

## Community Briefing

July 10, 2009

### Today's Discussion



- Why change is necessary
- Review process
- Overview of proposed new program
- Transition benefits
- What the change means to you
- Alternatives explored
- Competitive view
- Next steps

## Why Change is Necessary



- Recent changes to pension laws have made WHOI's contributions to the pension plan more unpredictable
  - For example:
    - The expected pension contribution in 2014 is \$20 million
    - A 5% chance it could be zero
    - A 5% chance it could be more than \$42 million
- Unpredictability makes it more difficult to seek reimbursement from the government
- Pension contributions can put a significant strain on WHOI's unrestricted endowment

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## Estimated Financial Status of Pension Plan



- Funded position – January 1, 2009
  - Value of future benefits earned to date      \$180 million
  - Market value of plan assets                      135 million
  - Shortfall    \$ 45 million
  - Estimated annual cost  
to fund shortfall over 7 years                      \$ 8 million
  - Percentage of WHOI payroll                              **13%**
  
- Ongoing cost – excluding cost of shortfall
  - Total    \$ 8 million
  - Percentage of WHOI payroll                              **13%**

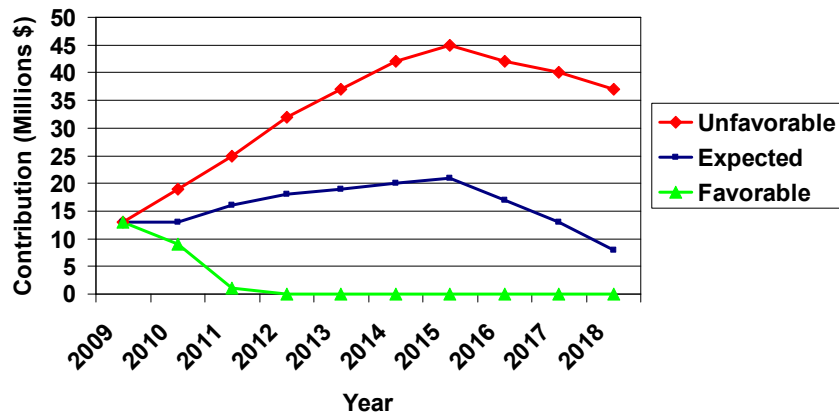
Note: Results based on Pension Protection Act basis as of 1/1/2009 assuming 6.5% discount rate.

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## Forecast Current Plan - Total Contributions



Projected that unfavorable result (or worse) will occur 5% of the time  
Projected that favorable result will occur 5% of the time  
Includes cost of current shortfall



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## Directive from the Trustee Retirement Committee



Recommended that WHOI move to a Defined Contribution Plan for delivering retirement benefits

- Recommendation is the result of considerable analysis completed by the Trustees and the Investment Committee during the past 18-24 months
- Investment Committee will also be implementing changes to investment strategy designed to reduce volatility of future pension contributions

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## Retirement Task Force Charge



1. Develop a new defined contribution plan with an annual cost equal to **10% of payroll**
2. Develop a 10-year transition plan with an average annual cost equal to **3% of payroll**
3. Minimal additional liability in Defined Benefit Plan

If appropriate, develop up to three options for review by the Trustee Retirement Committee

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## Retirement Task Force Process



- Significant number of retirement task force and trustee meetings and review over multi year period
- Executive group of the RTF met with Trustee retirement committee in New York to discuss Trustee decision to move to a DC
- Restructured RTF assigned co-Chairs (Matt Charette, Ernie Charette) and added additional members to better match WHOI demographics
- Two two-day retreats to work on new plan design plus transition benefit structure
- Additional meetings to incorporate Community feedback
- Periodic updates to Trustee Retirement Committee
- Meeting with Staff Council and RTF chairs

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## Key Task Force Decision Points



- Same plan for all employees
- Employee contributions should be encouraged, but not required
- Plan should reward long service employees as well as the experience employees bring to WHOI
- Spread impact of plan change throughout community as evenly as possible
- Ongoing program should be competitive
- Priority should be given to current workforce (when compared to future employees)

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## Defined Contribution Plan Design



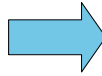
- WHOI Contribution:
  - 6% to 12% of pay based on points (age plus service) on first day of each year
- Employee Contributions
  - Automatic enrollment (for those not contributing) starting at 4% of pay with option to opt out
  - You can change election at any time (up or down)
- Transition
  - DB: Freeze service and pay grows until 25 years of service
  - DC: Additional contribution for 10 years of 2% - 6% based on age starting at 50
- Eligibility (for WHOI Contributions) - 1 year of service (i.e. 1,000+ hours)
- Vesting
  - Employer Contributions - 3 year cliff (i.e. 100% vested after 3 years; 0% vested prior to 3 years)
  - Employee Contributions - Always 100% vested

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### Defined Benefit Plan

- **BENEFIT** is defined by a formula
- Pays a lifetime annuity (or partial lump sum)
- WHOI contribution varies



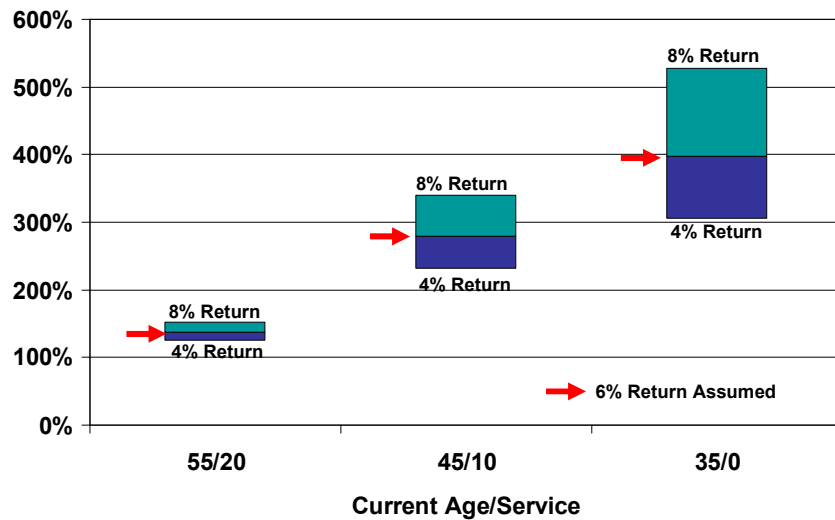
### Defined Contribution Plan

- Personal Account
- **CONTRIBUTION** is defined by a formula
- You choose investments
- Benefit is your account balance and varies with investment return

## DC Benefit Varies with Investment Return



Projected Balance at age 65 – Expressed as Multiple of Pay at Age 65



Assumes 3.5% annual salary increases

## Defined Contribution Plan Design



- Contribution based on each employee's age and service "points"

Age and Service Points	Contribution for Year
Less than 50	6% of pay
50 < 60	8% of pay
60 < 70	10% of pay
70 or more	12% of pay

- Example: You are 50 years old and have been at WHOI for 15 years
  - You have 65 points [50 + 15]
  - WHOI's contribution to your account for the year would be 10% of your pay that year

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## Special DC Transition Benefits



**Transition benefits are important because the Pension Plan weights benefits more heavily towards older employees**

- Additional Contribution (for first 10 years after conversion)

Age on First Day of Year	Additional Contribution for Year
Age 50 < Age 60	2% of pay
Age 60 < Age 62	4% of pay
Age 62 or Older	6% of pay

- You age into higher contribution rates during the transition period
  - For example, if you are 58 when the conversion takes place, your additional contribution would be 2% of pay for the first 2 years (ages 58 and 59), 4% for the next 2 years (ages 61 and 62), and 6% for the remainder of the transition period

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## Pension Plan Transition



### CONTINUED BENEFITS FOR THE PENSION PLAN

- Pension service will be frozen at the time of conversion
- The determination of highest 5-year average pay will continue to reflect pay increases until you complete 25 years of service

#### Example 1: 10 years of service at the time of conversion

- Your pension benefit will be based on 10 years of service, but continue to reflect pay increases for the next 15 years of service
- You receive contributions to the new defined contribution plan

#### Example 2: 25 years of service at the time of conversion

- Your pension benefit is frozen and will not reflect future pay increases
- You receive contributions to the new defined contribution plan

- Although future service isn't counted for purposes of determining the amount of your pension benefit, it will count towards eligibility for vesting, early retirement, and the special early retirement benefit (SERB)

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## Illustration of New Plan With Transition Benefits



- For an employee age **45** with **10** years of service at time of conversion

Year	Age	Points	Base Contribution	Transition Contribution	Total WHOI Contribution
1	45	55	8% of pay	0% of pay	8% of pay
2	46	57	8%	0%	8%
3	47	59	8%	0%	8%
4	48	61	10%	0%	10%
5	49	63	10%	0%	10%
6	50	65	10%	2%	12%
7	51	67	10%	2%	12%
8	52	69	10%	2%	12%
9	53	71	12%	2%	14%
10	54	73	12%	2%	14%
11	55	75	12%	0%	12%

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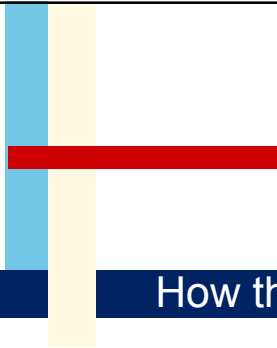
## Illustration of New Plan With Transition Benefits



- For an employee age **55** with **15** years of service at time of conversion

Year	Age	Points	Base Contribution	Transition Contribution	Total WHOI Contribution
1	55	70	12% of pay	2% of pay	14% of pay
2	56	72	12%	2%	14%
3	57	74	12%	2%	14%
4	58	76	12%	2%	14%
5	59	78	12%	2%	14%
6	60	80	12%	4%	16%
7	61	82	12%	4%	16%
8	62	84	12%	6%	18%
9	63	86	12%	6%	18%
10	64	88	12%	6%	18%
11	65	90	12%	0%	12%

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How the Changes Will Impact You

## How Benefits Compare



- Current Plan retirement benefits earned up to the time of conversion are protected
- Benefits payable at retirement age are expected to be less
  - Greatest impact on mid-career hires who would have received benefit equal to approximately 190% of competitor average
- Benefit value – for those who leave WHOI early in their career – can be better
  - New defined contribution plan isn't as skewed towards older employees as the current pension plan
- You will have to take more responsibility and assume more risk under the new defined contribution plan

## How the New Plan Stacks Up in 10 Years



- The following chart shows the ratio of benefits under the proposed DC plan (including the value of future pay indexing until 25 years of service, base contributions and additional transition contributions) to the benefits payable if the current pension plan were to continue

RATIO OF BENEFITS PROVIDED UNDER NEW PLAN TO BENEFITS PROVIDED BY CURRENT PLAN

		Current Service								
		1	5	10	15	20	25	30	35	
Current Age	25	154.9%	140.2%							
	30	119.6%	119.3%	119.3%						
	35	98.0%	102.4%	109.0%	113.4%					
	40	81.4%	92.1%	99.9%	104.2%	116.2%				
	45	77.7%	88.2%	95.2%	99.6%	108.7%	114.0%			
	50	67.5%	79.2%	87.4%	91.1%	91.6%	95.1%	94.2%		
	55	64.6%	76.5%	83.6%	87.8%	95.2%	98.7%	97.6%	95.3%	
	60	70.7%	84.1%	90.8%	93.1%	94.5%	98.7%	98.1%	96.9%	
62	74.5%	88.7%	94.0%	95.7%	96.6%	99.1%	98.8%	98.0%		

**Assumptions:** Termination in 10 years (or age 65 if earlier)  
6% investment return, 3.5% salary growth, 2.5% COLA at age 65

## How the New Plan Stacks Up at Age 65



- The following chart shows the ratio of benefits under the proposed DC plan (including the value of future pay indexing until 25 years of service, base contributions and additional transition contributions) to the benefits payable if the current pension plan were to continue

**RATIO OF BENEFITS PROVIDED UNDER NEW PLAN TO BENEFITS PROVIDED BY CURRENT PLAN**

		Current Service							
		1	5	10	15	20	25	30	35
Current Age	25	95.8%	106.9%						
	30	80.5%	92.9%	105.3%					
	35	66.8%	80.8%	94.5%	105.0%				
	40	54.7%	70.5%	85.8%	95.7%	102.8%			
	45	54.1%	64.1%	80.0%	91.2%	97.6%	101.3%		
	50	57.3%	67.8%	76.3%	87.9%	95.2%	98.2%	96.7%	
	55	64.6%	76.5%	83.6%	87.8%	95.2%	98.7%	97.7%	95.3%
	60	70.7%	84.1%	90.8%	93.1%	94.5%	98.7%	98.1%	96.9%
62	74.5%	88.8%	94.0%	95.7%	96.6%	99.1%	98.8%	98.0%	

**Assumptions:** Retirement at age 65  
6% investment return, 3.5% salary growth, 2.5% COLA at age 65

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## The Value of Future Retirement Benefits



- The following chart shows the value of future retirement benefits earned between transition and age 65 expressed as a level percentage of pay (including the value of future pay indexing until 25 years of service, base contributions and additional transition contributions).

		Current Service							
		1	5	10	15	20	25	30	35
Current Age	25	8.9%	9.6%						
	30	9.1%	10.0%	10.7%					
	35	9.4%	10.6%	11.5%	12.0%				
	40	9.7%	11.4%	12.7%	12.9%	12.7%			
	45	10.6%	13.3%	14.7%	15.0%	14.1%	12.5%		
	50	11.9%	14.7%	18.3%	18.2%	16.5%	13.4%	13.4%	
	55	14.3%	17.7%	21.4%	25.2%	21.4%	15.5%	15.5%	15.5%
	60	16.1%	19.9%	24.7%	28.4%	32.1%	17.2%	17.2%	17.2%
62	16.8%	20.9%	25.9%	29.9%	33.9%	18.0%	18.0%	18.0%	

**Assumptions:** Retirement at age 65  
6% investment return, 3.5% salary growth, 2.5% COLA at age 65

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## Other Alternatives Explored



- Numerous contribution schedules were considered by the RTF during the design process
  - Flat contribution schedules (e.g. 10% of pay for all employees)
  - Contributions based on age and/or service
  - Different contribution schedules for different employee groups
  - Schedules that required employee contributions, such as matching formulas
  - Mandatory employee contributions
  
- Numerous transition schedules considered
  - Full pension grandfather for all or some employees\*
  - Partial grandfather - a combination of some pension and some defined contribution\*
  - Multiple contribution schedules under transition plan were considered

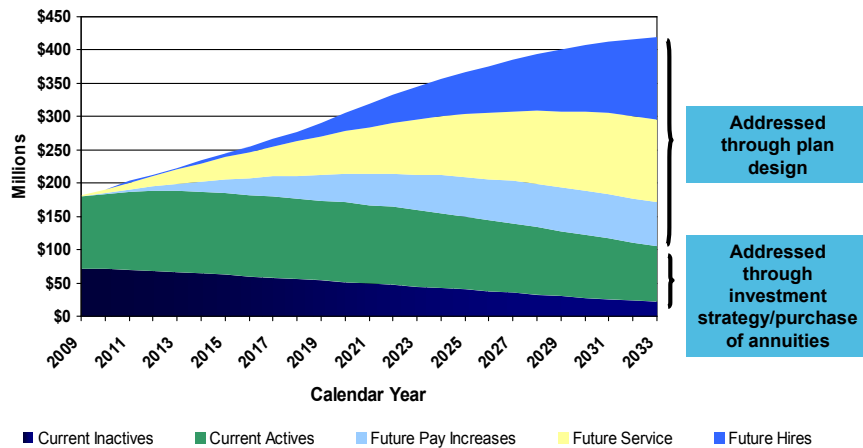
\* Since transition approaches that continue the pension plan for all or some employees have a limited impact on cost volatility, these are not acceptable solutions to the Trustees

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## Full Grandfather Does Little to Address Volatility



Projected Pension Liability - Illustrative



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## Partial Grandfather - 50/15 Grandfather



- The following chart shows the ratio of benefits under the proposed DC plan (including the value of future pay indexing until 25 years of service, base contributions and additional transition contributions) to the benefits payable if the current pension plan were to continue

RATIO OF BENEFITS PROVIDED BY PROPOSED DC PLAN TO BENEFITS PROVIDED BY CURRENT PLAN

		1	5	10	14	20	25	30
Current Age	25	107.5%	111.1%	114.7%	118.3%	121.9%	125.5%	129.1%
	35	71.1%	71.1%	84.0%	89.7%	95.4%	101.1%	106.8%
	40	56.1%	56.1%	71.3%	77.0%	82.7%	88.4%	94.1%
	45	50.9%	50.9%	60.9%	65.6%	70.3%	75.0%	81.0%
	49	49.0%	49.0%	54.1%	58.1%	62.1%	66.1%	71.0%
	50	48.6%	48.6%	52.1%	56.1%	60.1%	64.1%	68.1%
	55	47.3%	47.3%	50.1%	54.1%	58.1%	62.1%	66.1%
	60	49.2%	49.2%	52.1%	56.1%	60.1%	64.1%	68.1%
62	53.5%	53.5%	56.1%	60.1%	64.1%	68.1%	72.1%	

**Assumptions:** Retirement at age 65, 6% investment return, 3.5% salary growth, 2.5% COLA at age 65

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## The Value of Future Retirement Benefits



- The following chart shows the value of future retirement benefits earned between transition and age 65 expressed as a level percentage of pay (including the value of future pay indexing until 25 years of service, base contributions and additional transition contributions).

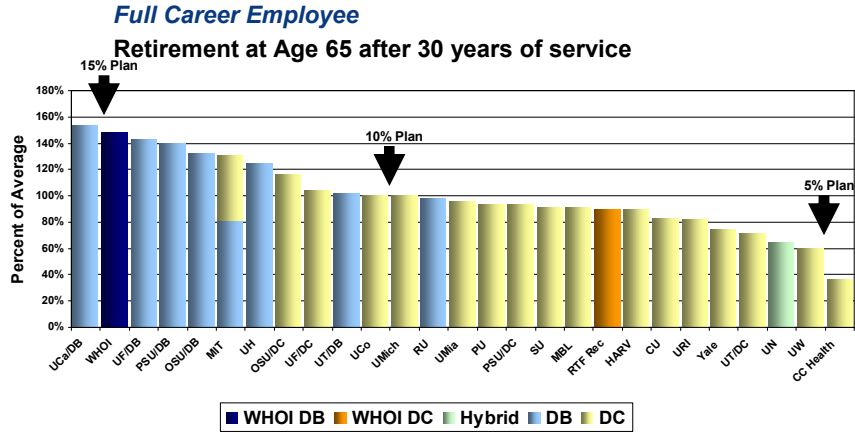
Current Service

		1	5	10	15	20	25	30	35
Current Age	25	8.9%	9.6%	10.3%	11.0%	11.7%	12.4%	13.1%	13.8%
	30	9.1%	10.0%	10.7%	11.5%	12.2%	13.0%	13.7%	14.5%
	35	9.4%	10.6%	11.5%	12.0%	12.7%	13.4%	14.1%	14.8%
	40	9.7%	11.4%	12.7%	12.9%	12.7%	13.4%	14.1%	14.8%
	45	10.6%	13.3%	14.7%	15.0%	14.1%	12.5%	13.4%	14.1%
	50	11.9%	14.7%	18.3%	18.2%	16.5%	13.4%	13.4%	15.5%
	55	14.3%	17.7%	21.4%	25.2%	21.4%	15.5%	15.5%	15.5%
	60	16.1%	19.9%	24.7%	28.4%	32.1%	17.2%	17.2%	17.2%
62	16.8%	20.9%	25.9%	29.9%	33.9%	18.0%	18.0%	18.0%	

**Assumptions:** Retirement at age 65, 6% investment return, 3.5% salary growth, 2.5% COLA at age 65

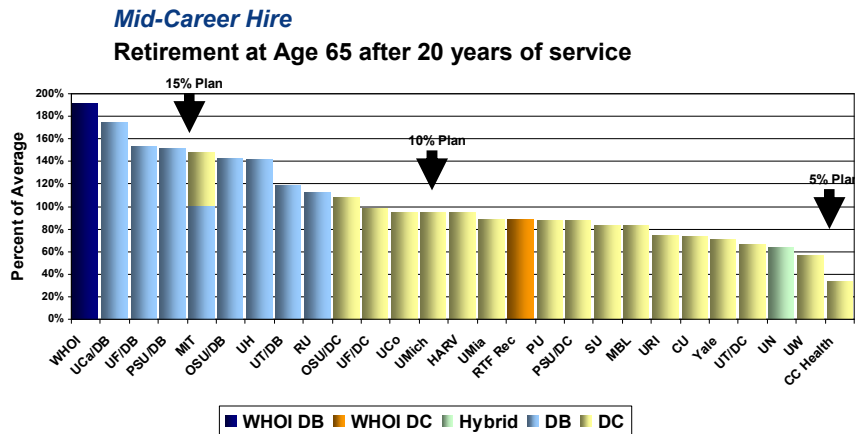
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## Competitive View – Plans for New Hires



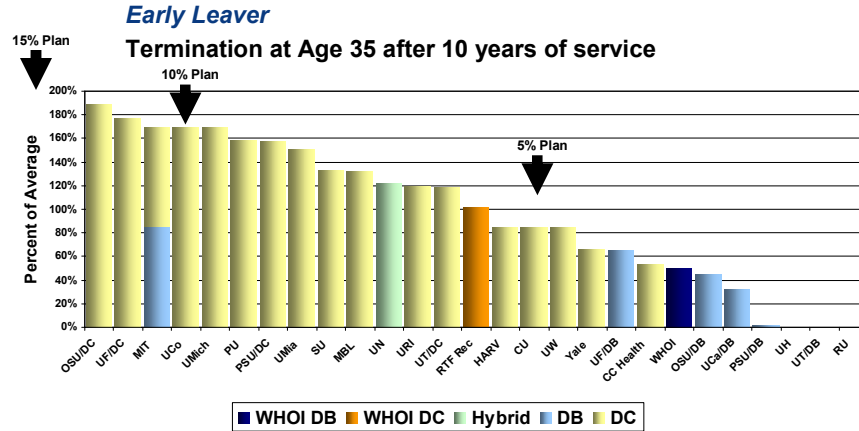
**Assumptions:** \$50,000 pay at retirement, 3.5% salary increases, 6.0% investment return, 6.0% annuity conversion, 6% employee savings rate. Excludes impact of transition.

## Competitive View – Plans for New Hires



**Assumptions:** \$50,000 pay at retirement, 3.5% salary increases, 6.0% investment return, 6.0% annuity conversion, 6% employee savings rate. Excludes impact of transition.

## Competitive View – Plans for New Hires



**Assumptions:** \$50,000 pay at retirement, 3.5% salary increases, 6.0% investment return, 6.0% annuity conversion, 6% employee savings rate. Excludes impact of transition.

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## Next Steps



- Institution updates for both Quissett/Village Campuses (Today)
- Continued employee communication through RTF co-Chair visits to individual WHOI Departments
- Feedback from community and trustees regarding proposed design
- Additional RTF and Staff Council meetings as necessary to finalize recommendation to the Trustee RTF by August
- Formal vote on recommendation at October trustee meeting
- Employee individual impact statements
- Employee education workshops
- Plan effective date to be determined

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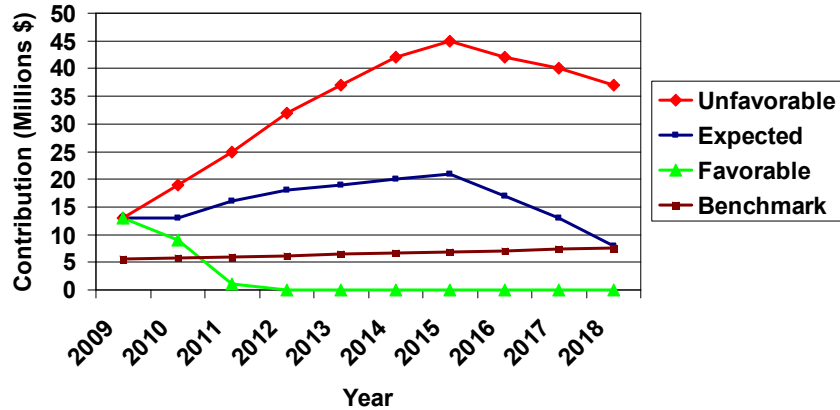


Extra/Additional Slides

## Forecast Current Plan - Total Contributions



Benchmark line represents 10% of pay which represents a typical contribution for our competitive peers



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## How Benefits Compare



- Comparison between the current plan and the new plan is different for each employee
- Two examples
  - Older, long service employee
    - Age 55 with 20 years of service. Pay of \$75,000
  - Younger employee
    - Age 30 with 5 years of service. Pay of \$35,000

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## Age 55 with 20 years of service; \$75,000 pay



### Benefits Comparison

Termination Age	Estimated Annual Lifetime Income			
	Current Plan	New Plan (DB + DC)	Change	%
55	\$13,545	\$13,545	\$0	0.0%
60	\$30,164	\$28,718	-\$1,445	-4.8%
62	\$43,083	\$39,610	-\$3,473	-8.1%
65	\$47,767	\$45,467	-\$2,300	-4.8%

### Estimated Annual Lifetime Income at Age 65

	Estimated Annual Lifetime Income			
	Current Plan	New Plan (DB + DC)	Change	%
Estimated Social Security	\$31,404	\$31,404		
Pension	\$47,767	\$32,175		
Future DC Plan	\$0	\$13,292		
Personal Savings	\$0	\$0		
Total Lifetime Income	\$79,171	\$76,871	-\$2,300	-2.9%
Pay at Retirement Age	\$102,217	\$102,217		
% of Pay Replaced	77%	75%		

Key assumptions: 3.5% salary growth; 6% investment return

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## Age 35 with 5 years of service; \$35,000 pay



### Benefits Comparison

Termination Age	Estimated Annual Lifetime Income			
	Current Plan	New Plan (DB + DC)	Change	%
40	\$3,754	\$3,992	\$238	6.3%
45	\$6,687	\$6,847	\$160	2.4%
60	\$28,009	\$22,769	-\$5,240	-18.7%
65	\$44,355	\$35,829	-\$8,526	-19.2%

### Estimated Annual Lifetime Income at Age 65

	Estimated Annual Lifetime Income			
	Current Plan	New Plan (DB + DC)	Change	%
Estimated Social Security	\$34,440	\$34,440		
Pension	\$44,355	\$6,289		
Future DC Plan	\$0	\$29,540		
Personal Savings	\$0	\$0		
Total Lifetime Income	\$78,795	\$70,269	-\$8,526	-10.8%
Pay at Retirement Age	\$94,916	\$94,916		
% of Pay Replaced	83%	74%		

Key assumptions: 3.5% salary growth; 6% investment return

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## How the New Plan Stacks Up in 5 Years



- The following chart shows the ratio of benefits under the proposed DC plan (including the value of future pay indexing until 25 years of service, base contributions and additional transition contributions) to the benefits payable if the current pension plan were to continue

**RATIO OF BENEFITS PROVIDED UNDER NEW PLAN TO BENEFITS PROVIDED BY CURRENT PLAN**

		Current Service								
		1	5	10	15	20	25	30	35	
Current Age	25	184.8%	150.9%							
	30	142.3%	125.4%	116.9%						
	35	110.6%	106.3%	110.3%	112.6%					
	40	89.1%	98.9%	104.1%	106.5%	108.1%				
	45	79.3%	92.0%	98.0%	101.2%	103.0%	109.4%			
	50	83.2%	93.0%	98.0%	100.4%	101.9%	106.1%	105.3%		
	55	67.2%	82.6%	90.1%	94.0%	95.2%	95.6%	95.2%	94.2%	
	60	70.7%	84.1%	90.8%	93.1%	94.5%	98.7%	98.1%	96.9%	
	62	74.5%	88.7%	94.0%	95.7%	96.6%	99.1%	98.8%	98.0%	

**Assumptions:** Termination in 5 years (or age 65 if earlier)  
6% investment return, 3.5% salary growth, 2.5% COLA at age 65

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## Competitive View – Organizations Included



- Woods Hole (WHOI)
- Columbia University (CU)
- Harvard University (Harv)
- Marine Biological Laboratory (MBL)
- Massachusetts Institute of Technology (MIT)
- Oregon State University (OSU)
- Penn State University (PSU)
- Princeton University (PU)
- Rutgers University (RU)
- Stanford University (SU)
- University of California (UCa)
- University of Colorado (UCo)
- University of Florida (UF) \*
- University of Hawaii (UH)
- University of Miami (UMia)
- University of Michigan (UMich)
- University of Nebraska (UN)
- University of Rhode Island (URI)
- University of Texas at Austin (UT)
- University of Washington (UW)
- Yale University (Yale)
- Cape Cod Healthcare

\* State of Florida Plan. Also covers Florida Atlantic University and University of Southern Florida

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## DC Benefit Varies with Investment Return

