



Matthew A. Strom FSA, MAAA, EA
 Senior Vice President, Actuary
 mstrom@segalco.com

101 North Wacker Drive
 Suite 500
 Chicago, IL 60606-1724
 www.segalco.com

March 7, 2022

Via Email

Ms. Beth Pearce
 Vermont Retirement Systems
 Office of the State Treasurer
 109 State Street
 Montpelier, Vermont 05609

Re: Impact of Creating New VSERS “Group G” Based on Employees Identified in Universe 2 – Additional “Or” Eligibility Scenarios

Dear Beth:

As requested, we have calculated the impact of moving certain Vermont State Employees’ Retirement System (VSERS) Group F active members, as outlined in “Universe 2” (described in detail below), to a newly-created “Group G” benefit and eligibility structure. Using this Universe, we modeled the costs associated with different retirement eligibility provisions and benefit multipliers as outlined below. The results of the June 30, 2021, actuarial valuation, projected forward on an open group basis, are used as a baseline.

As a follow up to our letter dated February 4th, 2022, we prepared additional scenarios that reflect alternative unreduced retirement eligibilities, varying benefit multipliers that are applied to all future service, and a maximum retirement benefit for all Group G new hires of 50% of Average Final Compensation (AFC). The exhibits contained in this letter should be treated as a supplement to the February 4th communication.

We have calculated the impact that these changes would have on current active members (as defined in Universe 2) as of the June 30, 2021, valuation date, as well as all expected new hires of Universe 2.

Universe of Members – The following Universe of active members defines a possible cohort that would make up Group G:

Universe	Description of Members Included
Uni-2	All Department of Corrections active members plus other active members mentioned in 3 V.S.A. § 459(c)(2)(A) in Group F who are currently covered by the provision allowing unreduced retirement at age 55 with 20 years of service. This includes “ <i>Group F members who have 20 years of service as facility employees of the Department of Corrections, as Department of Corrections employees who provide direct security and treatment services to offenders under supervision in the community, or as Woodside facility employees, or as Vermont State Hospital employees, or as employees of its successor in interest, who provide direct patient care</i> ”.

Universe data and assumptions:

- **Identification of members in Universe 2**

- The “Retirement DOC DHM employees early retirement” data file provided by the Vermont Office of the State Treasurer on October 28, 2021, was used to identify all members in Universe 2.
- This file identified 796 members in Universe 2.

- **Additional assumptions**

- All current Group F members in Universe 2 would be reclassified from Group F to Group G plan provisions.
- All new entrants replacing members of Universe 2 that terminate employment in the projection model would be valued with Group G plan provisions going forward.

Group G Plan Provisions – The following plan provisions are assumed to apply to members that would comprise Group G. In some instances, multiple provisions are under consideration. If unspecified below, provisions would remain the same as under current Group F¹.

- **Eligibility for unreduced retirement benefits:** Either age 55 or 20 years of service, age 55 or 25 years of service, or age 57 or 20 years of service.
- **Early retirement amount:** For members hired prior to July 1, 2008, normal allowance reduced by one-twelfth of 6% per month that commencement precedes eligibility for unreduced retirement benefits. For members hired on or after July 1, 2008, normal allowance reduced by five-ninths of 1% per month that commencement precedes eligibility for unreduced retirement benefits.
- **Definition of AFC:** Average annual compensation during the highest three consecutive years.
- **Benefit multiplier:** 1.80%, 2.00%, 2.20%, or 2.50% of AFC times service.
- **Maximum benefit for new hires:** A maximum benefit amount of 50% of AFC for all new hires in Group G.

¹ Including a 60% (or 50%, if hired prior to July 1, 2008) of AFC maximum benefit.

Group G assumptions:

- Existing Universe 2 members that are assumed to be covered by Group G will accrue service under the Group G benefit multiplier beginning July 1, 2022. Service earned through June 30, 2022, will be applied at the Group F multiplier of 1.67%.
- Members identified in Universe 2 are valued using Group F actuarial assumptions related to termination of employment from active status and post-retirement mortality, with the exception of the retirement assumption. For retirement from active status, Group G-specific retirement rates were developed based on professional judgement to reflect anticipated changes in retirement patterns resulting from the change in eligibility for unreduced retirement benefits and the increased benefit multiplier. *To the extent that actual Group G retirement experience emerges differently than assumed in these schedules – particularly if more members retire earlier than assumed – the actual impact to VSERS will be more than that shown in this analysis.* A schedule of retirement rates is included as an appendix.
- No changes in member contribution rates were modeled in this analysis. Any increase in member contribution rate results in a small, offsetting increase in actuarial liability due to the increased value related to refunds of contributions.
- Group G payroll is assumed to grow at the VSERS payroll growth assumption of 3.5%.

Plan Change Scenarios – The following combinations of plan design elements for Group G members were prepared:

Scenario	Uni-1	Uni-2	55 or 20	55 or 25	57 or 20	Prospective	All Service	Multiplier
Uni-2 + PC-18		✓	✓			✓		1.8%
Uni-2 + PC-19		✓	✓			✓		2.0%
Uni-2 + PC-20		✓	✓			✓		2.2%
Uni-2 + PC-21		✓	✓			✓		2.5%
Uni-2 + PC-22		✓		✓		✓		1.8%
Uni-2 + PC-23		✓		✓		✓		2.0%
Uni-2 + PC-24		✓		✓		✓		2.2%
Uni-2 + PC-25		✓		✓		✓		2.5%
Uni-2 + PC-26		✓			✓	✓		1.8%
Uni-2 + PC-27		✓			✓	✓		2.0%
Uni-2 + PC-28		✓			✓	✓		2.2%
Uni-2 + PC-29		✓			✓	✓		2.5%

Plan Change Scenario assumptions:

- Retirement rates
 - Rates of retirement for PC-18 through PC-29 are shown in the appendix.

Methodology

This plan change where existing active Group F members would become members of a newly created Group G benefit structure will generally increase the actuarial accrued liability. This is a byproduct of the Entry Age Normal actuarial cost method, where a member's projected retirement benefit is discounted to their age at plan entry and spread over their expected working lifetime as a level percentage of salary. To approximate the ongoing increase in cost attributable to the value of Group G benefits relative to Group F, we have calculated the increase in the present value of benefits divided by the present value of future salary for existing Group F members moving to Group G and for Group G new entrants projected over the next 20 years².

Using the above-mentioned values for the existing members assumed to move to Group G and 20 years of future new entrants, we derived a composite additional member contribution rate that can be applied to all Group G members as a proxy for separate additional rates applied to each group (i.e., existing Group F members that move to Group G and future new entrants into Group G) resulting in a similar impact to the System.

With the exception of rates of retirement, actuarial assumptions related to decrement from active status and post-retirement mortality used to model Group G are the same as those used to value Group F. Group G members are a subset of the Group F data that was used to develop actuarial assumptions for valuation purposes. If experience related to active turnover, incidence of disability, and pre/post-retirement mortality for the Group G subset is materially different than the larger Group F, actual costs may be different than those illustrated in this analysis.

Disclosure

This analysis was prepared in accordance with generally accepted actuarial principles and practices at the request of the Office of the State Treasurer. Please refer to our June 30, 2021, Actuarial Valuation and Review reports for VSERS for the data, assumptions, and plan of benefits underlying these calculations.

The measurements shown in these actuarial calculations 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); and changes in plan provisions or applicable law.

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 presented 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

² Present value of benefits and present value of future salary for new entrants were discounted back to June 30, 2021, at the valuation discount rate assumption of 7.00%.

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 actuary.

The actuarial calculations were directed under my supervision. I am a member of the American Academy of Actuaries and 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 report is complete and accurate. In my opinion, each assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and the assumptions, in combination, offer my best estimate of anticipated experience under the plan.

Please let me know if you have any questions or need any additional information.

Sincerely,

A handwritten signature in black ink that reads "Matthew A. Strom". The signature is fluid and cursive, with a long horizontal line extending from the end of the name.

Matthew A. Strom, FSA, MAAA, EA
Senior Vice President and Actuary

cc: Kathleen Riley, Segal

Results

VSERS Group G – Scenario Descriptions

Universe	Description of Members Included
Uni-2	All Department of Corrections active members plus other active members mentioned in 3 V.S.A. § 459(c)(2)(A) in Group F who are currently covered by the provision allowing unreduced retirement at age 55 with 20 years of service. This includes “Group F members who have 20 years of service as facility employees of the Department of Corrections, as Department of Corrections employees who provide direct security and treatment services to offenders under supervision in the community, or as Woodside facility employees, or as Vermont State Hospital employees, or as employees of its successor in interest, who provide direct patient care”.

Scenario	Uni-1	Uni-2	55 or 20	55 or 25	57 or 20	Prospective	All Service	Multiplier
Uni-2 + PC-18		✓	✓			✓		1.8%
Uni-2 + PC-19		✓	✓			✓		2.0%
Uni-2 + PC-20		✓	✓			✓		2.2%
Uni-2 + PC-21		✓	✓			✓		2.5%
Uni-2 + PC-22		✓		✓		✓		1.8%
Uni-2 + PC-23		✓		✓		✓		2.0%
Uni-2 + PC-24		✓		✓		✓		2.2%
Uni-2 + PC-25		✓		✓		✓		2.5%
Uni-2 + PC-26		✓			✓	✓		1.8%
Uni-2 + PC-27		✓			✓	✓		2.0%
Uni-2 + PC-28		✓			✓	✓		2.2%
Uni-2 + PC-29		✓			✓	✓		2.5%

VSERS – Universe 2 –Scenarios PC-18 to PC-21

Age 55 or 20 retirement eligibility; 1.8%, 2.0%, 2.2%, and 2.5% benefit multiplier applied to future service

2021 Valuation (\$ in millions)	Baseline	Uni-2 + PC-18	Uni-2 + PC-19	Uni-2 + PC-20	Uni-2 + PC-21
Actuarial Accrued Liability:	\$3,280.9	\$3,315.4	\$3,324.3	\$3,330.9	\$3,340.5
Change from Baseline Valuation:		\$34.5	\$43.4	\$50.0	\$59.6
Total Normal Cost*:	\$72.5	\$75.2	\$75.8	\$76.4	\$77.2
Change from Baseline Valuation:		\$2.7	\$3.3	\$3.9	\$4.7
Expected Group G Payroll:	N/A	\$56.0	\$56.0	\$56.0	\$56.0
Actuarially Determined Contribution for Fiscal 2023:	\$125.9	\$131.8	\$133.3	\$134.4	\$136.1
Change from Baseline Valuation:		\$5.9	\$7.4	\$8.5	\$10.2
As a percentage of expected FY23 Group G payroll:		10.11%	12.66%	14.65%	17.57%
Additional Contribution Rate (% of Future Salary) for existing Group G members needed to offset the increase in PVB:	N/A	9.36%	12.23%	14.67%	18.54%

* Total normal cost as of July 1, 2021, adjusted for timing.

Projected Amortization Payment for the Plan Year Ending June 30 (\$ in millions)

Year	Baseline	Uni-2 + PC-18	Uni-2 + PC-19	Uni-2 + PC-20	Uni-2 + PC-21
2023	\$89.1	\$92.2	\$93.0	\$93.6	\$94.5
2024	87.7	91.1	92.0	92.7	93.6
2025	86.1	89.6	90.5	91.2	92.2
2026	84.7	88.4	89.4	90.1	91.1
2027	83.7	87.5	88.4	89.2	90.2
2028	82.8	86.7	87.7	88.5	89.5
2029	82.1	86.1	87.1	87.9	89.0
2030	81.5	85.7	86.7	87.5	88.7
2031	81.0	85.3	86.4	87.2	88.4
2032	80.5	84.9	86.0	86.9	88.1
2033	80.0	84.5	85.7	86.5	87.8
2034	79.3	83.9	85.1	86.0	87.3
2035	78.3	83.0	84.3	85.2	86.6
2036	76.8	81.6	82.9	83.9	85.3
2037	74.1	79.1	80.4	81.4	82.9
2038	68.9	74.0	75.3	76.4	77.9

VSERS – Universe 2 –Scenarios PC-22 to PC-25

Age 55 or 25 retirement eligibility; 1.8%, 2.0%, 2.2%, and 2.5% benefit multiplier applied to future service

2021 Valuation (\$ in millions)	Baseline	Uni-2 + PC-22	Uni-2 + PC-23	Uni-2 + PC-24	Uni-2 + PC-25
Actuarial Accrued Liability:	\$3,280.9	\$3,309.5	\$3,317.3	\$3,323.1	\$3,331.3
Change from Baseline Valuation:		\$28.6	\$36.4	\$42.2	\$50.4
Total Normal Cost*:	\$72.5	\$74.7	\$75.3	\$75.7	\$76.4
Change from Baseline Valuation:		\$2.2	\$2.8	\$3.2	\$3.9
Expected Group G Payroll:	N/A	\$56.0	\$56.0	\$56.0	\$56.0
Actuarially Determined Contribution for Fiscal 2023:	\$125.9	\$130.8	\$132.1	\$133.1	\$134.4
Change from Baseline Valuation:		\$4.9	\$6.2	\$7.2	\$8.5
As a percentage of expected FY23 Group G payroll:		8.34%	10.57%	12.29%	14.69%
Additional Contribution Rate (% of Future Salary) for existing Group G members needed to offset the increase in PVB:	N/A	7.56%	9.92%	11.85%	14.68%

* Total normal cost as of July 1, 2021, adjusted for timing.

Projected Amortization Payment for the Plan Year Ending June 30 (\$ in millions)

Year	Baseline	Uni-2 + PC-22	Uni-2 + PC-23	Uni-2 + PC-24	Uni-2 + PC-25
2023	\$89.1	\$91.7	\$92.4	\$92.9	\$93.6
2024	87.7	90.5	91.3	91.9	92.7
2025	86.1	89.0	89.8	90.4	91.3
2026	84.7	87.8	88.6	89.2	90.1
2027	83.7	86.8	87.7	88.3	89.2
2028	82.8	86.0	86.9	87.6	88.5
2029	82.1	85.4	86.3	87.0	88.0
2030	81.5	85.0	85.9	86.6	87.6
2031	81.0	84.5	85.5	86.2	87.2
2032	80.5	84.2	85.2	85.9	86.9
2033	80.0	83.7	84.8	85.5	86.6
2034	79.3	83.1	84.2	85.0	86.1
2035	78.3	82.2	83.3	84.1	85.3
2036	76.8	80.8	81.9	82.7	83.9
2037	74.1	78.2	79.4	80.2	81.5
2038	68.9	73.1	74.3	75.2	76.4

VSERS – Universe 2 –Scenarios PC-26 to PC-29

Age 57 or 20 retirement eligibility; 1.8%, 2.0%, 2.2%, and 2.5% benefit multiplier applied to future service

2021 Valuation (\$ in millions)	Baseline	Uni-2 + PC-26	Uni-2 + PC-27	Uni-2 + PC-28	Uni-2 + PC-29
Actuarial Accrued Liability:	\$3,280.9	\$3,314.3	\$3,322.7	\$3,329.1	\$3,338.3
Change from Baseline Valuation:		\$33.4	\$41.8	\$48.2	\$57.4
Total Normal Cost*:	\$72.5	\$75.0	\$75.6	\$76.1	\$76.8
Change from Baseline Valuation:		\$2.5	\$3.1	\$3.6	\$4.3
Expected Group G Payroll:	N/A	\$56.0	\$56.0	\$56.0	\$56.0
Actuarially Determined Contribution for Fiscal 2023:	\$125.9	\$131.5	\$132.9	\$134.0	\$135.6
Change from Baseline Valuation:		\$5.6	\$7.0	\$8.1	\$9.7
As a percentage of expected FY23 Group G payroll:		9.57%	11.99%	13.89%	16.65%
Additional Contribution Rate (% of Future Salary) for existing Group G members needed to offset the increase in PVB:	N/A	8.82%	11.52%	13.84%	17.48%

* Total normal cost as of July 1, 2021, adjusted for timing.

Projected Amortization Payment for the Plan Year Ending June 30 (\$ in millions)

Year	Baseline	Uni-2 + PC-26	Uni-2 + PC-27	Uni-2 + PC-28	Uni-2 + PC-29
2023	\$89.1	\$92.1	\$92.8	\$93.4	\$94.3
2024	87.7	91.0	91.8	92.5	93.4
2025	86.1	89.5	90.4	91.0	92.0
2026	84.7	88.3	89.2	89.9	90.9
2027	83.7	87.3	88.3	89.0	90.0
2028	82.8	86.6	87.5	88.2	89.3
2029	82.1	86.0	87.0	87.7	88.8
2030	81.5	85.5	86.5	87.3	88.4
2031	81.0	85.1	86.2	87.0	88.1
2032	80.5	84.7	85.8	86.6	87.8
2033	80.0	84.3	85.4	86.3	87.5
2034	79.3	83.7	84.9	85.8	87.0
2035	78.3	82.9	84.1	85.0	86.3
2036	76.8	81.4	82.7	83.6	85.0
2037	74.1	78.9	80.2	81.1	82.5
2038	68.9	73.8	75.1	76.1	77.6

VSERS – Universe 2 –Scenarios PC-18 to PC-29

Age 55 or 20, age 55 or 25, and age 57 or 20 retirement eligibilities; 1.8%, 2.0%, 2.2%, and 2.5% benefit multiplier applied to future service

2021 Valuation (\$ in millions)	Existing Group G Members			Group G New Entrants*			Composite		
	Increase in Present Value of Benefits (PVB)	Present Value of Future Salary (PVFS)	Additional Contribution Rate (PVB/PVFS)	Increase in Present Value of Benefits (PVB)	Present Value of Future Salary (PVFS)	Additional Contribution Rate (PVB/PVFS)	Increase in Present Value of Benefits (PVB)	Present Value of Future Salary (PVFS)	Additional Contribution Rate (PVB/PVFS)
Uni-2 + PC-18	\$47.2	\$504.4	9.36%	\$19.2	\$363.4	5.29%	\$66.4	\$867.8	7.65%
Uni-2 + PC-19	57.9	473.6	12.23%	26.2	363.8	7.19%	84.1	837.4	10.04%
Uni-2 + PC-20	66.7	454.3	14.67%	32.1	364.2	8.81%	98.7	818.5	12.06%
Uni-2 + PC-21	78.9	425.4	18.54%	40.1	365.0	11.00%	119.0	790.5	15.06%
Uni-2 + PC-22	40.7	538.2	7.56%	15.6	363.4	4.30%	56.3	901.5	6.25%
Uni-2 + PC-23	51.0	514.5	9.92%	20.9	363.5	5.74%	71.9	878.0	8.19%
Uni-2 + PC-24	59.2	499.4	11.85%	25.0	363.6	6.87%	84.2	863.0	9.75%
Uni-2 + PC-25	70.0	476.6	14.68%	30.8	364.0	8.47%	100.8	840.5	11.99%
Uni-2 + PC-26	44.7	507.0	8.82%	17.9	363.3	4.91%	62.5	870.3	7.19%
Uni-2 + PC-27	55.0	477.3	11.52%	24.3	363.7	6.68%	79.3	841.0	9.43%
Uni-2 + PC-28	63.4	458.4	13.84%	29.8	364.0	8.18%	93.2	822.5	11.33%
Uni-2 + PC-29	75.1	429.9	17.48%	37.0	364.8	10.15%	112.2	794.7	14.12%

* Based on the present value of new entrants over the next 20 years. Additionally, the maximum retirement benefit for all Group G new entrants was set to 50% of AFC.

Appendix

Retirement Rates

For retirement from active status, Group G-specific retirement rates were developed based on professional judgement to reflect anticipated changes in retirement patterns resulting from the change in eligibility for unreduced retirement benefits and increased benefit multiplier. The following guidelines were used as a basis for adjusting the existing Group F retirement rates for purposes of Group G:

- Members of Universe 2 would retire earlier, on average, than other members of Group F.
- A higher benefit multiplier for Group G service would tend to accelerate the pattern of retirement.
- Rates for remaining Group F members would not materially change when members of Universe 2 were moved from Group F to Group G.

Rates applied to Group G under 55 or 20 and 55 or 25 retirement eligibilities:

Age	Group F		Group G (1.8%)		Group G (2.0%)		Group G (2.2%)		Group G (2.5%)	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
40	20.0%	10.0%	9.4%	9.4%	12.5%	12.5%	15.0%	15.0%	20.0%	20.0%
41	20.0%	10.0%	9.4%	9.4%	12.5%	12.5%	15.0%	15.0%	20.0%	20.0%
42	20.0%	10.0%	9.4%	9.4%	12.5%	12.5%	15.0%	15.0%	20.0%	20.0%
43	20.0%	10.0%	9.4%	9.4%	12.5%	12.5%	15.0%	15.0%	20.0%	20.0%
44	20.0%	10.0%	9.4%	9.4%	12.5%	12.5%	15.0%	15.0%	20.0%	20.0%
45	20.0%	10.0%	9.4%	9.4%	12.5%	12.5%	15.0%	15.0%	20.0%	20.0%
46	20.0%	10.0%	9.4%	9.4%	12.5%	12.5%	15.0%	15.0%	20.0%	20.0%
47	20.0%	10.0%	9.4%	9.4%	12.5%	12.5%	15.0%	15.0%	20.0%	20.0%
48	20.0%	10.0%	9.4%	9.4%	12.5%	12.5%	15.0%	15.0%	20.0%	20.0%
49	20.0%	10.0%	9.4%	9.4%	12.5%	12.5%	15.0%	15.0%	20.0%	20.0%
50	20.0%	10.0%	9.4%	9.4%	12.5%	12.5%	15.0%	15.0%	20.0%	20.0%
51	20.0%	10.0%	9.4%	9.4%	12.5%	12.5%	15.0%	15.0%	20.0%	20.0%
52	20.0%	10.0%	9.4%	9.4%	12.5%	12.5%	15.0%	15.0%	20.0%	20.0%
53	15.0%	10.0%	9.4%	9.4%	12.5%	12.5%	15.0%	15.0%	20.0%	20.0%
54	15.0%	10.0%	9.4%	9.4%	12.5%	12.5%	15.0%	15.0%	20.0%	20.0%
55	5.0%	5.0%	10.1%	10.1%	14.5%	14.5%	18.0%	18.0%	25.0%	25.0%
56	5.0%	5.0%	10.1%	13.0%	14.5%	18.0%	18.0%	22.0%	25.0%	30.0%
57	5.0%	5.0%	13.0%	13.0%	18.0%	18.0%	22.0%	22.0%	30.0%	30.0%
58	5.0%	7.5%	13.0%	13.0%	18.0%	18.0%	22.0%	22.0%	30.0%	30.0%
59	7.5%	7.5%	21.6%	18.8%	28.5%	25.0%	34.0%	30.0%	45.0%	40.0%
60	7.5%	7.5%	30.9%	30.9%	36.5%	36.5%	41.0%	41.0%	50.0%	50.0%
61	15.0%	12.5%	24.1%	21.3%	31.0%	27.5%	36.5%	32.5%	47.5%	42.5%
62	25.0%	25.0%	28.8%	23.8%	35.0%	30.0%	40.0%	35.0%	50.0%	45.0%
63	17.5%	15.0%	29.5%	26.6%	37.0%	33.5%	43.0%	39.0%	55.0%	50.0%
64	20.0%	15.0%	32.4%	38.1%	40.5%	47.5%	47.0%	55.0%	60.0%	70.0%
65	22.5%	20.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
66	25.0%	30.0%								
67	25.0%	30.0%								
68	25.0%	30.0%								
69	25.0%	30.0%								
70	100.0%	100.0%								

Rates applied to Group G under 57 or 20 retirement eligibility:

Age	Group F		Group G (1.8%)		Group G (2.0%)		Group G (2.2%)		Group G (2.5%)	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
40	20.0%	10.0%	9.4%	9.4%	12.5%	12.5%	15.0%	15.0%	20.0%	20.0%
41	20.0%	10.0%	9.4%	9.4%	12.5%	12.5%	15.0%	15.0%	20.0%	20.0%
42	20.0%	10.0%	9.4%	9.4%	12.5%	12.5%	15.0%	15.0%	20.0%	20.0%
43	20.0%	10.0%	9.4%	9.4%	12.5%	12.5%	15.0%	15.0%	20.0%	20.0%
44	20.0%	10.0%	9.4%	9.4%	12.5%	12.5%	15.0%	15.0%	20.0%	20.0%
45	20.0%	10.0%	9.4%	9.4%	12.5%	12.5%	15.0%	15.0%	20.0%	20.0%
46	20.0%	10.0%	9.4%	9.4%	12.5%	12.5%	15.0%	15.0%	20.0%	20.0%
47	20.0%	10.0%	9.4%	9.4%	12.5%	12.5%	15.0%	15.0%	20.0%	20.0%
48	20.0%	10.0%	9.4%	9.4%	12.5%	12.5%	15.0%	15.0%	20.0%	20.0%
49	20.0%	10.0%	9.4%	9.4%	12.5%	12.5%	15.0%	15.0%	20.0%	20.0%
50	20.0%	10.0%	9.4%	9.4%	12.5%	12.5%	15.0%	15.0%	20.0%	20.0%
51	20.0%	10.0%	9.4%	9.4%	12.5%	12.5%	15.0%	15.0%	20.0%	20.0%
52	20.0%	10.0%	9.4%	9.4%	12.5%	12.5%	15.0%	15.0%	20.0%	20.0%
53	15.0%	10.0%	9.4%	9.4%	12.5%	12.5%	15.0%	15.0%	20.0%	20.0%
54	15.0%	10.0%	9.4%	9.4%	12.5%	12.5%	15.0%	15.0%	20.0%	20.0%
55	5.0%	5.0%	9.4%	9.4%	12.5%	12.5%	15.0%	15.0%	20.0%	20.0%
56	5.0%	5.0%	9.4%	9.4%	12.5%	12.5%	15.0%	15.0%	20.0%	20.0%
57	5.0%	5.0%	10.1%	12.3%	14.5%	16.0%	18.0%	19.0%	25.0%	25.0%
58	5.0%	7.5%	13.0%	13.8%	18.0%	20.0%	22.0%	25.0%	30.0%	35.0%
59	7.5%	7.5%	21.6%	18.8%	28.5%	25.0%	34.0%	30.0%	45.0%	40.0%
60	7.5%	7.5%	30.9%	30.9%	36.5%	36.5%	41.0%	41.0%	50.0%	50.0%
61	15.0%	12.5%	24.1%	21.3%	31.0%	27.5%	36.5%	32.5%	47.5%	42.5%
62	25.0%	25.0%	28.8%	23.8%	35.0%	30.0%	40.0%	35.0%	50.0%	45.0%
63	17.5%	15.0%	29.5%	26.6%	37.0%	33.5%	43.0%	39.0%	55.0%	50.0%
64	20.0%	15.0%	32.4%	38.1%	40.5%	47.5%	47.0%	55.0%	60.0%	70.0%
65	22.5%	20.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
66	25.0%	30.0%								
67	25.0%	30.0%								
68	25.0%	30.0%								
69	25.0%	30.0%								
70	100.0%	100.0%								