### Financial Risk Assessment

Montana Pension Systems

Legislative Fiscal Division November 2018

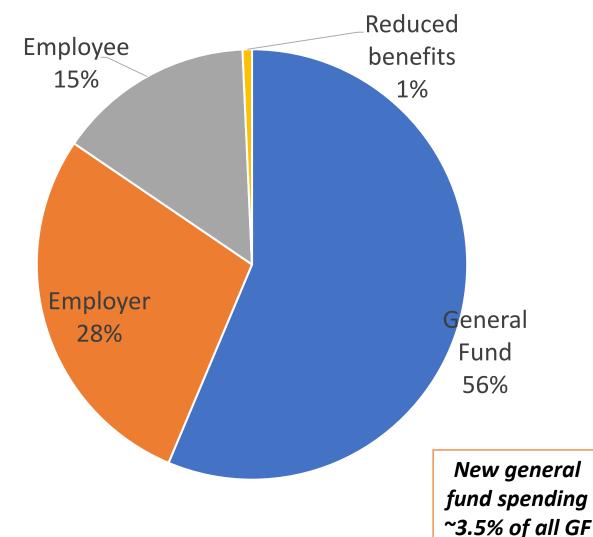
### Legislature does not control previous benefits, but must find funding if short

Pension Boards have Constitutional responsibility for setting actuarial assumptions Courts have limited
Legislative choices in
resolving a short fall
in assets current
employees and
retirees benefits

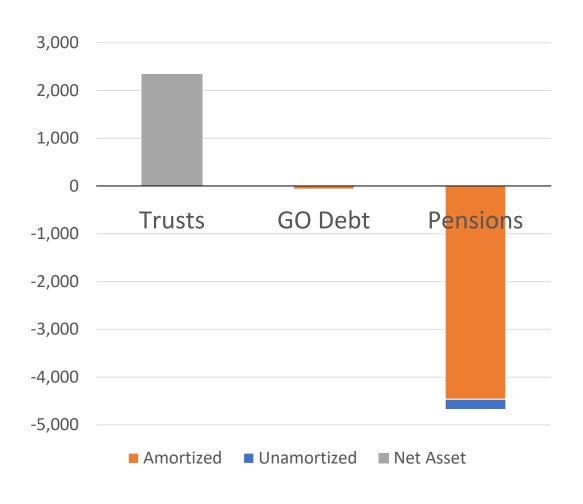
The
Legislature
must
understand
risk

# Previous PERS/TRS Pension Solutions: \$140 million per year

- Direct additional general fund pension contributions \$80 million per year or over 3% of annual general fund spending
- Employer contributions 1-2% increases will cap out at \$40 million per year (~\$4 million from GF)
- Employee 1% contributions cap out at \$21 million per year
- Reduced benefits for future employees impact small so far



#### Order of Magnitude Comparisons



- GO Debt is relatively small
- Pension liabilities are larger
- State efforts to in recent years amortize (pay off) most of the liability within 30 years
- Pension unfunded liabilities are double the size of current state trust funds including:
  - School trusts,
  - Coal trusts,
  - Tobacco trust,
  - Resource indemnity, and others

# Whole area of 3 color box are the liabilities: discounted cost of future pension benefits

Assets: Funded portion of the liabilities

Amortized Unamortized

Unfunded

Assets (bonds & equities) = Funded portion of the liabilities

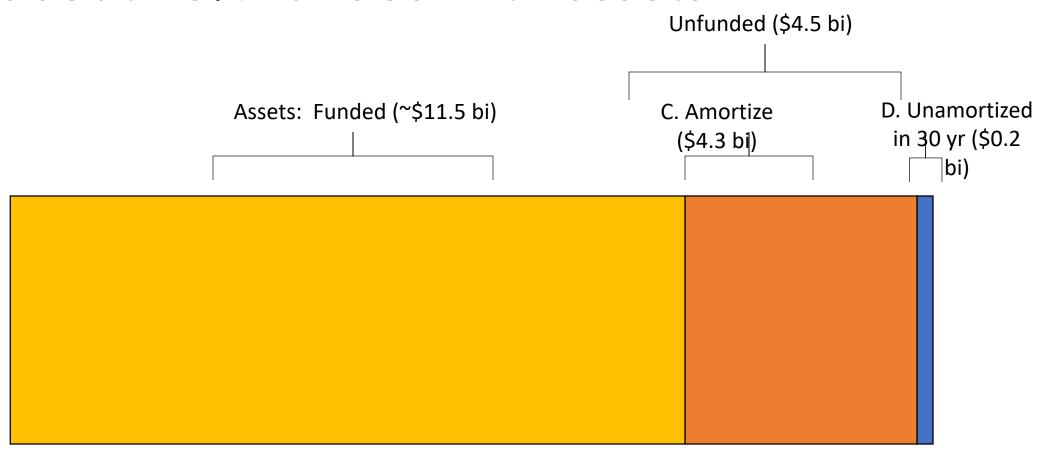
Another key term is Funded Ratio Funded ratio = assets/liabilities

#### Amortized:

Actuaries use all payments into and out of the system to determine if the unfunded portion of the liabilities will amortize or be paid off within 30 years.

Unamortized portion of the liability is the amount that does not amortize in 30 years

## \$16 billion in discounted benefits owed with about 70% funded with assets

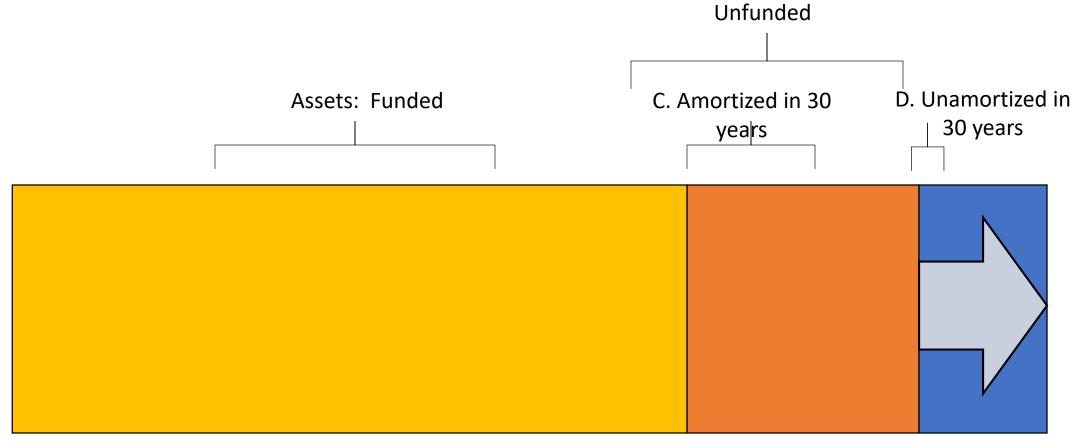


What is the impact to the state if the assumptions are wrong?

Likelihood of Risk

Cost of Risk to State

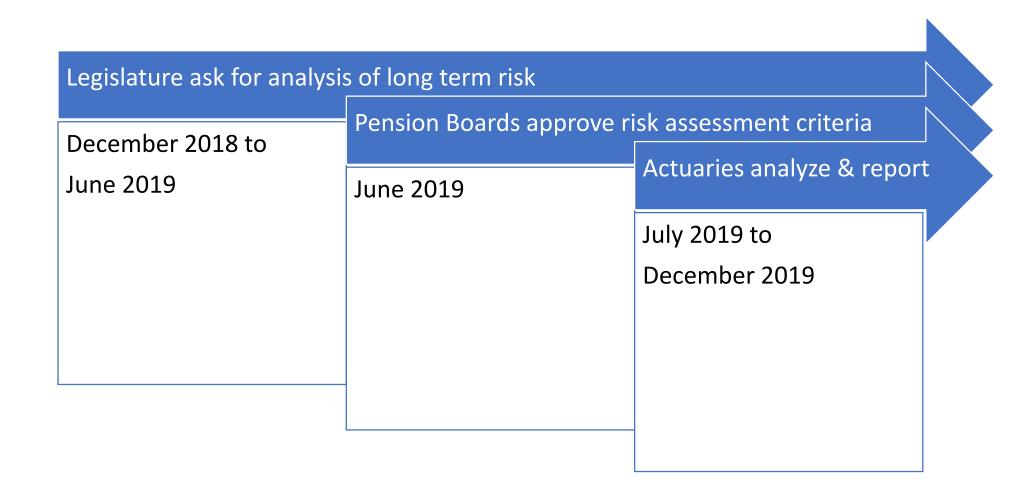
# Risk Assessment: what do different assumptions yield



### Risk Assessment: New Actuary Standard

- Actuarial Standards Boards issued Actuarial Standard of Practice 51(ASOP 51) entitled "Assessment and Disclosure of Risk Associated with Measuring Pension Obligations and Determining Pension Plan Contributions"
- Requires actuaries to better educate interested parties about risks facing their plans
- Educate interested parties on the potential for future plans' health to differ from expected results. Identify realistic risks to the system such as investment risks, contribution risks, longevity, etc
- If returns on investment are lower than the assumed rate, what increase in contributions would be required to still fully amortize?
- Also provides a way to incorporate states overall economic conditions, tax collections, and history of making required contributions to inform policy

#### Legislative Information Option



### Details of Accounting

