Estimated Cost of the Veto of the 2017 Pension Bill

MSRS General

This chart evaluates the failure to enact the following benefit reforms and assumption changes:

- Elimination of the COLA trigger
- Reduction of the COLA from 2% to 1% for five years, 1.5% thereafter
- Elimination of augmentation effective for all former and current employees
- Elimination of augmentation adjustment in determining the actuarial equivalent early retirement factors, effective
 July 1, 2018, with a 5-year phase-in
- Deferral of the payment of the first COLA until normal retirement age, effective January 1, 2023, but not applicable to Rule of 90 retirees
- Reduction of the interest rate on payments, refunds, etc., from 4% to 3%
- Employee contribution increase of 0.5% phased in over two years
- Employer contribution increase of 0.75% phased in over two years
- Extension of the amortization period to 2047
- Decrease in the assumed investment rate of return from 8% to 7.5%

\$ amount of state aid not received for FY 2018 due to the veto

Long-term Impact

	Veto of Bill (Status quo: as of 7/1/17) \$ in billions, contri	Enactment of Bill butions as % of pay
Target amortization date	2042	2047
Actuarial Accrued Liability Market Value of Assets Unfunded Actuarial Accrued Liability (UAAL) Funded Ratio	\$15.2 <u>\$12.4</u> \$2.8 81.5%	
Normal Cost (with expenses) Amortization of UAAL Total Required Contributions	9.2% <u>6.1%</u> 15.3%	8.5% <u>3.4%</u> 11.9%
Member Contributions Employer Contributions Total Contributions Contribution Surplus/(Deficiency)	5.5% <u>5.5%</u> 11.0% (4.3%)	6.0%* <u>6.25%</u> * 12.25%* 0.35%
Funded Ratio at end of applicable amortization period	62.6% in 2042	Exceed 100% funding within amortization (2047)
*When fully implemented		
Short-term FY 2018	Impact	
\$ amount of COLA payments made to retirees for FY 2018 that would not have been paid had the bill not been vetoed		\$100 Million
\$ amount of increased contributions not received for FY 2018 do	ue to the veto	\$7.2 Million Employee \$10.8 Million Employer

n/a

MSRS Correctional

This chart evaluates the failure to enact the following benefit reforms and assumption changes:

- Elimination of the COLA trigger
- Reduction of the COLA from 2% to 1.5%
- Elimination of augmentation effective for all former and current employees
- Reduction of the interest rate on payments, refunds, etc., from 4% to 3%
- Extension of the amortization period to 2047
- Decrease in the assumed investment rate of return from 8% to 7.5%
- Employee contribution increase of 0.5% beginning FY 2018
- Employer contribution increase of 1.55% and new 4.45% supplemental contribution, 6% total, phased in over four years

Long-term Impact

	Veto of Bill (Status quo: as of 7/1/17) \$ in millions, contri	Enactment of Bill butions as % of pay	
Target amortization date	2038	2047	
Actuarial Accrued Liability Market Value of Assets Unfunded Actuarial Accrued Liability (UAAL) Funded Ratio	\$1,500.3 <u>\$1,021.7</u> \$478.6 68.1%	<u>\$1,021.7</u>	
Normal Cost (with expenses) Amortization of UAAL Total Required Contributions	18.7% <u>13.4%</u> 32.1%	17.5% <u>9.2%</u> 1.75%	
Member Contributions Employer Contributions Supplemental Employer Contributions Total Contributions	9.1% 12.85% <u>none</u> 21.95%	9.6% 14.4% <u>4.45%</u> * 28.45%*	
Contribution Surplus/(Deficiency)	(10.15%)	1.75%	
Funded Ratio at end of applicable amortization period	About 55% in 2038	Exceed 100% funding within amortization (2047)	
*When fully implemented			
Short-term FY 2018 Impact			
\$ amount of COLA payments made to retirees for FY 2018 that would not have been paid had the bill not been vetoed		\$6.6 Million	
\$ amount of increased contributions not received for FY 2018 due to the veto		\$1.2 Million Employee \$3.8 Million Employer	
\$ amount of state aid not received for FY 2018 due to the vet	:0	n/a	

MSRS State Patrol

This chart evaluates the failure to enact the following benefit reforms and assumption changes:

- Elimination of the COLA trigger
- Elimination of augmentation effective for all former and current employees
- Reduction of the interest rate on payments, refunds, etc., from 4% to 3%
- Extension of the amortization period to 2047
- Decrease in the assumed investment rate of return from 8% to 7.5%
- Employee contribution increase of 1.0% phased in by FY 2020
- Employer contribution increase of 2.5% and new 7.0% supplemental contribution, 9.5% total, phased in over four years

Long-term Impact

	Veto of Bill	
	(Status quo: as of 7/1/17)	Enactment of Bill
	\$ in millions, contributions as % of pay	
Target amortization date	2038	2047
Actuarial Accrued Liability	\$909.2	
Market Value of Assets	<u>\$691.0</u>	
Unfunded Actuarial Accrued Liability (UAAL)	\$218.2	
Funded Ratio	76.0%	
Normal Cost (with expenses)	24.9%	24.9%
Amortization of UAAL	<u>21.1%</u>	<u>17.2%</u> *
Total Required Contributions	46.0%	42.1%
Member Contributions	14.4%	15.4%**
Employer Contributions	21.6%	23.1%**
Supplemental Employer Contributions	None	7.0%**
State Contribution	<u>1.4%</u>	<u>1.4%</u>
Total Contributions	37.4%	46.9%
Contribution Surplus/(Deficiency)	(8.6%)	4.8%
Funded Ratio at end of applicable amortization period	Estimated 62% in 2038	Exceed 100% by 2047
* Savings all due to reamortization ** When fully implemented		

\$ amount of COLA payments made to retirees for FY 2018 that would not have been	n/a
paid had the bill not been vetoed	
\$ amount of increased contributions not received for FY 2018 due to the veto	\$0.4 Million Employee \$1.8 Million Employer
\$ amount of state aid not received for FY 2018 due to the veto	n/a

PERA General

This chart evaluates the failure to enact the following benefit reforms and assumption changes:

- Elimination of the COLA trigger
- Elimination of augmentation effective for all former and current employees
- Elimination of augmentation adjustment in determining the actuarial equivalent early retirement factors, effective
 July 1, 2018, with a 5-year phase-in
- Deferral of the payment of the first COLA until normal retirement age, effective January 1, 2023, but not applicable to Rule of 90 retirees
- Reduction of the interest rate on payments, refunds, etc., from 4% to 3%
- Extension of the amortization period to 2047
- Decrease in the assumed investment rate of return from 8% to 7.5%

Long-term Impact

	Veto of Bill	5
	(Status quo: as of 7/1/17)	Enactment of Bill
	\$ in billions, contribu	ıtions as % of pay
Target amortization date	2033	2047
Actuarial Accrued Liability	\$25.4	\$25.6
Market Value of Assets	<u>\$20.1</u>	<u>\$20.1</u>
Unfunded Actuarial Accrued Liability (UAAL)	\$5.3	\$5.5
Funded Ratio	78.9%	78.2%
Normal Cost (with expenses)	8.1%	7.9%
Amortization of UAAL	<u>7.7%</u>	<u>5.4%</u>
Total Required Contributions	15.8%	13.3%
Member Contributions	6.5%	6.5%
Employer Contributions	7.5%	7.5%
Supplemental Employer Contributions	<u>0.6%</u>	<u>0.6%</u>
Total Contributions	14.6%	14.6%
Contribution Surplus/(Deficiency)	(1.2%)	1.3%
Funded Ratio at end of applicable amortization period	95.0% (2033)	116.8%
	108.9% (2047)	
Short-term F	′ 2018 Impact	
\$ amount of COLA payments made to retirees for FY 2018 that would not have been paid had the bill not been vetoed		n/a
\$ amount of increased contributions not received for FY 2	018 due to the veto	n/a
\$ amount of state aid not received for FY 2018 due to the veto		n/a

PERA P&F

This chart evaluates the failure to enact the following benefit reforms:

- Elimination of the COLA trigger
- Elimination of augmentation effective for all former and current employees
- Reduction of the interest rate on payments, refunds, etc., from 4% to 3%
- Employee contribution increase of 1%, phased in over 2 years beginning January 1, 2018
- Employer contribution increase of 1.5%, phased in over 2 years, beginning January 1, 2018
- Additional state aid beginning 7/1/2018, of \$4.5 million annually for 2 years, increasing to \$9 million annually until
 7/1/2047 or 100% funded
- Extension of the amortization period to 2047
- Decrease in the assumed investment rate of return from 8% to 7.5%

Long-term Impact

	Veto of Bill (Status quo: as of 7/1/17)	Enactment of Bill
	\$ in millions, contributions as % of pay	
Target amortization date	2042	2047
Actuarial Accrued Liability	\$9.1	\$9.2
Market Value of Assets	<u>\$7.9</u>	<u>\$7.9</u>
Unfunded Actuarial Accrued Liability (UAAL)	\$1.2	\$1.3
Funded Ratio	86.2%	85.7%
Normal Cost (with expenses)	21.3%	21.2%
Amortization of UAAL	<u>8.9%</u>	<u>8.2%</u>
Total Required Contributions	30.2%	29.4%
Member Contributions	10.8%	11.8%*
Employer Contributions	16.2%	17.7%*
Supplemental Employer Contributions	1.4%	1.4%
State Aid	<u>1.0%</u>	<u>2.0%</u> *
Total Contributions	29.4%	32.9%*
Contribution Surplus/(Deficiency)	(0.8%)	3.5%
Funded Ratio at end of applicable amortization period	97.9% (2042)	109.4%
	100.0% (2047)	
*M/han fully implamented		

^{*}When fully implemented

\$ amount of COLA payments made to retirees for FY 2018 that would not have been	n/a
paid had the bill not been vetoed	
\$ amount of increased contributions not received for FY 2018 due to the veto	\$5.5 million
\$ amount of state aid not received for FY 2018 due to the veto	\$4.5 million

PERA Correctional

This chart evaluates the failure to enact the following benefit reforms:

- Elimination of the COLA trigger
- Reduction of the COLA from 2.5% to 1.5%
- Elimination of augmentation effective for all former and current employees
- Reduction of the interest rate on payments, refunds, etc., from 4% to 3%
- Extension of the amortization period to 2047
- Decrease in the assumed investment rate of return from 8% to 7.5%

Long-term Impact

Veto of Bill	
atus quo: as of 7/1/17)	Enactn

	(Status quo: as of 7/1/17)	Enactment of Bill
	\$ in millions, contributions as % of pay	
Target amortization date	2036	2047
Actuarial Accrued Liability	\$640.1	\$614.4
Market Value of Assets	<u>\$601.1</u>	<u>601.1</u>
Unfunded Actuarial Accrued Liability (UAAL)	\$39.0	\$13.3
Funded Ratio	93.9%	97.8%
Normal Cost (with expenses)	14.2%	13.9%
Amortization of UAAL	<u>1.5%</u>	<u>0.4%</u>
Total Required Contributions	15.7%	14.3%
Member Contributions	5.8%	5.8%
Employer Contributions	<u>8.8%</u>	<u>8.8%</u>
Total Contributions	14.6%	14.6%
Contribution Surplus/(Deficiency)	(1.1%)	0.3%
Funded Ratio at end of applicable amortization period	95.0% (2036) 96.0% (2047)	120.3%
	30.070 (2047)	

\$ amount of COLA payments made to retirees for FY 2018 that would not have been	\$0.05M
paid had the bill not been vetoed	
\$ amount of increased contributions not received for FY 2018 due to the veto	n/a
\$ amount of state aid not received for FY 2018 due to the veto	n/a

This chart evaluates the failure to enact the following benefit reforms and assumption changes:

- Elimination of the COLA trigger
- Reduction of the COLA from 2% to 1% for five years, increasing by .1% each year thereafter until the COLA reaches 1.5%, effective January 1, 2027
- Elimination of augmentation effective for all former and current employees
- Elimination of augmentation adjustment in determining the actuarial equivalent early retirement factors, effective
 July 1, 2018, with a 5-year phase-in, except for retirees under the 62/30 rule
- Deferral of the payment of the first COLA until normal retirement age, effective January 1, 2023, but not applicable to Rule of 90 retirees and retirees under the 62/30 rule
- Reduction of the interest rate on payments, refunds, etc., from 4% to 3%
- Employee contribution increase of 0.25% effective July 1, 2023
- Employer contribution increase of 0.21% each year for six years starting July 1, 2017 (total of 1.25%)
- Extension of the amortization period to 2047
- Decrease in the assumed investment rate of return from 8.5% to 7.5%

Long-term Impact

	Veto of Bill	
	(Status quo: as of 7/1/17)	Enactment of Bill
	\$ in billions, contribu	tions as % of pay
Target amortization date	2039	2047
Actuarial Accrued Liability	\$27.5	\$28.2
Market Value of Assets	<u>\$21.2</u>	<u>\$21.2</u>
Unfunded Actuarial Accrued Liability (UAAL)	\$6.3	\$7.0
Funded Ratio	77.1%	75.3%
Normal Cost (with expenses)	8.99%	10.31%
Amortization of UAAL	<u>9.34%</u>	<u>7.87%</u>
Total Required Contributions	18.33%	18.18%
Member Contributions	7.5%	7.75%*
Employer Contributions	7.5%	8.75%*
Supplemental Employer	0.94%	<u>0.94</u> %
Total Contributions	15.94%	17.44%*
Contribution Surplus/(Deficiency)	(2.39%)	(0.74%)
Funded Ratio at end of applicable amortization period	87%	95%
*When fully implemented		
Short-term FY	' 2018 Impact	
\$ amount of COLA payments made to retirees for FY 2018 that would not have been paid had the bill not been vetoed		\$18 million
\$ amount of increased contributions not received for FY 2	018 due to the veto	\$9.5 million
\$ amount of state aid not received for FY 2018 due to the veto		n/a

SPTRFA

This chart evaluates the failure to enact the following benefit reforms and assumption changes:

- Elimination of the COLA trigger
- Two-year COLA freeze, return to 1% COLA effective January 1, 2020
- Elimination of augmentation effective for all former and current employees
- Elimination of augmentation adjustment in early retirement factors, effective July 1, 2018, with a 5-year phase-in, except for retirees under the 62/30 rule
- Deferral of the payment of the first COLA until normal retirement age, effective January 1, 2023, but not applicable to Rule of 90 retirees and retirees under the 62/30 rule
- Reduction of the interest rate on payments, refunds, etc., from 4% to 3%
- Extension of the amortization period to 2047
- Decrease in the assumed investment rate of return from 8.0% to 7.5%
- Impact of mortality assumption changes
- Employee contribution increase of 0.25% effective July 1, 2021
- Employer contribution increases of 2.5% phased in over four years
- Additional state aid of \$5 million per year

Long-term Impact

	Veto of Bill *	
	(Status quo: as of 7/1/17)	Enactment of Bill **
	\$ in billions, contrib	utions as % of pay
Target amortization date	2042	2047
Actuarial Accrued Liability	\$1.61	
Market Value of Assets	<u>\$1.033</u>	<u>\$1.033</u>
Unfunded Actuarial Accrued Liability (UAAL)	\$0.582	
Funded Ratio	64.0%	64.0%
Normal Cost (with expenses)	9.1%	8.9%
Amortization of UAAL	<u>13.0%</u>	<u>13.8%</u>
Total Required Contributions	22.0%	22.7%
Member Contributions	7.5%	7.75%***
Employer Contributions	6.5%	9.0% ***
Supplemental Employer Contributions	3.84%	3.84%
State Aids	<u>3.76%</u>	<u>5.26%</u>
Total Contributions	21.6%	25.85%
Contribution Surplus/(Deficiency)	(0.5%)	0.9%
Funded Ratio at end of applicable amortization period	Approx. 64.3%	Approx. 99%

^{*}Does not reflect added cost of mortality assumption changes

\$ amount of COLA payments made to retirees for FY 2018 that would not have been	\$1.2 million
paid had the bill not been vetoed	
\$ amount of increased contributions not received for FY 2018 due to the veto	\$1.3 million
\$ amount of state aid not received for FY 2018 due to the veto	\$5 million

^{**}Includes added impact of mortality assumption changes

^{***}When fully implemented