

# Division of Safety and Hygiene

# Welcome BWC Board of Directors

## Presenters:

- **Joy Bush,**  
Executive Director, Employer Management Services,  
CPCU, PMP
- **Mark Garver,**  
Acting Superintendent, Division of Safety & Hygiene
- **Jerry Andersen,**  
Service Office Manager, Youngstown, CSP

## Missions:

- **BWC Mission:** To protect injured workers and employers from loss as a result of a workplace accident, and to enhance the general health and wellbeing of Ohioans and the Ohio economy.
- **Division of Safety & Hygiene Mission:** Help Ohio employers and employees prevent injuries and illnesses.
- Services provided to public employers, private employers and self-insured employers

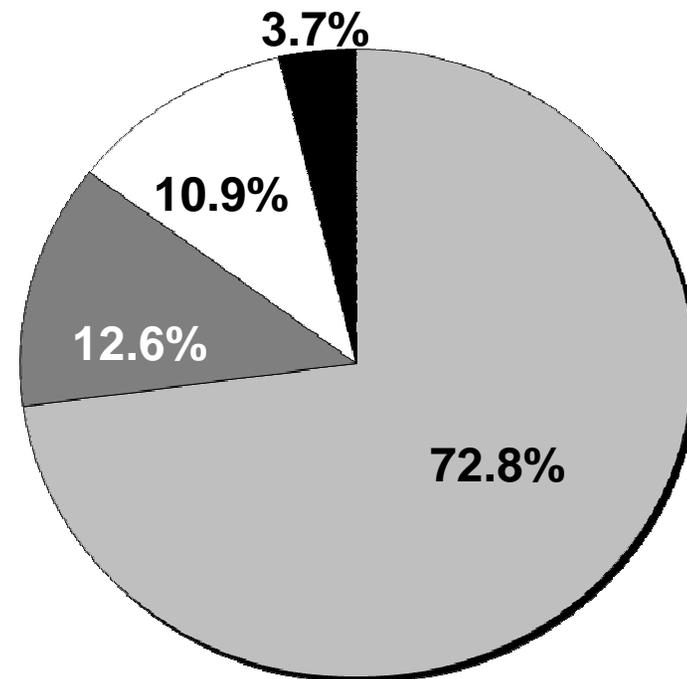
## Ohio Constitution – Section 2.35

“Such board shall set aside as a separate fund such proportion of the contributions paid by employers as in its judgment may be necessary, not to exceed one per centum thereof in any year, and so as to equalize, insofar as possible, the burden thereof, to be expended by such board in such manner as may be provided by law for the investigation and prevention of industrial accidents and diseases.”

# Funding

- State Fund - Private - 72.8%
- State Fund - PEC - 12.6%
- Self-Insured - 10.9%
- State Agencies - 3.7%

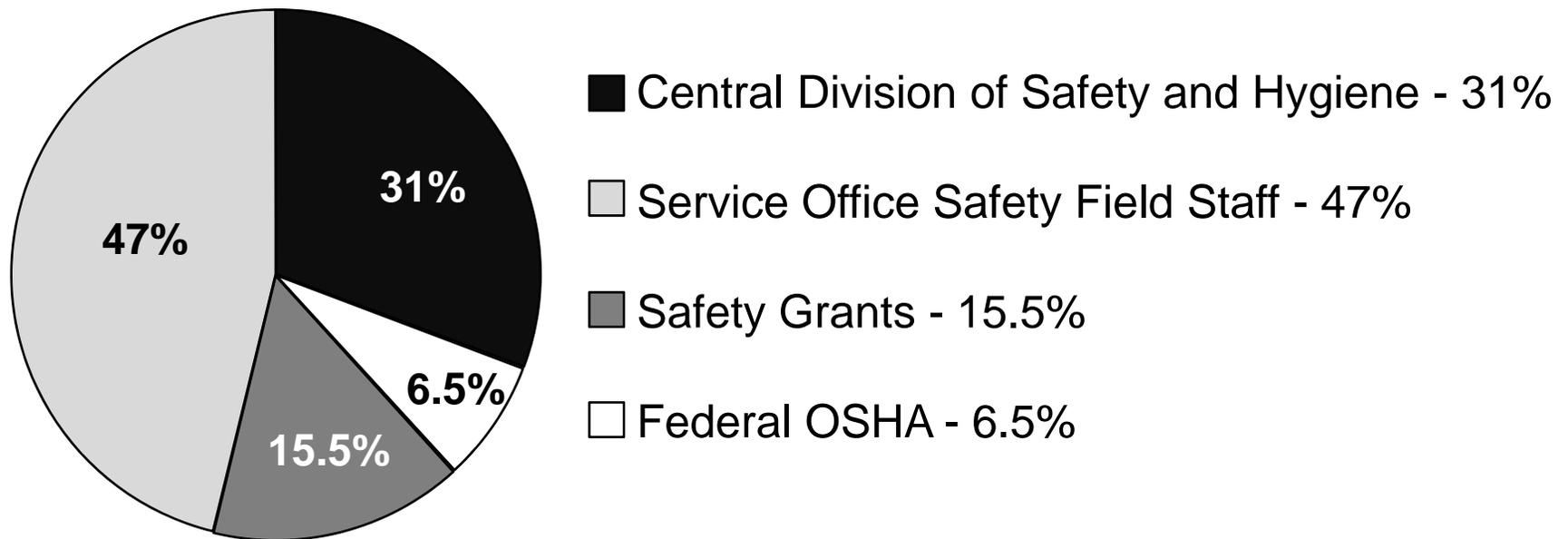
Federal OSHA Grant (\$1,698,489)



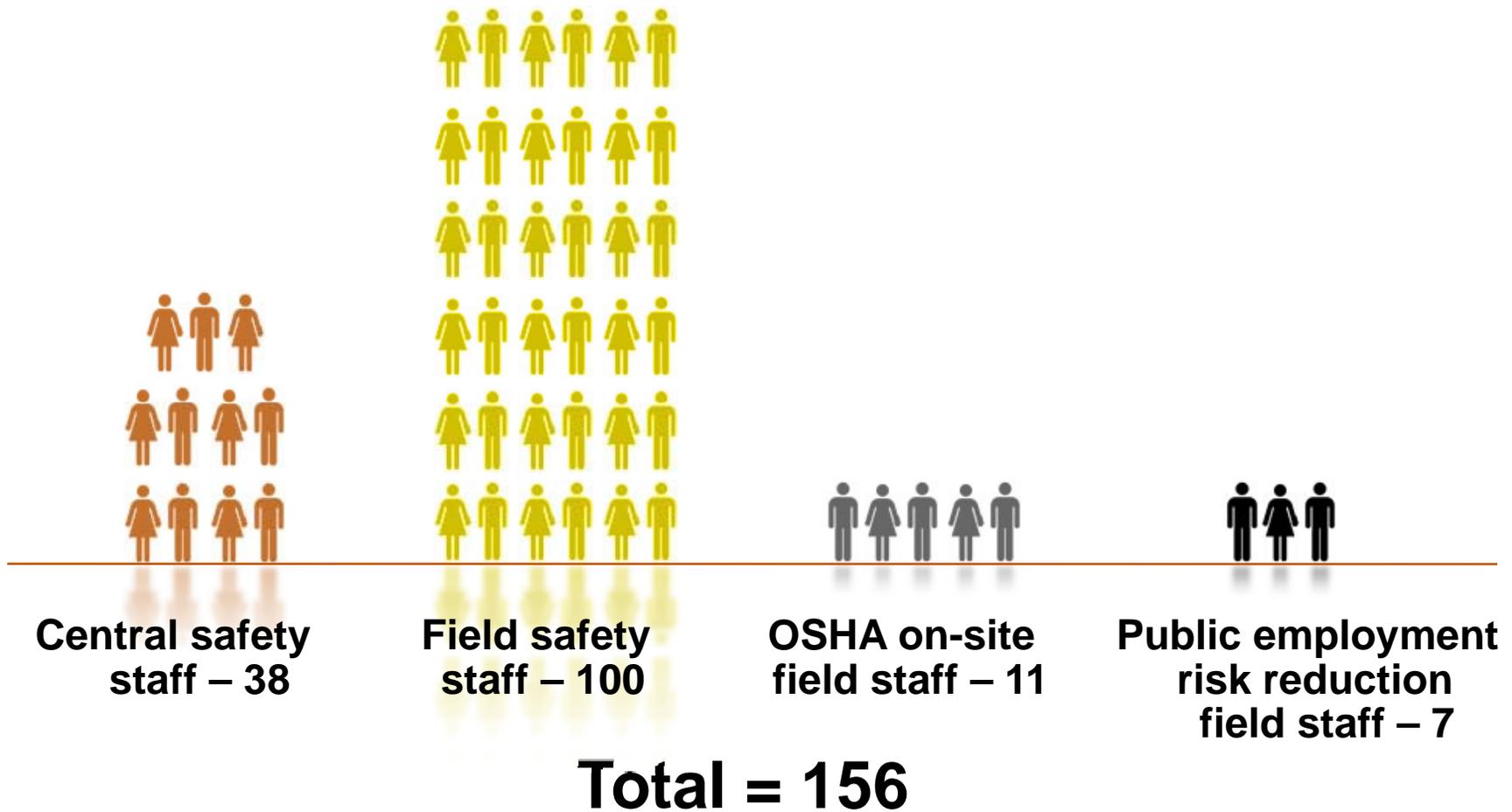
# FY08 Budget Allocations –

Department	Personal Services	Supplies & Maintenance	Equipment	Totals
Service Office Safety Field Staff	\$11,613,348	\$423,536	\$0	\$12,036,884
Central Division of Safety & Hygiene	\$4,527,316	\$3,442,569	\$3,660	\$7,973,545
<b>Subtotal</b>	<b>\$16,140,664</b>	<b>\$3,866,105</b>	<b>\$3,660</b>	<b>\$20,010,429</b>
Federal OSHA (federal matching portion)	\$1,562,933	\$102,605	\$32,951	\$1,698,489
Safety Grants	\$0	\$4,000,000	\$0	\$4,000,000
Safety Loans	\$0	\$2,000,000	\$0	\$2,000,000
<b>Subtotal</b>	<b>\$1,562,933</b>	<b>\$6,102,605</b>	<b>\$32,951</b>	<b>\$7,698,489</b>
<b>Total Budget</b>	<b>\$17,703,597</b>	<b>\$9,968,710</b>	<b>\$36,611</b>	<b>\$27,708,918</b>
	<b>(69%)</b>	<b>(31%)</b>	<b>(.001%)</b>	<b>(100%)</b>

# Division of Safety & Hygiene FY2008 Budget Total = \$27,708,918



# Staffing



## What Are We Going to Discuss?

- Central Safety & Health Services
- BWC Enterprise Project
  - Preferred Customer Markets
- Field Safety & Health Services

## Training Center (\$1.28M annual budget)

- Main Facility – Pickerington
- Customer service offices across the state
- FY 2007 – over 8,500 students attended more than 400 classes featuring 64 different topics

## Training Center

- **Classes:**
  - Training Center and service offices
  - Web-based training
  - OCOOSH classes on-site
- **Instructors:**
  - BWC employees
  - Outside vendors
- **On-line Registration**

# Ohio Safety Congress & Expo (\$433,050 annual budget)

- Largest regional safety and health exhibition in the United States
- 2007 – Cleveland – Over 5,000 people attended the 3 day event
- 2008 – Columbus Convention Center – April 1-3



## Safety Councils (\$1.5M in subsidy)

- Host monthly meetings: accident prevention, risk management and workers' compensation issues
- Fiscal Year 2007–79 Safety Councils
- 2005 – 6,128 members
- 2007 – 9,500 members
- Significant Growth:
  - Safety Council Incentive Program – Encourage Active Participation

## Safety Publications

- Educational Guides
  - Hand Tools, PPE, Manual Material Handling, etc.
- Safety Grants – Best Practices
- Manuals
  - Safety Leaders Discussion Guide
  - Industrial Safety Manual
  - Construction Safety Manual
- Stickers, Cards, and Signs

## Library Services

- Two libraries to serve internal & external customers
- Central Library – William Green Building
- Resource Center & Video Library at OCOSH
- Free information services and research on safety, health and workers' compensation

## Library Services

- Internal Requests (Field Staff)
  - What contaminants are released from burning enamel-based paints?
  - What are the storage requirements for propane gas cylinders?
- External Requests
  - Provide detail on seating for long haul truck drivers
  - When is fall protection required?

## OSHA On-Site Consultation – Cooperative Agreement

(\$1,698,489 annual budget)

- Private sector voluntary consulting
- Employer Request – No risk of citations
- Assist private employers with OSHA regulations and compliance
- FY 07 - 924 Consultations
- 65% of all visits were in Strategic Plan Areas of Emphasis

## **Public Employment Risk Reduction Program (PERRP) – (\$1.1M annual budget)**

- Public sector voluntary consulting
- Assist public employers with OSHA regulations and compliance
- Collect PERRP 300 Injury and Illness Statistics (Identify Trends)
- 2007 - Identified 9,310 serious hazards affecting 24,410 employees
- “Right of Entry”

## Technical Advisors

- Industrial & Construction Safety, Industrial Hygiene and Ergonomics
- Provides technical advice to internal and external customers
- Technical support to the Service Offices
- Develop training for field staff and supervisors
- Conducts research on regulations and best practices
- Purchase equipment, instruct OCOOSH classes and review classes for content

## Business Development & Oversight

- Develops new products, services and systems to impact BWC customers
- Products, Services, Systems
  - Safety Intervention Grants -\$2M
  - Long Term Care Loan Program (HB 100) - \$2M
  - Youth Safety Web Page (In Development)
  - Learning Management System
  - Annual Reports, Technical Papers and Research Data

## Safe Workplaces

- Safety & Accident Prevention Strategies
  - Engage employers with poor claim history
  - Demonstrate measurable improvements

## Safe Workplaces, BWC Enterprise Project

- Preferred Customer Markets
  - Public Employer Commissions - Taxing Districts (PECs)- (Cities, Counties, Schools)
  - Construction Companies
  - Temporary Staffing Agencies
  - Nursing Homes

## Safe Workplaces

- Goals for the Preferred Customer Markets
  - Reduce Frequency and Claims Costs by 5% (in each industry market)
  - Develop “Best Practices” for the entire industry

## Public Employer Taxing Districts - PECs

(Cities, Counties, Schools)

- High injury/high costs because of types of services offered to the public (police, fire, refuse collection, road crews, etc.)
- Top 25 employers in each category
  - Counties – 63% claims, 60% of costs
  - Cities – 57% of claims, 73% of costs
  - Schools – 34% of claims, 51% of costs
- Tight budgets – reduce Workers' Compensation costs

## Construction Industry

- High risk industry
- Fall protection & trenching
- Lack of fall protection – major cause of fatalities in construction
- Trenching – OSHA emphasis – see a trench – stop and inspect
- Safety can affect the bottom line

## Temporary Employee Staffing Agencies

- High injury – dangerous tasks
- Confusion on training issues
- Confusion on recordkeeping
- Confusion on Workers' Compensation and Violation of a Specific Safety Requirement Issues
- OSHA alliance

## Nursing Homes

- High back injury industry
- High cost claims
  
- **Strategy – No Lift Policy**
  - Equipment to minimize lifting
  - Safety Grant
  - Long-Term Care Loan Program

## Safety/Health Services

- Industrial Safety Consultant Specialist – 52
- Ergonomist – 20
- Industrial Hygienist - 28



## Industrial Safety Consultant Specialist

- Industrial Safety Consultant Specialists (ISCS) assist employers with loss prevention strategies and developing a holistic safety and health process

## Tools of the Trade for Hazard Assessments

- Depending on the job, different technical tools may be necessary, such as:
  - Electrical tester
  - Sound level meter
  - Stop time measuring device
  - Video and digital cameras
  - Carbon Monoxide testers
  - Velometer

## Phases of a Consultation

Not all consultations will be the same, but a general outline of the process follows:

- Research and preparation
- Preliminary on-site risk assessment
- Worksite hazard identification (hazard assessments)
- Development of safety teams
- Development of written safety programs
- Report writing and research (work product)
- Presentation of report to company
- Follow-up and support of developed Employer Action Plan

## Common Problems Identified for Companies

- Lack of management commitment & support
- Lack of accountability within the safety process
- Poor internal communications
- Safety is identified as a staff problem
- Lack of safety team
- Lack of accident investigation
- Inadequate safety knowledge for management and labor (limited safety training)
- OSHA violations

# Ergonomists

Specialize in preventing musculoskeletal disorders

## Relative Technical Skills

- Biomechanics
- Physiology
- Anatomy
- Industrial Engineering
- Mechanical Engineering
- Human Factors Engineering

## Prevention Value

- Musculoskeletal Disorders (MSDs)
  - Back Pain
  - Carpal Tunnel Syndrome
  - Tendonitis
  - Sprains & Strains
  - “Overexertion”
- @25% of all claims (*Frequency*)
- @45% of all claims costs (*Severity*)

## When Can an Ergonomist Help?



awkward bend



new tool

## What Will an Ergonomist Do?

- Identify / quantify risk
  - Take measurements
  - Use assessment tools (Ergo Toolkit on Intrafin)
- Recommend solutions
  - Engineering
  - Administrative
- Evaluate effectiveness
  - Reduction in risk
  - Reduction in frequency / severity
  - Cost / benefit



## Ohio Bureau of Workers' Compensation

Governor, Ted Strickland  
Administrator, Marsha P. Ryan

Focus on  
Ohio Employers

- [Accident/Injury Info »](#)
- [Claim Info »](#)
- [Claim Payment »](#)
- [Claim Reference Info »](#)
- [Coverage look-up](#)
- [Employer Services »](#)
- [Quick Pay](#)
- [Safety Services »](#)
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**Service:** (Lifting guidelines look-up) – Enter criteria

### Division of Safety & Hygiene - Lifting guidelines

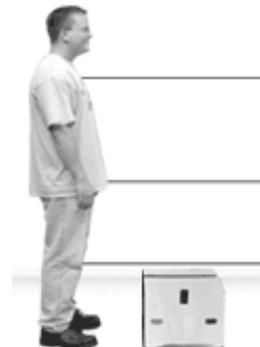
Enter the criteria for the specific situation in your workplace, and then click **submit**. You can enter the lifting specifics in one of two ways. You can click on the drop-down arrows, and then click on what you want to enter. Or, you can click on the image in the spot that matches the criteria you want to enter.

Select the back type for your scenario.

- Healthy    Lower back disorder

Select the vertical lift origin (the level from which lifts will be made).

Floor level



Select the horizontal reach, distance from the spine (measured from spine to the center of the load).



# Industrial Hygienists

- Specialize in preventing occupational diseases/illnesses rather than acute injuries

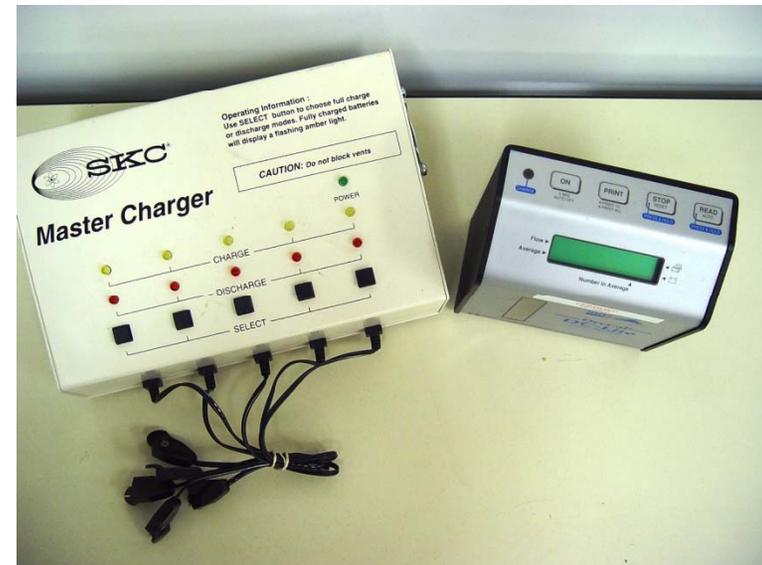
# Sampling for Dusts, Vapors, Mists, Gases, Aerosols, Noise and Indoor Air Quality

- When do Industrial Hygienists sample?
- Method (total, respirable, inhalable)



# Preparation for IH Surveys

- Walk-through
  - Material safety data sheets
- Charging of equipment
- Calibration of equipment



# Heat Stress Monitoring

## Work Rest Regiments



## Frequency & Severity

of claims is supported by prevention of serious injuries after conducting Risk Assessments.

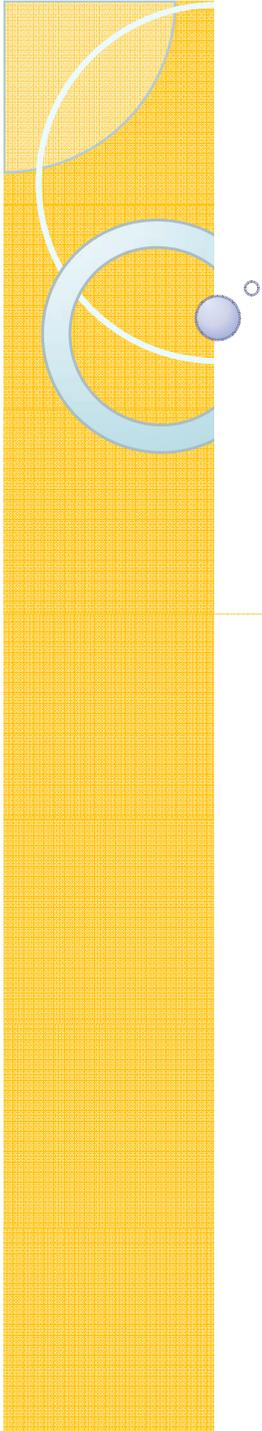
- EM / IM staffing of priority accounts establish customer service strategies
- Industrial safety surveys
- Construction safety surveys
- Development of safety teams
- Development of written safety programs
- Onsite training classes
- OCOOSH seminars
- Review of cost analysis
- Support of safety grants
- EM / IM staffing strategies

# Severity and Lag Time

of claims is supported through referral for Loss Control Services after conducting Risk Assessments.

- Claims management (medical only and lost time claims)
- Managing high reserves and costs that impact premiums
- Consultation for special risk programs to include PDP+, Retrospective Rating, DFWP-EZ, Claims Settlement, Handicap Reimbursement
- Rehabilitation services
- Subrogation
- Transitional work
- EM / IM staffing strategies

**Questions?**

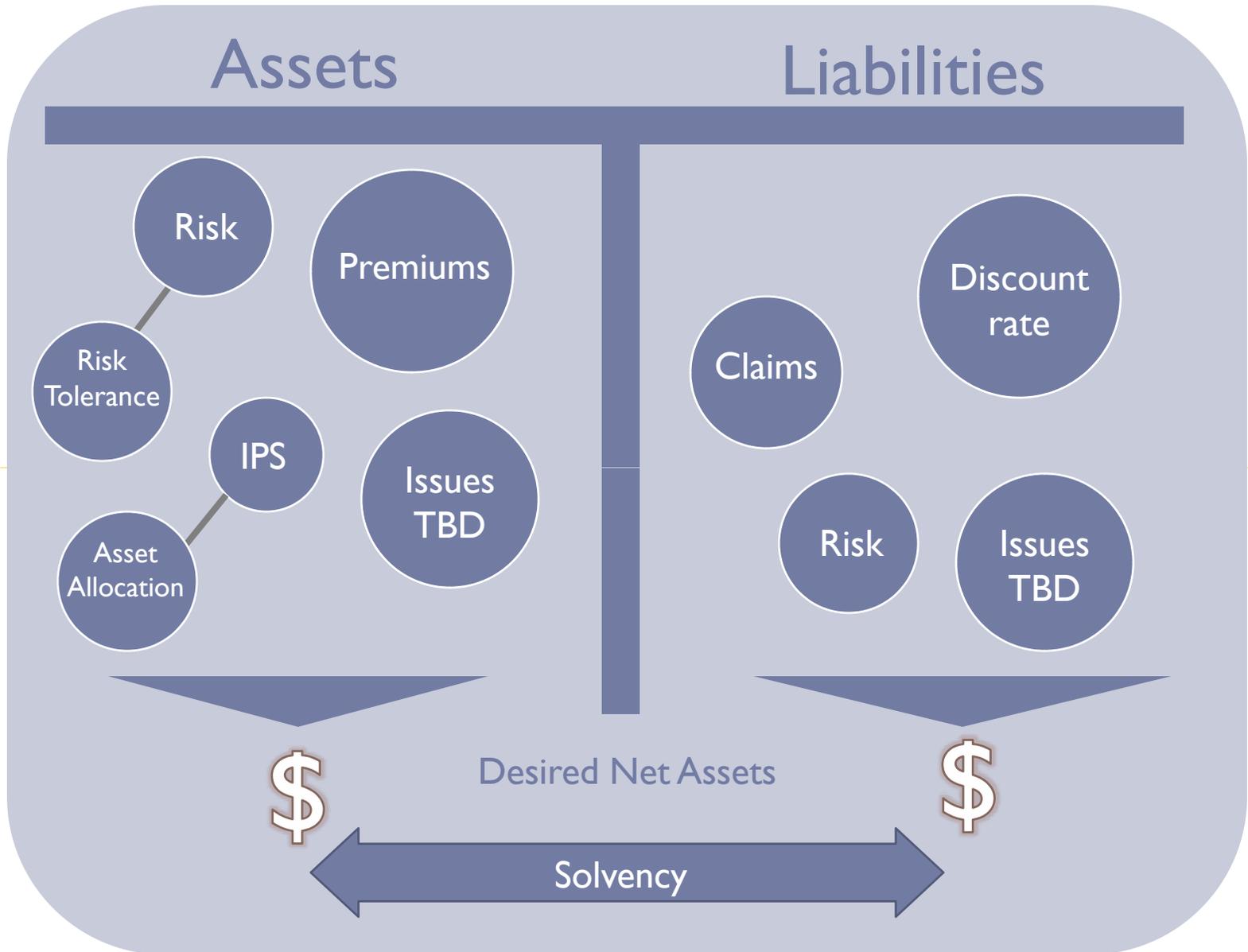


# Setting the Discount Rate

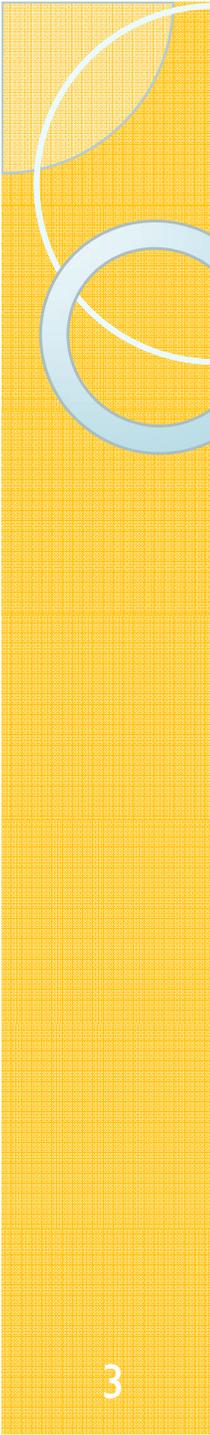
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Marsha P. Ryan, Administrator

March 27, 2008



RC 4123.34: "...fix and maintain...the lowest possible rates of premium consistent with the maintenance of a solvent state insurance fund..."



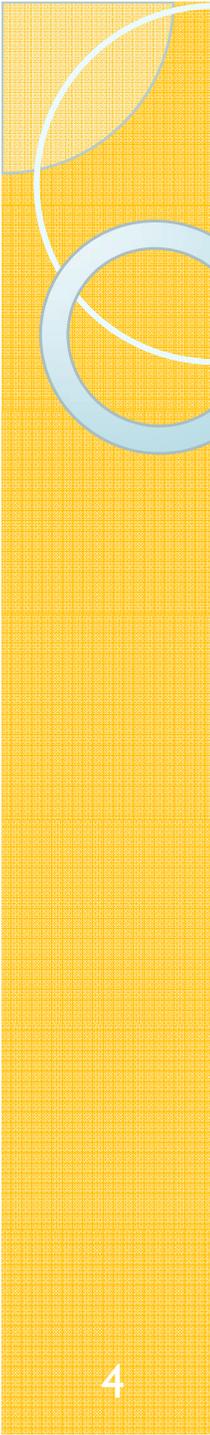
# Discount rate

The discount rate is NOT

- Investment policy
- It does not change the amount of assets we have today to make future claims payments
- It does not change the amounts we will pay in the future for claims.

The discount rate IS

- Recognition of the time value of money
- \$1 of future claims liability can be paid by setting aside less than \$1 today due to expected investment earnings
- The minimum investment return over the next 50+ years in which we are highly confident

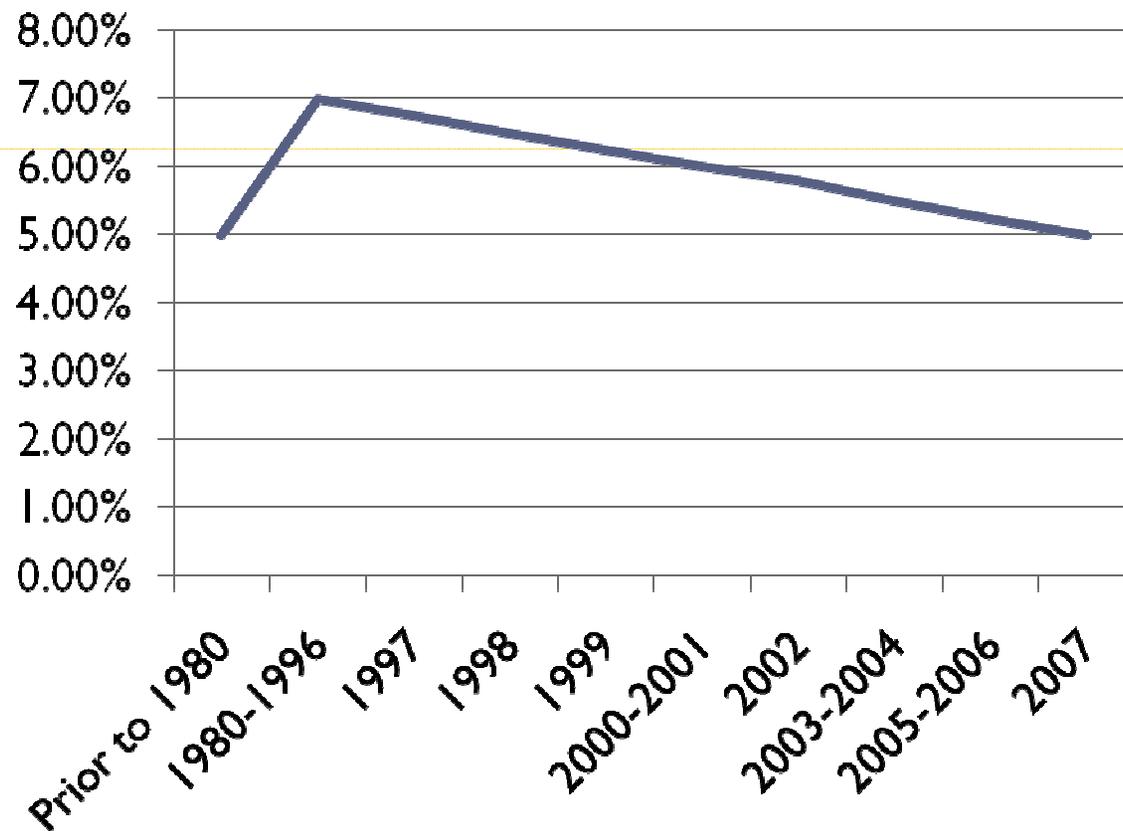


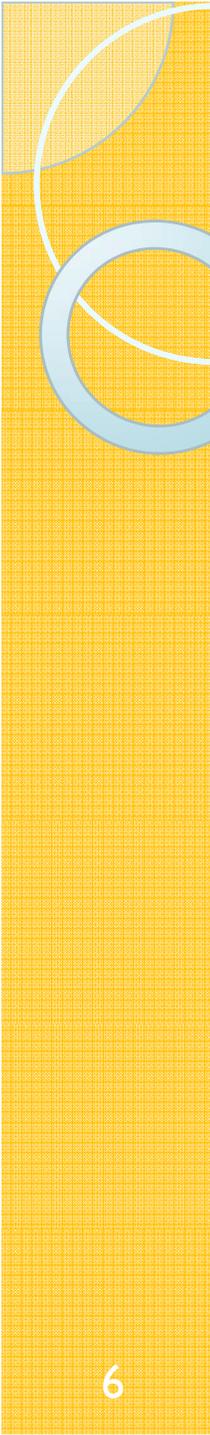
# Goals

- Establishment of a conservative discount rate using a methodology supported by accounting and actuarial literature
  - Should be established with a long term view to reduce volatility in our balance sheet and premiums
  - Should not exceed highly dependable investment returns over long periods of time
  - Should enable management to focus on business enterprise goals, such as financial strength and operational excellence

# Discount rate

## History of the Reserve Discount



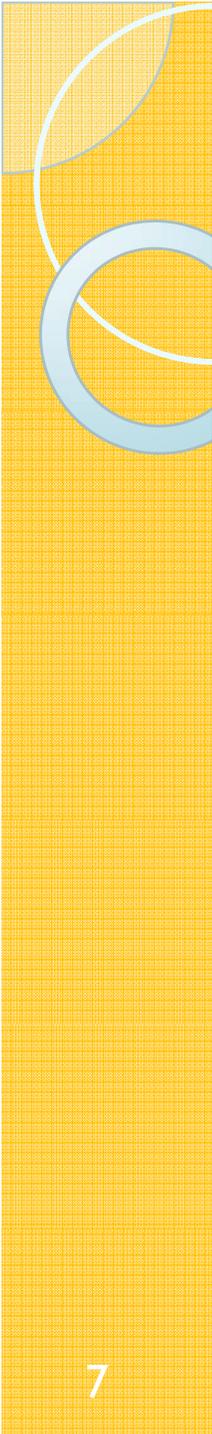


# Discount rate

## How is the discount rate set?

Factors are provided in GASB 10

- 
- Investment yields
    - BWC performance
    - Long-term “riskless” investment
  - Cash flow patterns
    - On an annual basis, cash inflows approximate cash outflows
  - Settlement rates



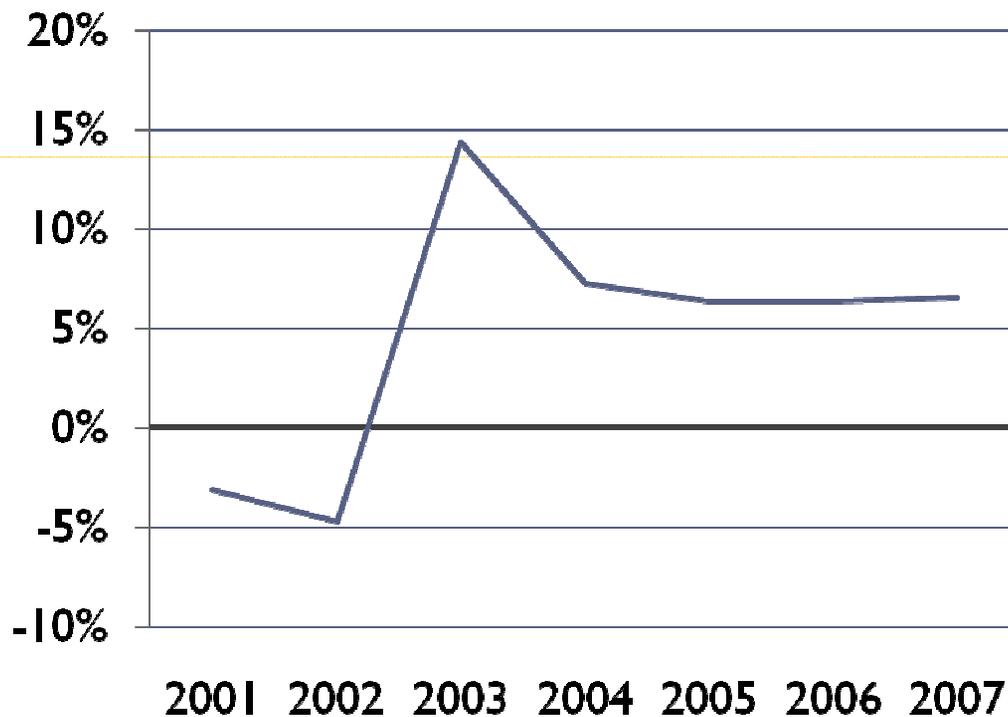
# Discount rate

## Investment factors included in BWC's methodology

- As a point of reference, the average 30-year treasury constant maturity index yield for the five-year period ended June 30, 2007 was 4.859%
- Annual returns on State Insurance Fund for the past seven years have ranged from 14.4 % in 2003 to -4.7% in 2002.
- Consideration of the time value of money using a low-risk rate of return

# Discount rate

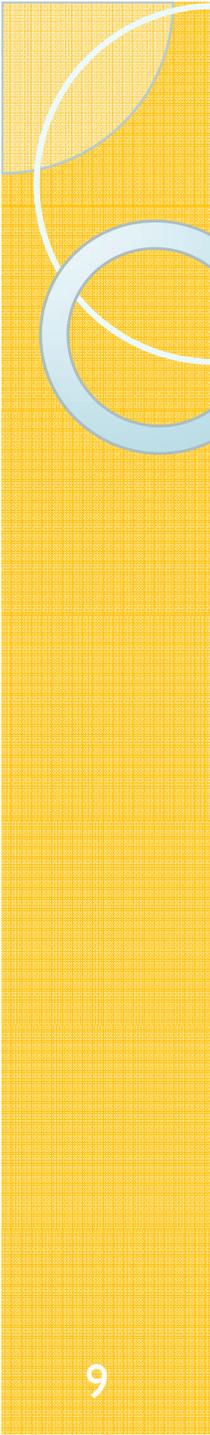
BWC avg. annual total investment returns



2004-07 6.7%

2003-07 8.2%

2001-07 4.7%



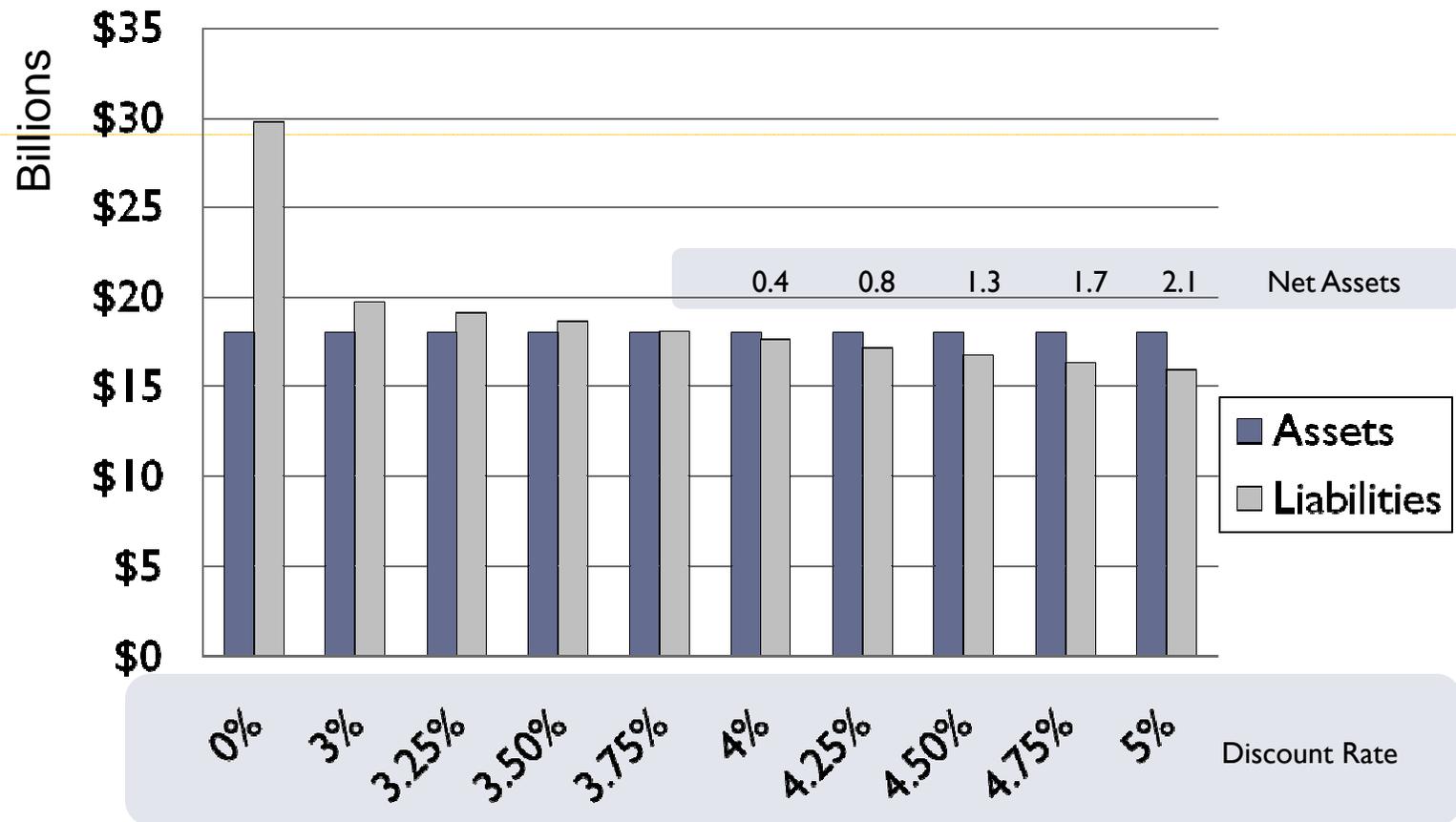
# Discount rate

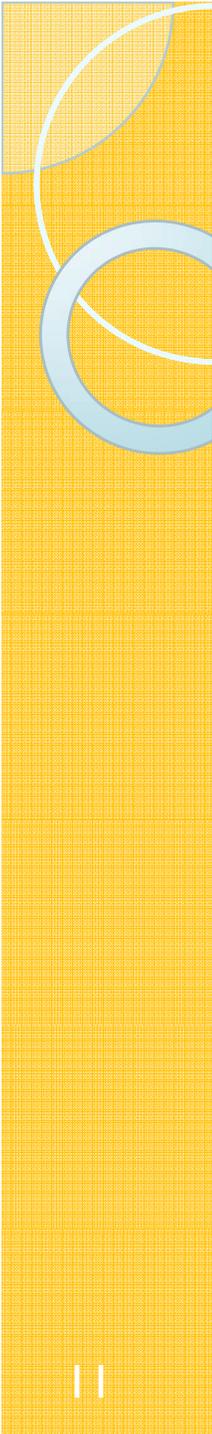
## Actuarial considerations included in BWC's methodology

- Timing of future payments is uncertain
- Amount of future payments is uncertain
- Historical patterns analyzed using today's knowledge may not estimate future costs with complete accuracy
- Investment returns vary annually

# Discount rate

## Balance Sheet Impacts





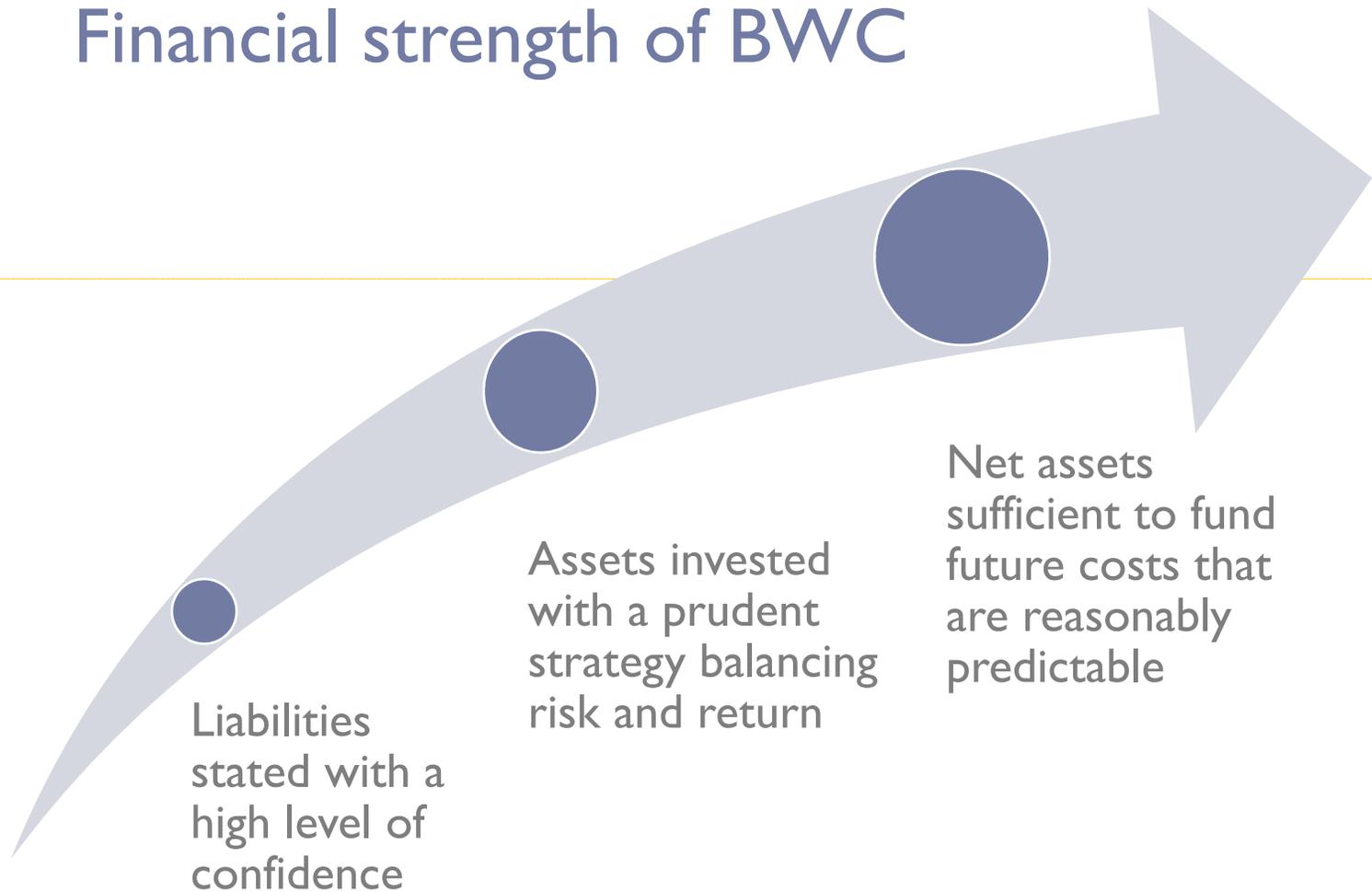
# Discount rate

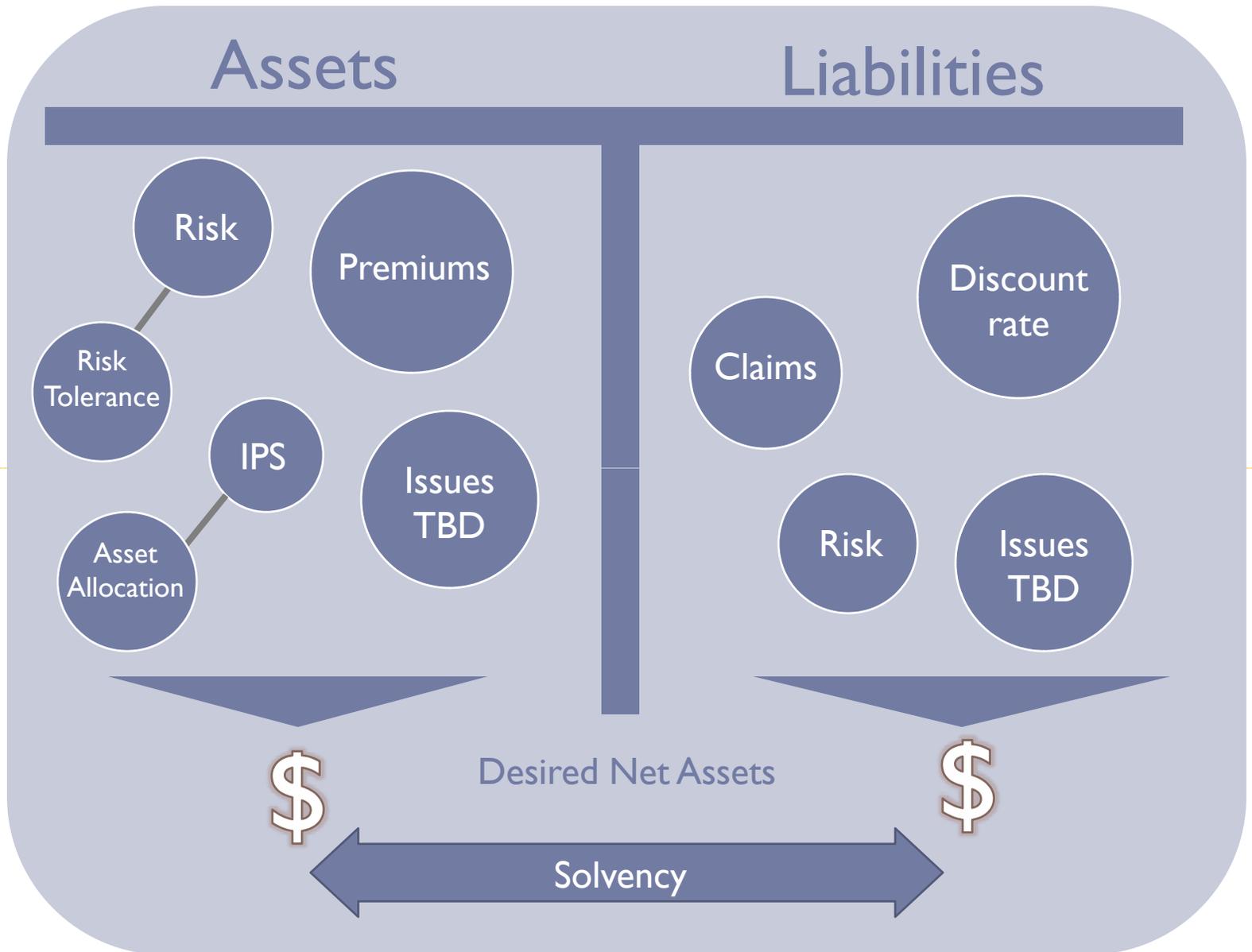
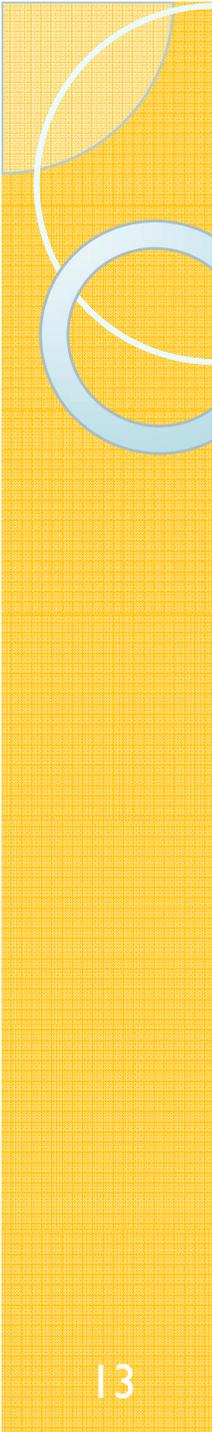
## Next Steps:

- Set rate for this policy year beginning July 1, 2008
  - Will use the most recent data for all of the items we have discussed today.
- Complete catastrophic analysis next policy year using information from Deloitte and other studies
- Will re-examine discount rate annually

# Discount rate

## Financial strength of BWC





RC 4123.34: "...fix and maintain...the lowest possible rates of premium consistent with the maintenance of a solvent state insurance fund..."