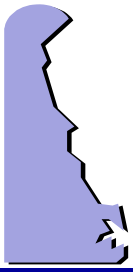


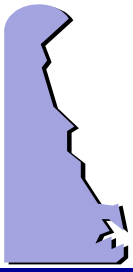
# **Hybrid Budget Smoothing Model**

March 23, 2018



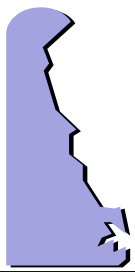
# Development of Hybrid Model

- As requested by the Chair, staff from DoF, OST, OMB, and the CG's Office discussed budget-smoothing issues and goals
- From those discussions, a “hybrid model” was developed, emphasizing:
  - An objective measure to benchmark the budget against Delaware's economy
  - Withdrawals available for in-year and out-year shortfalls, but not intended to fully close shortfalls
  - Mechanisms to ensure the fund would neither collapse nor grow indefinitely (floor and cap)
- Building on existing structure, not replacing it



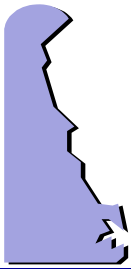
# Appropriations Benchmark

- Benchmark is 3-year rolling average of economic measures, applied to 98% appropriations limit
- If 98% rule generates higher appropriations limit, excess funds are deemed “extraordinary”
- Half of extraordinary funds are available for one-time expenditures
- Other half are deposited in new Budget Stabilization Fund (BSF) until it hits 10% cap, at which point they are available for any purpose



# Budget Stabilization Fund

- BSF is initially funded with Budget Reserve Account and capped at 10% of gross revenues
- Withdrawal from BSF is allowed if
  - There is an operating deficit greater than 2% of the 100% appropriation limit, or
  - The benchmark growth rate is higher than the growth in the 98% appropriations limit
- Withdrawal limited to the lesser of half of the BSF balance or half of the relevant shortfall
- Withdrawal below 3% of gross revenues requires 3/5 vote of General Assembly



# Balance and Appropriation Changes

(for demonstration purposes only)

## FY 2018 BUDGET

Budget	\$4,106.9
Grants	\$37.2
<b>Benchmark Budget</b>	<b>\$4,144.2</b>
Supplemental	\$0.0
Total Appropriations	\$4,144.2
Plus: C & E from Prior Years	<u>\$178.6</u>
Total Spending Authority	\$4,322.8

## FY 2018 EXPENDITURES

Total Spending Authority	\$4,322.8
Less: C & E from FY 2018	(\$140.6)
Less: Reversions	<u>(\$10.0)</u>
Total Expenditures	\$4,172.2

## FY 2018 BALANCES

Total Expenditures	\$4,172.2
vs. FY 2018 Revenues	4,374.3
Operating Balance	202.1
Prior Year Cash Balance	<u>\$474.9</u>
Cumulative Cash Balance	677.0
Less: C & E from FY 2018	(140.6)
Less: Budgetary Reserve Account	(\$231.6)
<b>Plus: Available In-year Withdrawal</b>	<b><u>\$0.0</u></b>
Unencumbered Cash Balance 6/30	\$304.8

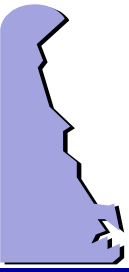
## FY 2019 APPROPRIATION LIMITS

FY 2019 Revenue Estimate	\$4,199.3
Unencumbered Cash Balance from FY 18	<u>\$304.8</u>
100% Appropriation Limit	\$4,504.1
98% Appropriation Limit	<u>\$4,414.0</u>
<b>Economic Benchmark</b>	<b>2.76%</b>
Benchmark Appropriation	\$4,258.6
Extraordinary Funds	\$155.4
Available Out-year Withdrawal	0.0
BSF Deposit	77.7
Available for one-time	77.7
Actual Appropriation Limit	4,336.3



# Analysis of Hybrid Model

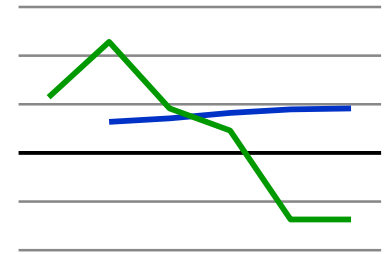
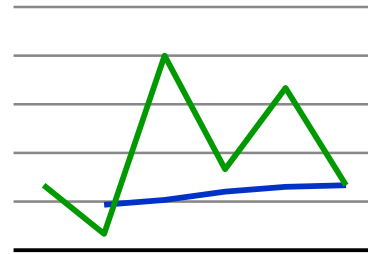
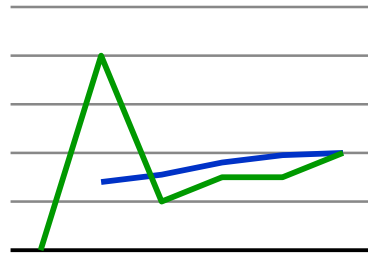
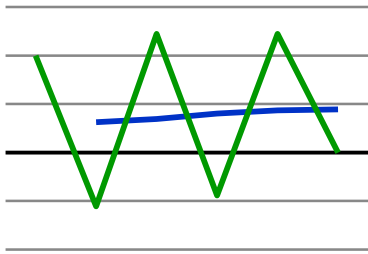
- Impact of hybrid model on budget analyzed under four scenarios representing patterns of revenue growth over past fifteen years
  - *Case 1*: alternating growth and decline
  - *Case 2*: modest growth, similar to current forecast
  - *Case 3*: strong revenue growth as in mid-2000s
  - *Case 4*: revenue growth prior to and including the 2008/2009 financial crisis
- Intended to address most of the feasible general trends in revenue collections

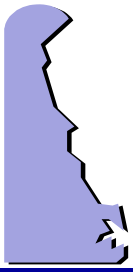


# Economic Benchmark and Revenue Assumptions

	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23
Benchmark	—	2.8%	3.1%	3.6%	3.9%	4.0%
Case 1 (FY 11)	9%	-5%	11%	-4%	11%	0%
Case 2 (FY 17)	0%	8%	2%	3%	3%	4%
Case 3 (FY 02)	4%	1%	12%	5%	10%	4%
Case 4 (FY 05)	5%	10%	4%	2%	-6%	-6%

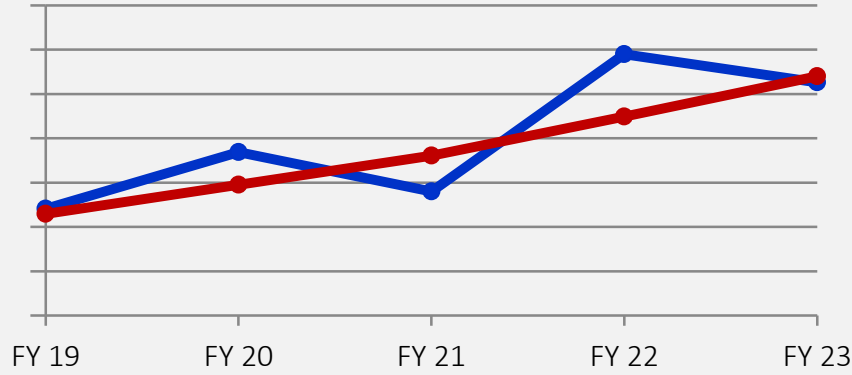
Case 1	Case 2	Case 3	Case 4
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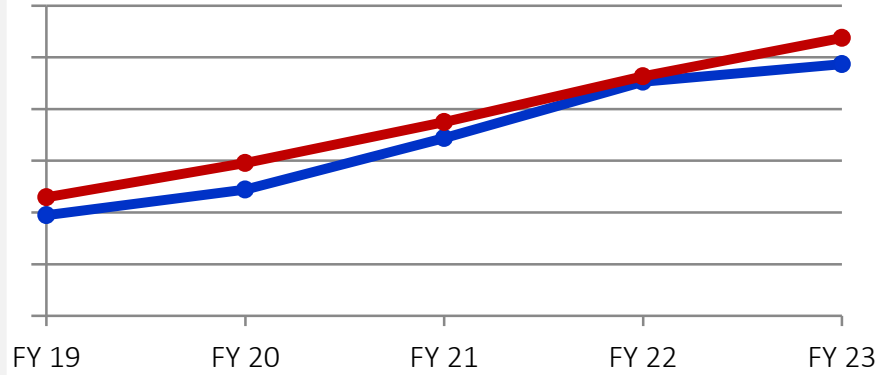


# Smooother Operating Budgets

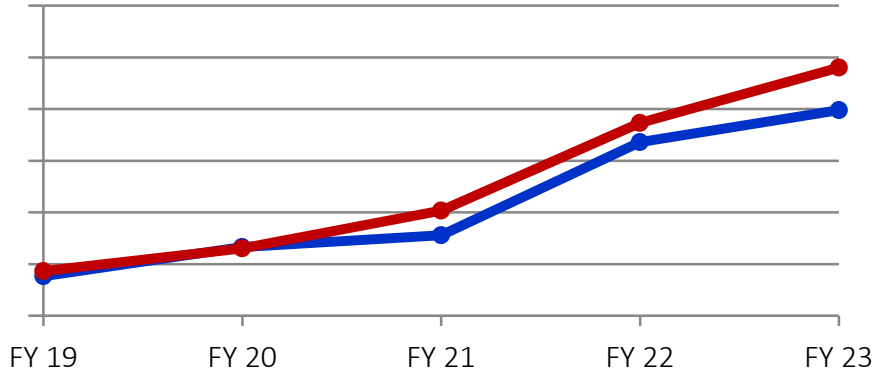
Case 1



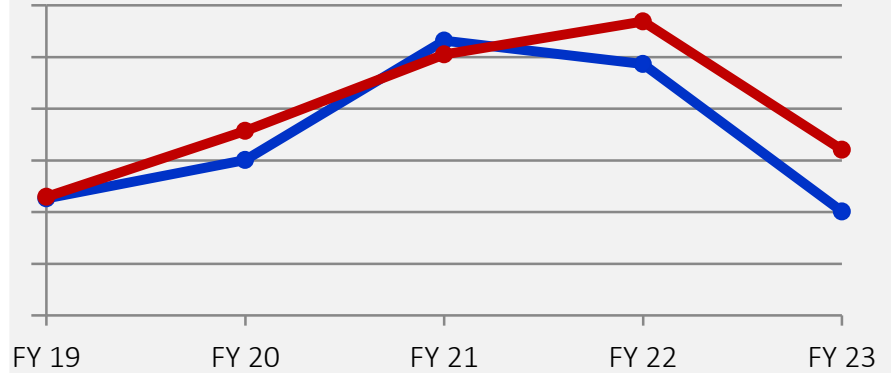
Case 2



Case 3

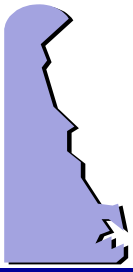


Case 4



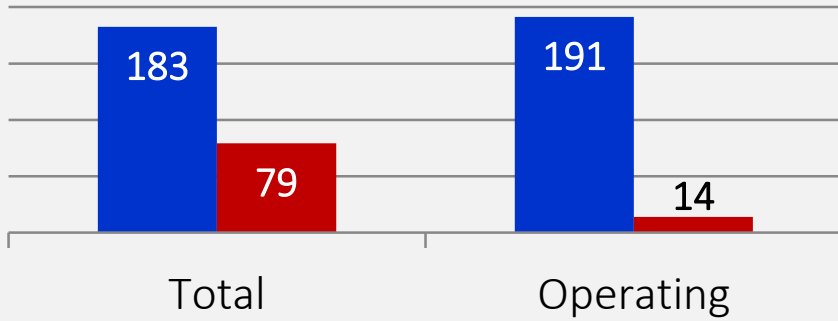
Status Quo Hybrid Model



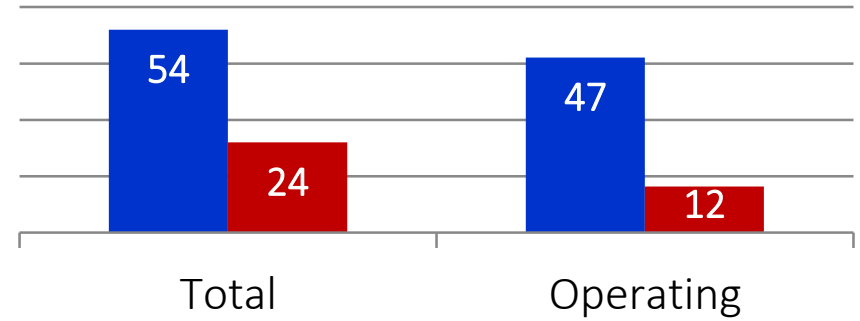


# Lower Volatility

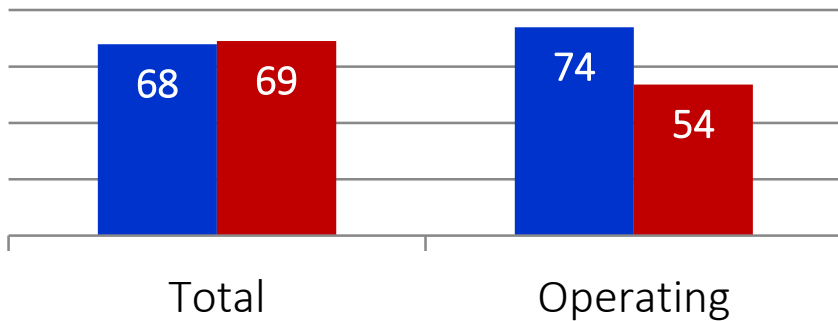
Case 1



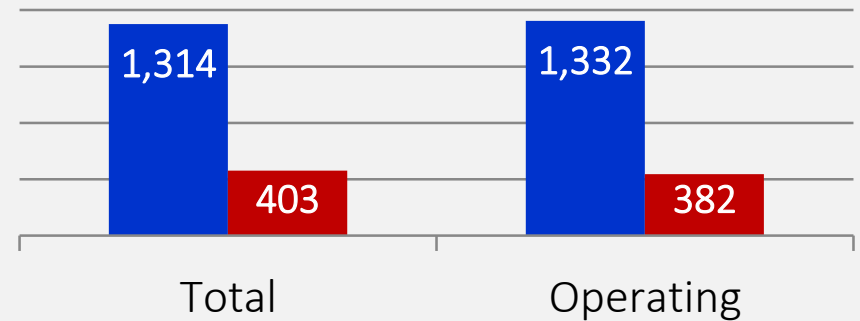
Case 2

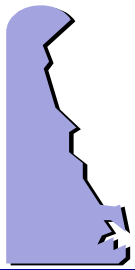


Case 3



Case 4



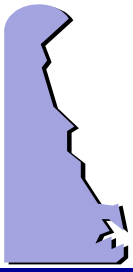


# Spending is Lower

(\$ in millions)

- Except in recession cases, larger reserves must result in declines in total appropriations
- Which budget bill experiences a decline depends on assumptions
- Using history as a guide, the hybrid rule would reduce one-time spending to enable a smoother operating budget

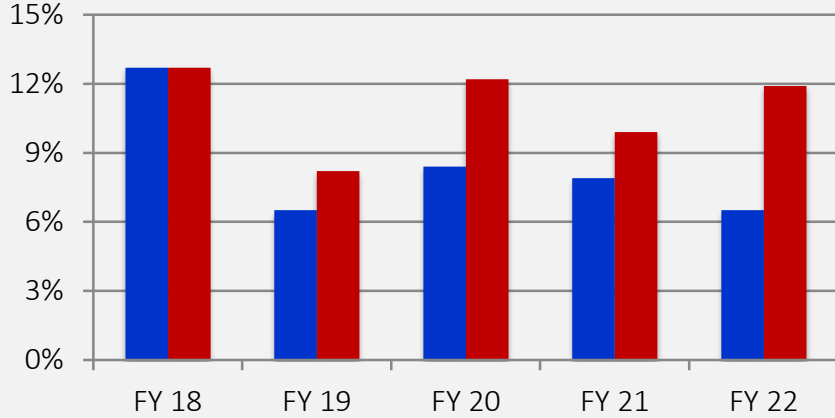
Case	Budget Effects		
	Average Status Quo	Average Hybrid Model	Percent Reduction
1	4,579	4,539	-0.87%
2	4,502	4,491	-0.26%
3	4,869	4,815	-1.09%
4	4,606	4,611	0.11%



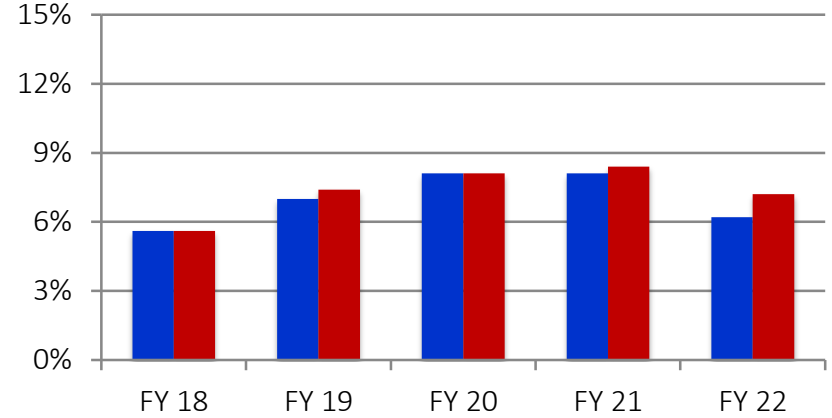
# Reserves Are Generally Higher

(% of gross GF revenue)

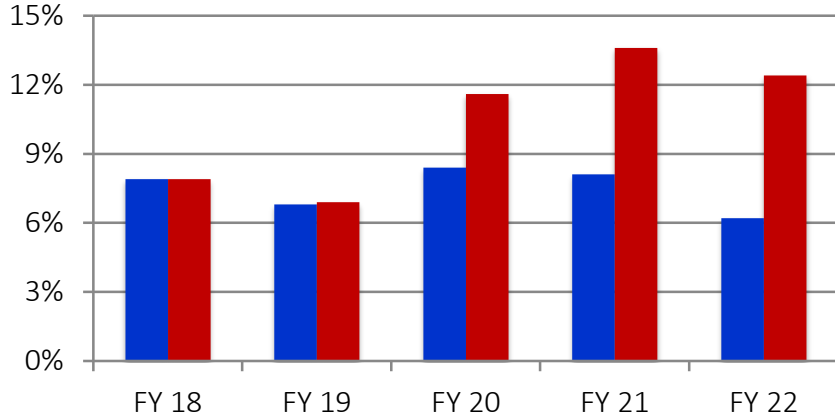
Case 1



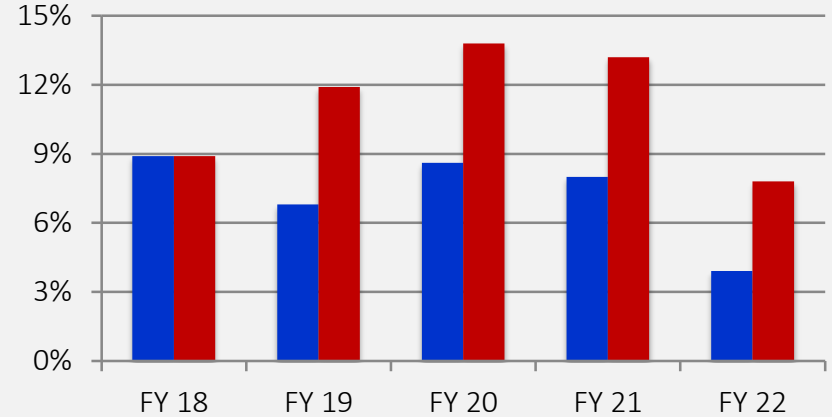
Case 2



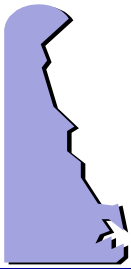
Case 3



Case 4



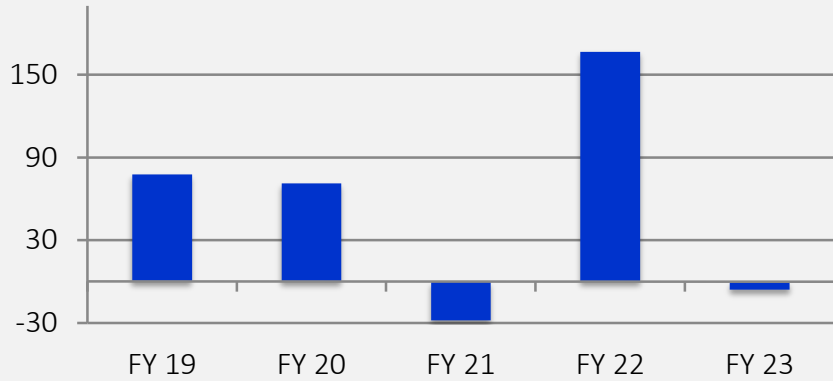
Status Quo Hybrid Model



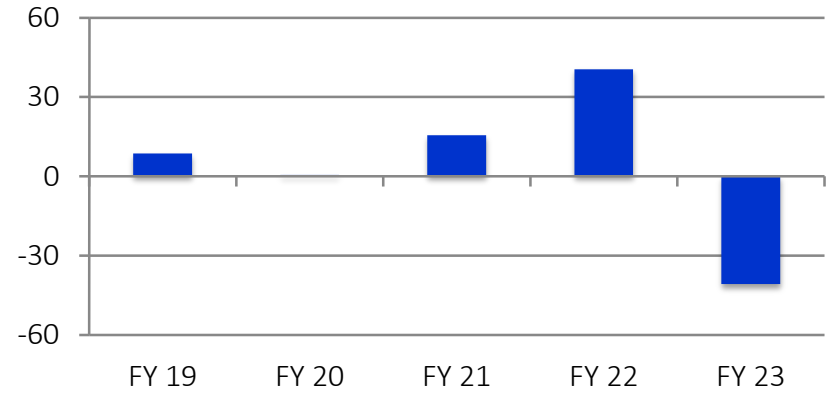
# Reserves are Used

(\$ in millions)

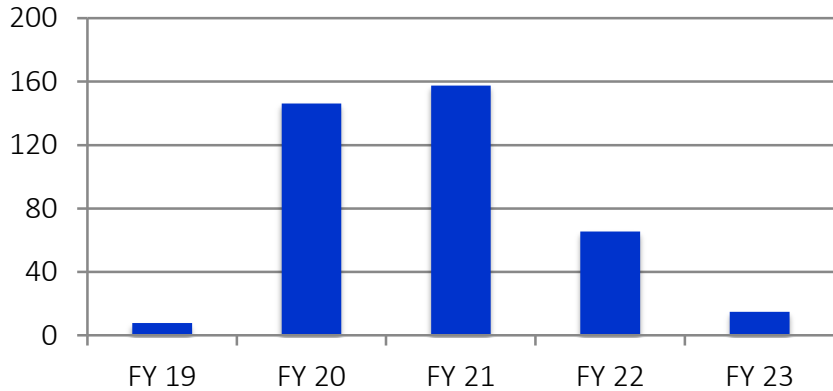
Case 1



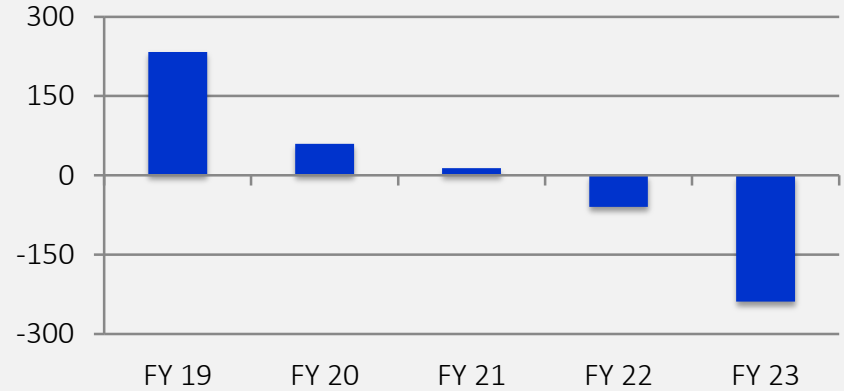
Case 2



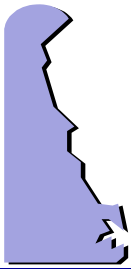
Case 3



Case 4



Positive values are deposits to the BSF, negative values are withdrawals



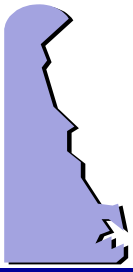
# Withdrawal Rules In Action

(\$ in millions)

Case	Triggers					Withdrawal Components		
	Operating Balance	2% Set Aside	Benchmark	98% Rule	Trigger Enabled	Fund	Shortfall	Withdrawal
1	(135)	(90)	4,391	4,583	Def	309	45	22
1	155	(94)	4,550	4,491	Bmk	383	59	29
1	81	(103)	4,884	4,874	Bmk	521	11	5
2	(99)	(85)	4,259	4,290	Def	232	15	7
2	(49)	(98)	4,916	4,835	Bmk	297	82	41
4	(6)	(101)	4,997	4,877	Bmk	538	120	60
4	(279)	(100)	5,134	4,202	Bmk	478	932	239

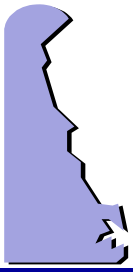
Def – Operating Deficit

Bmk – Economic Benchmark



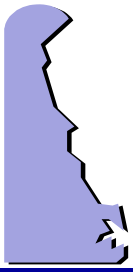
# Consistency of Investment and Consumption

- Saving more in good times to address operating issues in bad times may have been undervalued relative to long-term investments in “capital”
- Reducing the counter-cyclical nature of state spending may help business cycles stabilize faster
- The State is infinitely lived—smoothing consumption (as opposed to an end-of-life insurance policy) is more valuable to the State than to a household



# Review— Appropriations Benchmark

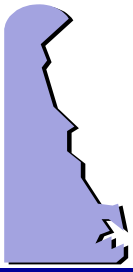
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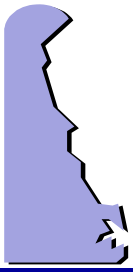


# Illustrations of Revenue-Neutral Structural Revenue Reform

- Senior preferences replaced with \$22,500 (joint) / \$17,500 (single) retirement income exemption, and itemized deductions repealed
- Phases out from \$110K - \$160K (joint) / \$60K - \$110K (single)
- Eligibility age of 65, taxpayers 60 and older grandfathered in
- Rates reduced as shown below right
- Revenue-neutral in fiscal year 2019

Distributional Impact				
Quintile	Average TY 19 Change		Share of Change	
	A	B	A	B
1	(3)	(5)	-100%	-96.1%
2	12	0	2.2%	-3.9%
3	88	72	16.6%	13.0%
4	234	204	44.2%	36.7%
5	196	279	37.1%	50.3%

Income Over	Current Rate	Proposed Rates A	Proposed Rates B
\$0	0.00%	0.00%	0.00%
\$2,000	2.20%	2.10%	2.00%
\$5,000	3.90%	3.70%	3.70%
\$10,000	4.80%	4.60%	4.50%
\$20,000	5.20%	5.00%	4.90%
\$25,000	5.55%	5.20%	5.20%
\$60,000	6.60%	5.98%	5.90%
\$150,000	6.60%	5.98%	6.20%



# Next Steps

- Even with budget smoothing and structural revenue reform, there would be work to be done
- Over 40% of revenues are essentially unaffected by economic cycles
  - Growth from a portion currently requires legislative action
  - Over the long term, the remaining portion of non-economic revenues may decline
- Working to mitigate this structural imbalance in Delaware's revenues should remain a priority