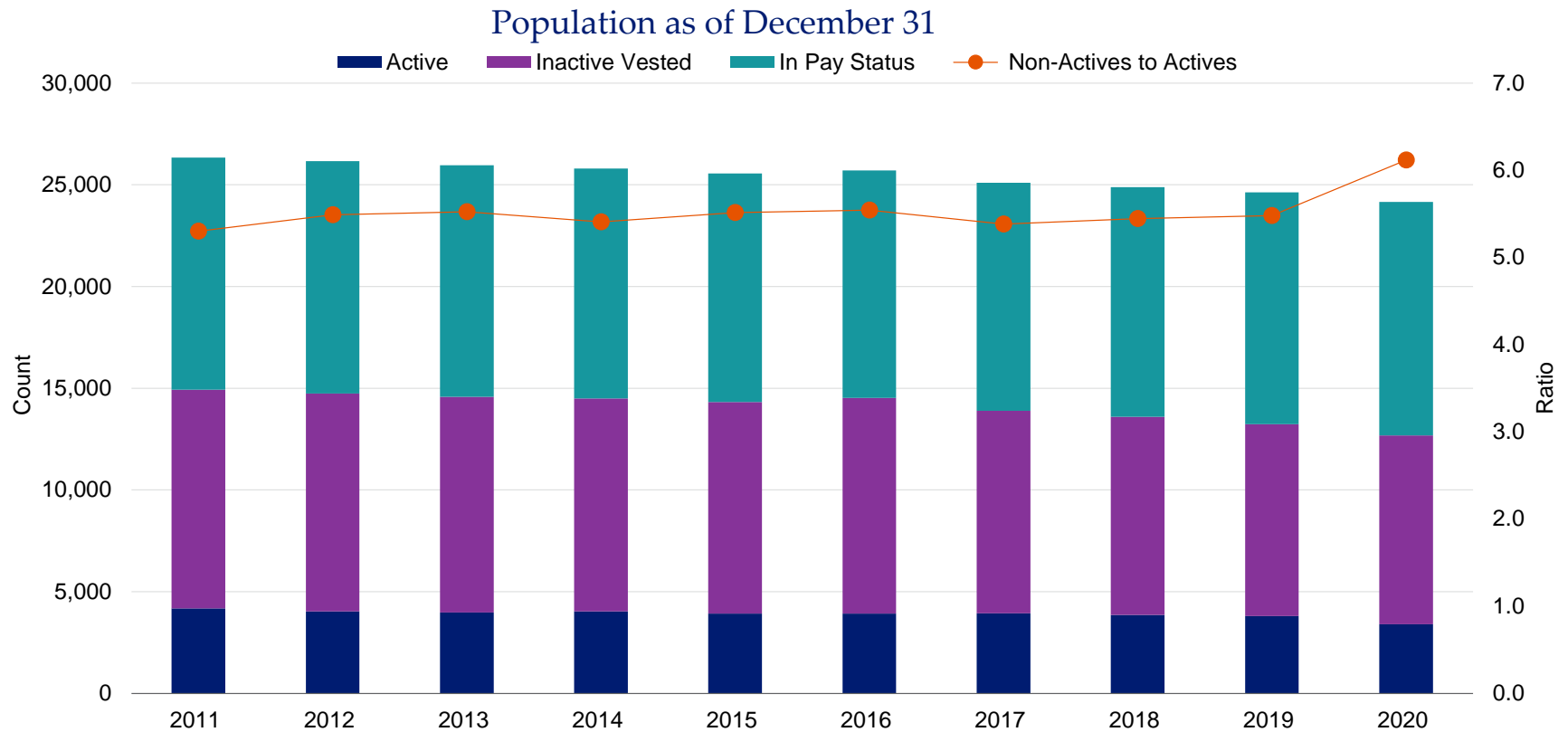
1. *Importance of projections:* Most of the results included in this valuation report are snapshot measurements, showing the Plan's status as of the valuation date. In addition to understanding the Plan's current status, it is also important to understand where the Plan is headed through actuarial projections. Projections may evaluate various metrics, such as funded percentage, Funding Standard Account, zone status, cash flows and solvency.
2. *Baseline projections:* Based on the actuarial assumptions included in this report, including an investment return assumption of 6.00% per year and the employment level from the 2021 zone certification, the Plan is projected to become insolvent in 2032. The insolvency year is the same as projected in the 2021 zone certification, and 1 year later than projected in last year's valuation due mainly to the market value return of 11.6%.
3. *Understanding risk:* Projections can also help the Trustees understand the sensitivity of future results to various risk factors, such as investment volatility or changes in future contributions. For example, if future investment returns are less than the actuarial assumption, or future contributions are less than projected, the Plan may not meet its funding objectives or may face eventual insolvency. See Section 2 for a general discussion on the risks facing the Plan, and how they might be better evaluated, understood and addressed.

**A more detailed assessment of the risks** would provide the Trustees with a better understanding of the risks inherent in the Plan. This assessment may include scenario testing, sensitivity testing, stress testing and stochastic modeling. A detailed risk assessment could be important for the Plan because the Plan's assets are quickly diminishing as benefit and expense outflow is far greater than contribution and investment income.



# Section 2: Actuarial Valuation Results

## Participant information



|                 | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   |
|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| In Pay Status   | 11,402 | 11,419 | 11,377 | 11,300 | 11,239 | 11,179 | 11,204 | 11,277 | 11,394 | 11,474 |
| Inactive Vested | 10,749 | 10,709 | 10,602 | 10,470 | 10,394 | 10,594 | 9,962  | 9,741  | 9,435  | 9,289  |
| Active          | 4,180  | 4,031  | 3,979  | 4,026  | 3,923  | 3,928  | 3,933  | 3,860  | 3,801  | 3,394  |
| Ratio           | 5.30   | 5.49   | 5.52   | 5.41   | 5.51   | 5.54   | 5.38   | 5.45   | 5.48   | 6.12   |

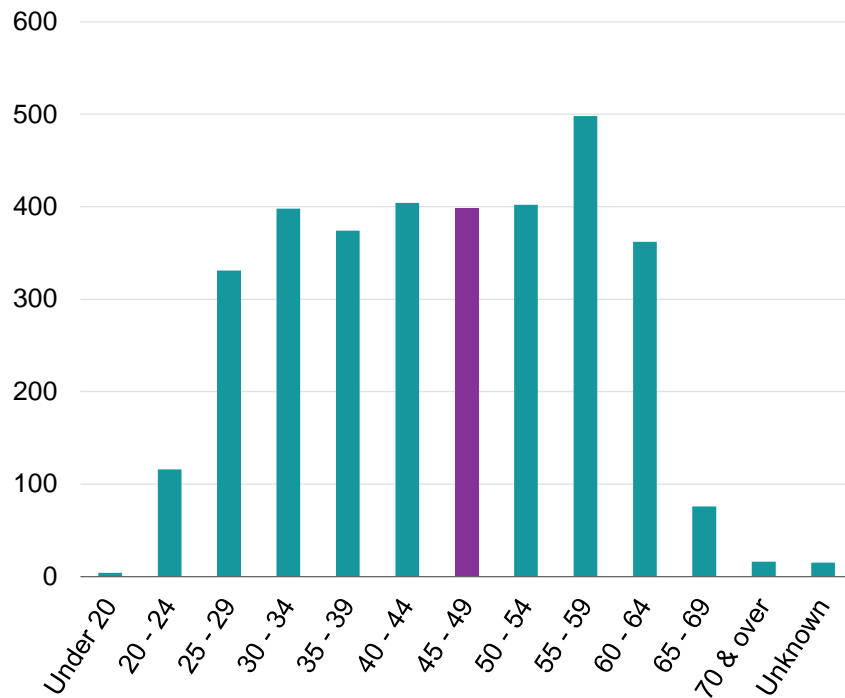
## Section 2: Actuarial Valuation Results

### Active participants

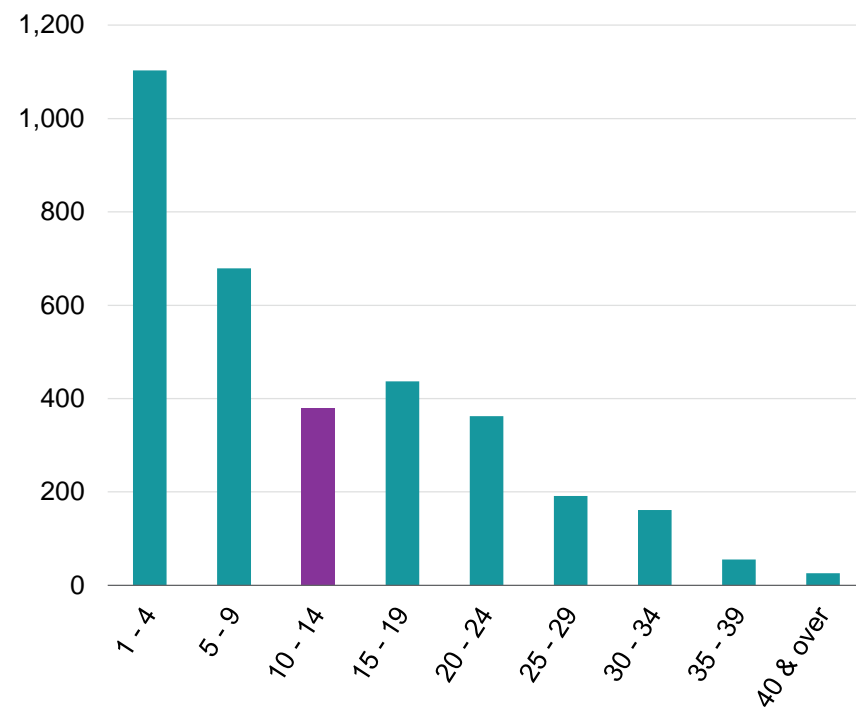
| As of December 31,                | 2019  | 2020  | Change |
|-----------------------------------|-------|-------|--------|
| Active participants               | 3,801 | 3,394 | -10.7% |
| Average age                       | 45.0  | 45.4  | 0.4    |
| Average years of credited service | 11.6  | 11.9  | 0.3    |

Distribution of Active Participants as of December 31, 2020

by Age

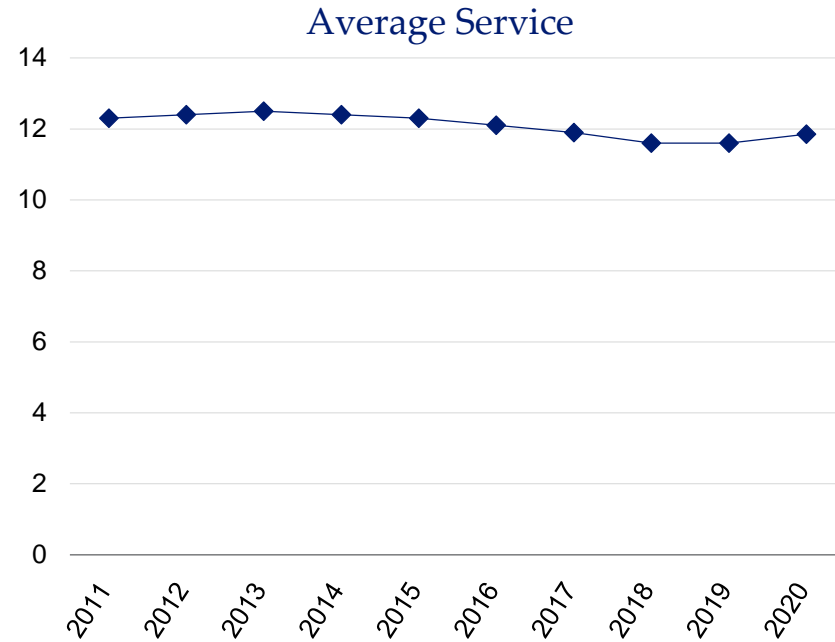
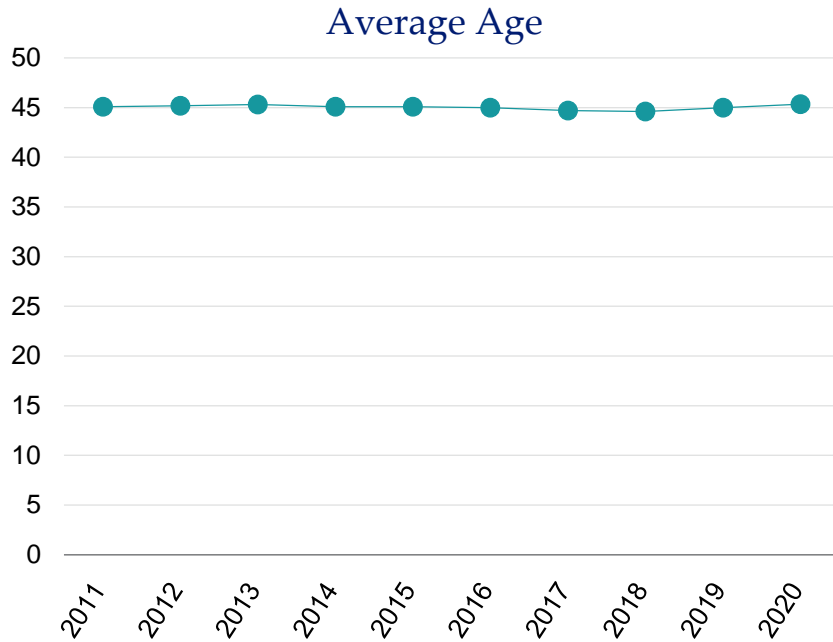


by Years of Credited Service



## Section 2: Actuarial Valuation Results

### Progress of active participants

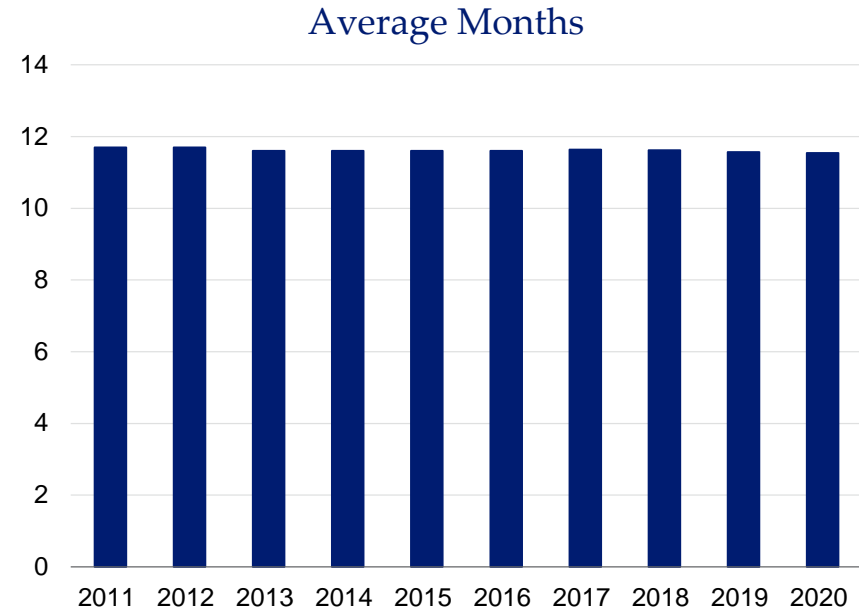
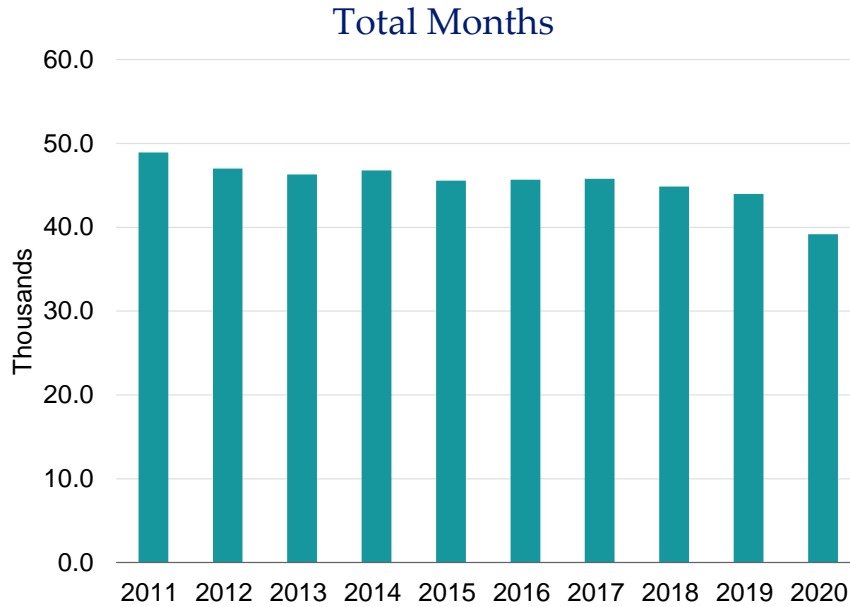


|          | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|----------|------|------|------|------|------|------|------|------|------|------|
| Avg. Age | 45.1 | 45.2 | 45.3 | 45.1 | 45.1 | 45.0 | 44.7 | 44.6 | 45.0 | 45.4 |
| Avg. Svc | 12.3 | 12.4 | 12.5 | 12.4 | 12.3 | 12.1 | 11.9 | 11.6 | 11.6 | 11.9 |

## Section 2: Actuarial Valuation Results

### Historical employment

- The 2021 zone certification was based on an industry activity assumption of 3,325 active participants with each active assumed to work 11.6 months each year.



|                           | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 5-year average | 10-year average |
|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------|-----------------|
| Total Months <sup>1</sup> | 48.94 | 46.99 | 46.30 | 46.77 | 45.56 | 45.67 | 45.77 | 44.86 | 43.97 | 39.18 | 43.89          | 45.40           |
| Average Months            | 11.6  | 11.6  | 11.6  | 11.6  | 11.6  | 11.6  | 11.6  | 11.6  | 11.6  | 11.6  | 11.6           | 11.6            |

<sup>1</sup> In thousands

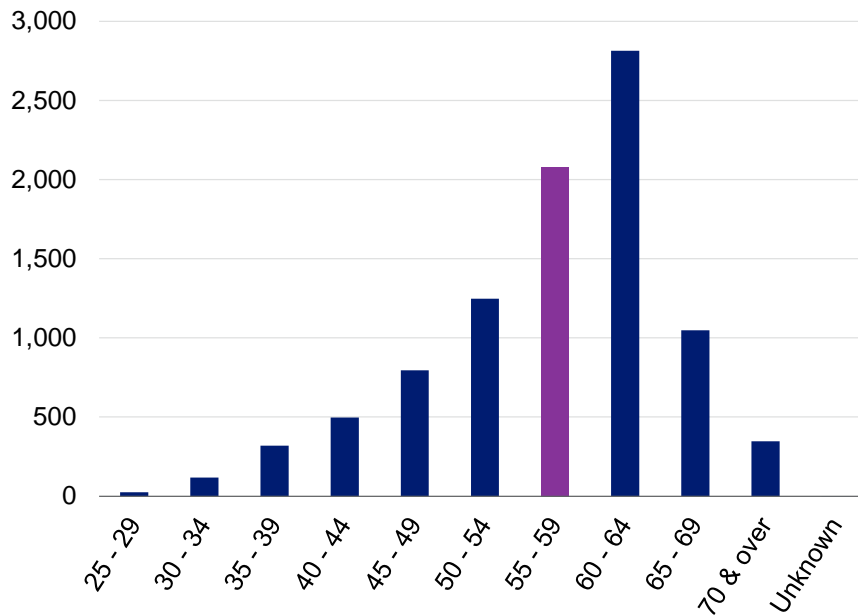


## Section 2: Actuarial Valuation Results

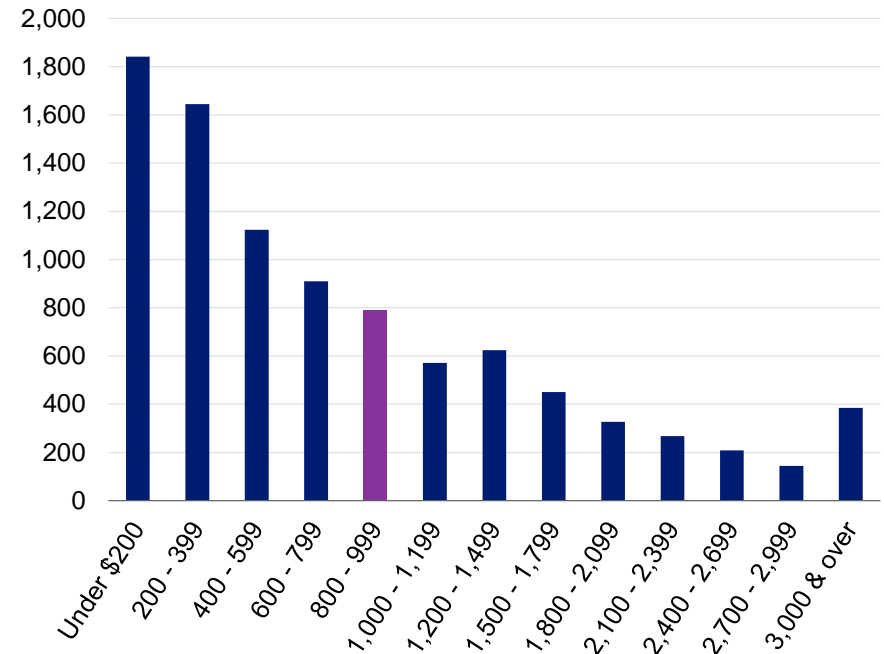
### Inactive vested participants

| As of December 31,                        | 2019  | 2020  | Change |
|---|-------|-------|--------|
| Inactive vested participants <sup>1</sup> | 9,435 | 9,289 | -1.5%  |
| Average age                               | 56.7  | 56.9  | 0.2    |
| Average amount                            | \$910 | \$913 | 0.3%   |

Distribution of Inactive Vested Participants as of December 31, 2020  
by Age



by Monthly Amount



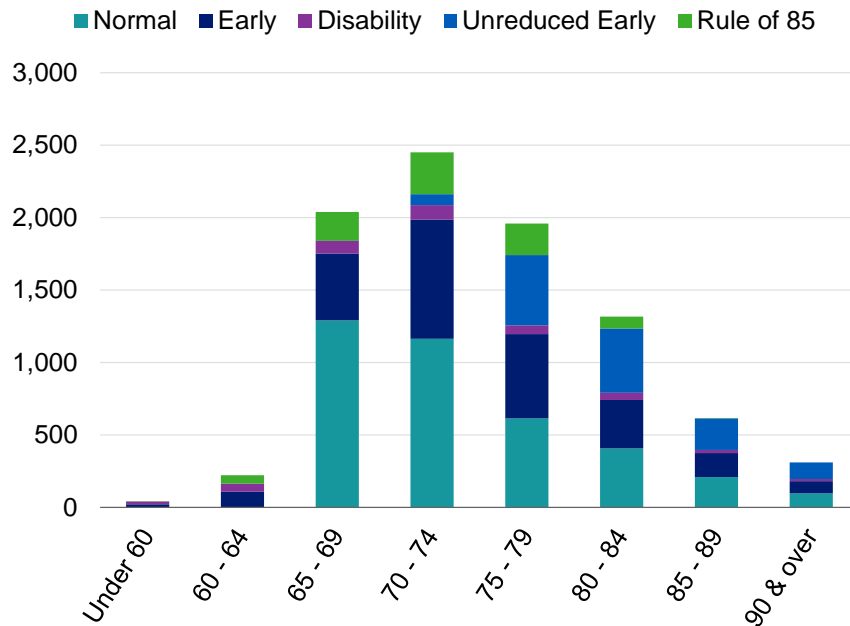
<sup>1</sup> A participant who is not currently active and has satisfied the vesting requirements for, but has not yet commenced, a pension is considered an “inactive vested” participant. 51 inactive vested participants over age 80 are excluded from the valuation.

## Section 2: Actuarial Valuation Results

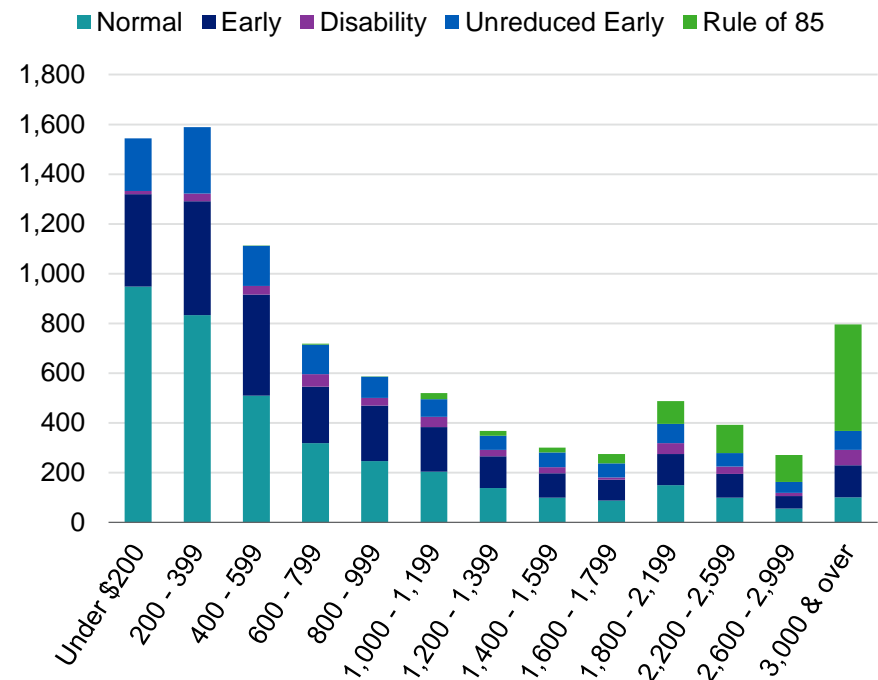
### Pay status information

| As of December 31,   | 2019         | 2020         | Change |
|----------------------|--------------|--------------|--------|
| Pensioners           | 8,889        | 8,960        | 0.8%   |
| Average age          | 74.6         | 74.9         | 0.3    |
| Average amount       | \$1,143      | \$1,143      | 0.0%   |
| Beneficiaries        | 2,464        | 2,480        | 0.6%   |
| Total monthly amount | \$11,415,814 | \$11,566,022 | 1.3%   |

Distribution of Pensioners as of December 31, 2020  
by Type and Age



by Type and Monthly Amount



## Section 2: Actuarial Valuation Results

### New pension awards

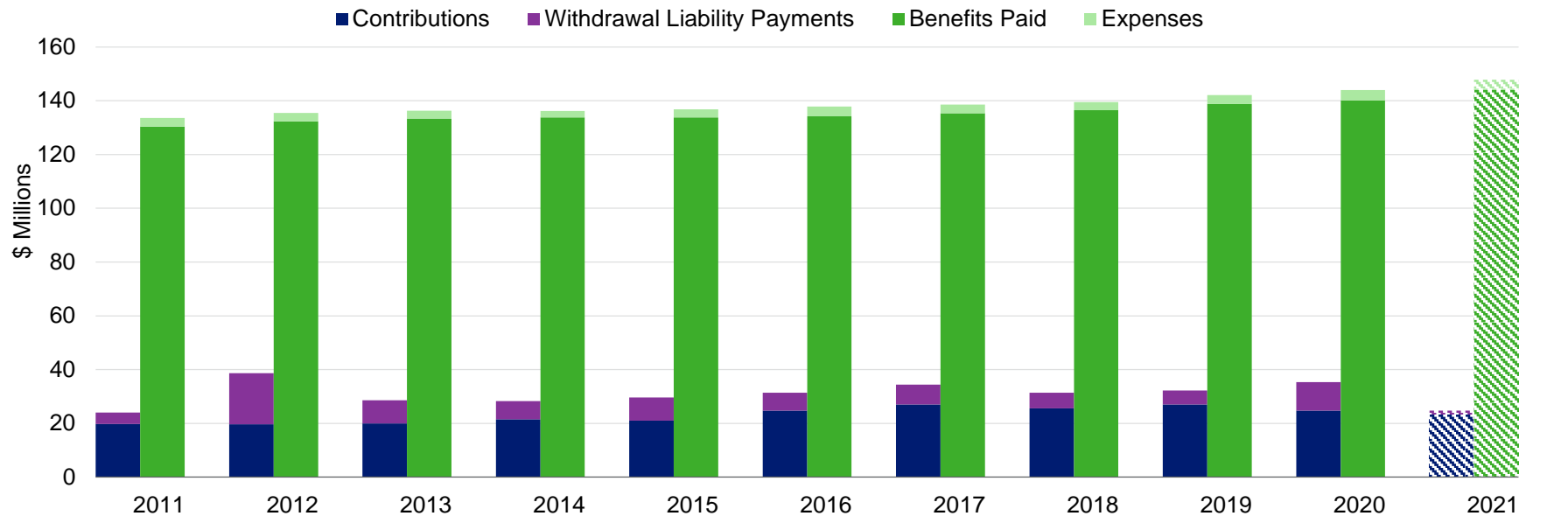
| Year Ended Dec 31 | Total  |                        | Normal |                        | Early  |                        | Disability |                        | Unreduced Early |                        | Rule of 85 |                        |
|-------------------|--------|------------------------|--------|------------------------|--------|------------------------|------------|------------------------|-----------------|------------------------|------------|------------------------|
|                   | Number | Average Monthly Amount | Number | Average Monthly Amount | Number | Average Monthly Amount | Number     | Average Monthly Amount | Number          | Average Monthly Amount | Number     | Average Monthly Amount |
| 2011              | 462    | \$1,105                | 146    | \$547                  | 224    | \$625                  | 16         | \$2,397                | 19              | \$2,056                | 57         | \$3,611                |
| 2012              | 311    | 1,157                  | 212    | 534                    | 42     | 1,627                  | 6          | 2,822                  | 17              | 2,012                  | 34         | 3,742                  |
| 2013              | 288    | 875                    | 230    | 510                    | 21     | 1,410                  | 9          | 1,422                  | 6               | 1,936                  | 22         | 3,663                  |
| 2014              | 247    | 872                    | 203    | 672                    | 33     | 1,268                  | 4          | 1,593                  | 1               | 1,101                  | 6          | 4,940                  |
| 2015              | 310    | 909                    | 267    | 759                    | 39     | 1,497                  | 1          | 2,004                  | –               | –                      | 3          | 6,252                  |
| 2016              | 293    | 893                    | 263    | 798                    | 29     | 1,554                  | –          | –                      | –               | –                      | 1          | 6,595                  |
| 2017              | 477    | 799                    | 432    | 690                    | 45     | 1,844                  | –          | –                      | –               | –                      | –          | –                      |
| 2018              | 438    | 781                    | 417    | 734                    | 21     | 1,714                  | –          | –                      | –               | –                      | –          | –                      |
| 2019              | 479    | 969                    | 454    | 922                    | 25     | 1,827                  | –          | –                      | –               | –                      | –          | –                      |
| 2020              | 497    | 1,004                  | 464    | 943                    | 33     | 1,848                  | –          | –                      | –               | –                      | –          | –                      |

## Section 2: Actuarial Valuation Results

### Financial information

- Benefits and expenses are funded solely from contributions and investment earnings.

#### Cash Flow



|                            | 2011    | 2012    | 2013    | 2014    | 2015    | 2016    | 2017    | 2018    | 2019    | 2020    | 2021 <sup>1</sup> |
|----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------------------|
| Contributions <sup>2</sup> | \$19.75 | \$19.65 | \$19.99 | \$21.52 | \$21.01 | \$24.75 | \$27.05 | \$25.55 | \$27.01 | \$24.77 | \$23.27           |
| W/L Payments <sup>2</sup>  | 4.27    | 19.04   | 8.57    | 6.79    | 8.60    | 6.63    | 7.38    | 5.81    | 5.21    | 10.55   | 1.43              |
| Benefits Paid <sup>2</sup> | 130.35  | 132.30  | 133.36  | 133.80  | 133.83  | 134.18  | 135.34  | 136.44  | 138.79  | 140.11  | 144.02            |
| Expenses <sup>2</sup>      | 3.24    | 3.17    | 2.94    | 2.42    | 3.00    | 3.67    | 3.21    | 3.04    | 3.27    | 3.87    | 3.75              |

<sup>1</sup> Projected

<sup>2</sup> In millions

## Section 2: Actuarial Valuation Results

### Determination of Actuarial Value of Assets

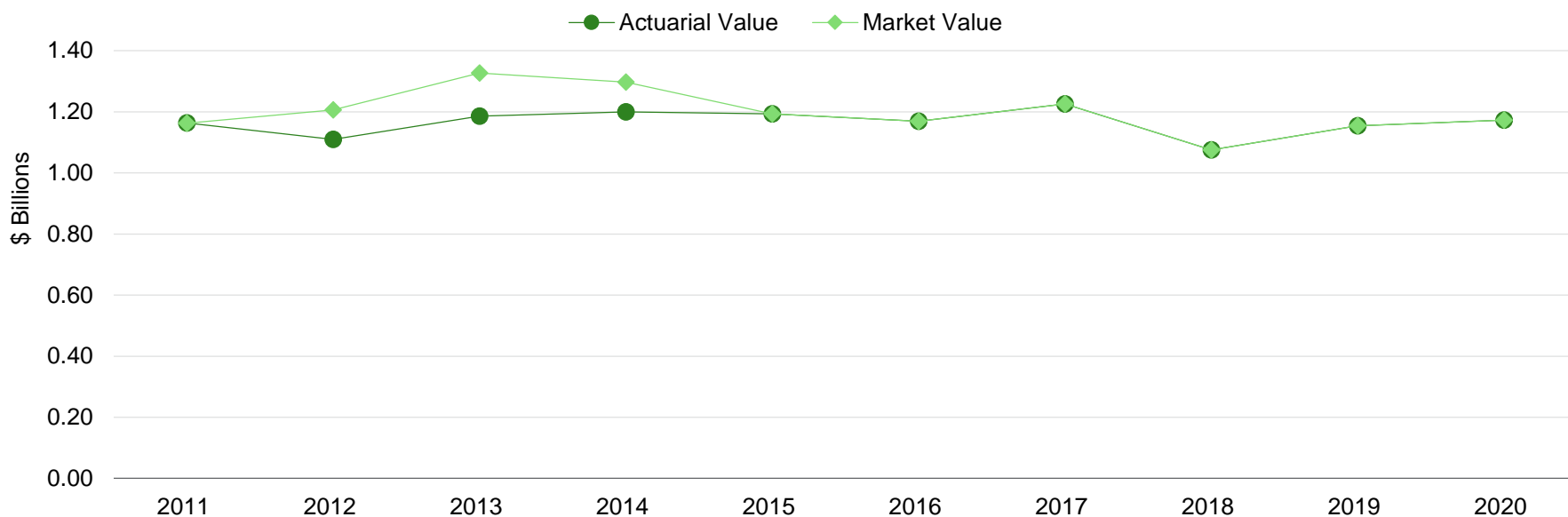
- The actuarial value of assets is set equal to the market value of assets for the valuation. Under this valuation method, the full value of market fluctuation is recognized in a single year and, as a result, the asset value and the pension plan cost are relatively volatile. However, the volatility of plan costs is not an important factor for plans projected to become insolvent.

|   |  |                 |
|---|--|-----------------|
| 1 | Actuarial value of assets = Market value of assets | \$1,172,977,684 |
|---|--|-----------------|

## Section 2: Actuarial Valuation Results

### Asset history for years ended December 31

Actuarial Value of Assets vs. Market Value of Assets



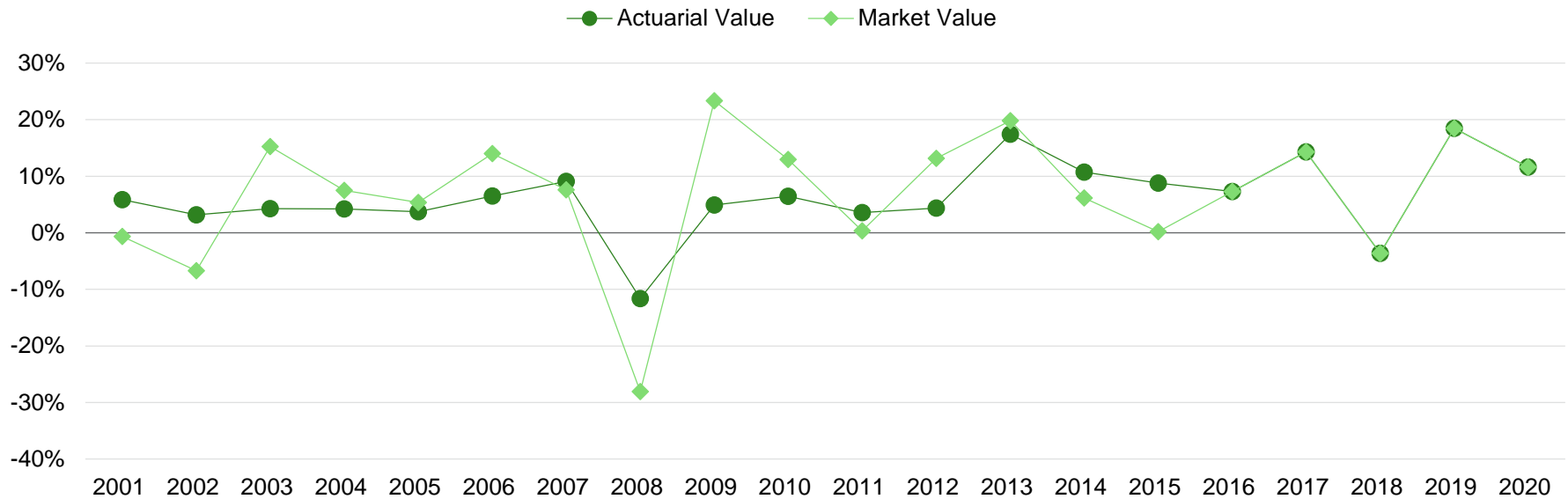
|                              | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   |
|------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Actuarial Value <sup>1</sup> | \$1.16 | \$1.11 | \$1.19 | \$1.20 | \$1.19 | \$1.17 | \$1.23 | \$1.08 | \$1.15 | \$1.17 |
| Market Value <sup>1</sup>    | 1.16   | 1.21   | 1.33   | 1.30   | 1.19   | 1.17   | 1.23   | 1.08   | 1.15   | 1.17   |
| Ratio                        | 100.1% | 92.0%  | 89.3%  | 92.4%  | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

<sup>1</sup> In billions

## Section 2: Actuarial Valuation Results

### Historical investment returns

Actuarial Rates of Return (equal to Market Value Rates of Return) for Years Ended December 31



|     | 2001  | 2002  | 2003  | 2004 | 2005 | 2006  | 2007 | 2008   | 2009  | 2010  | 2011 | 2012  | 2013  | 2014  | 2015 | 2016 | 2017  | 2018  | 2019  | 2020  |
|-----|-------|-------|-------|------|------|-------|------|--------|-------|-------|------|-------|-------|-------|------|------|-------|-------|-------|-------|
| AVA | 5.9%  | 3.2%  | 4.3%  | 4.2% | 3.7% | 6.5%  | 9.1% | -11.6% | 4.9%  | 6.5%  | 3.6% | 4.4%  | 17.4% | 10.7% | 8.8% | 7.3% | 14.3% | -3.6% | 18.5% | 11.6% |
| MVA | -0.7% | -6.7% | 15.3% | 7.5% | 5.4% | 14.0% | 7.6% | -28.1% | 23.3% | 13.0% | 0.4% | 13.2% | 19.8% | 6.1%  | 0.2% | 7.3% | 14.3% | -3.6% | 18.5% | 11.6% |

| Average Rates of Return               | Actuarial Value | Market Value |
|---------------------------------------|-----------------|--------------|
| Most recent five-year average return: | 9.32%           | 9.32%        |
| Most recent ten-year average return:  | 9.08%           | 8.47%        |
| 20-year average return:               | 5.99%           | 6.06%        |

## Section 2: Actuarial Valuation Results

### Actuarial experience

- Assumptions should consider experience and should be based on reasonable expectations for the future.
- Each year actual experience is compared to that projected by the assumptions. Differences are reflected in the actuarial valuation.
- Assumptions are not changed if experience is believed to be a short-term development that will not continue over the long term. On the other hand, if experience is to expected to continue, assumptions are changed.

#### Experience for the Year Ended December 31, 2020

|          |  |                            |
|----------|--|----------------------------|
| <b>1</b> | Gain from investments  | \$61,728,620               |
| <b>2</b> | Loss from administrative expenses                                    | -378,879                   |
| <b>3</b> | Net gain from other experience (0.2% of projected accrued liability) | <u>5,274,404</u>           |
| <b>4</b> | <b>Net experience gain: 1 + 2 + 3</b>                                | <b><u>\$66,624,145</u></b> |



## Section 2: Actuarial Valuation Results

### Investment experience

- Actuarial planning is long term. The obligations of a pension plan are expected to continue for the lifetime of all its participants.
- The assumed rate of return of 6.00% considers past experience, the Trustees' asset allocation policy, future expectations and the Plan's projected insolvency.

#### Gain from Investments

|          |  |                            |
|----------|--|----------------------------|
| <b>1</b> | Average actuarial value of assets                    | \$1,099,600,754            |
| <b>2</b> | Assumed rate of return                               | 6.00%                      |
| <b>3</b> | Expected net investment income: <b>1 x 2</b>         | \$65,976,045               |
| <b>4</b> | Net investment income (11.61% actual rate of return) | <u>127,704,665</u>         |
| <b>5</b> | <b>Actuarial gain from investments: 4 – 3</b>        | <u><b>\$61,728,620</b></u> |

### Administrative expenses

- Administrative expenses for the year ended December 31, 2020 totaled \$3,868,842, as compared to the prior year's assumption of \$3,500,000.

### Other experience

- The net gain from other experience is not considered significant and is mainly due to higher than expected number of deaths among pensioners and beneficiaries.

## Section 2: Actuarial Valuation Results

### Actuarial assumptions

- Based on past experience and future expectations, the following assumption was changed:
  - The annual administrative expense assumption increased from \$3,500,000 to \$3,750,000, payable monthly.
- This change did not affect the plan's projected insolvency year.
- Details on actuarial assumptions and methods are in Section 3.

### Plan provisions

- There were no changes in plan provisions.
- A summary of plan provisions is in Section 3.

### Contribution rates

- The contributions are based on monthly rates set in agreements negotiated by the bargaining parties.
- The average monthly credited contribution rate used for benefit accruals increased from \$413.59 as of January 1, 2020 to \$428.77 as of January 1, 2021.
- After reflecting the off-benefit rate increases under the Default Schedule, the estimated average monthly total contribution rate increased from \$581.96 as of January 1, 2020 to \$603.32 as of January 1, 2021.

## Section 2: Actuarial Valuation Results

### Plan funding

#### Comparison of Funded Percentages

| Plan Year Beginning                          | January 1, 2020        |                 | January 1, 2021        |                 |
|--|------------------------|-----------------|------------------------|-----------------|
| <b>Market Value of Assets</b>                | <b>\$1,153,928,489</b> |                 | <b>\$1,172,977,684</b> |                 |
|  | <b>Amount</b>          | <b>Funded %</b> | <b>Amount</b>          | <b>Funded %</b> |
| • Funding interest rate                      |                        | 6.00%           |                        | 6.00%           |
| • Present value (PV) of future benefits      | \$2,333,939,267        | 49.4%           | \$2,322,790,317        | 50.5%           |
| • Actuarial accrued liability <sup>1</sup>   | 2,264,467,746          | 51.0%           | 2,258,488,490          | 51.9%           |
| • PV of accumulated plan benefits (PVAB)     | 2,264,467,746          | 51.0%           | 2,258,488,490          | 51.9%           |
| • Current liability interest rate            |                        | 2.95%           |                        | 2.43%           |
| • Current liability                          | \$3,357,561,092        | 34.4%           | \$3,552,383,659        | 33.0%           |
| <b>Actuarial Value of Assets</b>             | <b>\$1,153,928,489</b> |                 | <b>\$1,172,977,684</b> |                 |
|  | <b>Amount</b>          | <b>Funded %</b> | <b>Amount</b>          | <b>Funded %</b> |
| • Funding interest rate                      |                        | 6.00%           |                        | 6.00%           |
| • PV of future benefits                      | \$2,333,939,267        | 49.4%           | \$2,322,790,317        | 50.5%           |
| • Actuarial accrued liability <sup>1</sup>   | 2,264,467,746          | 51.0%           | 2,258,488,490          | 51.9%           |
| • PPA'06 liability and annual funding notice | 2,264,467,746          | 51.0%           | 2,258,488,490          | 51.9%           |

These measurements are not necessarily appropriate for assessing the sufficiency of the Plan's assets to cover the estimated cost of settling the Plan's benefit obligations or the need for or the amount of future contributions. The funded percentages based on the actuarial value of assets would be different if they were based on the market value of assets.

<sup>1</sup> Based on Unit Credit actuarial cost method

## Section 2: Actuarial Valuation Results

### Pension Protection Act of 2006

#### 2021 Actuarial status certification

- PPA'06 requires trustees to actively monitor their plans' financial prospects to identify emerging funding challenges so they can be addressed effectively.
- As reported in the 2021 certification, the Plan was classified as critical and declining (in the Red Zone) because there was a projected deficiency in the FSA within one year and a projected insolvency within 15 years.
- In addition, the Plan is making the Scheduled Progress in meeting the requirements of its Rehabilitation Plan.

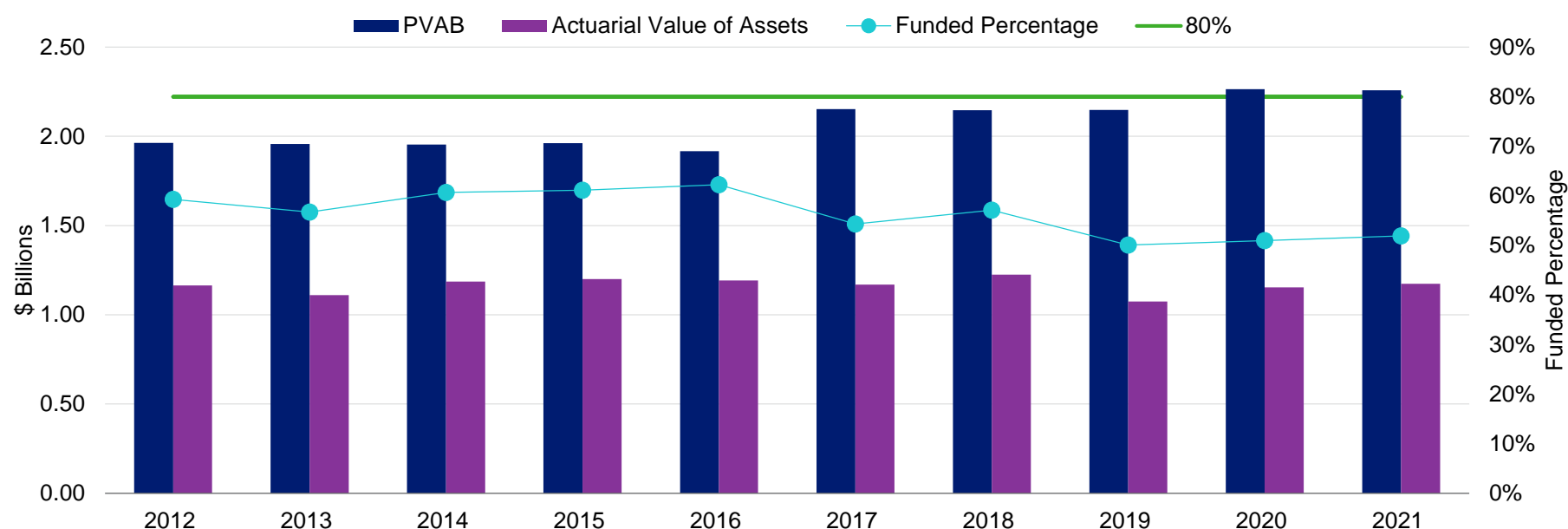
#### Rehabilitation Plan

- The Trustees initially adopted a Rehabilitation Plan to enable the plan to cease being in critical status by the end of the Rehabilitation Period. Under the Rehabilitation Plan, new collective bargaining agreements negotiated on or after April 28, 2008 will include various benefit reductions, including the removal of all early retirement subsidies, joint and survivor subsidies, disability pensions, the 36-payment pre-retirement death benefit and all benefit options besides the single life annuity, QJSA or QOSA. The Rehabilitation Plan also includes supplemental off-benefit contributions to the plan beginning January 1, 2013.
- Due to the adverse experience, the Trustees have determined that they could not make any reasonable updates to the Rehabilitation Plan to emerge from critical status. As a result, the Rehabilitation Plan was restated in 2012 to forestall plan insolvency. Working toward that goal, the Trustees have eliminated early retirement benefits for inactive participants and have reduced the supplemental off-benefit contributions to encourage continued plan participation. The Rehabilitation Plan now includes 7 annual supplemental off-benefit contribution rate increases of 5% each year beginning January 1, 2013.
- Section 432(e)(3)(B) requires that the Trustees annually update the Rehabilitation Plan and Schedules. Segal will continue to assist the Trustees to evaluate and update the Rehabilitation Plan and prepare the required assessment of Scheduled Progress in meeting the requirements of the Rehabilitation Plan.

## Section 2: Actuarial Valuation Results

### Pension Protection Act of 2006 historical information

#### Funded Percentage and Zone



| Plan Year         | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 2021   |
|-------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Zone Status       | Red    | Red    | Red    | Red    | Red    | Red    | Red    | Red    | Red    | Red    |
| PVAB <sup>1</sup> | \$1.96 | \$1.96 | \$1.95 | \$1.96 | \$1.92 | \$2.15 | \$2.15 | \$2.15 | \$2.26 | \$2.26 |
| AVA <sup>1</sup>  | 1.16   | 1.11   | 1.19   | 1.20   | 1.19   | 1.17   | 1.23   | 1.08   | 1.15   | 1.17   |
| Funded %          | 59.3%  | 56.7%  | 60.7%  | 61.1%  | 62.2%  | 54.3%  | 57.1%  | 50.0%  | 51.0%  | 51.9%  |

<sup>1</sup> In billions

## Section 2: Actuarial Valuation Results

### Projections

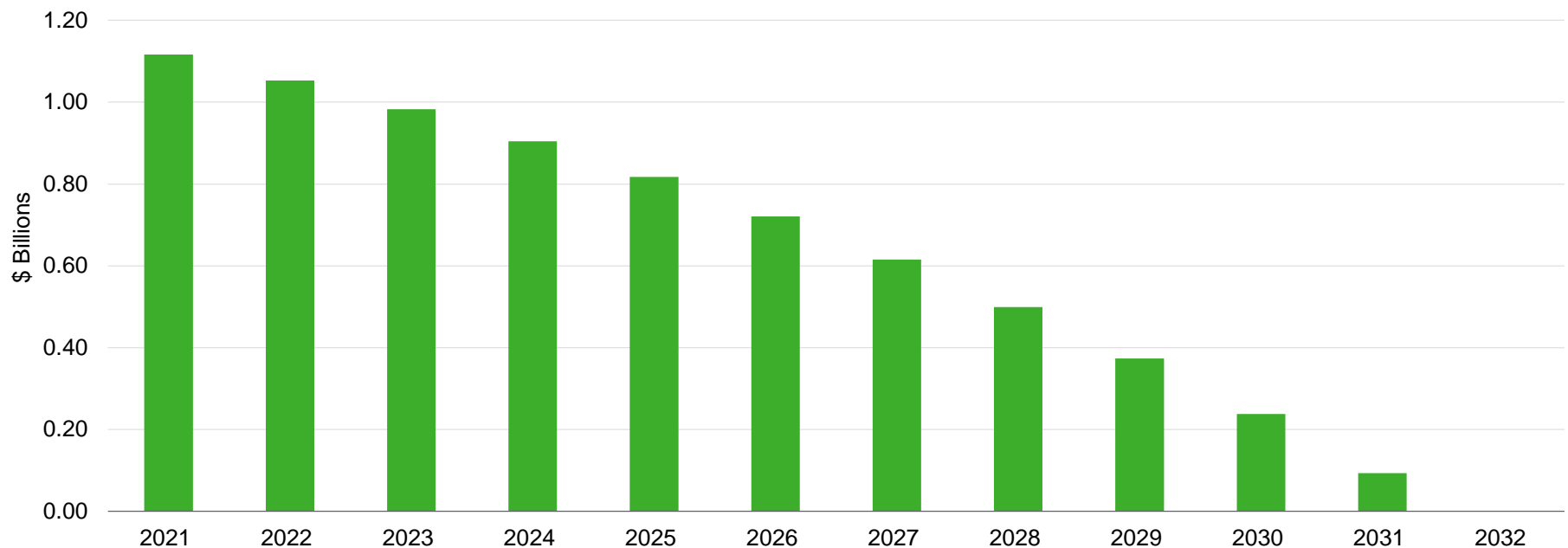
- The projection on the following page assumes the following, unless otherwise noted:
  - The Plan will earn a market rate of return equal to 6.00% each year.
  - Industry activity is from the 2021 zone certification with a level number of active employees (3,325) and 11.6 months worked per active each year.
  - Administrative expenses are projected to increase 2% per year.
  - There are no plan amendments or changes in law/regulation.
  - All other experience emerges as assumed, and no assumption changes are made.
- The projections in this valuation illustrate the potential future impact of one given set of assumptions. Additional scenarios would demonstrate sensitivity to risk from investment return, employment and other factors.

## Section 2: Actuarial Valuation Results

### Solvency projection

- PPA'06 requires Trustees to monitor plan solvency - the ability to pay benefits and expenses when due.
- The Plan is operating under a Rehabilitation Plan that is intended to forestall insolvency.
- Based on this valuation, assets are now projected to be exhausted in 2032, as shown below. This is one year later than projected in the prior year valuation, due to favorable investment experience during the 2020 plan year.
- These projections are based on the plan of benefits and assumptions used in this valuation, adjusted for the following:
  - reflects all contribution rate increases under the Rehabilitation Plan Default Schedule, 5% per year over 7 years, beginning January 1, 2013 (the additional contributions do not count toward benefit accruals),
  - assumes expected future withdrawal liability payments used in the 2021 zone certification.

Projected Assets as of December 31



## Section 2: Actuarial Valuation Results

### Risk

- The actuarial valuation results are dependent on a single set of assumptions; however, there is a risk that emerging results may differ significantly as actual experience proves to be different from the current assumptions.
- We have not been engaged to perform a detailed analysis of the potential range of the impact of risk relative to the Plan's future financial condition, but have included a brief discussion of some risks that may affect the Plan.
- Economic Shock Risk. Potential implications for the Plan due to the effects of the COVID-19 pandemic (that were not reflected as of the valuation date) include:
  - Volatile financial markets and investment returns lower than assumed
  - Short-term or long-term employment levels far different than past experience, including a projected rate of change and possible “new normal” long-term state
  - Changes in future demographic experience, such as retirement, disability, turnover, and mortality patterns
- Investment Risk (the risk that returns will be different than expected)

As can be seen in Section 2, the market value rate of return over the last 20 years ended December 31, 2020 has ranged from a low of -28.1% to a high of 23.3%.

- Contribution/Employment Risk (the risk that actual contributions will be different from projected contributions)
- Longevity Risk (the risk that mortality experience will be different than expected)

The actuarial valuation includes an expectation of future improvement in life expectancy. Emerging plan experience that does not match these expectations will result in either an increase or decrease in the plan costs.

- Other Demographic Risk (the risk that participant experience will be different than assumed)

Examples of this risk include:

- Actual retirements occurring earlier or later than assumed. The value of retirement plan benefits is sensitive to the rate of benefit accruals and any early retirement subsidies that apply. While it is difficult to quantify the impact of potential experience, earlier retirements would generally result in higher costs for the Plan.
- More or less active participant turnover than assumed. Lower turnover would generally result in higher costs for the Plan.
- Return to covered employment of previously inactive participants. More rehires would generally result in higher costs for the Plan.



## Section 2: Actuarial Valuation Results

- Actual Experience over the Last Ten Years

Past experience can help demonstrate the sensitivity of key results to the Plan's risk profile. Over the past ten years ended December 31, 2020:

- The investment gain (loss) on market value for a year has ranged from a loss of \$118,480,557 to a gain of \$144,772,395.

- Maturity Measures

The risk associated with a pension plan increases as it becomes more mature, meaning that the actives represent a smaller portion of the liabilities of a plan. When this happens, there is a greater risk that fluctuations in the experience of the non-active participants or of the assets of a plan can result in large swings in the contribution requirements.

- Benefits and administrative expenses less contributions totaled \$108,655,470 as of December 31, 2020, 9% of the market value of assets. The Plan is dependent upon investment returns in order to pay benefits.
- There are external factors including legislative, regulatory or financial reporting changes that could impact the Plan's funding and disclosure requirements. While we do not assume any changes in such external factors, it is important to understand that they could have significant consequences for the Plan.
- A more detailed assessment of the risks would provide the Trustees with a better understanding of the risks inherent in the Plan. This assessment may include scenario testing, sensitivity testing, stress testing, and stochastic modeling.
- A detailed risk assessment could be important for the Plan because the Plan's assets are quickly diminishing as benefit and expense outflow is far greater than contribution and investment income.

## Section 2: Actuarial Valuation Results

### Summary of PPA'06 zone status rules

- Based on projections of the credit balance in the FSA, the funded percentage, and cash flow sufficiency tests, plans are categorized in one of the “zones” described below.
- The funded percentage is determined using the actuarial value of assets and the present value of benefits earned to date, based on the actuary’s best estimate assumptions.

#### Critical Status (Red Zone)

A plan is classified as being in critical status (the Red Zone) if:

- The funded percentage is less than 65%, and either there is a projected FSA deficiency within five years or the plan is projected to be unable to pay benefits within seven years, or
- There is a projected FSA deficiency within four years, or
- There is a projected inability to pay benefits within five years, or
- The present value of vested benefits for inactive participants exceeds that for actives, contributions are less than the value of the current year’s benefit accruals plus interest on existing unfunded accrued benefit liabilities, and there is a projected FSA deficiency within five years, or
- As permitted by the Multiemployer Pension Reform Act of 2014, the plan is projected to be in the *Red Zone* within the next five years and the plan sponsor elects to be in critical status.

A critical status plan is further classified as being in critical and declining status if:

- The ratio of inactive participants to active participants is at least 2 to 1, and there is an inability to pay benefits projected within 20 years, or
- The funded percentage is less than 80%, and there is an inability to pay benefits projected within 20 years, or
- There is an inability to pay benefits projected within 15 years.

Any amortization extensions are ignored for testing initial entry into the *Red Zone*.

The Trustees are required to adopt a formal Rehabilitation Plan, designed to allow the plan to emerge from critical status by the end of the rehabilitation period. If they determine that such emergence is not reasonable, the Rehabilitation Plan must be designed to emerge as of a later time or to forestall possible insolvency.

Trustees of *Red Zone* plans have tools, such as the ability to reduce or eliminate early retirement subsidies, to remedy the situation. Accelerated forms of benefit payment (such as lump sums) are prohibited. However, unless the plan is critical and declining, Trustees may not reduce benefits of participants who retired before being notified of the plan’s critical status (other than rolling back recent benefit increases) or alter core retirement benefits payable at normal retirement age.

## Section 2: Actuarial Valuation Results

### Endangered Status (Yellow Zone)

A plan not in critical status (*Red Zone*) is classified as being in endangered status (the *Yellow Zone*) if:

- The funded percentage is less than 80%, or
- There is a projected FSA deficiency within seven years.

A plan that has both of the endangered conditions present is classified as seriously endangered.

Trustees of a plan that was in the *Green Zone* in the prior year can elect not to enter the *Yellow Zone* in the current year (although otherwise required to do so) if the plan's current provisions would be sufficient (with no further action) to allow the plan to emerge from the *Yellow Zone* within ten years.

The Trustees are required to adopt a formal Funding Improvement Plan, designed to improve the current funded percentage, and avoid a funding deficiency as of the emergence date.

### Green Zone

A plan not in critical status (the *Red Zone*) nor in endangered status (the *Yellow Zone*) is classified as being in the *Green Zone*.

### Early Election of Critical Status

Trustees of a *Green* or *Yellow Zone* plan that is projected to enter the *Red Zone* within the next five years may elect whether or not to enter the *Red Zone* for the current year.

# Section 3: Certificate of Actuarial Valuation

November 23, 2021

## Certificate of Actuarial Valuation

This is to certify that Segal has prepared an actuarial valuation of the Automotive Industries Pension Plan as of January 1, 2021 in accordance with generally accepted actuarial principles and practices. It has been prepared at the request of the Board of Trustees to assist in administering the Fund and meeting filing requirements of federal government agencies. This valuation report may not otherwise be copied or reproduced in any form without the consent of the Board of Trustees and may only be provided to other parties in its entirety.

The measurements shown in this actuarial valuation may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the Plan's funded status); and changes in plan provisions or applicable law.

The valuation is based on the assumption that the Plan is qualified as a multiemployer plan for the year and on information supplied by the auditor with respect to contributions and assets and reliance on the Plan Administrator with respect to the participant data. Segal does not audit the data provided. The accuracy and comprehensiveness of the data is the responsibility of those supplying the data. To the extent we can, however, Segal does review the data for reasonableness and consistency. Based on our review of the data, we have no reason to doubt the substantial accuracy of the information on which we have based this report and we have no reason to believe there are facts or circumstances that would affect the validity of these results. Adjustments for incomplete or apparently inconsistent data were made as described in the attached Exhibit K.

I am a member of the American Academy of Actuaries and I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of my knowledge, the information supplied in this actuarial valuation is complete and accurate, except as noted in Exhibit A. Each prescribed assumption for the determination of Current Liability was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the Plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the Plan.



Paul C. Poon, ASA, MAAA  
Vice President & Actuary  
Enrolled Actuary No. 20-06069

## Section 3: Certificate of Actuarial Valuation

### Exhibit A: Table of Plan Coverage

The valuation was made with respect to the following data supplied to us by the Plan Administrator.

| Category   | Year Ended December 31 |               | Change from Prior Year |
|--|------------------------|---------------|------------------------|
|  | 2019                   | 2020          |                        |
| <b>Active participants in valuation:</b>               |                        |               |                        |
| • Number   | 3,801                  | 3,394         | -10.7%                 |
| • Average age  | 45.0                   | 45.4          | 0.4                    |
| • Average years of Credited Service                    | 11.6                   | 11.9          | 0.3                    |
| • Estimated average total monthly contribution rate    | \$581.96               | \$603.32      | 3.7%                   |
| • Average contribution rate for benefit accruals       | \$413.59               | \$428.77      | 3.7%                   |
| • Number with unknown age                              | 0                      | 15            | N/A                    |
| • Total active vested participants                     | 2,482                  | 2,291         | -7.7%                  |
| <b>Inactive participants with rights to a pension:</b> |                        |               |                        |
| • Number   | 9,435                  | 9,289         | -1.5%                  |
| • Average age  | 56.7                   | 56.9          | 0.2                    |
| • Average monthly benefit                              | \$910                  | \$913         | 0.3%                   |
| <b>Pensioners:</b>                                     |                        |               |                        |
| • Number in pay status                                 | 8,889                  | 8,960         | 0.8%                   |
| • Average age  | 74.6                   | 74.9          | 0.3                    |
| • Average monthly benefit                              | \$1,143                | \$1,143       | 0.0%                   |
| • Number in suspended status                           | 41                     | 34            | -17.1%                 |
| <b>Beneficiaries:</b>                                  |                        |               |                        |
| • Number in pay status                                 | 2,464                  | 2,480         | 0.6%                   |
| • Average age  | 76.6                   | 76.8          | 0.2                    |
| • Average monthly benefit                              | \$511                  | \$533         | 4.3%                   |
| <b>Total participants</b>                              | <b>24,630</b>          | <b>24,157</b> | <b>-1.9%</b>           |

## Section 3: Certificate of Actuarial Valuation

### Exhibit B: Actuarial Factors for Minimum Funding

|   | 2020                   | 2021                   |
|---|------------------------|------------------------|
| Interest rate assumption                          | 6.00%                  | 6.00%                  |
| Normal cost, including administrative expenses    | \$10,704,821           | \$10,442,864           |
| Actuarial present value of projected benefits     | \$2,333,939,267        | \$2,322,790,317        |
| Present value of future normal costs              | 69,471,521             | 64,301,827             |
| <b>Actuarial accrued liability</b>                | <b>\$2,264,467,746</b> | <b>\$2,258,488,490</b> |
| • Pensioners and beneficiaries                    | \$1,340,879,559        | \$1,343,083,875        |
| • Inactive participants with vested rights        | 709,826,257            | 722,883,102            |
| • Active participants                             | 213,761,930            | 192,521,513            |
| Actuarial value of assets (AVA)                   | \$1,153,928,489        | \$1,172,977,684        |
| Market value as reported by Lindquist LLP (MVA)   | 1,153,928,489          | 1,172,977,684          |
| Unfunded actuarial accrued liability based on AVA | 1,110,539,257          | 1,085,510,806          |

## Section 3: Certificate of Actuarial Valuation

### Exhibit C: Summary Statement of Income and Expenses on a Market Value Basis

|  | Year Ended December 31, 2019 | Year Ended December 31, 2020 |
|--|------------------------------|------------------------------|
| <b>Contribution income:</b>                |                              |                              |
| • Employer contributions                   | \$26,979,804                 | \$24,761,810                 |
| • Withdrawal liability payments            | 5,211,469                    | 10,551,629                   |
| • Liquidated damages                       | <u>31,907</u>                | <u>10,612</u>                |
| <i>Contribution income</i>                 | \$32,223,180                 | \$35,324,051                 |
| <b>Net investment income</b>               | <b>188,648,245</b>           | <b>127,704,665</b>           |
| <b>Total income available for benefits</b> | <b>\$220,871,425</b>         | <b>\$163,028,716</b>         |
| <b>Less benefit payments and expenses:</b> |                              |                              |
| • Pension benefits                         | -\$138,786,516               | -140,110,679                 |
| • Administrative expenses                  | <u>-3,272,106</u>            | <u>-3,868,842</u>            |
| <i>Total benefit payments and expenses</i> | -\$142,058,622               | -\$143,979,521               |
| <b>Market value of assets</b>              | <b>\$1,153,928,489</b>       | <b>\$1,172,977,684</b>       |

## Section 3: Certificate of Actuarial Valuation

### Exhibit D: Information on Plan Status as of January 1, 2021

|  |                               |
|--|-------------------------------|
| Plan status (as certified on March 31, 2021, for the 2021 zone certification)  | <b>Critical and Declining</b> |
| Scheduled progress (as certified on March 31, 2021, for the 2021 zone certification)   | Yes                           |
| Actuarial value of assets for FSA  | \$1,172,977,684               |
| Accrued liability under unit credit cost method  | 2,258,488,490                 |
| Funded percentage for monitoring plan status   | 51.9%                         |
| Reduction in unit credit accrued liability benefits since the prior valuation date resulting from the reduction in adjustable benefits | \$0                           |
| Year in which insolvency is expected   | 2032                          |

#### Annual Funding Notice for Plan Year Beginning January 1, 2021 and Ending December 31, 2021

|  | 2021<br>Plan Year | 2020<br>Plan Year | 2019<br>Plan Year |
|--|-------------------|-------------------|-------------------|
| Actuarial valuation date                   | January 1, 2021   | January 1, 2020   | January 1, 2019   |
| Funded percentage                          | 51.9%             | 51.0%             | 50.0%             |
| Value of assets                            | \$1,172,977,684   | \$1,153,928,489   | \$1,075,115,686   |
| Value of liabilities                       | 2,258,488,490     | 2,264,467,746     | 2,148,164,545     |
| Market value of assets as of Plan Year end | Not available     | 1,172,977,684     | 1,153,928,489     |

### Critical, Critical and Declining or Endangered Status

The Plan was in critical and declining status because the plan had a projected Funding Standard Account deficiency within 1 year and a projected insolvency within 15 years.



## Section 3: Certificate of Actuarial Valuation

### Exhibit E: Schedule of Projection of Expected Benefit Payments

(Schedule MB, Line 8b(1))

| Plan Year | Expected Annual Benefit Payments |
|-----------|----------------------------------|
| 2021      | \$144,018,168                    |
| 2022      | 147,399,139                      |
| 2023      | 150,627,680                      |
| 2024      | 153,984,379                      |
| 2025      | 157,368,795                      |
| 2026      | 160,884,058                      |
| 2027      | 164,274,019                      |
| 2028      | 167,694,294                      |
| 2029      | 169,821,533                      |
| 2030      | 171,125,316                      |

This assumes the following:

- No additional benefits will be accrued.
- Experience is in line with valuation assumptions.
- No new entrants are covered by the Plan.
- Does not reflect any benefit reductions at projected plan insolvency.

## Section 3: Certificate of Actuarial Valuation

### Exhibit F: Schedule of Active Participant Data

(Schedule MB, Line 8b(2))

The participant data is for the year ended December 31, 2020.

| Age          | Years of Credited Service |              |            |            |            |            |            |            |           |           |
|--------------|---------------------------|--------------|------------|------------|------------|------------|------------|------------|-----------|-----------|
|              | Total                     | 1 - 4        | 5 - 9      | 10 - 14    | 15 - 19    | 20 - 24    | 25 - 29    | 30 - 34    | 35 - 39   | 40 & over |
| Under 25     | 120                       | 116          | 4          | –          | –          | –          | –          | –          | –         | –         |
| 25 - 29      | 331                       | 230          | 97         | 4          | –          | –          | –          | –          | –         | –         |
| 30 - 34      | 398                       | 209          | 131        | 51         | 7          | –          | –          | –          | –         | –         |
| 35 - 39      | 374                       | 167          | 117        | 59         | 26         | 5          | –          | –          | –         | –         |
| 40 - 44      | 404                       | 122          | 98         | 62         | 65         | 53         | 4          | –          | –         | –         |
| 45 - 49      | 398                       | 90           | 80         | 56         | 87         | 65         | 20         | –          | –         | –         |
| 50 - 54      | 402                       | 54           | 63         | 64         | 81         | 69         | 43         | 25         | 3         | –         |
| 55 - 59      | 498                       | 63           | 61         | 45         | 93         | 90         | 65         | 65         | 15        | 1         |
| 60 - 64      | 362                       | 32           | 23         | 31         | 62         | 60         | 51         | 59         | 31        | 13        |
| 65 - 69      | 76                        | 3            | 5          | 8          | 15         | 17         | 7          | 8          | 5         | 8         |
| 70 & over    | 16                        | 2            | –          | –          | 1          | 3          | 1          | 4          | 1         | 4         |
| Unknown      | 15                        | 15           | –          | –          | –          | –          | –          | –          | –         | –         |
| <b>Total</b> | <b>3,394</b>              | <b>1,103</b> | <b>679</b> | <b>380</b> | <b>437</b> | <b>362</b> | <b>191</b> | <b>161</b> | <b>55</b> | <b>26</b> |

## Section 3: Certificate of Actuarial Valuation

### Exhibit G: Funding Standard Account

- ERISA imposes a minimum funding standard that requires the Plan to maintain an FSA. The accumulation of contributions in excess of the minimum required contributions is called the FSA credit balance. If actual contributions fall short on a cumulative basis, a funding deficiency has occurred.
- The FSA is charged with the normal cost and the amortization of increases or decreases in the unfunded actuarial accrued liability due to plan amendments, experience gains or losses, and changes in actuarial assumptions and funding methods. The FSA is credited with employer contributions and withdrawal liability payments.
- Employers contributing to plans in critical status will generally not be subject to the excise tax if a funding deficiency develops, provided the parties fulfill their obligations under the Rehabilitation Plan, including negotiation of bargaining agreements consistent with Schedules provided by the Trustees.

|  | December 31, 2020       | December 31, 2021 |
|--|-------------------------|-------------------|
| <b>1</b> Prior year funding deficiency   | \$969,138,991           | \$1,102,798,478   |
| <b>2</b> Normal cost, including administrative expenses  | 10,704,821              | 10,442,864        |
| <b>3</b> Amortization charges  | 148,597,288             | 55,432,408        |
| <b>4</b> Interest on <b>1, 2 and 3</b>   | <u>67,706,466</u>       | <u>70,120,425</u> |
| <b>5</b> Total charges   | \$1,196,147,566         | \$1,238,794,175   |
| <b>6</b> Prior year credit balance   | \$0                     | \$0               |
| <b>7</b> Employer contributions  | 35,324,051              | TBD               |
| <b>8</b> Amortization credits  | 53,740,864              | 60,212,381        |
| <b>9</b> Interest on <b>6, 7 and 8</b>   | 4,284,173               | 3,612,743         |
| <b>10</b> Full funding limitation credits  | <u>0</u>                | <u>0</u>          |
| <b>11</b> Total credits  | \$93,349,088            | \$63,825,124      |
| <b>12</b> Credit balance/(Funding deficiency): <b>11 - 5</b>   | <b>-\$1,102,798,478</b> | TBD               |
| <b>13</b> Minimum contribution with interest required to avoid a funding deficiency: <b>5 -11</b> not less than zero | N/A                     | \$1,174,969,051   |

#### Full Funding Limitation (FFL) and Credits for Plan Year January 1, 2021

|   |                 |
|---|-----------------|
| ERISA FFL (accrued liability FFL)           | \$1,161,710,890 |
| RPA'94 override (90% current liability FFL) | 2,067,737,468   |
| FFL credit                                  | 0               |

## Section 3: Certificate of Actuarial Valuation

### Schedule of FSA Bases (Charges) (Schedule MB, Line 9c)

| Type of Base          | Date Established | Outstanding Balance  | Years Remaining | Amortization Amount |
|-----------------------|------------------|----------------------|-----------------|---------------------|
| Plan Amendment        | 01/01/2012       | \$358,910            | 6               | \$68,857            |
| Experience Loss       | 01/01/2012       | 19,665,220           | 6               | 3,772,803           |
| Experience Loss       | 01/01/2013       | 25,266,160           | 7               | 4,269,862           |
| Change in Assumptions | 01/01/2014       | 2,835,652            | 8               | 430,794             |
| Change in Assumptions | 01/01/2017       | 192,771,296          | 11              | 23,058,527          |
| Change in Assumptions | 01/01/2018       | 11,415,279           | 12              | 1,284,510           |
| Experience Loss       | 01/01/2019       | 104,361,737          | 13              | 11,121,427          |
| Change in Assumptions | 01/01/2020       | 112,573,086          | 14              | 11,425,628          |
| <b>Total</b>          |                  | <b>\$469,247,340</b> |                 | <b>\$55,432,408</b> |

## Section 3: Certificate of Actuarial Valuation

### Schedule of FSA Bases (Credits) (Schedule MB, Line 9h)

| Type of Base             | Date Established | Outstanding Balance  | Years Remaining | Amortization Amount |
|--------------------------|------------------|----------------------|-----------------|---------------------|
| Plan Amendment           | 07/01/2012       | \$13,602,369         | 6.5             | \$2,442,087         |
| Plan Amendment           | 01/01/2013       | 24,815               | 7               | 4,194               |
| Plan Amendment           | 07/01/2013       | 7,361,057            | 7.5             | 1,176,885           |
| Plan Amendment           | 01/01/2014       | 5,074,993            | 8               | 770,996             |
| Experience Gain          | 01/01/2014       | 68,896,804           | 8               | 10,466,851          |
| Experience Gain          | 01/01/2015       | 29,637,813           | 9               | 4,110,771           |
| Change in Asset Method   | 01/01/2016       | 4,150,258            | 5               | 929,487             |
| Experience Gain          | 01/01/2016       | 11,679,289           | 10              | 1,497,020           |
| Change in Funding Method | 01/01/2016       | 14,152,335           | 5               | 3,169,541           |
| Change in Assumptions    | 01/01/2016       | 40,262,099           | 10              | 5,160,688           |
| Experience Gain          | 01/01/2017       | 4,115,984            | 11              | 492,337             |
| Experience Gain          | 01/01/2018       | 99,211,704           | 12              | 11,163,847          |
| Experience Gain          | 01/01/2020       | 121,741,347          | 14              | 12,356,162          |
| Experience Gain          | 01/01/2021       | 66,624,145           | 15              | 6,471,515           |
| <b>Total</b>             |                  | <b>\$486,535,012</b> |                 | <b>\$60,212,381</b> |

## Section 3: Certificate of Actuarial Valuation

### Exhibit H: Maximum Deductible Contribution

- Employers that contribute to defined benefit pension plans are allowed a current deduction for payments to such plans. There are various measures of a plan's funded level that are considered in the development of the maximum tax-deductible contribution amount.
- The maximum deductible amount for this valuation is the excess of 140% of "current liability" over assets as shown below. "Current liability" is one measure of the actuarial present value of all benefits earned by the participants as of the valuation date. This limit is significantly higher than the current contribution level.
- Contributions in excess of the maximum deductible amount are not prohibited; only the deductibility of these contributions is subject to challenge and may have to be deferred to a later year. In addition, if contributions are not fully deductible, an excise tax in an amount equal to 10% of the non-deductible contributions may be imposed. However, the plan sponsor may elect to exempt the non-deductible amount up to the ERISA full-funding limitation from the excise tax.
- The Trustees should review the interpretation and applicability of all laws and regulations concerning any issues as to the deductibility of contribution amounts with Fund Counsel.

|   |  |                        |
|---|--|------------------------|
| 1 | Current liability for maximum deductible contribution, projected to the end of the Plan Year | \$3,509,772,037        |
| 2 | 140% of current liability  | 4,913,680,852          |
| 3 | Actuarial value of assets, projected to the end of the Plan Year                             | 1,091,057,366          |
| 4 | <b>Maximum deductible contribution: 2 - 3</b>  | <b>\$3,822,623,486</b> |

## Section 3: Certificate of Actuarial Valuation

### Exhibit I: Current Liability

The table below presents the current liability for the Plan Year beginning January 1, 2021.

| Item <sup>1</sup>   | Number of Participants | Current Liability      |
|---|------------------------|------------------------|
| Interest rate assumption  |                        | 2.43%                  |
| Retired participants and beneficiaries receiving payments                                       | 11,474                 | \$1,826,489,582        |
| Inactive vested participants  | 9,289                  | 1,344,052,833          |
| Active participants   |                        |                        |
| • Non-vested benefits   |                        | 14,340,271             |
| • Vested benefits   |                        | 367,500,973            |
| • Total active  | <u>3,394</u>           | <u>\$381,841,244</u>   |
| <b>Total</b>  | <b>24,157</b>          | <b>\$3,552,383,659</b> |
| Expected increase in current liability due to benefits accruing during the Plan Year            |                        | \$16,537,923           |
| Expected release from current liability for the Plan Year                                       |                        | 144,123,242            |
| Expected plan disbursements for the Plan Year, including administrative expenses of \$3,750,000 |                        | 147,873,242            |
| Current value of assets   |                        | \$1,172,977,684        |
| Percentage funded for Schedule MB   |                        | 33.01%                 |

<sup>1</sup> The actuarial assumptions used to calculate these values are shown in Exhibit K.

## Section 3: Certificate of Actuarial Valuation

### Exhibit J: Actuarial Present Value of Accumulated Plan Benefits

The actuarial present value of accumulated plan benefits calculated in accordance with FASB ASC 960 is shown below as of January 1, 2020 and as of January 1, 2021. In addition, a reconciliation between the two dates follows.

|   | Benefit Information Date |                        |
|---|--------------------------|------------------------|
|   | January 1, 2020          | January 1, 2021        |
| Actuarial present value of vested accumulated plan benefits:      |                          |                        |
| • Participants currently receiving payments                       | \$1,340,879,559          | \$1,343,083,875        |
| • Other vested benefits   | <u>919,240,038</u>       | <u>911,520,045</u>     |
| • Total vested benefits   | \$2,260,119,597          | \$2,254,603,920        |
| Actuarial present value of non-vested accumulated plan benefits   | <u>4,348,149</u>         | <u>3,884,570</u>       |
| <b>Total actuarial present value of accumulated plan benefits</b> | <b>\$2,264,467,746</b>   | <b>\$2,258,488,490</b> |

| Factors  | Change in Actuarial Present Value of Accumulated Plan Benefits |
|--|--|
| Benefits accumulated, net experience gain or loss, changes in data | \$2,466,679  |
| Benefits paid  | -140,110,679   |
| Interest   | 131,664,744  |
| <b>Total</b>   | <b>-\$5,979,256</b>  |



## Section 3: Certificate of Actuarial Valuation

### Exhibit K: Statement of Actuarial Assumptions, Methods and Models

(Schedule MB, Line 6)

#### Mortality Rates

*Healthy:* RP-2014 Blue Collar Healthy Annuitant Mortality Tables, with generational projection using Scale MP-2018.

*Disabled:* RP-2014 Disabled Annuitant Mortality Tables, with generational projection using Scale MP-2018.

*Pre-Retirement:* RP-2014 Blue Collar Employee Mortality Tables, with generational projection using Scale MP-2018.

The underlying tables with the generational projection to the ages of participants as of the measurement date reasonably reflect the mortality experience of the Plan as of the measurement date.

These mortality tables were then adjusted to future years using the generational projection to reflect future mortality improvement between the measurement date and those years.

The mortality rates were based on historical and current demographic data, adjusted to reflect estimated future experience and professional judgment. As part of the analysis, a comparison was made between the actual number of benefit weighted deaths and the projected number based on the assumption over the most recent five years.

#### Annuitant Mortality Rates

| Age | Rate (%) <sup>1</sup> |        |          |        |
|-----|-----------------------|--------|----------|--------|
|     | Healthy               |        | Disabled |        |
|     | Male                  | Female | Male     | Female |
| 55  | 0.60                  | 0.40   | 2.34     | 1.45   |
| 60  | 0.85                  | 0.57   | 2.66     | 1.70   |
| 65  | 1.26                  | 0.87   | 3.17     | 2.09   |
| 70  | 1.97                  | 1.40   | 4.03     | 2.82   |
| 75  | 3.15                  | 2.30   | 5.43     | 4.10   |
| 80  | 5.19                  | 3.82   | 7.66     | 6.10   |
| 85  | 8.68                  | 6.50   | 11.33    | 9.04   |
| 90  | 14.64                 | 11.19  | 17.30    | 13.27  |

<sup>1</sup> Mortality rates shown for base table.

## Section 3: Certificate of Actuarial Valuation

### Termination Rates

| Age | Rate (%)               |        |                         |
|-----|------------------------|--------|-------------------------|
|     | Mortality <sup>1</sup> |        | Withdrawal <sup>2</sup> |
|     | Male                   | Female |                         |
| 20  | 0.05                   | 0.02   | 10.00                   |
| 30  | 0.06                   | 0.02   | 8.00                    |
| 40  | 0.08                   | 0.04   | 5.00                    |
| 50  | 0.22                   | 0.12   | 4.00                    |
| 60  | 0.61                   | 0.27   | 0.00                    |
| 70  | 1.73                   | 0.70   | 0.00                    |
| 80  | 4.50                   | 1.98   | 0.00                    |

<sup>1</sup> Mortality rates shown for base year.

<sup>2</sup> Withdrawal rates are set to 13.50% for the first 5 years of service. Withdrawal rates do not apply at retirement eligibility.

The termination rates were based on historical and current demographic data, adjusted to reflect estimated future experience and professional judgment. As part of the analysis, a comparison was made between the actual number of terminations by age and the projected number based on the assumption over the most recent five years.

## Section 3: Certificate of Actuarial Valuation

### Retirement Rates

| <u>Age</u> | <u>Annual Retirement Rates</u> |
|------------|--------------------------------|
| 55 – 57    | 1.50%                          |
| 58         | 2.50                           |
| 59 – 60    | 3.00                           |
| 61         | 4.00                           |
| 62         | 10.00                          |
| 63         | 6.00                           |
| 64         | 10.00                          |
| 65         | 25.00                          |
| 66         | 35.00                          |
| 67 – 69    | 22.50                          |
| 70         | 100.00                         |

The retirement rates were based on historical and current demographic data, adjusted to reflect estimated future experience and professional judgment. As part of the analysis, a comparison was made between the actual number of retirements and the projected number based on the assumption over the most recent five years.

### Description of Weighted Average Retirement Age

Age 65.3, determined as follows: The weighted average retirement age for each participant is calculated as the sum of the product of each potential current or future retirement age times the probability of surviving from current age to that age and then retiring at that age, assuming no other decrements. The overall weighted retirement age is the average of the individual retirement ages based on all the active participants included in this actuarial valuation.

## Section 3: Certificate of Actuarial Valuation

|  |  |                                |
|--|--|--------------------------------|
| <b>Retirement Age for Inactive Vested Participants</b>   | For inactive vested participants with a current age of 71 or younger:  |                                |
|  | <u>Age</u>   | <u>Annual Retirement Rates</u> |
|  | 65   | 50.00%                         |
|  | 66   | 25.00                          |
|  | 67 – 68  | 20.00                          |
|  | 69 – 70  | 15.00                          |
|  | 71   | 100.00                         |
|  | For inactive vested participants with a current age of 72 or older:  |                                |
|  | <u>Age</u>   | <u>Annual Retirement Rates</u> |
|  | 72 – 75  | 10.00%                         |
| 76 – 80  | 5.00   |                                |
| 81   | 0.00   |                                |
| The retirement rates for inactive vested participants were based on historical and current demographic data, adjusted to reflect estimated future experience and professional judgment. As part of the analysis, a comparison was made between the actual number of retirements by age and the projected number based on the assumption over the most recent five years. |  |                                |
| <b>Future Benefit Accruals</b>   | Work-year of 11.6 months of contributions per active participant.<br>The future benefit accruals were based on historical and current demographic data, adjusted to reflect estimated future experience and professional judgment. As part of the analysis, a comparison was made between the assumed and the actual benefit accruals over the most recent five years.                                       |                                |
| <b>Unknown Data for Participants</b>   | Same as those exhibited by participants with similar known characteristics. If not specified, participants are assumed to be male.   |                                |
| <b>Definition of Active Participants</b>   | Active participants are defined as those with at least five months in the most recent plan year, excluding those who have retired as of the valuation date.  |                                |
| <b>Exclusion of Inactive Vested Participants</b>   | Inactive participants over age 80 are excluded from the valuation. The number excluded from this valuation is 51.<br>The exclusion of inactive vested participants over age 80 was based on historical and current demographic data, adjusted to reflect estimated future experience and professional judgment. As part of the analysis, the ages of new retirees from inactive vested status were reviewed. |                                |
| <b>Percent Married</b>   | 50%  |                                |
| <b>Age of Spouse</b>   | Spouses of male participants are three years younger and spouses of female participants are three years older.   |                                |

## Section 3: Certificate of Actuarial Valuation

|                                       |  |
|---------------------------------------|--|
| <b>Benefit Election</b>               | <p>For future retirements, 60% of participants are assumed to elect the Straight Life Annuity, 20% of participants are assumed to elect the 50% Joint and Survivor Option, and 20% of participants are assumed to elect the 75% Joint and Survivor Option.</p> <p>The benefit elections were based on historical and current demographic data, adjusted to reflect the plan design, estimated future experience and professional judgment. As part of the analysis, a comparison was made between the assumed and the actual option election patterns over the most recent five years.</p>   |
| <b>Delayed Retirement Factors</b>     | <p>Active participants are assumed to work enough hours each month to not qualify for delayed retirement adjustment. Inactive vested participants who are assumed to commence receipt of benefits after attaining normal retirement age may qualify for delayed retirement increases under the plan's actuarial equivalence basis.</p> <p>For inactive vested participants who are expected to retire after their Required Minimum Distribution date, 60% are assumed to receive actuarial increases through their retirement date and 40% are assumed to be in covered employment with no actuarial increases. These participants are assumed to receive a retroactive annuity from their Required Minimum Distribution date.</p> <p>For inactive vested participants who are expected to retire before their Required Minimum Distribution date, 60% are assumed to receive a retroactive annuity from their Normal Retirement Date, 20% are assumed to receive actuarial increases through their retirement date, and 20% are assumed to be in covered employment with no actuarial increases.</p> <p>The delayed retirement assumptions were based on historical and current demographic data, adjusted to reflect estimated future experience and professional judgment. As part of the analysis, the actual benefits were reviewed for new retirees from inactive vested status over the most recent five years.</p> |
| <b>Net Investment Return</b>          | <p>6.00%</p> <p>The net investment return assumption is an estimate derived from historical data, current and recent market expectations, and professional judgment. As part of the analysis, a building block approach was used that reflects inflation expectations and anticipated risk premiums for each of the portfolio's asset classes as provided by Segal Marco Advisors, as well as the Plan's target asset allocation.</p>  |
| <b>Annual Administrative Expenses</b> | <p>\$3,750,000 payable monthly (equivalent to \$3,634,000 payable at the beginning of the year) or 53.4% of Normal Cost.</p> <p>The annual administrative expenses were based on historical and current data, adjusted to reflect estimated future experience and professional judgment.</p>   |
| <b>Actuarial Value of Assets</b>      | <p>At market value.</p>  |
| <b>Actuarial Cost Method</b>          | <p>Unit Credit Actuarial Cost Method. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are allocated by service.</p>  |
| <b>Benefits Valued</b>                | <p>Unless otherwise indicated, includes all benefits summarized in Exhibit L.</p>  |

## Section 3: Certificate of Actuarial Valuation

|   |  |
|---|--|
| <b>Current Liability Assumptions</b>                  | <i>Interest:</i> 2.43%, within the permissible range prescribed under IRC Section 431(c)(6)(E)<br><i>Mortality:</i> Mortality prescribed under IRS Regulations 1.431(c)(6)-1 and 1.430(h)(3)-1(a)(2): RP-2014 employee and annuitant mortality tables, adjusted backward to the year (2006) using scale MP-2014, projected forward generationally using scale MP-2019 (previously, the MP-2018 scale was used).  |
| <b>Estimated Rate of Investment Return</b>            | <i>On actuarial value of assets (Schedule MB, line 6g):</i> 11.6%, for the Plan Year ending December 31, 2020<br><i>On current (market) value of assets (Schedule MB, line 6h):</i> 11.6%, for the Plan Year ending December 31, 2020  |
| <b>FSA Contribution Timing (Schedule MB, line 3a)</b> | Unless otherwise noted, contributions are paid periodically throughout the year pursuant to collective bargaining agreements. The interest credited in the FSA is therefore assumed to be equivalent to a July 1 contribution date.  |
| <b>Actuarial Models</b>                               | Segal valuation results are based on proprietary actuarial modeling software. The actuarial valuation models generate a comprehensive set of liability and cost calculations that are prepared to meet regulatory, legislative and client requirements. Deterministic cost projections are based on a proprietary forecasting model. Our Actuarial Technology and Systems unit, comprised of both actuaries and programmers, is responsible for the initial development and maintenance of these models. The models have a modular structure that allows for a high degree of accuracy, flexibility and user control. The client team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results, under the supervision of the responsible Enrolled Actuary. |

## Section 3: Certificate of Actuarial Valuation

**Justification for  
Change in Actuarial  
Assumptions  
(Schedule MB, line 11)**

For purposes of determining current liability, the current liability interest rate was changed from 2.95% to 2.43% due to a change in the permissible range and recognizing that any rate within the permissible range satisfies the requirements of IRC Section 431(c)(6)(E) and the mortality tables and mortality improvement scales were changed in accordance with IRS Regulations 1.431(c)(6)-1 and 1.430(h)(3)-1.

Based on past experience and future expectations, the following actuarial assumption was changed as of January 1, 2021:

Annual administrative expenses, previously \$3,500,000, payable monthly.

## Section 3: Certificate of Actuarial Valuation

### Exhibit L: Summary of Plan Provisions

(Schedule MB, Line 6)

This exhibit summarizes the major provisions of the Plan included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

|                            |   |
|----------------------------|---|
| <b>Plan Year</b>           | January 1 through December 31   |
| <b>Pension Credit Year</b> | January 1 through December 31   |
| <b>Plan Status</b>         | Ongoing plan  |
| <b>Normal Pension</b>      | <ul style="list-style-type: none"><li>• <i>Age Requirement:</i> 65</li><li>• <i>Service Requirement:</i> 5 years of Credited Service (including 24 months of Future Service)</li><li>• <i>Amount:</i> The monthly amount is the sum of (a), (b), (c), (d) and (e).<ol style="list-style-type: none"><li>a. \$10.00 for each year of Past Service.</li><li>b. \$5.00 for each \$100 of the contributions made on the participant's behalf from his Contribution Date through June 30, 2003.</li><li>c. \$3.00 for each \$100 of the contributions made on the participant's behalf from July 1, 2003 through December 31, 2004.</li><li>d. 0.5% for the first \$250 of monthly contributions, 1.0% for the next \$250 of monthly contributions, and 2.0% of monthly contributions in excess of \$500 made on the participant's behalf on or after January 1, 2005.</li><li>e. 1.0% of monthly contributions made on the participant's behalf on or after July 1, 2008.</li></ol></li><li>• Contribution increases under the Rehabilitation Plan do not count for benefit accruals.</li></ul> |
| <b>Early Retirement</b>    | <ul style="list-style-type: none"><li>• <i>Age Requirement:</i> 55</li><li>• <i>Service Requirement:</i> 60 months of Credited Future Service</li><li>• <i>Amount:</i> Accrued Normal Pension amount to which the participant would be entitled, reduced by 3% for each year that the retiring employee is younger than 62 (no reduction is applied between ages 62 and 65 for the Unreduced Early Pension, or if participants age and service total at least 85 for the Unreduced Rule of 85 Pension). For participants subject to the Rehabilitation Plan benefit reductions, all Early Retirement Pensions are reduced from age 65, using the plan's actuarial equivalence basis. This benefit is not available to those who retire from inactive status.</li></ul>  |



## Section 3: Certificate of Actuarial Valuation

|                                     |   |
|-------------------------------------|---|
| <b>Disability Pension</b>           | <ul style="list-style-type: none"><li>• Age Requirement: None</li><li>• Service Requirement: 5 years of Credited Service (including 24 months of Future Service)</li><li>• Other Requirements: Eligible for a Social Security disability benefit.</li><li>• Amount: Accrued Normal Pension amount to which the participant would be entitled (on his date of disability) without any reduction. For participants subject to the Rehabilitation Plan benefit reductions, the Disability Pension is not available and those who become disabled are eligible only for the Vested Benefit described below.</li></ul>   |
| <b>Vested Benefit</b>               | <ul style="list-style-type: none"><li>• <i>Age Requirement:</i> None</li><li>• <i>Service Requirement:</i> 5 years of Credited Service (including 24 months of Future Service)</li><li>• <i>Amount:</i> Accrued Normal Pension, payable commencing at Normal Retirement Age, or, if available (on a reduced basis), as early as age 55.</li><li>• <i>Normal Retirement Age:</i> The later of age 65 and the fifth anniversary of participation.</li></ul>   |
| <b>Spouse's Benefit</b>             | <ul style="list-style-type: none"><li>• <i>Age Requirement:</i> None</li><li>• <i>Service Requirement:</i> 5 years of Credited Service (including 24 months of Future Service)</li><li>• <i>Amount:</i> 50% of the benefit that the participant would have received had he or she retired the day before death on a Joint and Survivor Annuity. If the participant is not eligible to retire at the time of death, payments will be deferred until the participant's earliest retirement age.</li></ul>   |
| <b>Pre-Retirement Death Benefit</b> | <ul style="list-style-type: none"><li>• <i>Age Requirement:</i> None</li><li>• <i>Service Requirement:</i> 5 years of Credited Service (including 24 months of Future Service)</li><li>• <i>Amount:</i> Return of the total contributions made on account of the participant's employment or, if greater, the participant's unreduced pension at time of death payable for 36 months. This benefit is not payable if benefits are due under the Spouse's Benefit or for participants subject to the Rehabilitation Plan benefit reductions.</li></ul>   |
| <b>Joint and Survivor Annuity</b>   | <ul style="list-style-type: none"><li>• All retirements are paid in the form of a 50% joint and survivor annuity unless this form is rejected by the participant and spouse. The benefit amount otherwise payable is reduced to reflect the joint and survivor coverage. If the spouse predeceases the participant, the benefit "pops-up" to the amount is payable before the reduction. If this type of pension is rejected, benefits are payable for the life of the participant without reduction (with a minimum guarantee of 36 monthly payments) or in any other available optional form elected by the participant. For participants subject to the Rehabilitation Plan benefit reductions, the "pop-up" feature and the 36-month guarantee are not available, and the joint and survivor reduction factors are based on the plan's actuarial equivalence basis.</li></ul> |

## Section 3: Certificate of Actuarial Valuation

### Optional Forms of Benefit Payment

- 50% Joint and Survivor Option (“QJSA”)
- 75% Joint and Survivor Option (“QOSA”)
- Life with 36-Month Guarantee Option
- Life with 120-Month Guarantee Option
- Full 100% Joint and Survivor Option

Aside from a life only annuity, QJSA and QOSA, these options are not available for participants subject to the Rehabilitation Plan benefit reductions.

### Credited Service Schedule

Commencing January 1, 1976 a year of Future Service is credited during any Plan Year in which the participant completes at least 5 months of covered service. (No fractional credit is granted.) Prior to January 1, 1976, Future Service was granted at the rate of one-twelfth of a year for each month of contribution payments.

Past Service is credited for service prior to the Contribution Date up to a maximum of 20 years for members who became participants prior to January 1, 1975 and 10 years for members who entered the Plan after January 1, 1975. For participants who joined the Plan after 1978, the amount of Credited Past Service can not exceed the Credited Future Service earned under the Plan.

### Break in Service Rules

- *One-Year Break:* A participant incurs a One-Year Break in Service if he or she fails to complete five months of service or 501 hours of service in a Plan Year.
- *Permanent Break:* A non-vested participant incurs a Permanent Break in Service if the number of consecutive One-Year Breaks in Service is at least 5 and it equals or exceeds the number of years of Credited Service which the employee had previously accumulated. At this time, the non-vested portion of the participant’s service and benefits accrued are canceled.

### Participation Rule

An employee becomes a “Participant” the first day of the first month for which an employer contribution was made.

### Contribution Rate

The average benefit contribution rate on January 1, 2021 was \$428.77 per month.

### Plan Amendments

There were no changes in plan provisions reflected in this actuarial valuation

# Section 4: General Background

A summary of major developments with the background and position of the Pension Plan is provided in this Section.

## Changes in Benefit Amounts and Average Contribution Rate

| Effective Date |           | Average Monthly Credited Contribution Rate | Monthly Pension Amount   |   | Improvement to Existing Retirees |
|----------------|-----------|--|--------------------------|---|----------------------------------|
| Year           | Month     |  | Per Year of Past Service | Future Service (per \$100 of Contributions)   |                                  |
| 1976           | January   |  |                          |   |                                  |
| 1980           | January   | \$87.58                                    | \$5.50                   | \$3.03  | 10%                              |
| 1981           | November  | 103.49                                     |                          |   | (1)                              |
| 1984           | September | 126.33                                     | 6.05                     | 3.33  | 10%                              |
| 1986           | January   | 139.13                                     | 6.96                     | 3.83  | 15%                              |
| 1989           | January   | 153.00                                     | 7.27                     | 4.00  | 4.5%                             |
| 1990           | January   | 163.60                                     | 7.71                     | 4.24  | 6%                               |
| 1991           | December  | 180.00                                     |                          |   | (1)                              |
| 1992           | January   | 183.00                                     |                          | 4.45/4.24 <sup>(2)</sup>                      | 4.25%                            |
| 1993           | January   | 187.00                                     |                          | 4.50/4.24 <sup>(3)</sup>                      | 1%                               |
| 1994           | January   | 191.25                                     |                          | 4.50/4.24 <sup>(4)</sup>                      | 4% <sup>(1)</sup>                |
| 1995           | January   | 200.67                                     |                          |   |                                  |
| 1996           | January   | 220.37                                     |                          | 4.50/4.24 <sup>(5)</sup>                      |                                  |
| 1997           | January   | 195.75                                     |                          | 4.73/4.24 <sup>(5)</sup>                      | 2% <sup>(1)</sup>                |
| 1998           | January   | 205.64                                     |                          | 4.90/4.73 <sup>(4)</sup> /4.24 <sup>(5)</sup> | 1% <sup>(1)</sup>                |
| 1999           | January   | 208.60                                     | 10.00                    | 5.00/4.24 <sup>(5)</sup>                      | 2% <sup>(1)</sup>                |
| 2000           | January   | 222.52                                     |                          |   |                                  |
| 2001           | January   | 235.22                                     |                          |   |                                  |
| 2002           | January   | 324.40                                     |                          |   |                                  |
| 2003           | January   | 352.56                                     |                          |   |                                  |
| 2003           | July      |  |                          | 5.00/3.00 <sup>(6)</sup>                      |                                  |

## Section 4: General Background

### CHANGES IN BENEFIT AMOUNTS AND AVERAGE CONTRIBUTION RATE (CONTINUED)

| Effective Date |         | Average Monthly Credited Contribution Rate | Monthly Pension Amount   |   | Improvement to Existing Retirees |
|----------------|---------|--|--------------------------|---|----------------------------------|
| Year           | Month   |  | Per Year of Past Service | Future Service (per \$100 of Contributions) |                                  |
| 2004           | January | \$365.78                                   |                          |   |                                  |
| 2005           | January | 390.04                                     |                          | \$0.50/\$1.00/\$2.00 <sup>(7)</sup>         |                                  |
| 2006           | January | 393.84                                     |                          |   |                                  |
| 2007           | January | 404.09                                     |                          |   |                                  |
| 2008           | January | 395.33                                     |                          |   |                                  |
| 2008           | July    |  |                          | 1.00 <sup>(8)</sup>                         |                                  |
| 2009           | January | 381.89                                     |                          |   |                                  |
| 2010           | January | 394.93                                     |                          |   |                                  |
| 2011           | January | 393.62                                     |                          |   |                                  |
| 2012           | January | 399.53                                     |                          |   |                                  |
| 2013           | January | 405.25                                     |                          |   |                                  |
| 2014           | January | 398.95                                     |                          |   |                                  |
| 2015           | January | 398.43                                     |                          |   |                                  |
| 2016           | January | 399.29                                     |                          |   |                                  |
| 2017           | January | 395.58                                     |                          |   |                                  |
| 2018           | January | 391.20                                     |                          |   |                                  |
| 2019           | January | 407.30                                     |                          |   |                                  |
| 2020           | January | 413.59                                     |                          |   |                                  |

(1) Additional, one-time only, pension payment was granted.

(2) The lower factor applies to service after January 1, 1992.

(3) The lower factor applies to service after January 1, 1994.

(4) The lower factor applies to service after January 1, 2000.

(5) The lower factor applies to service after January 1, 2005.

(6) The lower factor applies to service after July 1, 2003.

(7) The first factor applies to the first \$250 of monthly contributions, the second factor applies to the second \$250 of monthly contributions, and the last factor applies to monthly contributions in excess of \$500. All three factors apply to service after January 1, 2005.

(8) This factor applies to service after July 1, 2008.

## Section 4: General Background

### Other Developments

| Date               | Event   |
|--------------------|---|
| September 1, 1955: | Board of Trustees executed Trust Agreement.<br>Pension Plan was adopted.  |
| July 12, 1956:     | Favorable determination letter from the Internal Revenue Service was received.  |
| January 1, 1976:   | Plan revised to satisfy ERISA.<br>Funding Standard Account was established.   |
| January 1, 1985:   | Early Retirement reduction factor was lowered to 1/3 of 1% per month.   |
| January 1, 1986:   | Plan amended to satisfy REA.<br>Partial vested-rights adopted for participants with at least 5 years of service.<br>Early Retirement reduction was dropped for participants retiring at age 62 or later and lowered to 1/4 of 1% per month for ages between 55 and 62.<br>Eligibility requirements for Early Retirement and Disability pensions were lowered to 5 years of service.<br>Pre-retirement death benefits are payable on the basis of vested percentage. |
| January 1, 1997:   | Full vesting adopted for participants with at least 5 years of service.   |
| October 1, 1997:   | Plan amended to provide Unreduced Rule of 85 Retirement.  |
| October 1, 1999:   | Joint and Survivor factors were increased and now reflect a simplified formula  |
| January 1, 2002:   | One-time IAP rollover allowed for all non-retired participants. Future rollovers at retirement will no longer be allowed.   |
| January 1, 2003:   | Eligibility requirements for Disability Pension amended to require receipt of a Social Security Disability award.   |
| January 15, 2008:  | Board adopts the Segal interest rate method and the market value of assets for determining withdrawal liability.  |
| March 4, 2008:     | For collective bargaining agreements effective on or after March 4, 2008, the \$700 per month cap on contribution rates was eliminated.   |

## Section 4: General Background

### OTHER DEVELOPMENTS (CONTINUED)

| Date               | Event   |
|--------------------|---|
| March 28, 2008:    | Plan certified as being in "Critical" status under PPA '06. A Rehabilitation Plan was adopted that includes supplemental off-benefit contributions beginning January 1, 2013 and the following benefit reductions: <ol style="list-style-type: none"><li>1. Early retirement and joint and survivor adjustment factors will be based on the plan's actuarial equivalence basis.</li><li>2. The "Rule of 85" unreduced early retirement benefit will no longer be available.</li><li>3. The Plan's disability benefit will no longer be available to new applicants.</li><li>4. The 36-payment pre-retirement death benefit is eliminated.</li><li>5. Payment forms, except for a life annuity or automatic joint and 50% survivor annuity, will no longer be available to new retirees.</li></ol> |
| March 5, 2009:     | Board elects under WRERA to freeze 2009 plan status under PPA '06 and to extend Rehabilitation Period by three years.   |
| February 1, 2011:  | The commencement of the Vested Benefit (for inactive vested participants) prior to Normal Retirement Age was eliminated.  |
| March 8, 2011:     | Board adopts resolution to forestall plan insolvency under the Rehabilitation Plan.<br>Board adopts simplified method under PBGC Technical Update 10-3 for determining withdrawal liability.  |
| March 8, 2012:     | Board elects to reduce annual supplemental off-benefit contribution under Rehabilitation Plan Default Schedule from 12.5% to 5.0%.  |
| March 31, 2015:    | Plan certified as being in "Critical and Declining" status under PPA '06 and MPRA.  |
| September 3, 2015: | Date of most recent favorable determination letter from the IRS.  |

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