

*Prognosis for Pensions  
and  
Strategies for the Future*

*Virginia Municipal League  
Annual Conference  
October 4, 2010*

William M. Dowd, FCA, EA, MAAA  
SageView Consulting Group  
4951 Lake Brook Drive, Suite 400, Glen Allen, VA 23060  
804.935.3708 [wdowd@sageviewadvisory.com](mailto:wdowd@sageviewadvisory.com)  
[www.sageviewadvisory.com](http://www.sageviewadvisory.com)



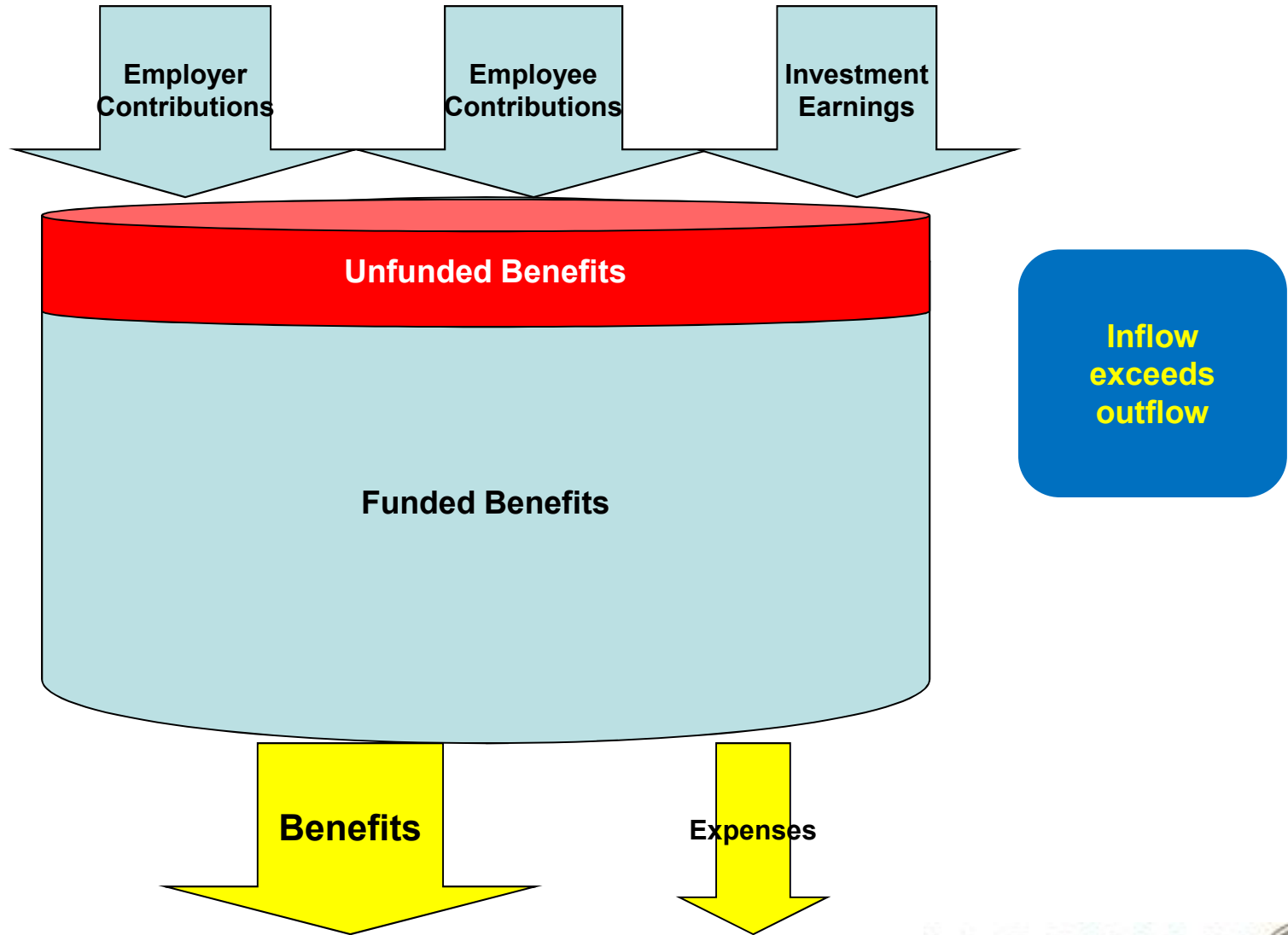
## *State of the Union*

- Over the past few years, public sector defined benefit retirement systems across the US have seen their funded status drop to the lowest point in recent memory due to investment losses
- Contribution rates will increase substantially in the future in the absence of a significant market recovery or a change in benefit strategy
  - Exacerbated by the fact that most plans are “smoothing” the impact of recent investment losses
- Think-tanks and the media have been whipped into a frenzy by gloom and doom scenarios for the future of public pensions
- Governing bodies can no longer take a head-in-the sand approach

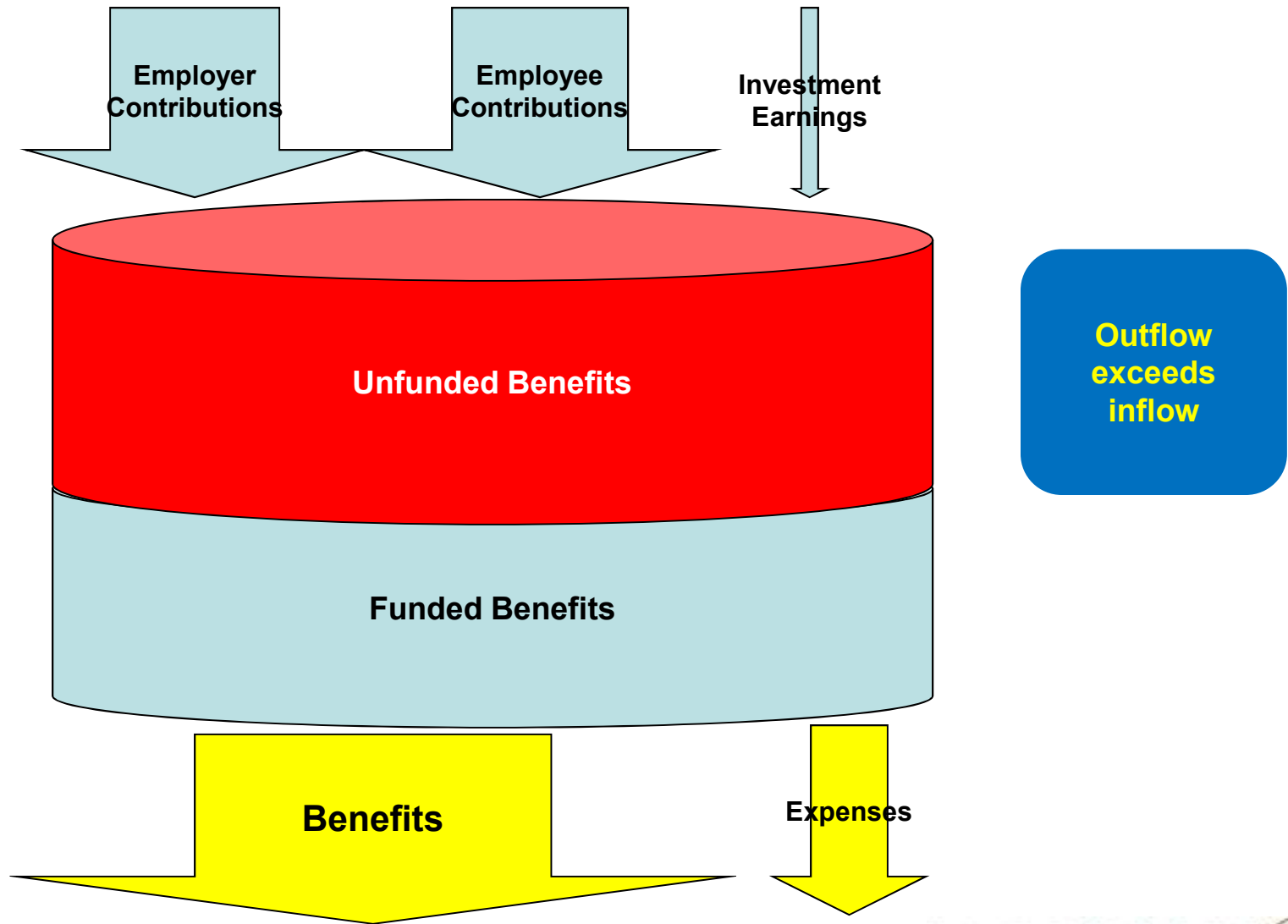
## *In the news...*

- “Localities should be looking at the economic value of benefits using a risk-free rate of return; current valuations are woefully understating the unfunded liability”
- “If you work one day your benefits are guaranteed forever”
- “We can only change benefits for new employees but we can capture future gains in our current funding strategy”
- “Overtime”
- “Public pensions will be the next bailout”

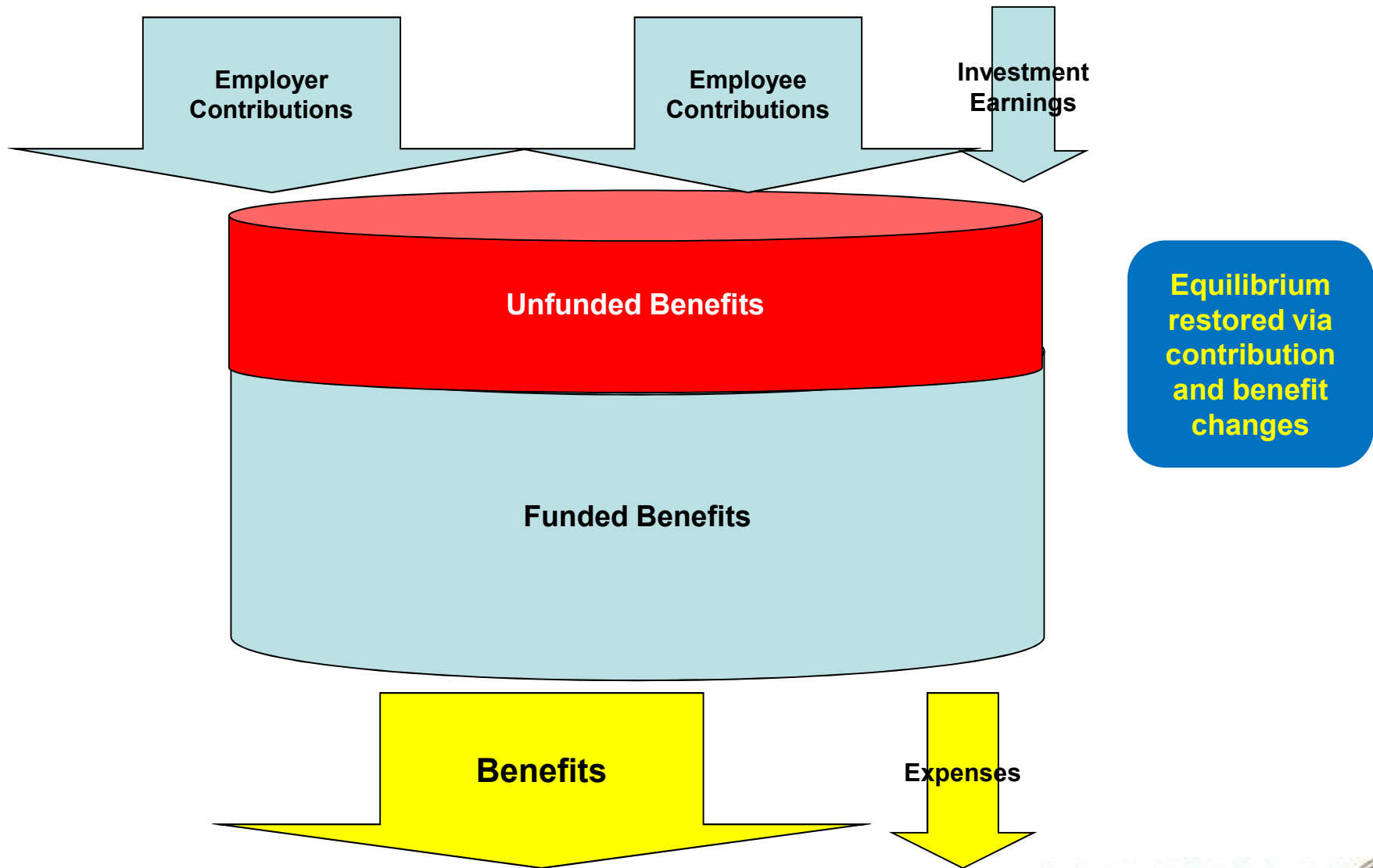
# Filling the Retirement Bucket: Then



# Filling the Retirement Bucket: Now



# Filling the Retirement Bucket: Future



# *Capital Market Projections*

- Recent unscientific survey of 5 investment advisors
- Sample portfolio
  - Domestic Equity 45%
  - International Equity 10%
  - Emerging Markets 5%
  - Core Bonds 25%
  - High Yield Bonds 5%
  - Real Estate 5%
  - Private Equity 5%
- Expected returns - survey says?
  - Low 6.99%; High 8.58%; Mean 7.56%
- What does this mean?
  - No one knows for sure where markets are headed
  - Tendency is toward lower returns, at least in the short run
- Should plans change their assumptions?
  - Median is 8%
  - Trend toward lower assumption results in lower funded status and higher contributions

# *Reality*

- It is highly unlikely that future investment performance will come to the rescue of underfunded plans
  - Funded status will decline in the short and mid-term
  - Contribution and benefit changes will be needed
- It is highly unlikely that public sector employers will abandon defined benefit pension plans the way the private sector has
  - State law interpretations
  - Collective bargaining agreements
  - Implied contracts
  - Political pressure

# *Reality*

- It is highly unlikely that public sector employers can afford to increase their contributions substantially each year in the foreseeable future
  - Too many competing interests for shrinking revenue dollars
- It is highly unlikely that public employees will be willing and/or able to sustain higher and higher contribution levels
- If you only change things for new employees, it takes a long time to feel the impact!
  - But if you never change, you never feel the impact!

## *Addressing the Problem*

- Prudent fiduciary oversight
- Legislative constraint
- Plan design changes
- Additional funding, when available
- “Good Corporate Governance”
  - Realistic assumptions
  - Realistic methods
  - Realistic benefits

# *Recent Initiatives*

*Source: NCSL May 2010 Report*

- **Contribution Rates and Funding Issues**

- **Colorado, Iowa, Mississippi, Vermont and Wyoming have required employee contribution increases** from some or all current members of public retirement systems.
- **Virginia has converted a** noncontributory retirement system to a contributory system for future state and local government employees, although local governments have the option of paying the contribution for their employees, an option not available to state government employers.
- **Wyoming effectively shifted a** noncontributory system to a contributory system for current state and local government employees.

# *Recent Initiatives*

*Source: NCSL May 2010 Report*

- **Defined Benefit Plan Changes**
  - **Arizona, Colorado, Illinois, Iowa, Mississippi, New Jersey, Vermont and Virginia have substantially** changed the retirement benefits available to future members of various state-sponsored retirement plans (and in some instances to current members of those plans). The specific provisions vary from state to state but include, among the eight states, greater contribution requirements, increased age and service requirements for normal and early retirement, greater service requirements for vesting, longer periods for the calculation of final average salary, caps on final average salary or on benefits as a percentage of final average salary and reductions in the multipliers used for calculating benefits as a percentage of final average salary.

# *Recent Initiatives*

*Source: NCSL May 2010 Report*

- **Defined Contribution & Hybrid Plans**

- In addition to the defined benefit plan changes listed above, **Utah closed its defined benefit plans** (which include all state and local employees in the state) to future enrollment as of July 1, 2011, and will replace it with plans between which future employees may choose: a defined contribution plan and an option that includes both a defined benefit plan and a defined contribution plan.

## *Case Study*

- Large public employer with a primary defined benefit pension plan and secondary defined contribution plans
- Ongoing project, still in the strategy stages

## *Case Study: Plan Design Alternatives*

- Plan design alternatives fall into two categories
  - Options related to the provisions of the defined benefit plan
    - Should there be a lower cost/lower benefit option (i.e. Tier 2 benefits)?
      - Could be traditional or Cash Balance design
  - Options related to alternatives to the defined benefit plan
    - Should there be a 401(a) defined contribution alternative to the traditional defined benefit plan (i.e. Optional Retirement Plan (ORP))?
- Who should be affected by the changes?

## *Case Study: Applicability*

- **New Employees**
  - Could be required to participate in DC plan
  - Could be offered one-time choice of DC plan or less costly DB plan than current plan (i.e. later retirement age, longer average earnings period, lower multiplier, etc.)
- **Existing Employees**
  - May be offered choice to opt into new DC plan or less costly DB plan than current plan
  - Need to prepare in-depth review of cost, benefit, and administrative considerations before making a decision; would also require extensive employee education

## Case Study: Plan Design - Sample Alternatives

	Current DB	Sample Alternatives		
		DB Tier 2 (Traditional)	DB Tier 2 (Cash Balance)	ORP
Average Pay	High 3 years in last 10	High 5 years in last 10	n/a	n/a
Employer Contribution	Actuarially determined	Actuarially determined	Actuarially determined	5%-10% of pay (possibly based on service)
Member Contribution	5% of pay	TBD, but lower than 5%	TBD, but lower than 5%	n/a
Service Retirement				
Eligibility	Age 60 and 10 years or any age with 25 years	Age 65 and 5 years or any age with 30 years	Age 65 and 3 years	Age 65 and 3 years
Benefit	2.00% x Average Pay x Service	1.50% x Average Pay x Service	Accumulated Cash Balance account (contribution and interest credits)	Accumulated ORP account
Early Service Retirement				
Eligibility	n/a	Age 55 and 5 years of service	Age 55 and 3 years of service	Age 55 and 3 years of service
Benefit	n/a	Service Retirement benefit, reduced 4% for each year earlier than age 65	Accumulated Cash Balance account	Accumulated ORP account
Disability				
Eligibility	10 years of service; totally and permanently disabled	10 years of service; totally and permanently disabled	3 years of service; totally and permanently disabled	3 years of service; totally and permanently disabled
Benefit	Service Retirement benefit payable immediately	Service Retirement benefit payable immediately	Accumulated Cash Balance account	Accumulated ORP account
Vesting				
Eligibility	10 years of service	5 years of service	3 years of service	3 years of service
Benefit	May apply for Service Retirement benefit at age 60	May apply for Service Retirement benefit at age 65 or Early Service Retirement benefit at age 55	Accumulated Cash Balance account	Accumulated ORP account
DROP				
Eligibility	Age 55 and 25 years of service	Age 60 and 30 years of service	n/a	n/a
Benefit	May DROP for 3-5 years; payout equals accumulated DROP, employee contributions, plus interest	May DROP for 3-5 years; payout equals accumulated DROP, employee contributions, plus interest	n/a	n/a
Investment of Plan Assets	Directed by Trustees	Directed by Trustees	Directed by Trustees	Employee Directed
Form of Payment	Various forms of single and joint life annuity	Various forms of single and joint life annuity	Lump sum (eligible for rollover) or various forms of single and joint life annuity	Lump sum (eligible for rollover)

## Case Study: Plan Design - Advantages and Disadvantages

	Sample Alternatives			
	Current DB	DB Tier 2 (Traditional)	DB Tier 2 (Cash Balance)	ORP
<b>Advantages (employer perspective)</b>	Status quo least disruptive to employees	Lower cost plan	Lower cost plan	Fixed cost
	Effective recruiting tool	Effective recruiting and retention tool	Effective recruiting and retention tool (if credits based on age/service)	Effective recruiting tool
				Investment risk borne by employee (no impact on cost)
<b>Disadvantages (employer perspective)</b>	Vesting too long for mobile workforce; impacts recruiting	Investment risk borne by employer (could impact cost)	Investment risk borne by employer (could impact cost)	Investment risk borne by employee (impacts benefits)
	25 and out contrary to retention objectives			
	Increasing cost due to market decline			
	Investment risk borne by employer			
<b>Advantages (employee perspective)</b>	Status quo least disruptive to employees	Lower cost than current plan	Lower cost than current plan	Lower cost than current plan
	Guaranteed benefit for life	Guaranteed benefit for life	Guaranteed benefit for life (if annuity chosen)	Portability
	Investment risk borne by employer	Investment risk borne by employer	Portability	Shorter vesting period
	25 and out an attractive option	Shorter vesting period	Investment risk borne by employer	Able to direct investments
	DROP an attractive option	DROP an attractive option	Shorter vesting period	
<b>Disadvantages (employee perspective)</b>	Vesting too long for mobile workforce	No portability	Lower benefits than current DB	Investment risk borne by employee
	No portability	Lower benefits than current DB		Required to direct investments
	Increasing cost puts pressure on funding for other initiatives			No guaranteed benefit (possible to outlive)

## *Case Study: Relative Impact of Design Changes*

- Although it is not contemplated that wholesale design changes would apply to current employees, we looked at the impact of such changes as if they were applicable to all employees to get a feel for the potential long term impact of possible changes
  - Note: if changes are applicable to new hires only, it will take a long period of time for impact to be realized
- Changes reviewed include
  - A. Multiplier and Employee Contribution Rate
    - Change multiplier from 2.0% to 1.5%
    - Reduce contribution rate from 5% to 3.75%
  - B. Average Pay
    - Change from 3 year average to 5 year average
  - C. Retirement Age
    - Change from age 60 and 10 years or any age with 25 years to 65 and 5 years or any age with 30 years, with reduction for earlier retirement at age 55 with 5 years (4% per year)
  - D. DROP
    - Eliminate

# Case Study: Relative Impact of Design Changes

	Baseline	3.75% EE Contribution 1.5% of Pay	5 Year Average	65 and 5 or 30 Years	No Drop	All Changes
Annual Required Contribution (Using Actuarial Value)						
<b>Employer Contribution</b>						
Normal Cost	6.39%	4.82%	5.91%	4.96%	6.39%	3.44%
Amortization of Unfunded Actuarial Liability	5.45%	4.65%	5.29%	4.92%	5.45%	4.16%
Other (Admin, Death benefits, etc.)	0.38%	0.38%	0.38%	0.38%	0.38%	0.38%
<b>Total</b>	<b>12.22%</b>	<b>9.85%</b>	<b>11.58%</b>	<b>10.26%</b>	<b>12.22%</b>	<b>7.98%</b>
Employee Contribution	5.00%	3.75%	5.00%	5.00%	5.00%	3.75%
Total Contribution	17.22%	13.60%	16.58%	15.26%	17.22%	11.73%
Annual Required Contribution (Using Market Value)						
<b>Employer Contribution</b>						
Normal Cost	6.39%	4.82%	5.91%	4.96%	6.39%	3.44%
Amortization of Unfunded Actuarial Liability	8.05%	6.67%	7.78%	7.14%	8.05%	5.83%
Other (Admin, Death benefits, etc.)	0.38%	0.38%	0.38%	0.38%	0.38%	0.38%
<b>Total</b>	<b>14.82%</b>	<b>11.87%</b>	<b>14.07%</b>	<b>12.48%</b>	<b>14.82%</b>	<b>9.65%</b>
Employee Contribution	5.00%	3.75%	5.00%	5.00%	5.00%	3.75%
Total Contribution	19.82%	15.62%	19.07%	17.48%	19.82%	13.40%

Looked at impact  
of market losses,  
if fully recognized

## *Case Study: Relative Impact of Design Changes*

- High impact
  - Multiplier
  - Retirement age
- Medium impact
  - Averaging period
- Low impact
  - DROP

## *Case Study: Next Steps*

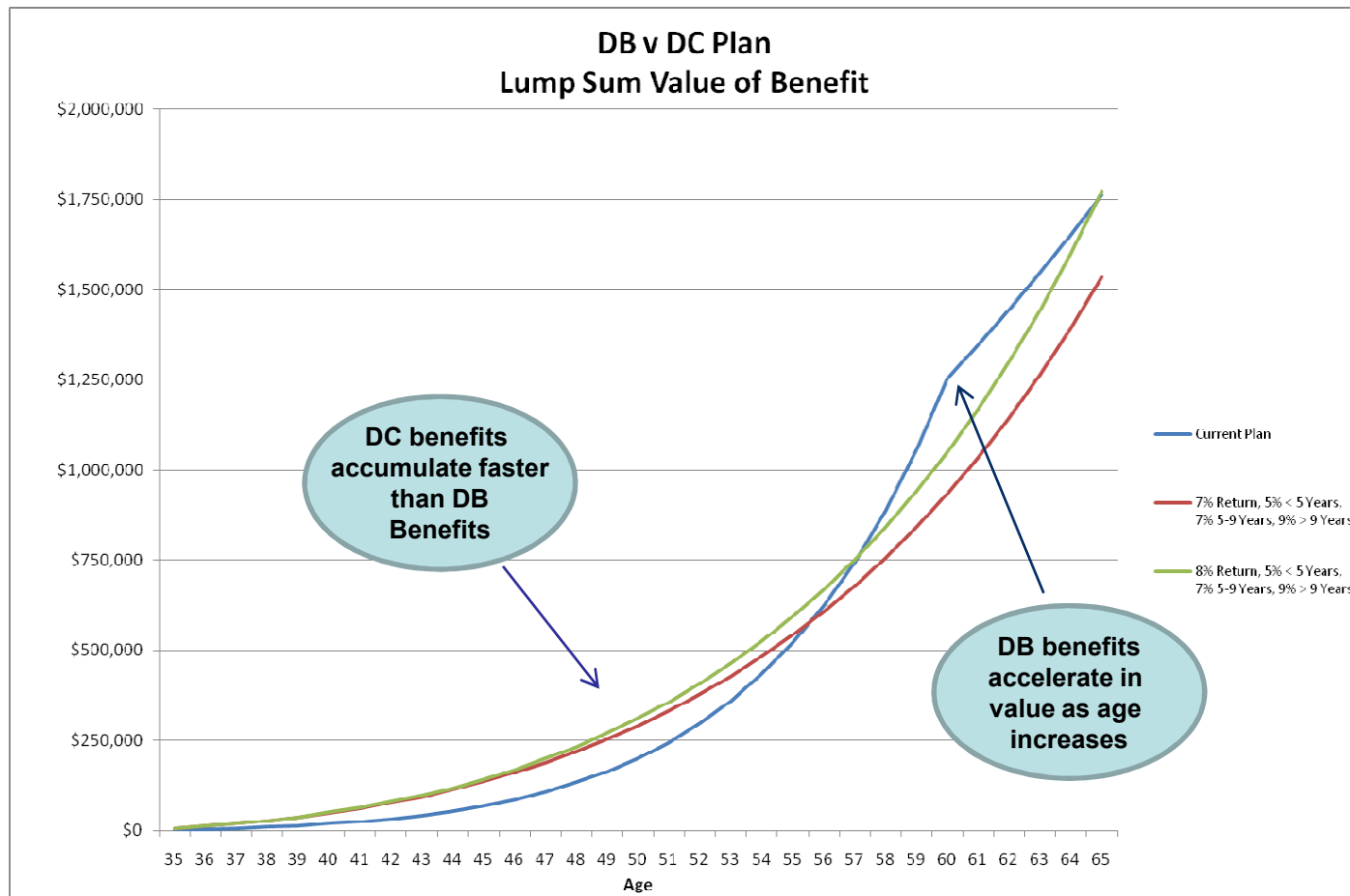
- Initial impressions on information provided
- Identify strategies worthy of further consideration
- Prepare additional cost/benefit illustrations
- Gather additional information
  - Peer group and/or survey data
  - Solicit input from employees
  - Other
- Prepare preliminary recommendations for discussion

# *Defined Contribution Plans*

- Code Section 401(a) provides regulatory parameters for qualified defined contribution plans
- Contributions
  - Employer (typically uniform or tiered based on age and/or service)
  - Employee (typically mandatory pre-tax 414(h) “pick-up”)
- Vesting
  - Employer contributions can be immediate, graded (i.e. fixed % per year), or cliff (100% after a fixed number of years)
  - Employee contributions are 100% vested immediately
- Distributions
  - Typically lump sum, which are eligible for rollover
  - Annuities may also be provided
- Investments
  - Typically participant directed to a choice of funds including target date or asset allocation models

# Benefits (DB versus DC Plan)

Estimated lump sum value of accrued benefit at various ages



DC plan benefits tend to accumulate in value more rapidly than DB benefits, especially at the younger ages. As a result, early termination benefits can be costly. DB benefits tend to increase in value rapidly as age increases; persons hired later in their careers are impacted the most.



## *DC Plans: Cost Considerations*

- DC plan costs are predictable and not affected by investment performance; risk is shifted to the employee
- Depending on the plan design and demographics of plan participants, contributions can be greater or less than DB Normal Cost
  - Employer DC plan contributions should be set no higher than average DB Normal Cost
- Existing DB unfunded liability will remain and need to be funded in future years; new hires will not subsidize costs for existing DB members because they will not participate in the DB plan
  - Employer and remaining DB plan participants will foot the bill

## *DC Plans: Ancillary Benefits*

- The DB plan provides ancillary benefits for death and disability.
- In a DC plan, the only benefit is the account balance which cannot be “artificially sweetened” at death or disability.
- Consideration should be given to providing supplementary death or disability benefits outside the DC plan for employees covered by the DC plan.

*Questions?*