(E)
(4)


## DB Benefits Will Be Paid For a Long Time



[^0]

Donuts?


Economic Projections!

## Agenda

- Economic Projection Basics
- Overview of 2021 Economic Projections
- Case Study
- Dave Andersen Northwest Texas Conference

[^1]
## Economic Projection Basics

- Cover a 20-year period
- Can include any or all retirement programs as well as asset accounts
- Can model under multiple economic environments
- Can include modeling of Compass plan adoption
- Can look at other variables, such as rate of future PSR increases


[^2]
## Sample Exhibit

| Year | Pre-82 <br> Earnings | CRSP <br> Earnings | MPP <br> Earnings | Pre-82 |  |  |  |  |  |  |  | MPP Annuities Based on Corridor |  | CRSP-DB <br> Based on Corridor |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & \text { Discount } \\ & \text { Rate } \end{aligned}$ | Past Service Rate | Smoothed Value of Assets | Liability | Funded <br> Status | Funded Ratio | Advanced Contribution | Amortizable Contribution | Funded Ratio | Contribution | Funded <br> Ratio | Contribution |
| 2020 | 15.450\% | 18.210\% | 12.470\% | 5.500\% | 605 | 37,264 | 42,499 | $(5,235)$ | 88\% | 0 | 561 | 111\% | 0 | 108\% | 1,555 |
| 2021 | 3.861\% | 4.650\% | 2.840\% | 5.500\% | 605 | 36,822 | 40,308 | $(3,486)$ | 91\% | 0 | 1,041 | 115\% | 0 | 113\% | 1,524 |
| 2022 | -1.366\% | -0.850\% | 0.050\% | 5.250\% | 605 | 36,830 | 38,765 | $(1,935)$ | 95\% | 0 | 1,725 | 117\% | 0 | 117\% | 1,479 |
| 2023 | 9.467\% | 14.560\% | 11.420\% | 5.375\% | 605 | 36,262 | 36,151 | 111 | 100\% | 0 | 151 | 117\% | 0 | 117\% | 1,471 |
| 2024 | 7.643\% | 15.160\% | 8.910\% | 5.375\% | 605 | 35,280 | 33,906 | 1,374 | 104\% | 0 | 152 | 120\% | 0 | 120\% | 0 |
| 2025 | -0.735\% | 2.730\% | 0.540\% | 5.500\% | 605 | 33,748 | 31,380 | 2,368 | 108\% | 0 | 0 | 121\% | 0 | 124\% | 0 |
| 2026 | 5.397\% | 3.020\% | 7.350\% | 5.500\% | 605 | 31,174 | 29,245 | 1,929 | 107\% | 0 | 0 | 117\% | 0 | 126\% | 0 |
| 2027 | 10.229\% | 15.290\% | 10.090\% | 5.500\% | 605 | 28,668 | 27,159 | 1,510 | 106\% | 0 | 0 | 116\% | 0 | 128\% | 0 |
| 2028 | 6.533\% | 8.470\% | 4.110\% | 5.500\% | 605 | 26,958 | 25,129 | 1,829 | 107\% | 0 | 0 | 119\% | 0 | 132\% | 0 |
| 2029 | -4.866\% | -19.750\% | -6.060\% | 5.375\% | 605 | 25,155 | 23,400 | 1,755 | 108\% | 0 | 0 | 120\% | 0 | 136\% | 0 |
| 2030 | 0.278\% | 5.840\% | 1.240\% | 5.250\% | 605 | 22,761 | 21,673 | 1,088 | 105\% | 0 | 0 | 117\% | 0 | 128\% | 0 |
| 2031 | 3.497\% | 6.870\% | 4.160\% | 5.125\% | 605 | 20,492 | 19,990 | 501 | 103\% | 0 | 0 | 115\% | 0 | 126\% | 0 |
| 2032 | 2.769\% | 11.640\% | 8.540\% | 5.125\% | 605 | 18,176 | 18,195 | (19) | 100\% | 0 | 0 | 111\% | 0 | 121\% | 0 |
| 2033 | 3.554\% | 8.240\% | 3.990\% | 5.125\% | 605 | 15,605 | 16,483 | (878) | 95\% | 0 | 0 | 107\% | 0 | 116\% | 0 |
| 2034 | 3.380\% | 17.510\% | 9.200\% | 5.125\% | 605 | 13,005 | 14,859 | $(1,854)$ | 88\% | 0 | 5 | 103\% | 0 | 110\% | 0 |
| 2035 | 3.743\% | 5.050\% | 5.610\% | 5.125\% | 605 | 10,939 | 13,325 | $(2,386)$ | 82\% | 0 | 225 | 102\% | 0 | 115\% | 0 |
| 2036 | 4.163\% | 7.020\% | 5.620\% | 5.125\% | 605 | 9,341 | 11,883 | $(2,542)$ | 79\% | 0 | 463 | 101\% | 0 | 120\% | 0 |
| 2037 | 6.087\% | 13.820\% | 6.470\% | 5.125\% | 605 | 8,113 | 10,535 | $(2,422)$ | 77\% | 0 | 576 | 94\% | 0 | 125\% | 0 |
| 2038 | 8.203\% | -10.210\% | 7.230\% | 5.125\% | 605 | 7,191 | 9,282 | $(2,091)$ | 77\% | 0 | 642 | 94\% | 0 | 132\% | 0 |
| 2039 | 7.531\% | 10.420\% | 7.400\% | 5.125\% | 605 | 6,536 | 8,124 | $(1,588)$ | 80\% | 0 | 692 | 94\% | 0 | 134\% | 0 |

[^3]
## Sample Exhibit

| Equity Allocation | 65\% | 65\% | 59\% | Accounts |  |  | Post-Retirement Medical |  |  | CRSP-DC | UMPIP | CPP |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Account 1 Earnings | Account 2 <br> Earnings | Account 3 Earnings | Account \#1 | Account \#2 | Account \#3 | Discount <br> Rate | Liability | Expected Benefit Payments | Contribution | Contribution | Contribution |
| 2017 | 18.220\% | 18.220\% | 16.400\% | 13,780 | 5,329 | 5,810 | 3.80\% | 8,108 | 460 | 187 | 14 | 201 |
| 2018 | 3.080\% | 3.080\% | 2.770\% | 14,453 | 7,550 | 6,649 | 3.95\% | 7,896 | 465 | 192 | 15 | 207 |
| 2019 | -19.690\% | -19.690\% | -17.720\% | 14,898 | 7,918 | 6,821 | 4.10\% | 7,705 | 468 | 193 | 15 | 208 |
| 2020 | -0.380\% | -0.380\% | -0.340\% | 11,965 | 6,491 | 5,615 | 4.25\% | 7,531 | 466 | 194 | 15 | 209 |
| 2021 | 11.060\% | 11.060\% | 9.960\% | 11,919 | 6,600 | 5,598 | 4.40\% | 7,373 | 460 | 195 | 15 | 210 |
| 2022 | 16.900\% | 16.900\% | 15.210\% | 13,153 | 7,470 | 6,158 | 4.56\% | 7,249 | 470 | 196 | 15 | 211 |
| 2023 | 3.550\% | 3.550\% | 3.200\% | 14,993 | 8,862 | 7,077 | 4.71\% | 7,128 | 474 | 197 | 15 | 212 |
| 2024 | -12.150\% | -12.150\% | -10.940\% | 14,680 | 9,303 | 7,136 | 4.86\% | 7,016 | 465 | 198 | 15 | 213 |
| 2025 | -3.000\% | -3.000\% | -2.700\% | 11,759 | 8,307 | 6,146 | 5.01\% | 6,938 | 471 | 199 | 15 | 214 |
| 2026 | 14.690\% | 14.690\% | 13.220\% | 9,915 | 8,187 | 5,664 | 5.16\% | 6,870 | 460 | 199 | 15 | 215 |
| 2027 | 6.230\% | 6.230\% | 5.610\% | 9,587 | 9,530 | 6,025 | 5.16\% | 6,946 | 450 | 200 | 15 | 216 |
| 2028 | -14.990\% | -14.990\% | -13.490\% | 8,346 | 10,274 | 5,933 | 5.16\% | 7,030 | 437 | 201 | 15 | 217 |
| 2029 | 5.240\% | 5.240\% | 4.710\% | 5,466 | 8,897 | 4,619 | 5.16\% | 7,147 | 426 | 202 | 15 | 218 |
| 2030 | 18.640\% | 18.640\% | 16.780\% | 4,205 | 9,538 | 4,265 | 5.16\% | 7,264 | 415 | 203 | 15 | 219 |
| 2031 | 6.160\% | 6.160\% | 5.540\% | 3,576 | 11,501 | 4,319 | 5.16\% | 7,393 | 401 | 204 | 15 | 220 |
| 2032 | 5.050\% | 5.050\% | 4.540\% | 2,472 | 12,409 | 3,725 | 5.16\% | 7,561 | 395 | 205 | 16 | 221 |
| 2033 | 8.100\% | 8.100\% | 7.290\% | 1,383 | 13,240 | 2,969 | 5.16\% | 7,750 | 398 | 206 | 16 | 222 |
| 2034 | 13.920\% | 13.920\% | 12.530\% | 491 | 14,515 | 2,288 | 5.16\% | 7,931 | 404 | 207 | 16 | 223 |
| 2035 | 28.750\% | 28.750\% | 25.870\% | (246) | 16,731 | 1,683 | 5.16\% | 8,103 | 411 | 208 | 16 | 224 |
| 2036 | -32.460\% | -32.460\% | -29.210\% | (890) | 21,731 | 1,225 | 5.16\% | 8,297 | 432 | 209 | 16 | 225 |
|  |  |  |  |  |  |  |  |  | Contribution | 3,995 | 304 | 4,305 |

[^4]
## What Prompted Recent Economic Projections?

- How much, if any, Pre-82 surplus may be available to my conference in the future?


## Sample Output Chart



10 | Wespath

## What Prompted Recent Economic Projections?

- Are annual withdrawals of 5\% from a specified account adequate to cover future core DB plan contributions?


## Sample Output Chart

## Account Withdrawals



## What Prompted Recent Economic Projections?

- If my conference establishes
a legal Benefits Reserve
Trust, what should be the initial funding amount?


## Sample Output Chart

Benefits Reserve Trust Balances (initial \$10 Million)


## What Prompted Recent Economic Projections?

- Are our current reserves reasonable compared to future contribution requirements or are they too high?


## Sample Output Chart

## Total Account Balances



[^5]
## What Prompted Recent Economic Projections?

- How much can we spend from our accounts while still maintaining enough to meet core financial obligations even in poor market environments?


## Sample of Output Chart

Account Balances - Poor Return Scenario ( $\# 3,25^{\text {th }}$ percentile)


## What Prompted Recent Economic Projections?

- Are our reserves sufficient even in adverse economic scenarios? What would be the impact of a short-term market correction?



## Sample of Output Chart



## Case Study - Northwest Texas Conference

- Setting up a legal Benefits Reserve Trust to fund future DB and Post-Retirement Medical costs
- How much should we fund it initially?
- Dave Andersen will talk about the process


[^0]:    2 | Wespath

[^1]:    5 | Wespath

[^2]:    6 | Wespath

[^3]:    7 | Wespath

[^4]:    8 | Wespath

[^5]:    16 | Wespath

