

Classic Member Handbook

For MCERA members in classic tiers available on or before December 31, 2012

Marin County Employees' Retirement Association

Contact Our Office:

Marin County Employees' Retirement Association One McInnis Parkway, Suite 100 San Rafael, CA 94903-2764

Main: (415) 473-6147 Fax: (415) 473-3612

Website: www.mcera.org

Hours: Monday - Friday, 8:00 AM to 5:00 PM

Voicemail:

MCERA's voicemail system is available 24 hours a day. You can leave a message in the general mailbox and it will be forwarded to the correct person for a response. Please remember to leave your name and telephone number.

Information:

General information questions often can be answered at the time of your call. Specific questions about your personal account, or assistance with more complex subjects, may require research. MCERA staff will answer your queries as soon as possible.

Legal Notice

This handbook is intended to provide members with general information about the benefits available through the Marin County Employees' Retirement Association (MCERA), but it does not describe every plan provision in detail. Every effort has been made to ensure the timeliness and accuracy of the information offered; however, you should not rely solely on the information contained herein.

MCERA is governed by the County Employees Retirement Law of 1937 (CERL, Government Code Section 31450 et. seq.) as adopted by the Marin County Board of Supervisors and implemented by the MCERA Retirement Board. The laws governing public retirement systems are complex. No statement in this handbook is a legally binding interpretation, enlargement, or amendment of the provisions in the CERL or MCERA's bylaws and policies. If conflict arises between this handbook and the CERL, the decision will be based on the CERL, Board policies, Board resolutions, and other governing law, and not on information contained in this handbook.

The information presented in this handbook should not be construed as legal advice or as a legal opinion on specific facts. For legal advice, consult an attorney knowledgeable in retirement law matters.

Other available handbooks:

PEPRA Member Handbook

Preparing for Retirement

Terminating Employment

Disability Retirement

Inside

About Your Plan	2
Plan Structure	2
Defined Benefit Plan	2
Contributions	2
MCERA Staff	2
Retirement Board	3
Basic Information about Your Membership	
Entering MCERA Membership	
Funding Your Retirement Benefit	
Reciprocity	
Becoming Eligible to Receive a Retirement Benefit	
Leaving before Retirement	9
Service Credit	11
Earning Service Credit	
Service Purchases	
Calculating Your Retirement Benefit	14
Calculation Formula	14
Limits to Your Retirement Benefit	
Sample benefit Calculation	15
Detinement Depetit Estimates	40
Retirement Benefit Estimates	
Benefit Payment Options	17
Additional Information about Your Benefits	19
Divorce/Domestic Partnership Dissolution	19
Disability Retirement	
Death before Retirement	
Social Security	22
Preparing for Retirement	22
Benefit Estimate Worksheet	24

About This Handbook

This handbook will help you understand many of the basics about your MCERA benefits. It can be used in conjunction with other MCERA resources that provide greater detail.

In support of our mission to provide superior service to our members, MCERA is committed to informing you about your retirement benefits so that you have the resources you need to make decisions that are right for you.

We want you to retire with a sense of confidence. Please read through this handbook carefully and contact us if there is something we can help you understand.

About Your Plan

Plan Structure

MCERA is a multiple-employer governmental pension plan established by the County of Marin on July 1, 1950, under the County Employees Retirement Law of 1937 (California State Government Code Section 31450 et. seq., also referred to as the 1937 Act). MCERA is also governed by the California Constitution and the regulations, procedures and policies adopted by MCERA's Retirement Board. The Marin County Board of Supervisors may also adopt resolutions, as permitted by the 1937 Act, which may affect the benefits of MCERA members.

MCERA's membership includes active, deferred and retired members and beneficiaries of the following nine agencies and organizations (these are called the "plan sponsors"):

- City of San Rafael
- County of Marin
- LAFCO
- Marin City Community Services District
- Marin/Sonoma Mosquito & Vector Control District
- Marin Superior Court
- Novato Fire Protection District
- Southern Marin Fire Protection District
- Tamalpais Community Services District

Defined Benefit Plan

MCERA administers a defined benefit retirement plan. This means that your future retirement benefit is not based on how much you and your employer contribute. Instead, your benefit is a predictable lifetime income based on your years of service under the plan, your age at retirement, and your final average compensation. Pension benefits do not vary with movements in the stock market, in either direction.

Contributions

You and your employer both contribute to the plan. Your employee contribution rate is determined by your age when you entered MCERA membership (or your age when you entered a prior reciprocal retirement system). The younger you are when you enter membership the lower your contribution rate will be.

See "Funding Your Retirement Benefit" on page 7 for more information.

MCERA Staff

MCERA staff, under direction from the Retirement Administrator, assist the Retirement Board in the administration of the retirement system. MCERA staff process applications for retirement benefits, contribution refunds, service purchases and death benefits while maintaining member records. MCERA staff is responsible for retirement system accounting and disbursing funds, including monthly retirement benefits as authorized by the Retirement Board.

Retirement Board

Retirement system administration is managed by the Retirement Board. All Board members, except the County Director of Finance serve for a term of three years. By statute, Board members include the following:

- The Director of Finance of Marin County.
- Four members who are qualified electors of the County and not connected with County government in any capacity, except one may be a County Supervisor. The Board of Supervisors appoints these members.
- Two general members of MCERA elected by the general membership.
- One safety member and one safety member alternate elected by the safety membership.
- One retired member and one retired member alternate elected by the retired membership.

The Retirement Board sets policy for the operation of MCERA, considers applications for disability retirement, recommends employer and employee contribution rates on the basis of actuarial studies, controls the investment of assets and authorizes all disbursements of MCERA funds.

Retirement Board meetings are open to the public. Regular monthly meetings are generally held the second Wednesday of each month at 9:00 AM in the Retirement Board Chambers, One McInnis Parkway, Suite 100, in San Rafael. The County Employees Retirement Law of 1937 and the bylaws and policies adopted by MCERA's Retirement Board are available on our website.

Basic Information about Your Membership

Entering MCERA Membership

Eligibility

All permanent/regular employees working at least 75% of full time in a permanent position for one of MCERA's plan sponsors are eligible and automatically enrolled in the retirement plan. All other employees working under contract or in temporary, seasonal, part time (less than 75% of full time) or provisional positions are not eligible for membership. Elected officials and new employees who are age 60 or older as of their date of membership may waive participation in the plan.

Membership begins on the first day of eligible employment. If you transfer from an ineligible to an eligible position, you will begin participating on the first day in an eligible position.

Pension Tiers

The calculation of your retirement benefit depends on your pension tier, which is determined by your employer and your date of entry into MCERA membership. General members have different tiers than Safety members. Your pension tier determines your minimum retirement age, the calculation formula, highest average compensation (HAC) parameters, and annual cost of living increases.

The following tables reflect the pension tiers for all plan sponsors for members with membership dates on or prior to December 31, 2012, or members who have incoming reciprocity from another public employer who became MCERA members on or after January 1, 2013.

If you entered MCERA membership on or after January 1, 2013, and you do not have reciprocity with another public employer in California prior to January 1, 2013, please refer to the PEPRA Member Handbook for information about your benefits.

City of San Rafael							
Membership Type	Tier	Minimum Age	Formula	Membership Date	Maximum COLA	HAC Period	
Safety-Police	Tier 1	50	3% at 55	Prior to 7/1/11	3%	1 year	
Safety-Fire	Tier 1	50	3% at 55	Prior to 7/1/11	3%	1 year	
Safety-All	Tier 2	50	3% at 55	7/1/11-12/31/12	2%	3 years	
General	Tier 1	50	2.7% at 55	Prior to 7/1/11	3%	1 year	
General	Tier 2	55	2% at 55	7/1/11-12/31/12	2%	3 years	

County of Marin

Membership Type	Tier	Minimum Age	Formula	Membership Date	Maximum COLA	HAC Period
Safety	Tier 1A	50	3% at 55	Prior to 7/1/80	4%	1 year
Safety	Tier 1B	50	3% at 50	Prior to 7/1/80	4%	1 year
Safety	Tier 2A*	50	3% at 55	7/1/80-12/31/12	2%	3 years
Safety	Tier 2B**	50	3% at 50	7/1/80-12/31/12	2%	3 years
General	Tier 1	50	2% at 55½	1/1/57-6/30/80	4%	1 year
General	Tier 2***	50	2% at 61¼	7/1/80-7/6/02	2%	3 years
General	Tier 3***	50	2% at 55	7/1/80-6/30/08	2%	3 years
General	Tier 3A	55	2% at 55	7/1/08-12/31/11	2%	3 years
General	Tier 4	55	2% at 61¼	1/1/12-12/31/12	2%	3 years

* Tier 2A applies only to Probation safety, Sheriff's Captains, Undersheriff, and Sheriff/Coroner classifications.

** The benefit formula for deferred County of Marin safety Tier 2B members with termination dates on or before July 6, 2002 is 2% at 50. The 3% at 55 benefit formula applies to deferred members with termination dates from July 7, 2002 through December 31, 2004. All other safety Tier 2B provisions are the same.

*** When the County created general Tier 3, general members were given an option to "opt out" of Tier 3 and remain in Tier 2. If you did not complete and return the election form in 2002, all of your service credit was automatically transferred to Tier 3.

			LAFCO			
Membership Type	Tier	Minimum Age	Formula	Membership Date	Maximum COLA	HAC Period
General	Tier 2	50	2% at 58½	Prior to 7/1/03	4%	1 year
General	Tier 3	50	2% at 55	7/1/03-12/31/12	2%	3 years

Marin City Community Services District						
Membership Type	Tier	Minimum Age	Formula	Membership Date	Maximum COLA	HAC Period
General	Tier 1	50	2% at 58½	Prior to 1/1/13	4%	1 year

Marin Superior Court						
Membership Type	Tier	Minimum Age	Formula	Membership Date	Maximum COLA	HAC Period
General	Tier 1	50	2% at 55½	Prior to 7/1/80	4%	1 year
General	Tier 2*	50	2% at 61¼	7/1/80-7/6/02	2%	3 years
General	Tier 3*	50	2% at 55	7/1/80-12/31/08	2%	3 years
General	Tier 4	55	2% at 55	1/1/09-12/31/12	2%	3 years

* When the Courts created Tier 3, members were given an option to "opt out" of Tier 3 and remain in Tier 2. If you did not complete and return the election form in 2002, all of your service credit was automatically transferred to Tier 3.

		Novato F	ire Protect	ion District		
Membership Type	Tier	Minimum Age	Formula	Membership Date	Maximum COLA	HAC Period
Safety	Tier 1*	50	3% at 50	Prior to 1/1/08	4%	1 year
Safety	Tier 2	50	3% at 55	1/1/08-12/31/12	4%	1 year
General	Tier 1*	50	2% at 55	Prior to 1/1/13	4%	1 year

* Deferred Novato Fire Tier 1 members who terminated employment on or before December 31, 2001 have a different benefit formula. For these members in Safety Tier 1, the 2% at 50 formula applies. For these members in General Tier 1, the 2% at 58.5 formula applies. All other provisions for Safety and General Tier 1 remain the same.

Southern Marin Fire Protection District						
Membership Type	Tier	Minimum Age	Formula	Membership Date	Maximum COLA	HAC Period
Safety	Tier 1*	50	3% at 50	Prior to 7/1/05	4%	1 year
Safety	Tier 2	50	3% at 55	7/1/05-6/30/14	4%	1 year
Safety	Tier 2A	50	3% at 55	7/1/14-present	3%	3 years
General	Tier 1	50	2.7% at 55	Prior to 1/1/13	4%	1 year

* The benefit formula for deferred Southern Marin Fire Safety Tier 1 members who terminated employment with the district on or before June 30, 2001 is 2% at 50. All other Safety Tier 1 provisions are the same.

	Tai	malpais Co	ommunity S	ervices Distric	:t	
Membership Type	Tier	Minimum Age	Formula	Membership Date	Maximum COLA	HAC Period
General	Tier 1	50	2% at 58½	Prior to 1/1/13	4%	1 year

Funding Your Retirement Benefit

Employee and Employer Contributions

Both you and your employer contribute to the retirement plan and the contributions are invested to fund future retirement benefits. All members are required to contribute a percentage of their earnable compensation through regular payroll deductions, generally made on a pre-tax basis. Employers contribute amounts needed in addition to employee contributions to provide for current and future benefits. The retirement law authorizes your employer to pay some or all of the contributions you would otherwise be obligated to pay. Any employer "pick up" of your contributions is a negotiated benefit and subject to current memorandum of understanding provisions. The employer contributions are kept in a separate reserve account. You will benefit from your employer's contributions only upon retirement.

Contribution Rates

Contribution rates change from time to time based on the results of periodic actuarial studies. Your contribution rate is determined by your retirement tier and your age at entry into membership. The younger you are when you enter membership the lower your contribution rate will be.

Your Contribution Account

Your account receives interest every June 30 and December 31 on the prior six-month balance. Your contributions plus the interest credited to your account belong to you and cannot be forfeited. However, in the event of a divorce, with the filing of a joinder and Domestic Relations Order, part of your contributions and interest (or benefit) may be reassigned due to a community property interest by your former spouse. A Classic member with 30 or more years of service credit is no longer required to make contributions.

Reciprocity

A reciprocal agreement may be made between California public employee retirement systems when a member terminates employment from one system, leaves contributions on deposit, and within six months (180 days) enters membership with a reciprocal retirement system (not necessarily the same as the date you enter employment). Reciprocity may be established with other 1937 Act retirement systems (twenty counties in California), with CalPERS, with most public agencies with reciprocity with CalPERS, or with the California State Teachers' Retirement System. There is no reciprocity with the University of California Retirement System. With reciprocity you may be able to link your previous service to your current service and obtain some additional benefits. Contributions from your prior employer do not transfer to MCERA and remain on deposit with your prior retirement plan.

Incoming and Outgoing Employees

There are three principal advantages to establishing reciprocity between your employers:

Age-based Contribution Rate

Some retirement systems base contribution rates on your age when you entered membership. If you establish reciprocity after leaving MCERA-covered employment and your new employer uses agebased contribution rates, your age for determining your contribution rate at your new agency will be the same entry age used in MCERA's retirement plan. In most cases, the younger you are when you enter membership the lower your contribution rate.

Service

If reciprocity has been established, your service credit in each retirement system will be added together in order to determine your eligibility for retirement benefits under all systems. For example, if you had six years of service with the County of Alameda, and four years of service with the County of Marin, you would be eligible to retire from both plans because your years of service combined would equal the ten-year minimum service requirement. Keep in mind that your years of service can be combined to meet retirement eligibility requirements only, and not eligibility requirements for any other post-employment benefits.

Highest Average Compensation

You must have the same retirement date for all of your reciprocal retirement plans so that benefits from all plans will be based on your highest average compensation earned under any plan. This means that if you left a supervisory position with one employer to take a lower position with less pay at a different agency, your higher compensation during the time you served as a supervisor could be used to calculate your retirement benefit.

It is important to note that a break in service longer than six months (180 days) between employers eliminates the option of reciprocity. Also, after establishing reciprocity you cannot change your mind and withdraw your contributions and interest without breaking the reciprocal arrangement.

Reciprocity at Retirement

We will not notify the other agency of your retirement application, but we do exchange/request highest average compensation information. You must file a separate retirement application with each reciprocal agency using the same retirement date. If you fail to file an application with your other agency with the same effective date of retirement, you will break reciprocity, and your service credit and compensation will not be linked.

Please keep in mind that different systems may have different highest average compensation look back periods, and benefits are paid separately by each system based on the service credit earned in each system. For example, if you had six years of service with the County of Alameda and four years of reciprocal service with the County of Marin, you will receive one benefit payment from Alameda based on six years of service, and a separate payment from Marin based on four years.

If you are retiring from two MCERA agencies, your beneficiary(ies) and benefit payment option will be effective for both agencies. However, your MCERA option election does not apply to your retirement from non-MCERA agencies. This means that if you retire from the City of San Rafael and the County of Marin, your payment option (Unmodified, Option 1, etc.) will apply to both agencies. If you retire from the County of Marin and the County of Alameda, you must choose benefit payment options from each agency separately.

Please notify MCERA if you believe you may be eligible for reciprocal benefits or if you have prior service with another public employer in California. We strongly recommend that you request a letter from every other agency for which you worked confirming whether or not you have established reciprocity with and between each agency.

Becoming Eligible to Receive a Retirement Benefit

Vesting

Vesting entitles you to receive a pension from MCERA once you have met all eligibility requirements. Members are vested after they have earned or purchased five years of retirement service credit. If you have established reciprocity with another qualified retirement system, your reciprocal service credit is included in determining eligibility for vesting and retirement.

Service Retirement Eligibility

Your minimum retirement eligibility requirements are determined by your employer, your tier, and whether you are a General or Safety member. Generally, both General members and Safety members have met the requirements for retirement eligibility after attaining 10 years of service and a minimum age of 50 or 55. General members can retire at any age after 30 years of service and Safety members can retire at any age after 20 years of service. Anyone can retire at age 70 with any amount of service. Please refer to the tables on pages 5 and 6 for the minimum age requirements specific to each tier.

Leaving before Retirement

Deferred Vested Membership

If you terminate employment after earning five or more years of service credit, including reciprocal service, you may choose to leave your contributions on deposit and defer your retirement to a later date. As a deferred vested member you may receive your retirement allowance at any time that you would have been eligible to retire for service had you remained in employment.

Members generally need a minimum of ten years of service to be eligible to retire. However, if you are a deferred vested member who terminates employment after earning only five years of service credit, you can leave your contributions on deposit with MCERA for five more years in order to meet the ten-year eligibility requirement to retire.

You will not automatically receive your retirement benefit at your earliest eligibility date. You must contact MCERA to apply for retirement when you are eligible or when you want to begin receiving benefits.

Deferred members may withdraw their accumulated contributions and interest at any time prior to receiving a retirement benefit, unless they have established reciprocity. Keep in mind that if you choose to withdraw your contributions and interest you forfeit your right to receive a monthly benefit in the future.

Deferred Non-vested Membership

If you terminate employment after earning less than five years of service credit, including reciprocal service, you will not be vested but you may still leave your contributions on deposit. Your contributions will continue accruing interest and you may request a refund of your account at any time. As a deferred non-vested member your earliest retirement eligibility occurs at age 70.

Refund of Your Contributions

When you leave your job prior to retirement, you have the option of requesting a refund of your contributions. However, if you are vested, you should consider this option carefully because you will be eligible to receive a lifetime benefit in the future, which may be more valuable than your refund. If you receive a refund you forfeit your right to any future MCERA benefits.

Reciprocity

You are eligible to establish reciprocity if you leave your contributions on deposit with MCERA and become a member in a reciprocal retirement system within 180 days (six months) of leaving active membership. Any future service credit earned in reciprocal retirement systems will count toward meeting MCERA retirement eligibility requirements as long as you retire from all reciprocal systems using the same effective date of retirement. Please refer to pages 7 and 8 for more information on reciprocity.

Reemployment

If you elect to defer your membership after termination (leaving your contributions on deposit) and are subsequently rehired, you will maintain your original membership entry date and return to your prior retirement tier. Service credit is not earned while you are in deferred status but your funds will continue to earn interest while on deposit.

If your break in service between termination and reemployment is less than 180 days, when you return to active membership you will pay contributions based on your original entry age. If your break in service is longer than 180 days, you will pay contributions based on your age at re-entry. If you chose to withdraw your contributions after termination and are subsequently rehired and reenter membership with an MCERA employer, you may restore your previously earned service credit in your original membership tier by redepositing the full amount of contributions withdrawn, plus the interest your account would have earned, had you left your funds on deposit. Please refer to page 12 for more information on redeposits of previously withdrawn contributions.

If you choose to not redeposit your previously withdrawn contributions you will be placed in your employer's currently available retirement tier and will begin a new period of membership with a new membership entry date.

> The Terminating Employment handbook has more information on your options should you end your employment with an MCERA plan sponsor prior to retiring. The handbook is available on our website or upon request.

Service Credit

Earning Service Credit

Service credit is used to determine when you are eligible to retire and the amount of your monthly lifetime retirement benefit. The most common way of accumulating service credit is by working for a participating employer in an eligible position. The more service credit you have the higher your monthly benefit will be.

Service credit includes service earned each pay period of employment during membership, starting with your date of entry into membership and ending with your termination date. Service credit may also include qualifying service that you purchase through MCERA. Reciprocal service with another public employer counts toward retirement eligibility but is not used when calculating your MCERA benefit. Sick leave accruals (if applicable) are converted to service credit at the time of your retirement but do not count toward eligibility. Retirement service credit does not include time missed due to leave without pay, unpaid strike time, part time hours not worked, or service less than 75% of full time.

Sick Leave

Sick leave is the only type of leave accrual that may be counted towards service credit. The amount of sick leave that a member can convert to service credit depends on the member's employer and bargaining agreement. In order to be eligible to convert a portion of your unused sick leave to service credit you must terminate active employment and begin retirement the day after your termination date.

Sick leave balances are not transferable between employers and credit for accrued sick leave is only available through your final employer. Converted sick leave service is used when calculating your retirement benefit but does not count toward meeting any eligibility requirements. Currently, County and Courts employees may convert 75% of their accrued sick leave, Novato Fire Protection District employees are eligible to convert 100%, and Southern Marin Fire Protection District employees are eligible to convert 40%.

The City of San Rafael sick leave conversion policies vary by bargaining unit. Most San Rafael employees hired before June 30, 2009 are eligible to convert 100% of their sick leave to service credit. San Rafael employees with questions about their bargaining unit's sick leave conversion policy should contact the San Rafael Human Resources Department.

All other participating employers do not currently have sick leave conversion policies.

Furloughs

As long as both you and your employer continue to make full retirement contributions based on your full pensionable pay rate as if the furlough was not in place, your average compensation for retirement purposes will not be changed, and your retirement service credit will not be affected by the reduced work schedule.

If your compensation is insufficient to support a continuation of full contributions throughout the furlough, you will only receive full service credit for the period of time during which full contributions were made.

Each plan sponsor is responsible for initiating and administering their furlough programs. Contact your employer to confirm whether or not your particular furlough will affect your pension.

Service Purchases

Depending upon individual circumstances, members may be eligible to purchase additional service credit that counts toward retirement eligibility. You can choose to make a service purchase at any time in your career. However, it is a good idea to do so sooner rather than later because the cost of purchasing service includes interest. The longer you wait to purchase service credit the higher the cost will be. All service purchases must be completed prior to your effective date of retirement.

Purchasing service credit may not be beneficial for everyone. We encourage you to review benefit estimates with and without a service credit purchase to determine whether making a purchase is right for you.

Service Prior to Membership and Part Time Service

You may be eligible to purchase and receive retirement service credit for your work with an MCERA employer prior to entering MCERA membership. A common example of this type of service is employment in an extra-hire, seasonal or temporary capacity. If your working hours fell below 75% of full time and you stopped making contributions, you may also be eligible to purchase and receive retirement service credit for those hours.

To receive credit for this service you must deposit into your retirement account the amount you would have contributed had you been in membership or not working the reduced schedule, plus any interest that would have been credited to your account. You may purchase all or part of this service.

This purchased service counts toward your retirement eligibility and when calculating your benefit, but your membership date will not change to an earlier date.

Medical Leave without Pay

If you are unable to work due to illness, injury or maternity disability and have a period of unpaid leave, you may be entitled to purchase service credit for up to twelve consecutive months of the leave period once you return to full active employment. For this type of service purchase MCERA requires a copy of the doctor's note that states the effective date of your medical leave and the date you return to active employment.

To receive credit for this service you must deposit into your retirement account the amount you would have contributed during your period of leave plus any interest that would have been credited to your account. You may purchase all or part of your medical leave without pay, and payments must be made over the same or shorter period as the absence.

Non-medical leave without pay and strike time are not available for purchase.

Redeposit of Previously Withdrawn Contributions

If you previously worked for an MCERA plan sponsor and withdrew your contributions after terminating employment, you may restore those years of service by redepositing your contributions plus interest into your MCERA account upon returning to employment and MCERA membership. To receive credit for this service you must redeposit all of your previously withdrawn contributions, plus the interest your account would have earned had you left your funds on deposit. You may not redeposit only a portion of your previously withdrawn funds.

For members covered by County of Marin medical benefit plans, redeposits also restore your eligibility date for these post-retirement benefits.

Service Purchase Payments

Service purchase payments must be completed prior to your effective date of retirement in order to receive credit for the service. Generally, the payment period is equal to the period of the absence. However, you are limited to a maximum of five years to complete your purchase, regardless of the amount of time you are purchasing. For purchases of service prior to membership, part time service, or medical leave without pay, service is credited incrementally as payments are received. Service is credited for a redeposit of previously withdrawn contributions when the full payment is complete.

It's best to purchase service sooner rather than later because interest is calculated and applied to purchases every six months, just like contributions. The longer you wait to purchase service the greater the cost.

Payment for service purchases can be made by:

- Lump sum check (post-tax),
- Direct rollover from a qualified plan (pre-tax),
- Payroll deduction payments (post-tax),
- Combination of any of the above.

Calculating Your Retirement Benefit

Calculation Formula

MCERA is a defined benefit pension plan, so your retirement benefit will be based on a formula that will pay a guaranteed, monthly lifetime benefit. The formula is based on your retirement tier and considers your age at retirement, how long you've worked (your service credit) and your highest average compensation period.

Age Factor

Your retirement benefit generally increases as you age. Your age is converted to a factor used to calculate your retirement allowance. The factor determines what percentage of your highest average compensation we will use in the calculation. The age factor increases incrementally until you reach the maximum age for your tier formula.

For example, County of Marin Tier 3 (2% at 55) age factors start at 1.43% at age 50, increase to 2% at age 55, and reach the maximum factor of 2.4% at age 63. County of Marin Safety Tier 2b (3% at 50) age factors start at 1.8% at age 41, increase to 2.3% at age 45, and reach the maximum factor of 3% at age 50.

Service Credit

Your service credit includes service earned each pay period of employment during membership, starting with your date of entry into membership and ending with your termination date. Service credit may also include service earned through a service purchase or converted sick leave accruals (if applicable). Retirement service credit does not include time missed due to leave without pay, unpaid strike time, or part time service less than 75% of full time. Please refer to page 11 for more information on service credit.

Highest Average Compensation

Your highest average compensation is computed on your highest consecutive one- or three-year (12or 36-month) "look back period" of compensation earnable, determined by your tier. Also, your highest average compensation for retirement may differ from the amount you were actually paid because certain pay types may not be included as compensation earnable for retirement purposes. For example, overtime pay does not count toward your average compensation, but non-salary compensation such as uniform allowances or shift differentials may be included. For a list of pay types that are included in compensation earnable, see MCERA's policy on Compensation Earnable and Pensionable Compensation Determinations, or contact your employer.

Most members will have their highest compensation in their final years but this is not necessarily the case for everyone. If you think you have a higher consecutive one- or three-year (consecutive 12 or 36 months, as appropriate) period of compensation other than your final period please let us know so that we may use that period when calculating your benefit.

If you have established reciprocity, your retirement benefit from all reciprocal systems will be based on your highest average compensation earned, regardless of where you were working when you earned your highest wage.

Limits to Your Retirement Benefit

100% Maximum

MCERA will pay a retirement benefit amount up to but no greater than 100% of your final average compensation.

Internal Revenue Code Limits

Internal Revenue Code (IRC) regulations place a limit on the amount of pension benefits you can receive. Under IRC Section 415(b), you generally may not receive more than \$230,000 annually (effective January 1, 2021) and the amount is adjusted based on your retirement age. Some safety members are not impacted by the adjusted limits of IRC Section 415(b).

MCERA will notify you at the time of your retirement if your benefit is affected by the IRC limit.

Sample Benefit Calculation

Here is a sample retirement benefit calculation for a County of Marin Tier 3 (2% at 55) general member. This member is retiring at age 55 with 20 years of service and a final average annual compensation of \$50,000. Please keep in mind that age factors are dependent upon your Tier, so your own calculation may be different.

Factor for Age 55		Years of Service		Final Average Annual Compensation		Annual Retirement Benefit		Monthly Retirement Benefit
0.02000	Х	20	Х	\$50,000.00	=	\$20,000.00	÷ 12 =	\$1,666.67

Retirement Benefit Estimates

By estimating your future retirement benefit at various ages and service credit levels you can determine the best time to retire. There are a number of ways to estimate your retirement benefit.

Annual Benefit Statements

Every active, deferred and reciprocal member receives a customized Annual Benefit Statement, typically every fall. These statements include up to three retirement estimates for future dates based on your personal information.

Online Estimates

Members with retirement dates more than five years in the future are strongly encouraged to use the Retirement Benefit Estimator on our website. By using this tool you can personalize your estimate to reflect anticipated increases in compensation and add sick leave conversion credit (if applicable) to your total service time. The results are instantaneous and, assuming the variables you have entered are accurate, should yield an estimate that is very close to your actual future benefit if you chose the "unmodified" payment option.

Custom Estimates

Individuals with periods of part time service, those who have had periods of leave without pay, and those with retirement dates less than five years in the future may require a custom estimate from MCERA staff. Custom benefit estimates are based upon your current compensation only and do not include additional wage increases or credit for sick leave accruals, if available from your employer. As a result, custom estimates may not be representative of the future benefit that you may actually be entitled to at the time of your retirement under the "unmodified" payment option.

Percentage of Highest Average Compensation

Compensation percentage tables can help you determine a retirement date by showing what percentage of your highest average compensation you might receive in retirement if you retire at a certain age with a certain amount of service credit. The compensation percentage tables for the various benefit formulas are included in the back of this handbook.

Benefit Payment Options

In addition to age, service credit and highest average compensation, the amount of your retirement benefit is also affected by the benefit payment option you elect at the time of your retirement. The payment option determines the benefit that will be paid to you for your lifetime as well as any benefit that will continue to be paid to your survivor after your death. When you receive your retirement benefit estimate, review the amounts under each benefit option closely so that you can choose the one that best meets your needs and objectives. Your election cannot be changed once you receive your first payment.

Unmodified Benefit

The Unmodified benefit is the highest benefit possible. When you die after retiring and provided you were married/registered for at least one year at the time you retired, your surviving spouse/stateregistered domestic partner will receive a lifetime benefit equal to 60% of the benefit you were receiving upon your death. If you marry/partner after you are retired, you must be married/registered for at least two years prior to your death and your spouse/stateregistered partner must be at least age 55 at the time of your death to be considered eligible for the 60% continuance.

If there is no spouse/state-registered domestic partner and there are unmarried minor children under age 18, or to the age of 22 if in school full time and not married, there is a 60% continuance available as long as they remain eligible.

If you choose the Unmodified benefit and do not have an eligible spouse/partner or minor child to receive the survivor's continuance at the time of your death, any remaining balance in your member contribution account will be paid as a one-time lump-sum payment to the beneficiary you have designated.

Option 1: Cash Refund Annuity

This option provides that after your death a lump sum payment of your remaining member contributions will be paid to any beneficiary you choose. How much remains of your member contributions will be determined by how long you had been retired. Each month when you receive your retirement benefit, a portion of it comes from your contributions. Therefore, the amount of your contributions available to a beneficiary after your death gets smaller each month. This option does not provide a continuance to your named beneficiary.

Option 2: 100% Joint and Survivor Continuance

This option allows you to reduce the amount of the benefit you receive during retirement in order to provide the same benefit to a beneficiary of your choice following your death. Under this option the amount paid after your death will be 100% of the amount paid to you during retirement. The amount of the benefit reduction is based on the life expectancies of you and your designated beneficiary and may be sharply reduced if your beneficiary is much younger than you are. Also, If you name a beneficiary who is more than 10 years younger than you and who is not your spouse, the Internal Revenue Code requires further reductions to the survivor's continuance.

If you elect this option, you can only change your beneficiary after retirement if your beneficiary predeceases you. However, your retirement allowance will not be adjusted based on the new beneficiary's age, and the newly named beneficiary will receive a lump sum refund of your remaining member contributions.

Option 3: 50% Joint and Survivor Continuance

This option allows you to reduce the amount of the benefit you receive during retirement in order to provide a continuance to a beneficiary of your choice following your death. Under this option the amount paid after your death will be of 50% of the amount paid to you during retirement. The amount of the benefit reduction is based on the life expectancies of you and your designated beneficiary and may be sharply reduced if your beneficiary is much younger than you are.

If you elect this option you can only change your beneficiary after retirement if your beneficiary predeceases you. However, your retirement allowance will not be adjusted based on the new beneficiary's age, and the newly named beneficiary will receive a lump sum refund of your remaining member contributions.

Option 4: Multiple Beneficiaries

This option allows you to reduce the amount of the benefit you receive during retirement in order to provide a continuance to more than one beneficiary upon your death. Under this option you may assign the percent of continuance to each beneficiary. The amount of the benefit reduction is based on the life expectancies of you and your designated beneficiaries.

This option will need to be calculated by MCERA's actuary and there may be costs associated with the calculation. Please contact our office if you would like an estimate for this benefit payment option.

Named beneficiaries can be anyone you choose and need not be a natural person. For example, you may name an organization or a trust. However, organizations and trusts may not receive a continuance, only a refund of remaining contributions.

Additional Information about Your Benefits

Divorce/Domestic Partnership Dissolution

California is a community property state, which means that if you are a member of MCERA while you are married or partnered and subsequently divorce or dissolve your partnership, your retirement benefits are considered community property and your former spouse/partner may be entitled to an interest in a portion of your retirement benefit. Upon an initial divorce filing it is essential that all members notify MCERA as soon as possible. If not, you could face a delay in the payment of your retirement benefits.

Take the following steps to avoid any potential delays.

If You Are Already Divorced

Submit a copy of your judgment of dissolution of marriage and property settlement agreement.

As soon as you receive a completed judgment of dissolution of marriage and/or property settlement agreement from your divorce proceedings, please submit a copy to MCERA. The judgment will undergo a detailed internal review by MCERA to assess what impact there will be to your retirement account and whether your spouse is entitled to an interest in the community property portion of your retirement benefit as determined by the court. All pages of this document, including any attachments, will be required and it must contain a court's file stamp and the judge's signature. It is extremely important that the language in your judgment is clear, and it is best if the judgment specifically mentions MCERA and clearly states what you and your former spouse are entitled to.

If You Are Initiating a Divorce

File a joinder.

Joinder means that MCERA is joined in the divorce proceeding and will require a court-filed order before dividing and distributing any of your retirement benefits to you and/or your former spouse or partner.

Obtain a domestic relations order (DRO).

After filing a joinder, you may also be required to file a DRO. This is a court order that provides MCERA with detailed instructions regarding how the retirement benefits are to be divided. In order for MCERA to honor the orders of a DRO, it must be compliant with the 1937 Act and other applicable laws pertaining to pensions.

Change Your Beneficiary

Upon completion of your divorce, please be sure to complete and submit a Beneficiary Change form. If you are adding a new spouse or partner, MCERA will require you to submit a copy of your governmentissued marriage license or state registered domestic partnership. If you are not designating a spouse as your beneficiary you may also need to complete a Justification for Non-Signature of Spouse form. Both forms should be returned to MCERA as soon as possible.

Please be sure to provide MCERA with any additional orders or documents pertaining to your divorce that may affect your retirement benefits.

Disability Retirement

Active MCERA members who have an illness or injury that permanently incapacitates them from performing the essential functions of their job may be eligible to apply for disability retirement. Based on medical documentation, the Retirement Board will determine whether you are permanently disabled from performing the essential functions of your position. In order to meet the Board's definition of "permanent incapacity," the incapacitating condition must be expected to continue for such an extended and uncertain duration of time to be considered permanent according to competent medical evidence, and as determined by the Retirement Board.

Service Connected Disability Retirement

There is no minimum service requirement necessary to apply for a service connected disability retirement. As the applicant, you have the burden to provide evidence that you are permanently disabled from performing your job duties and that the disability is a result of injury or disease arising out of the course of your employment.

The monthly retirement allowance for a service connected disability retirement is no less than 50% of your highest final average compensation. Generally, the service connected disability retirement benefit equal to 50% of your highest average compensation is not subject to taxation.

Non-service Connected Disability Retirement

To qualify for a non-service connected disability retirement you must have a minimum of five years of retirement service credit. As the applicant, you have the burden to provide evidence that you are permanently disabled from performing your job duties.

The non-service connected disability retirement benefit is based upon a formula not to exceed onethird of your highest average compensation, or the amount of your service retirement benefit, whichever is greater. Non-service connected disability retirement benefits are subject to taxation.

Application Process

Your disability retirement application must be filed while you are still in service or within four months of your discontinuance of service. You may also file after you discontinue service if you have been continuously physically or mentally incapacitated from performing your job duties.

Disability retirement applications may be withdrawn in writing at any point before the Retirement Board makes a determination. The disability retirement processing brochure outlines the complete process from submission of the application to the Retirement Board's decision and is available on our website (www.mcera.org) or upon request.

Benefit Payments

Benefit payments are effective either as of the date a completed application is received by MCERA, or the day after the last day for which you received compensation, whichever is later. If you are eligible for service retirement and are considering whether to apply for disability retirement, you may wish to file for service retirement while your disability application is being processed. It is important to note that if you retire for service and are subsequently granted a disability retirement, you generally cannot change the benefit payment option you already selected (unmodified, option 1, etc.).

Service connected disability and non-service connected disability benefit calculations are always compared to service retirement benefit calculations, and the member will receive whichever is greater.

Please call us and ask to speak to our Disability Coordinator if you have questions about disability retirement.

Please keep in mind that Workers' Compensation is a separate process from that of disability retirement, with different criteria for determining incapacity. Receipt of a Workers' Compensation award does not guarantee eligibility to receive a disability retirement benefit.

Death before Retirement

Several options are available to your designated beneficiary in the event of your death before retirement. A spouse/state-registered domestic partner or minor child(ren) overrides any beneficiary designation.

Basic Survivor Benefits

If you die before retirement your beneficiary will be entitled to a death benefit equal to your contributions plus accumulated interest and a lump sum payment equal to one month of your final salary for each year of service you completed to a maximum of six months pay.

Alternate Survivor Benefits

Under certain specific circumstances, the surviving spouse/state-registered domestic partner or unmarried minor children may choose an alternative form of the survivor benefit. The available options will depend upon the circumstances of the member's death. MCERA will provide full details of all available choices when appropriate.

Continuance

If the deceased member was eligible for service retirement or would have been entitled to nonservice connected disability retirement at the time of death, the member's eligible surviving spouse/ state-registered domestic partner or unmarried minor children may choose to receive, in lieu of the basic death benefit, a monthly benefit equal to 60% of the allowance the member would have received if the member had retired on the date of death. It is a lifetime benefit for the spouse/state-registered domestic partner. For the minor unmarried child(ren) it is available to the age of 18 or to the age of 22 if he/ she remains unmarried and in school full time.

Lump Sum plus Continuance

If the deceased member was eligible for service retirement or would have been entitled to nonservice connected disability retirement at the time of death, the member's eligible surviving spouse/ state-registered domestic partner or unmarried minor children may choose to receive a combination of the basic lump sum death benefit plus an actuarially reduced monthly continuance based on the value of the death benefit. It is a lifetime benefit for the spouse/ state-registered domestic partner. For the minor unmarried child(ren) it is available to the age of 18 or to the age of 22 if he/she remains unmarried and in school full time.

Service Connected Death Benefit

If the death of the member is the result of injury or disease arising out of and in the course of employment, the member's eligible surviving spouse/ state-registered domestic partner or unmarried minor children may choose to apply for a service connected death benefit in lieu of the basic death benefit. The service connected death benefit is payable in monthly installments equal to 50% of the member's final compensation or the regular service retirement benefit, whichever is greater.

Social Security

Most MCERA members do not participate in Social Security during their MCERA-covered employment. However, many had jobs covered by Social Security elsewhere before coming to work for an MCERA plan sponsor, or may pay Social Security taxes in another job after retiring. If your service with MCERA or another government pension plan was not covered by Social Security, the pension you receive from MCERA (or other public plan) could reduce your Social Security benefits. Social Security has two special provisions which may affect MCERA members. One, the Windfall Elimination Provision (WEP), applies to public employees who also have enough credits to qualify for their own Social Security benefits. The other, the Government Pension Offset (GPO), applies to public employees when claiming Social Security benefits as a spouse.

Windfall Elimination Provision (WEP)

The WEP affects how the amount of your Social Security retirement or Social Security disability benefit is calculated. A modified formula is used to calculate your Social Security benefit amount, resulting in a lower Social Security benefit than you would otherwise receive. If you have over 30 years of substantial earnings under Social Security you are not subject to the WEP.

Government Pension Offset (GPO)

The GPO applies only if you are eligible for Social Security benefits as a spouse. The GPO reduces or eliminates Social Security spousal and survivor benefits for those who collect pension from jobs that were not covered by Social Security. If this is your situation and you expect to receive a Social Security spousal benefit, that benefit will be reduced by twothirds of your government pension. In some cases, this could eliminate your Social Security spousal benefit altogether.

Fact sheets on the WEP (Publication No. 05-10045) and GPO (Publication No. 05-10007) are available at the website for Social Security, www.ssa.gov.

Preparing for Retirement

Retirement planning is important, and educating yourself beforehand is the key to making good retirement decisions. MCERA has resources available to help you as you approach your retirement date.

Preparing to Retire Workshop

We recommend attending a Preparing to Retire workshop when you are within two years of your retirement date. In the Preparing to Retire workshop, MCERA staff will walk you through the information you need to consider as you prepare for service retirement including how to select a retirement date, what additional documents are required, how to select a benefit payment option and how to start the service retirement process. Post-retirement information on cost of living adjustments and working after retirement is also discussed.

Visit our website or call our office for upcoming workshop dates.

Preparing for Retirement Handbook

The Preparing for Retirement handbook covers everything discussed in the Planning to Retire workshop and is an excellent reference as you prepare for service retirement.

The Preparing for Retirement handbook is available on our website or upon request.

Benefit Estimate Worksheet

This worksheet and the compensation percentage tables on the following pages will help you estimate the retirement allowance you might receive under the "unmodified" benefit payment option (see page 17 more information on benefit payment options). Please keep in mind that this an estimate only. Your actual retirement benefit will be based upon the particulars of your employment history at the time you retire.

You are welcome at any time to contact our office for a benefit estimate, or you can create your own estimate on our website, www.mcera.org.

		Sample (2% at 55)	You
Step 1	Estimate your highest compensation. Estimate what your average earnable monthly compensation will be during your look back period.	\$3,695	\$
Step 2	Determine your retirement age. Enter your projected age at retirement.	55	
Step 3	Project your years of service credit. Enter the number of years of service credit you expect to have when you retire.	20	
Step 4	Find your compensation percentage. Go to the appropriate table on the following pages and find the percentage that corresponds to your projected age and years of service credit.	40%	%
Step 5	Calculate your estimated monthly benefit. Multiply the final monthly earnable compensation you entered in Step 1 by the percentage you entered in Step 4.	\$3,695 <u>x 40%</u> \$1,478	\$ _ <u>x %</u> \$

IMPORTANT NOTE:

You should not rely solely on this information. Your benefits at retirement will be determined according to the applicable provisions of the California Government Code as well as the Bylaws and Regulations governing MCERA, which may change without notice between now and the time you retire.

What is my benefit formula?

<i>3% at 55</i> Page 26	City of San Rafael Safety Tier 1 City of San Rafael Safety Tier 2 County of Marin Safety Tier 1a County of Marin Safety Tier 2a Novato Fire Safety Tier 2 Southern Marin Fire Safety Tier 2 Southern Marin Fire Safety Tier 2a					
<i>3% at 50</i> Page 27	County of Marin Safety Tier 1b County of Marin Safety Tier 2b Novato Fire Safety Tier 1 Southern Marin Fire Safety Tier 1					
2.7% at 55 Page 28	City of San Rafael General Tier 1 Southern Marin Fire General Tier 1					
2% at 55 Page 29	City of San Rafael General Tier 2 County of Marin General Tier 3 County of Marin General Tier 3a LAFCO Tier 3 Marin Superior Court General Tier 3 Marin Superior Court General Tier 4 Novato Fire General Tier 1					
2% at 61¼ Page 30	County of Marin General Tier 2 County of Marin General Tier 4 Marin Superior Court General Tier 2					
2% at 55½ Page 31	County of Marin General Tier 1 Marin Superior Court General Tier 1 Marin/Sonoma Mosquito & Vector Control Tier 1					
<i>2% at 58½</i> Page 32	Marin City Community Services Tier 1 Tamalpais Community Services Tier 1					

3% at 55 All values shown are percentages.

Years of				A	ge			
Service	41	45	50	51	52	53	54	55+
10			22.90	24.08	25.37	26.78	28.25	30.00
11			25.19	26.49	27.91	29.46	31.08	33.00
12			27.48	28.90	30.45	32.13	33.90	36.00
13			29.77	31.31	32.98	34.81	36.73	39.00
14			32.06	33.72	35.52	37.49	39.56	42.00
15			34.35	36.13	38.06	40.17	42.38	45.00
16			36.64	38.53	40.59	42.84	45.21	48.00
17			38.93	40.94	43.13	45.52	48.03	51.00
18			41.22	43.35	45.67	48.20	50.86	54.00
19			43.51	45.76	48.20	50.88	53.68	57.00
20	28.66	35.75	45.80	48.17	50.74	53.56	56.51	60.00
21	30.10	37.54	48.09	50.58	53.28	56.23	59.33	63.00
22	31.53	39.32	50.38	52.98	55.82	58.91	62.16	66.00
23	32.96	41.11	52.67	55.39	58.35	61.59	64.98	69.00
24	34.39		54.96	57.80	60.89	64.27	67.81	72.00
25	35.83		57.26	60.21	63.43	66.95	70.64	75.00
26	37.26		59.55	62.62	65.96	69.62	73.46	78.00
27	38.69		61.84	65.03	68.50	72.30	76.29	81.00
28			64.13	67.44	71.04	74.98	79.11	84.00
29			66.42	69.84	73.58	77.66	81.94	87.00
30			68.71	72.25	76.11	80.33	84.76	90.00
31			71.00	74.66	78.65	83.01	87.59	93.00
32			73.29	77.07	81.19	85.69	90.41	96.00
33			75.58	79.48	83.72	88.37	93.24	99.00
34			77.87	81.89	86.26	91.05	96.06	100.00
35			80.16	84.29	88.80	93.72	98.89	100.00
36			82.45	86.70	91.34	96.40	100.00	100.00
37			84.74	89.11	93.87	99.08	100.00	100.00
38			87.03	91.52	96.41	100.00	100.00	100.00
39			89.32	93.93	98.95	100.00	100.00	100.00
40			91.61	96.34	100.00	100.00	100.00	100.00
41			93.90	98.74	100.00	100.00	100.00	100.00



Years of				Ag	ge			
Service	41	44	45	46	47	48	49	50+
10	18.77	22.19	23.42	24.68	26.03	27.26	28.57	30.00
11	20.65	24.41	25.76	27.15	28.64	29.98	31.42	33.00
12	22.53	26.63	28.10	29.61	31.24	32.71	34.28	36.00
13	24.41	28.85	30.44	32.08	33.84	35.43	37.14	39.00
14	26.28	31.07	32.78	34.55	36.45	38.16	39.99	42.00
15	28.16	33.29	35.12	37.02	39.05	40.88	42.85	45.00
16	30.04	35.51	37.46	39.48	41.65	43.61	45.71	48.00
17	31.92	37.72	39.81	41.95	44.26	46.33	48.56	51.00
18	33.79	39.94	42.15	44.42	46.86	49.06	51.42	54.00
19	35.67	42.16	44.49	46.89	49.46	51.78	54.28	57.00
20	37.55	44.38	46.83	49.36	52.07	54.51	57.13	60.00
21	39.43	46.60	49.17	51.82	54.67	57.24	59.99	63.00
22	41.30	48.82	51.51	54.29	57.27	59.96	62.85	66.00
23	43.18	51.04	53.85	56.76	59.88	62.69	65.70	69.00
24	45.06	53.26	56.20	59.23	62.48	65.41	68.56	72.00
25	46.94	55.48	58.54	61.70	65.09	68.14	71.42	75.00
26	48.81	57.70	60.88	64.16	67.69	70.86	74.27	78.00
27	50.69	59.92	63.22	66.63	70.29	73.59	77.13	81.00
28	52.57	62.13	65.56	69.10	72.90	76.31	79.98	84.00
29	54.44	64.35	67.90	71.57	75.50	79.04	82.84	87.00
30	56.32	66.57	70.25	74.03	78.10	81.77	85.70	90.00
31	58.20	68.79	72.59	76.50	80.71	84.49	88.55	93.00
32	60.08	71.01	74.93	78.97	83.31	87.22	91.41	96.00
33	61.95	73.23	77.27	81.44	85.91	89.94	94.27	99.00
34	63.83	75.45	79.61	83.91	88.52	92.67	97.12	100.00
35	65.71	77.67	81.95	86.37	91.12	95.39	99.98	100.00
36	67.59	79.89	84.29	88.84	93.72	98.12	100.00	100.00
37	69.46	82.11	86.64	91.31	96.33	100.00	100.00	100.00
38	71.34	84.33	88.98	93.78	98.93	100.00	100.00	100.00
39	73.22	86.54	91.32	96.24	100.00	100.00	100.00	100.00
40	75.10	88.76	93.66	98.71	100.00	100.00	100.00	100.00
41	76.97	90.98	96.00	100.00	100.00	100.00	100.00	100.00

2.7% at 55 All values shown are percentages.

Years of			A	ge		
Service	50	51	52	53	54	55+
10	20.00	21.40	22.80	24.20	25.60	27.00
11	22.00	23.54	25.08	26.62	28.16	29.70
12	24.00	25.68	27.36	29.04	30.72	32.40
13	26.00	27.82	29.64	31.46	33.28	35.10
14	28.00	29.96	31.92	33.88	35.84	37.80
15	30.00	32.10	34.20	36.30	38.40	40.50
16	32.00	34.24	36.48	38.72	40.96	43.20
17	34.00	36.38	38.76	41.14	43.52	45.90
18	36.00	38.52	41.04	43.56	46.08	48.60
19	38.00	40.66	43.32	45.98	48.64	51.30
20	40.00	42.80	45.60	48.40	51.20	54.00
21	42.00	44.94	47.88	50.82	53.76	56.70
22	44.00	47.08	50.16	53.24	56.32	59.40
23	46.00	49.22	52.44	55.66	58.88	62.10
24	48.00	51.36	54.72	58.08	61.44	64.80
25	50.00	53.50	57.00	60.50	64.00	67.50
26	52.00	55.64	59.28	62.92	66.56	70.20
27	54.00	57.78	61.56	65.34	69.12	72.90
28	56.00	59.92	63.84	67.76	71.68	75.60
29	58.00	62.06	66.12	70.18	74.24	78.30
30	60.00	64.20	68.40	72.60	76.80	81.00
31	62.00	66.34	70.68	75.02	79.36	83.70
32	64.00	68.48	72.96	77.44	81.92	86.40
33	66.00	70.62	75.24	79.86	84.48	89.10
34	68.00	72.76	77.52	82.28	87.04	91.80
35	70.00	74.90	79.80	84.70	89.60	94.50
36	72.00	77.04	82.08	87.12	92.16	97.20
37	74.00	79.18	84.36	89.54	94.72	99.90
38	76.00	81.32	86.64	91.96	97.28	100.00
39	78.00	83.46	88.92	94.38	99.84	100.00
40	80.00	85.60	91.20	96.80	100.00	100.00
41	82.00	87.74	93.48	99.22	100.00	100.00

2% at 55 All values shown are percentages.

Years of Service	50	51	52	53	54	55	Age 56	57	58	59	90	61	62	63+
10	14.26	15.22	16.28	17.42	18.66	20.00	20.52	21.04	21.56	22.10	22.62	23.14	23.66	24.18
11	15.69	16.74	17.91	19.16	20.53	22.00	22.57	23.14	23.72	24.31	24.88	25.45	26.03	26.60
12	17.11	18.26	19.54	20.90	22.39	24.00	24.62	25.25	25.87	26.52	27.14	27.77	28.39	29.02
13	18.54	19.79	21.16	22.65	24.26	26.00	26.68	27.35	28.03	28.73	29.41	30.08	30.76	31.43
14	19.96	21.31	22.79	24.39	26.12	28.00	28.73	29.46	30.18	30.94	31.67	32.40	33.12	33.85
15	21.39	22.83	24.42	26.13	27.99	30.00	30.78	31.56	32.34	33.15	33.93	34.71	35.49	36.27
16	22.82	24.35	26.05	27.87	29.86	32.00	32.83	33.66	34.50	35.36	36.19	37.02	37.86	38.69
17	24.24	25.87	27.68	29.61	31.72	34.00	34.88	35.77	36.65	37.57	38.45	39.34	40.22	41.11
18	25.67	27.40	29.30	31.36	33.59	36.00	36.94	37.87	38.81	39.78	40.72	41.65	42.59	43.52
19	27.09	28.92	30.93	33.10	35.45	38.00	38.99	39.98	40.96	41.99	42.98	43.97	44.95	45.94
20	28.52	30.44	32.56	34.84	37.32	40.00	41.04	42.08	43.12	44.20	45.24	46.28	47.32	48.36
21	29.95	31.96	34.19	36.58	39.19	42.00	43.09	44.18	45.28	46.41	47.50	48.59	49.69	50.78
22	31.37	33.48	35.82	38.32	41.05	44.00	45.14	46.29	47.43	48.62	49.76	50.91	52.05	53.20
23	32.80	35.01	37.44	40.07	42.92	46.00	47.20	48.39	49.59	50.83	52.03	53.22	54.42	55.61
24	34.22	36.53	39.07	41.81	44.78	48.00	49.25	50.50	51.74	53.04	54.29	55.54	56.78	58.03
25	35.65	38.05	40.70	43.55	46.65	50.00	51.30	52.60	53.90	55.25	56.55	57.85	59.15	60.45
26	37.08	39.57	42.33	45.29	48.52	52.00	53.35	54.70	56.06	57.46	58.81	60.16	61.52	62.87
27	38.50	41.09	43.96	47.03	50.38	54.00	55.40	56.81	58.21	59.67	61.07	62.48	63.88	65.29
28	39.93	42.62	45.58	48.78	52.25	56.00	57.46	58.91	60.37	61.88	63.34	64.79	66.25	67.70
29	41.35	44.14	47.21	50.52	54.11	58.00	59.51	61.02	62.52	64.09	65.60	67.11	68.61	70.12
30	42.78	45.66	48.84	52.26	55.98	60.00	61.56	63.12	64.68	66.30	67.86	69.42	70.98	72.54
31	44.21	47.18	50.47	54.00	57.85	62.00	63.61	65.22	66.84	68.51	70.12	71.73	73.35	74.96
32	45.63	48.70	52.10	55.74	59.71	64.00	65.66	67.33	68.99	70.72	72.38	74.05	75.71	77.38
33	47.06	50.23	53.72	57.49	61.58	66.00	67.72	69.43	71.15	72.93	74.65	76.36	78.08	79.79
34	48.48	51.75	55.35	59.23	63.44	68.00	69.77	71.54	73.30	75.14	76.91	78.68	80.44	82.21
35	49.91	53.27	56.98	60.97	65.31	70.00	71.82	73.64	75.46	77.35	79.17	80.99	82.81	84.63
36	51.34	54.79	58.61	62.71	67.18	72.00	73.87	75.74	77.62	79.56	81.43	83.30	85.18	87.05
37	52.76	56.31	60.24	64.45	69.04	74.00	75.92	77.85	79.77	81.77	83.69	85.62	87.54	89.47
38	54.19	57.84	61.86	66.20	70.91	76.00	77.98	79.95	81.93	83.98	85.96	87.93	89.91	91.88
39	55.61	59.36	63.49	67.94	72.77	78.00	80.03	82.06	84.08	86.19	88.22	90.25	92.27	94.30
40	57.04	60.88	65.12	69.68	74.64	80.00	82.08	84.16	86.24	88.40	90.48	92.56	94.64	96.72
41	58.47	62.40	66.75	71.42	76.51	82.00	84.13	86.26	88.40	90.61	92.74	94.87	97.01	99.14

2% at 611/4 All values shown are percentages.

Years of Service	50	51	52	23	54	55	Age 56	57	58	59	60	61	62	63	64	65+
10	11.82	12.43	13.03	13.64	14.26	14.92	15.64	16.41	17.25	18.17	19.17	19.91	20.91	21.98	23.11	24.32
11	13.00	13.67	14.33	15.00	15.69	16.42	17.20	18.05	18.98	19.98	21.08	21.90	23.00	24.17	25.42	26.75
12	14.18	14.91	15.63	16.36	17.11	17.91	18.76	19.69	20.70	21.80	23.00	23.89	25.10	26.37	27.73	29.19
13	15.36	16.16	16.93	17.73	18.54	19.40	20.33	21.33	22.43	23.61	24.92	25.89	27.19	28.57	30.04	31.62
14	16.55	17.40	18.24	19.09	19.96	20.89	21.89	22.97	24.15	25.43	26.83	27.88	29.28	30.77	32.35	34.05
15	17.73	18.64	19.54	20.45	21.39	22.39	23.46	24.62	25.88	27.25	28.75	29.87	31.37	32.97	34.66	36.48
16	18.91	19.89	20.84	21.82	22.82	23.88	25.02	26.26	27.60	29.06	30.67	31.86	33.46	35.16	36.97	38.91
17	20.09	21.13	22.15	23.18	24.24	25.37	26.58	27.90	29.33	30.88	32.58	33.85	35.55	37.36	39.28	41.35
18	21.27	22.37	23.45	24.54	25.67	26.86	28.15	29.54	31.05	32.70	34.50	35.84	37.64	39.56	41.60	43.78
19	22.45	23.61	24.75	25.91	27.09	28.35	29.71	31.18	32.78	34.51	36.42	37.83	39.74	41.76	43.91	46.21
20	23.64	24.86	26.05	27.27	28.52	29.85	31.27	32.82	34.50	36.33	38.33	39.82	41.83	43.95	46.22	48.64
21	24.82	26.10	27.36	28.63	29.95	31.34	32.84	34.46	36.23	38.15	40.25	41.81	43.92	46.15	48.53	51.08
23	26.00	27.34	28.66	30.00	31.37	32.83	34.40	36.10	37.95	39.96	42.17	43.81	46.01	48.35	50.84	53.51
23	27.18	28.59	29.96	31.36	32.80	34.32	35.96	37.74	39.68	41.78	44.08	45.80	48.10	50.55	53.15	55.94
24	28.36	29.83	31.26	32.72	34.22	35.82	37.53	39.38	41.40	43.60	46.00	47.79	50.19	52.74	55.46	58.37
25	29.55	31.07	32.57	34.09	35.65	37.31	39.09	41.03	43.13	45.41	47.92	49.78	52.28	54.94	57.77	60.80
26	30.73	32.31	33.87	35.45	37.08	38.80	40.66	42.67	44.85	47.23	49.83	51.77	54.37	57.14	60.08	63.24
27	31.91	33.56	35.17	36.81	38.50	40.29	42.22	44.31	46.58	49.05	51.75	53.76	56.47	59.34	62.39	65.67
28	33.09	34.80	36.47	38.18	39.93	41.79	43.78	45.95	48.30	50.86	53.67	55.75	58.56	61.53	64.70	68.10
29	34.27	36.04	37.78	39.54	41.35	43.28	45.35	47.59	50.03	52.68	55.58	57.74	60.65	63.73	67.01	70.53
30	35.46	37.29	39.08	40.91	42.78	44.77	46.91	49.23	51.75	54.50	57.50	59.74	62.74	65.93	69.33	72.97
31	36.64	38.53	40.38	42.27	44.21	46.26	48.47	50.87	53.48	56.31	59.42	61.73	64.83	68.13	71.64	75.40
32	37.82	39.77	41.69	43.63	45.63	47.75	50.04	52.51	55.20	58.13	61.33	63.72	66.92	70.33	73.95	77.83
33	39.00	41.01	42.99	45.00	47.06	49.25	51.60	54.15	56.93	59.94	63.25	65.71	69.01	72.52	76.26	80.26
34	40.18	42.26	44.29	46.36	48.48	50.74	53.16	55.79	58.65	61.76	65.17	67.70	71.11	74.72	78.57	82.69
35	41.36	43.50	45.59	47.72	49.91	52.23	54.73	57.44	60.38	63.58	67.08	69.69	73.20	76.92	80.88	85.13
36	42.55	44.74	46.90	49.09	51.34	53.72	56.29	59.08	62.10	65.39	69.00	71.68	75.29	79.12	83.19	87.56
37	43.73	45.98	48.20	50.45	52.76	55.22	57.86	60.72	63.83	67.21	70.92	73.67	77.38	81.31	85.50	89.99
38	44.91	47.23	49.50	51.81	54.19	56.71	59.42	62.36	65.55	69.03	72.83	75.66	79.47	83.51	87.81	92.42
39	46.09	48.47	50.80	53.18	55.61	58.20	60.98	64.00	67.28	70.84	74.75	77.66	81.56	85.71	90.12	94.85
40	47.27	49.71	52.11	54.54	57.04	59.69	62.55	65.64	69.00	72.66	76.67	79.65	83.65	87.91	92.43	97.29
41	48.46	50.96	53.41	55.90	58.47	61.19	64.11	67.28	70.73	74.48	78.58	81.64	85.74	90.10	94.74	99.72
42	49.64	52.20	54.71	57.27	59.89	62.68	65.67	68.92	72.45	76.29	80.50	83.63	87.84	92.30	97.06	100.00
43	50.82	53.44	56.01	58.63	61.32	64.17	67.24	70.56	74.18	78.11	82.42	85.62	89.93	94.50	99.37	100.00
44	52.00	54.68	57.32	59.99	62.74	65.66	68.80	72.20	75.90	79.93	84.33	87.61	92.02	96.70	100.00	100.00
45	53.18	55.93	58.62	61.36	64.17	67.16	70.37	73.85	77.63	81.74	86.25	89.60	94.11	98.90	100.00	100.00

Activity 50 51 52 51 52 53 54 55 <	Years of							Age						
14.75 15.66 16.77 17.41 18.41 19.48 20.61 21.82 22.65 22.68 22.64 27.26 22.64 27.73 16.22 17.23 16.33 19.15 20.25 21.42 25.86 28.94 25.32 26.19 28.94 25.33 28.94 25.33 28.94 26.95 28.94 26.96 28.94 26.95 28.94 26.95 28.94 26.95 28.94 26.95 28.94 26.95 28.94 26.96 28.94 28.95 28.95 28.95 28.95 28.95 28.95 28.95 28.95 28.95 28.95 28.95 28.96 36.	Service	50	51	52	53	54	55	56	57	58	59	90	61	62+
1622 11723 1633 19.15 20.25 21.42 22.67 24.05 26.84 27.75 17.70 18.80 20.00 20.89 22.10 23.37 24.13 26.39 30.50 31.16 35.38 17.70 18.86 25.00 25.01 25.13 25.32 28.65 35.39 34.16 35.39 2560 25.00 26.12 27.72 28.87 31.40 36.50 31.40 35.50 37.60 37.84 2560 25.00 26.10 27.84 25.76 37.11 36.50 37.64 36.56 36.76 2560 2560 26.60 31.34 35.00 31.40 36.76 47.94 45.76 47.96 2560 2560 26.61 77.85 36.63 47.44 45.36 47.93 46.74 2560 31.61 31.61 43.74 45.36 47.93 47.93 56.56 56.56 56.57 56.56 56.57	10	14.75	15.66	16.67	17.41	18.41	19.48	20.61	21.82	22.68	23.54	24.40	25.25	26.11
17.70 18.80 20.00 20.84 23.71 23.37 24.73 26.19 23.71 23.85 30.51 35.76 35.36 19.17 20.36 21.67 25.84 23.94 55.73 24.95 35.61 35.76 35.96 31.76 35.96 35.76 45.96 40.76 45.96 35.76 35.76 35.67 35.67 35.67 35.67 35.67 35.67 35.67 35.67 35.67 35.67 35.67 35.67 35.67 35.67 35.67 35.67 35.	11	16.22	17.23	18.33	19.15	20.25	21.42	22.67	24.00	24.95	25.89	26.84	27.78	28.72
1917 2036 2167 22.04 2334 26.72 26.75 26.75 27.35 24.16 35.36 22112 2330 24.36 27.67 28.85 30.55 31.75 35.36 31.76 35.36 22112 2350 26.67 28.13 23.91 32.71 36.56 39.03 41.47 42.93 2365 25.05 28.13 33.01 33.11 35.03 37.10 36.59 47.77 46.35 47.78 2565 28.03 36.67 31.34 35.06 37.01 39.76 47.76 45.36 45.47 28.05 28.03 36.67 38.31 40.51 47.40 55.7 45.36 45.47 45.46 28.05 38.31 40.51 47.34 45.46 45.47 45.46 38.04 40.51 47.40 56.14 56.14 56.14 56.14 56.14 56.14 56.14 56.14 56.14 56.14 56.14	12	17.70	18.80	20.00	20.89	22.10	23.37	24.73	26.19	27.22	28.25	29.28	30.31	31.34
2065 2133 2438 2571 2885 3055 31.75 32.80 34.16 35.39 2210 2350 2607 2617 2780 3031 31.16 3033 34.02 36.50 36.50 2507 2660 2667 27.80 31.41 35.03 31.46 35.31 34.02 36.50 36.51 2507 2660 3667 31.67 33.03 31.41 35.03 39.23 43.91 45.49 2650 3617 31.67 33.03 31.41 35.03 39.23 43.91 45.43 45.91 45.43 2650 31.67 33.33 34.82 36.93 37.90 37.90 47.93 47.93 47.93 47.93 47.93 45.91 45.96 2650 36.63 36.73 36.93 47.93 47.93 47.93 45.91 45.96 30.41 41.74 46.94 47.40 47.93 47.63 47.93 45.9	13	19.17	20.36	21.67	22.64	23.94	25.32	26.79	28.37	29.48	30.60	31.72	32.83	33.95
22.12 23.50 26.17 27.62 29.46 31.16 32.97 34.91 35.53 35.51 35.53 37.68 37.68 37.68 37.68 37.68 37.68 37.68 37.68 37.68 37.68 37.68 37.69 37.68 37.69 37.68 37.68 41.47 45.36 41.47 45.46 25.60 26.67 31.67 33.08 34.99 37.01 39.16 41.46 43.08 43.76 45.46 47.98 45.46 2650 36.73 37.60 36.76 36.76 47.76 46.37 45.46 45.66 47.76 45.47 45.66 295.0 31.67 35.00 36.77 36.76 47.76 46.47 45.66 65.41 55.66 65.41 55.66 65.41 55.66 65.41 55.66 65.41 55.66 65.41 55.66 65.41 55.66 65.41 55.66 65.41 55.66 65.41 55.66 55.61 55.61	14	20.65	21.93	23.33	24.38	25.78	27.27	28.85	30.55	31.75	32.95	34.16	35.36	36.56
23.60 26.67 27.86 29.46 31.16 32.97 34.91 36.26 37.06 30.03 40.41 26.07 26.67 27.86 37.14 35.03 37.10 38.56 40.02 41.47 45.36 26.55 28.33 29.60 31.30 38.95 47.06 37.09 35.66 47.02 41.47 45.36 28.02 39.03 38.13 38.05 37.01 39.16 47.03 49.43 51.73 55.60 30.97 32.33 38.05 38.05 47.40 57.14 45.33 47.63 49.43 51.73 55.04 30.97 32.46 38.31 40.51 42.33 47.63 49.43 51.73 55.04 35.40 37.01 47.40 57.41 45.93 46.74 56.76 55.96 57.76 55.76 55.97 55.96 35.41 45.53 56.71 58.97 50.91 57.93 56.97 55.97 55.9	15	22.12	23.50	25.00	26.12	27.62	29.21	30.91	32.73	34.02	35.31	36.59	37.88	39.17
2507 2663 28.33 29.60 31.30 33.11 35.03 37.10 38.56 40.02 41.47 42.93 2655 28.20 30.00 31.34 33.14 35.06 37.09 36.56 37.09 47.39 46.73 47.93 45.43 2950 31.67 33.65 36.87 36.87 36.87 46.93 47.08 48.73 48.76 46.73 47.93 55.56 3245 34.46 36.57 38.33 40.51 47.40 50.19 57.16 56.73 56.76	16	23.60	25.06	26.67	27.86	29.46	31.16	32.97	34.91	36.29	37.66	39.03	40.41	41.78
2655 28.20 30.00 31.34 35.06 37.01 39.14 35.06 37.01 39.14 43.09 47.27 43.31 43.46 28.02 29.76 31.67 33.08 34.99 37.01 39.16 41.30 44.72 46.35 47.36 46.30 55.67 55.6	17	25.07	26.63	28.33	29.60	31.30	33.11	35.03	37.10	38.56	40.02	41.47	42.93	44.39
2802 29.76 31.67 33.08 34.99 37.01 39.16 41.46 45.36 46.35 46.35 47.08 48.79 60.51 2956 31.33 34.82 38.63 38.67 40.90 43.28 45.36 46.70 48.70 48.70 66.51 30.97 32.90 35.66 38.67 40.90 41.79 46.74 49.49 51.28 55.66 55.67 55.66 33.24 38.31 40.00 41.79 46.74 49.90 51.76 55.47 56.47 56.49 56.71 56.71 56.71 56.93 56.74 56.76 56.71 56.93 56.71 56.93 56.74	18	26.55	28.20	30.00	31.34	33.14	35.06	37.09	39.28	40.82	42.37	43.91	45.46	47.00
29.50 31.33 34.82 38.85 41.22 43.84 45.36 47.63 48.79 50.51 30.97 32.90 35.00 36.67 38.97 40.90 43.28 45.83 47.63 49.43 51.23 53.04 32.45 34.46 36.67 38.31 40.51 42.85 45.34 48.01 49.90 51.23 53.04 33.92 36.67 38.31 40.51 42.85 44.80 47.40 50.19 54.43 56.71 58.65 66.99 65.41 58.05 35.87 40.00 41.79 44.79 56.64 58.25 56.71 58.65 56.81 56.93 55.44 56.71 58.65 56.81 56.71 58.65 56.81 56.71 58.65 56.81 56.81 56.71 58.61 56.71 58.61 56.71 58.61 56.71 58.61 56.71 56.81 57.65 56.71 56.81 77.71 56.71 56.72 56.81	19	28.02	29.76	31.67	33.08	34.99	37.01	39.16	41.46	43.09	44.72	46.35	47.98	49.62
30.97 32.90 35.00 36.56 38.67 40.90 43.28 45.34 48.01 49.43 51.23 53.67 55.65 32.45 34.46 36.67 38.31 40.51 42.85 45.34 48.01 59.06 51.76 55.65 56.71 55.65 56.71 58.05 56.61 35.40 37.60 40.00 41.79 44.19 46.74 49.46 52.37 54.43 56.49 58.55 60.61 58.09 35.40 37.60 40.00 41.77 43.53 46.03 48.69 51.52 54.55 56.70 58.85 60.99 63.14 35.41 47.31 43.33 45.27 47.87 50.64 53.85 56.70 58.85 66.91 63.14 66.91 67.14 56.19 56.19 56.19 56.19 56.11 77.14 77.14 77.14 77.14 77.14 77.14 77.14 77.14 77.14 77.14 77.14 77.14	20	29.50	31.33	33.33	34.82	36.83	38.95	41.22	43.64	45.36	47.08	48.79	50.51	52.23
32.45 34.46 36.67 38.31 40.51 42.85 45.34 48.01 49.90 51.78 53.67 55.65 33.92 36.03 38.33 40.05 42.35 44.80 47.40 50.19 52.16 54.14 56.11 58.05 35.40 37.60 40.00 41.79 44.19 46.74 59.64 58.95 56.40 58.55 60.61 58.09 36.81 39.16 41.67 43.53 46.03 48.69 51.56 58.85 60.74 58.95 60.99 63.14 56.09 63.14 56.04 68.17 58.95 66.81 66.12 58.14 66.17 58.95 66.94 66.17 67.14 58.15 66.81 66.17 58.14 66.17 58.14 66.17 58.14 66.17 58.14 66.17 58.14 66.17 58.14 66.17 58.14 66.17 58.14 66.17 58.14 66.17 58.14 66.17 58.14 66.17	21	30.97	32.90	35.00	36.56	38.67	40.90	43.28	45.83	47.63	49.43	51.23	53.04	54.84
3332 36.03 38.33 40.05 42.35 44.80 77.40 50.19 52.16 54.44 56.49 58.55 60.61 58.05 35.40 37.60 40.00 41.79 44.19 45.74 49.46 52.37 54.43 56.49 58.55 60.79 63.54 65.95 65.43 65.95 65.41 63.95 65.41 63.43 65.67 65.47 66.99 63.14 65.16 63.14 65.16 65.41 65.45 65.45 65.45 65.45 65.45 65.45 65.47 65.47 65.47 65.45 65.4	22	32.45	34.46	36.67	38.31	40.51	42.85	45.34	48.01	49.90	51.78	53.67	55.56	57.45
35.40 37.60 40.00 41.79 46.14 49.46 5.33 56.43 56.45 56.46 58.55 60.69 63.14 36.87 39.16 41.67 43.53 46.03 48.69 51.52 54.55 56.70 58.85 60.99 63.14 38.35 40.73 45.00 47.01 49.72 52.59 55.64 58.92 61.20 63.43 65.87 68.19 38.35 40.73 45.00 47.01 49.72 52.59 55.64 58.92 61.20 63.43 65.87 68.97 66.37 68.31 70.71 41.30 43.86 51.66 53.40 55.45 55.46 63.28 65.77 68.27 68.31 70.75 73.24 42.77 45.43 51.60 53.40 55.46 53.46 63.86 67.76 63.37 65.37 65.37 65.37 65.37 65.37 65.37 65.37 65.37 65.37 65.37 65.36 <	23	33.92	36.03	38.33	40.05	42.35	44.80	47.40	50.19	52.16	54.14	56.11	58.09	60.06
36.87 39.16 41.67 43.53 46.03 48.69 51.52 54.55 56.70 58.85 60.99 63.14 38.35 40.73 43.33 45.27 47.87 50.64 53.58 56.74 58.97 61.20 63.43 65.66 39.82 42.30 45.00 47.01 49.72 52.59 55.64 58.92 61.20 63.31 63.19 63.14 41.30 43.86 51.56 54.53 57.70 61.10 63.50 65.91 68.31 7071 44.25 46.99 50.00 52.23 55.45 58.45 68.04 70.61 73.19 75.76 47.20 51.69 55.00 57.40 56.46 58.45 68.04 70.61 73.19 76.76 47.20 50.13 53.33 55.72 58.93 65.95 65.46 68.04 70.61 73.19 75.76 47.20 50.13 53.33 55.72 58.38 67.65	24	35.40	37.60	40.00	41.79	44.19	46.74	49.46	52.37	54.43	56.49	58.55	60.61	62.67
38.35 40.73 45.27 47.87 50.64 53.58 56.74 58.97 61.20 63.43 65.66 39.82 42.30 45.00 47.01 49.72 52.59 55.64 58.92 61.24 63.55 65.87 68.19 41.30 43.86 46.67 48.75 51.56 54.53 57.70 61.10 63.50 65.91 68.31 70.71 42.77 45.43 48.33 50.49 56.46 58.43 61.86 65.91 68.31 70.71 42.77 45.43 48.33 50.49 56.46 63.28 65.46 68.04 70.61 73.19 75.76 42.72 48.56 51.60 52.23 55.24 58.43 61.82 65.46 68.04 70.61 73.19 75.76 47.20 50.13 53.33 55.72 58.93 67.95 69.93 70.31 73.19 75.63 78.31 76.33 47.20 51.60 57.0	25	36.87	39.16	41.67	43.53	46.03	48.69	51.52	54.55	56.70	58.85	60.09	63.14	65.28
39.82 45.00 47.01 49.72 52.59 55.64 58.92 61.24 63.55 65.87 68.19 41.30 43.86 46.67 48.75 51.56 54.53 57.70 61.10 63.50 65.81 68.19 70.71 41.30 43.86 46.67 48.75 51.56 58.45 58.45 68.19 67.10 63.50 65.91 68.31 70.71 42.77 45.43 48.33 50.49 53.40 56.46 58.45 68.04 70.51 73.19 70.75 45.72 48.56 51.61 53.38 57.08 60.38 65.95 69.33 72.56 75.33 75.73 75.34 75.73 47.20 50.13 53.33 55.72 58.92 65.93 72.56 75.35 76.07 76.31 76.33 47.20 50.13 53.33 55.72 58.93 65.93 77.11 80.03 75.63 78.34 47.20 57.6	26	38.35	40.73	43.33	45.27	47.87	50.64	53.58	56.74	58.97	61.20	63.43	65.66	67.89
41.30 43.86 46.67 48.75 51.56 54.53 57.70 61.10 63.50 65.91 68.31 70.71 42.77 45.43 48.33 50.49 53.40 56.48 59.76 68.32 65.77 68.26 70.75 73.24 42.77 45.43 48.33 50.49 53.40 56.46 68.04 7061 73.19 75.76 45.72 48.56 51.67 53.33 55.24 58.43 61.82 65.46 68.04 70.61 73.19 75.76 45.72 48.56 51.67 53.33 55.72 58.92 62.33 65.95 69.83 72.56 70.76 76.33 78.29 78.34 47.20 50.13 55.72 58.92 68.03 72.43 76.63 80.51 80.35 85.39 65.95 56.07 62.04 68.01 74.19 77.11 80.51 83.34 7 51.66 59.20 62.61 68.07 <th>27</th> <th>39.82</th> <th>42.30</th> <th>45.00</th> <th>47.01</th> <th>49.72</th> <th>52.59</th> <th>55.64</th> <th>58.92</th> <th>61.24</th> <th>63.55</th> <th>65.87</th> <th>68.19</th> <th>70.51</th>	27	39.82	42.30	45.00	47.01	49.72	52.59	55.64	58.92	61.24	63.55	65.87	68.19	70.51
42.77 45.43 48.33 50.49 53.40 56.48 59.76 63.28 65.77 68.26 70.75 73.24 44.25 46.99 50.00 52.23 55.24 58.43 61.82 65.46 68.04 70.61 73.19 75.76 45.72 48.56 51.67 53.38 57.08 60.38 63.89 67.65 70.31 72.97 75.63 78.24 45.72 56.13 55.00 57.46 60.76 64.27 68.01 72.18 75.32 78.07 80.51 80.54 47.20 50.13 55.00 57.46 60.76 64.27 68.01 72.13 72.38 75.32 78.07 80.51 80.54 51.69 55.00 57.46 60.76 64.27 74.19 77.11 80.03 82.36 85.39 55.66 59.20 62.51 64.45 68.17 74.19 77.11 80.51 83.34 56.1 55.20 59.27	28	41.30	43.86	46.67	48.75	51.56	54.53	57.70	61.10	63.50	65.91	68.31	70.71	73.12
44.25 46.90 50.00 52.23 55.24 58.43 61.82 65.46 68.04 70.61 73.19 75.76 45.72 48.56 51.67 53.38 57.08 60.38 63.89 67.65 70.31 75.63 78.29 47.20 50.13 53.33 55.72 58.92 62.33 65.95 69.83 72.68 75.67 78.07 78.07 78.03 78.29 51.69 55.00 57.46 60.76 64.27 68.01 72.01 74.19 77.11 80.03 80.51 83.34 51.69 55.00 57.46 60.76 64.27 74.19 77.11 80.03 80.59 83.34 51.69 55.00 57.46 60.76 64.27 74.19 77.11 80.03 82.38 85.39 85.87 56.67 59.20 62.61 66.22 70.07 74.19 77.11 80.03 82.38 85.39 85.39 60.91 50.9	29	42.77	45.43	48.33	50.49	53.40	56.48	59.76	63.28	65.77	68.26	70.75	73.24	75.73
45.72 48.56 51.67 53.98 57.08 60.38 63.89 67.65 70.31 72.97 75.63 78.29 47.20 50.13 53.33 55.72 58.92 62.33 65.95 69.83 75.36 76.07 80.61 80.34 51.69 55.00 57.46 60.76 64.27 68.01 72.01 74.49 77.68 80.51 83.34 51.69 55.00 57.46 60.76 64.27 68.01 72.01 74.49 77.68 80.51 83.34 51.69 55.00 57.46 60.75 68.17 72.13 76.38 77.11 80.03 82.36 85.39 85.39 60.94 64.45 68.17 72.13 76.38 79.38 82.36 83.34 60.91 65.29 70.12 74.19 76.38 79.38 85.39 83.39 60.91 69.91 67.13 78.36 87.63 87.63 90.27 93.44 <t< th=""><th>30</th><th>44.25</th><th>46.99</th><th>50.00</th><th>52.23</th><th>55.24</th><th>58.43</th><th>61.82</th><th>65.46</th><th>68.04</th><th>70.61</th><th>73.19</th><th>75.76</th><th>78.34</th></t<>	30	44.25	46.99	50.00	52.23	55.24	58.43	61.82	65.46	68.04	70.61	73.19	75.76	78.34
47.20 50.13 55.72 58.92 62.33 65.95 69.83 72.58 75.32 78.07 80.82 1 51.69 55.00 57.46 60.76 64.27 68.01 72.01 74.84 77.68 80.51 83.34 1 51.69 55.00 57.46 60.76 64.27 68.01 72.01 74.84 77.68 80.51 83.34 1 56.67 59.20 62.61 66.22 70.07 74.19 77.11 80.03 82.95 85.89 1 1 56.04 64.45 68.17 72.13 76.38 73.36 82.95 85.39 83.34 1 1 1 72.13 76.38 76.38 82.35 85.39 83.34 1 1 1 71.10 78.56 81.65 81.45 81.45 81.34 1 1 1 72.13 78.56 81.65 81.45 91.44 91.44	31	45.72	48.56	51.67	53.98	57.08	60.38	63.89	67.65	70.31	72.97	75.63	78.29	80.95
51.69 55.00 57.46 60.76 64.27 68.01 72.01 74.84 77.68 80.51 83.34 56.67 59.20 62.61 66.22 70.07 74.19 77.11 80.03 82.95 85.81 60.94 64.45 68.17 72.13 76.38 79.38 82.39 85.39 85.39 60.94 64.45 68.17 72.13 76.38 79.38 82.39 85.39 85.39 60.91 70.12 74.19 78.56 81.65 84.74 87.33 90.92 70 71.1 82.92 87.16 87.83 90.92 93.44 71 72.06 76.25 80.74 83.92 87.43 90.27 93.44 71 72.06 76.25 80.74 87.43 90.27 93.44 71 71 82.92 86.18 91.80 92.71 95.91 90.92 71 71 72.06 76.25 86.16	32	47.20	50.13	53.33	55.72	58.92	62.33	65.95	69.83	72.58	75.32	78.07	80.82	83.56
56.67 59.20 62.61 66.22 70.07 74.19 77.11 80.03 82.95 85.87 60.94 64.45 68.17 72.13 76.38 79.38 85.39 88.39 60.94 64.45 68.17 72.13 76.38 79.38 85.39 88.39 60.94 64.45 68.17 72.13 76.38 79.38 85.39 88.39 66.29 70.12 74.19 78.56 81.65 84.74 87.83 90.92 72.06 76.25 80.74 83.92 87.09 90.27 93.44 72.06 76.25 80.74 83.92 87.09 90.27 93.44 78.01 78.31 82.92 86.18 89.45 91.80 95.97 79.01 78.14 78.34 91.70 96.15 97.49 97.49	33		51.69	55.00	57.46	60.76	64.27	68.01	72.01	74.84	77.68	80.51	83.34	86.17
60.94 64.45 68.17 72.13 76.38 79.38 85.39 88.39 60.29 70.12 74.19 78.56 81.65 84.74 87.83 90.92 66.29 70.12 74.19 78.56 81.65 84.74 87.83 90.92 72.06 76.25 80.74 83.92 87.09 90.27 93.44 72.06 76.26 80.74 83.92 87.09 90.27 93.44 72.06 76.26 80.74 83.92 86.18 99.45 92.71 95.97 85.10 88.45 91.80 95.15 86.45 91.80 95.97 96.49 90.75 94.15 74.15 74.15 96.71 100.00 96.49	34			56.67	59.20	62.61	66.22	70.07	74.19	77.11	80.03	82.95	85.87	88.79
66.29 70.12 74.19 78.56 84.74 87.83 90.92 72.06 76.25 80.74 83.92 87.09 90.27 93.44 72.06 76.25 80.74 83.92 87.09 90.27 93.44 72.06 78.31 82.92 80.18 89.45 92.71 95.97 78.01 85.10 88.45 91.80 95.15 95.47 85.10 88.45 91.80 95.15 96.49 97.69 90.75 90.71 96.51 100.00 90.50 90.50 90.50	35				60.94	64.45	68.17	72.13	76.38	79.38	82.38	85.39	88.39	91.40
72.06 76.25 80.74 83.92 87.09 90.27 93.44 78.31 82.92 86.18 89.45 92.71 95.97 78.31 82.92 86.18 89.45 92.71 95.97 85.10 88.45 91.80 95.15 98.49 90.72 90.72 94.15 97.59 100.00	36					66.29	70.12	74.19	78.56	81.65	84.74	87.83	90.92	94.01
78.31 82.92 86.18 89.45 92.71 95.97 85.10 88.45 91.80 95.15 98.49 90.72 94.15 97.59 100.00	37						72.06	76.25	80.74	83.92	87.09	90.27	93.44	96.62
85.10 88.45 91.80 95.15 98.49 90.72 94.15 97.59 100.00	38							78.31	82.92	86.18	89.45	92.71	95.97	99.23
90.72 94.15 97.59 96.51 100.00	39								85.10	88.45	91.80	95.15	98.49	100.00
96.51	40									90.72	94.15	97.59	100.00	
	41										96.51	100.00		

2% at 551/2 All values shown are percentages.

2% at 581/2 All values shown are percentages.

111	Years of Service	50	51	52	53	54	55	Age 56	57	58	59	09	61	62	63	64	65+
1367 14.56 15.00 16.25 17.20 16.30 17.25 25.65 20.64 20.64 20.65 20.64 20.65 20.64 20.65	10	12.42	13.14	13.91	14.75	15.66	16.67	17.41	18.41	19.48	20.61	21.82	22.68	23.54	24.40	25.25	26.11
1 1 1 1 1 1 1 2	11	13.67	14.45	15.30	16.22	17.23	18.33	19.15	20.25	21.42	22.67	24.00	24.95	25.89	26.84	27.78	28.72
1615 1706 1617 2264 2294 2532 2636 3615 3175 3269 3415 3569 3415 3569 3415 3569 3415 3569 3416 3569 3416 3569 3416 3569 3417 3569 3417 3569 3417 3569 3417 3569 3417 3569 3417 3569 3418 3669 3570 3619 3619 3614 3619 3619 3619 3619 3619 3619 3619 3616 3616 3616 3616 3616 3619 <td< th=""><th>12</th><th>14.91</th><th>15.76</th><th>16.69</th><th>17.70</th><th>18.80</th><th>20.00</th><th>20.89</th><th>22.10</th><th>23.37</th><th>24.73</th><th>26.19</th><th>27.22</th><th>28.25</th><th>29.28</th><th>30.31</th><th>31.34</th></td<>	12	14.91	15.76	16.69	17.70	18.80	20.00	20.89	22.10	23.37	24.73	26.19	27.22	28.25	29.28	30.31	31.34
1739 1837 1847 2065 2193 2333 2436 3715 2365 34.16 3533 1848 1107 2066 25.0 25.00 31.1 3503 37.19 3539 34.16 3539 34.16 3533 3539 34.17 3539 34.17 3533 3539 34.17 3539 34.17 3539 34.17 3539 34.17 3539 34.17 3539 34.17 3539 34.17 3539 34.17 34.17 3539 34.16 34.17 35.17 35.17 35.17 35.17 35.17 35.17 45.34 45.34 45.34 45.36 47.17 45.35 55.07 55.07 55.03 35.03 35.01 34.17 45.36 47.17 45.36 47.17 45.36 47.17 45.36 47.17 45.36 55.07 55.07 55.07 55.01 55.01 55.01 55.01 55.01 55.01 55.01 55.01 55.01 55.01	13	16.15	17.08	18.08	19.17	20.36	21.67	22.64	23.94	25.32	26.79	28.37	29.48	30.60	31.72	32.83	33.95
1610 1910 2006 2212 2550 2667 7762 3021 3633 3633 3633 3633 3633 3633 3633 3633 3633 3633 3633 3633 3633 3633 3633 3714 3503 3714 3503 3714 3503 3714 3503 3714 4534 4534 4534 4534 4534 4534 4534 4534 4534 4534 4534 4536 3653 3553 <td< th=""><th>14</th><th>17.39</th><th>18.39</th><th>19.47</th><th>20.65</th><th>21.93</th><th>23.33</th><th>24.38</th><th>25.78</th><th>27.27</th><th>28.85</th><th>30.55</th><th>31.75</th><th>32.95</th><th>34.16</th><th>35.36</th><th>36.56</th></td<>	14	17.39	18.39	19.47	20.65	21.93	23.33	24.38	25.78	27.27	28.85	30.55	31.75	32.95	34.16	35.36	36.56
1088 2102 2250 2506 2667 2768 2846 311 5207 3491 3463 4703	15	18.63	19.70	20.86	22.12	23.50	25.00	26.12	27.62	29.21	30.91	32.73	34.02	35.31	36.59	37.88	39.17
2112 2333 2365 2607 2663 2833 314 560 370 3856 4002 4147 4293 4564 2356 5540 2865 3803 3133 3334 3563 3509 4173 4653 4534 4565 4534 4565 4504 4536 4653 4703 4653 4703 4655 550 2466 2847 3841 4051 4235 4401 4016 4303 4517 550	16	19.88	21.02	22.26	23.60	25.06	26.67	27.86	29.46	31.16	32.97	34.91	36.29	37.66	39.03	40.41	41.78
2236 264 265 320 314 314 360 37.3 432 432 432 433 </th <th>17</th> <th>21.12</th> <th>22.33</th> <th>23.65</th> <th>25.07</th> <th>26.63</th> <th>28.33</th> <th>29.60</th> <th>31.30</th> <th>33.11</th> <th>35.03</th> <th>37.10</th> <th>38.56</th> <th>40.02</th> <th>41.47</th> <th>42.93</th> <th>44.39</th>	17	21.12	22.33	23.65	25.07	26.63	28.33	29.60	31.30	33.11	35.03	37.10	38.56	40.02	41.47	42.93	44.39
2360 247 287 3167 3167 3167 3167 3167 417 453 417 453 417 453 417 453 417 543 541 551 5	18	22.36	23.65	25.04	26.55	28.20	30.00	31.34	33.14	35.06	37.09	39.28	40.82	42.37	43.91	45.46	47.00
24.85 26.77 27.82 33.33 34.82 38.83 41.25 45.36 45.36 45.36 45.36 45.36 45.36 45.36 45.35 45.35 55.57 26.00 27.56 26.01 30.97 32.96 36.67 36.65 36.47 56.17 55.16 55.56 55.67 55.47 55.67 55.77 55.72 55.75 55.75 55.75 55.75 55.75 55.74 55.75 55.75 55.75 55.75 55.75 55.76 55.76 55.76 55.76 55.76 55.76 55.76 55.76 55.76 55.76 55.77 55.77 55.77 55.	19	23.60	24.96	26.43	28.02	29.76	31.67	33.08	34.99	37.01	39.16	41.46	43.09	44.72	46.35	47.98	49.62
2600 2750 2807 36.05 38.67 40.90 47.30 51.23 51.03 51	20	24.85	26.27	27.82	29.50	31.33	33.33	34.82	36.83	38.95	41.22	43.64	45.36	47.08	48.79	50.51	52.23
2733 2890 30.60 2.45 34.46 36.51 38.31 40.51 43.80 41.61 65.19 53.55 53.65 53	21	26.09	27.59	29.21	30.97	32.90	35.00	36.56	38.67	40.90	43.28	45.83	47.63	49.43	51.23	53.04	54.84
2857 30.21 3199 33.92 36.03 38.33 40.05 44.19 46.74 64.64 56.46 56.44 56.44 56.49 56.56 56.65 56.56 5	22	27.33	28.90	30.60	32.45	34.46	36.67	38.31	40.51	42.85	45.34	48.01	49.90	51.78	53.67	55.57	56.45
29.82 31.53 35.40 37.60 47.00 41.79 46.17 46.64 56.46 56.43 <td< th=""><th>23</th><th>28.57</th><th>30.21</th><th>31.99</th><th>33.92</th><th>36.03</th><th>38.33</th><th>40.05</th><th>42.35</th><th>44.80</th><th>47.40</th><th>50.19</th><th>52.16</th><th>54.14</th><th>56.11</th><th>58.09</th><th>60.06</th></td<>	23	28.57	30.21	31.99	33.92	36.03	38.33	40.05	42.35	44.80	47.40	50.19	52.16	54.14	56.11	58.09	60.06
31.06 32.84 34.17 36.87 36.16 41.67 43.53 45.03 45.05 45.05 56.45 56.45 56.97 56.95 <td< th=""><th>24</th><th>29.82</th><th>31.53</th><th>33.38</th><th>35.40</th><th>37.60</th><th>40.00</th><th>41.79</th><th>44.19</th><th>46.74</th><th>49.46</th><th>52.37</th><th>54.43</th><th>56.49</th><th>58.55</th><th>60.61</th><th>62.67</th></td<>	24	29.82	31.53	33.38	35.40	37.60	40.00	41.79	44.19	46.74	49.46	52.37	54.43	56.49	58.55	60.61	62.67
32.30 34.16 36.17 38.35 40.73 45.27 47.87 50.64 58.97 61.02 63.43 65.68 33.54 35.47 37.56 39.82 42.03 45.00 47.01 49.72 52.95 56.44 65.95 65.91 70.71 70.71 38.51 40.72 48.50 50.91 52.23 55.92 58.92 65.91 70.91 70.71 70.71 70.73 70.91 70.71 70.91 70.71 70.91 70.71 70.91 70.71 70.91 70.71 70.91 70.71 70.91 70.71 70.91 70.71 </th <th>25</th> <th>31.06</th> <th>32.84</th> <th>34.77</th> <th>36.87</th> <th>39.16</th> <th>41.67</th> <th>43.53</th> <th>46.03</th> <th>48.69</th> <th>51.52</th> <th>54.55</th> <th>56.70</th> <th>58.85</th> <th>60.99</th> <th>63.14</th> <th>65.28</th>	25	31.06	32.84	34.77	36.87	39.16	41.67	43.53	46.03	48.69	51.52	54.55	56.70	58.85	60.99	63.14	65.28
33.54 35.47 37.56 39.82 42.07 48.75 51.56 55.45 56.45 56.45 <td< th=""><th>26</th><th>32.30</th><th>34.16</th><th>36.17</th><th>38.35</th><th>40.73</th><th>43.33</th><th>45.27</th><th>47.87</th><th>50.64</th><th>53.58</th><th>56.74</th><th>58.97</th><th>61.20</th><th>63.43</th><th>65.66</th><th>67.89</th></td<>	26	32.30	34.16	36.17	38.35	40.73	43.33	45.27	47.87	50.64	53.58	56.74	58.97	61.20	63.43	65.66	67.89
34.76 36.76 36.96 41.30 43.86 46.67 48.75 51.56 54.53 57.70 61.10 65.56 65.91 68.31 70.71 36.03 38.10 40.34 42.77 48.33 50.49 55.46 56.46 56.46 56.76 66.77 68.26 70.61 73.19 75.79 38.51 40.72 44.51 44.51 48.56 51.69 50.33 55.23 55.93 65.96 69.33 72.68 70.31 72.99 75.63 38.51 40.70 44.51 47.50 56.16 57.33 55.73 56.93 65.93 65.93 70.91 72.91 72.93 72.93 72.93 72.93 72.93 72.93 72.93 72.93 76.93	27	33.54	35.47	37.56	39.82	42.30	45.00	47.01	49.72	52.59	55.64	58.92	61.24	63.55	65.87	68.19	70.51
36.03 38.10 40.34 42.71 45.43 68.33 50.49 53.40 56.46 68.04 70.61 73.9 75.76 37.27 39.41 41.73 44.55 46.99 50.00 52.23 55.24 58.43 61.82 65.46 68.04 70.61 73.93 75.76 38.51 40.72 43.12 45.70 50.13 53.33 55.72 58.92 62.33 65.95 69.83 72.97 75.07 80.83 39.75 42.04 44.51 47.20 50.13 53.33 55.72 58.92 62.33 65.95 69.83 72.97 76.07 80.83 39.75 42.04 44.51 77.20 56.30 57.46 66.17 74.19 77.11 80.03 80.35 43.75 56.35 56.05 57.46 66.17 74.19 77.11 80.03 80.35 43.75 56.35 56.35 56.35 56.35 66.16 69.17 7	28	34.79	36.78	38.95	41.30	43.86	46.67	48.75	51.56	54.53	57.70	61.10	63.50	65.91	68.31	70.71	73.12
37.27 39.41 41.73 44.25 46.90 50.00 55.24 56.43 61.82 65.46 66.04 70.61 73.93 75.76 38.51 40.72 43.12 45.72 48.56 51.67 53.33 55.72 58.92 65.33 65.96 69.83 72.97 75.63 78.93 39.75 42.04 44.51 47.20 50.13 53.33 55.72 58.92 62.33 65.96 69.83 72.97 78.03 78.93 39.75 42.04 44.51 47.20 50.13 53.33 55.72 58.92 62.93 65.96 69.83 72.95 78.07 80.33 1 43.35 45.90 48.67 51.69 50.00 57.46 60.76 74.19 77.11 80.23 85.39 89.34 1 43.24 60.16 62.26 68.17 72.13 77.14 87.38 89.39 89.34 1 41.1 74.19 77.11	29	36.03	38.10	40.34	42.77	45.43	48.33	50.49	53.40	56.48	59.76	63.28	65.77	68.26	70.75	73.24	75.73
38.51 40.72 43.12 45.72 48.66 51.05 53.38 57.08 60.38 67.65 70.31 75.63 75.63 78.29 39.75 42.04 44.51 47.20 50.13 53.33 55.72 58.92 62.33 65.95 69.83 75.68 76.07 76.63 78.07 43.35 45.90 88.67 51.69 55.00 57.46 60.76 64.27 68.01 72.01 74.84 77.68 80.51 83.34 1 43.35 51.62 53.26 56.66 53.26 65.07 74.19 77.11 80.03 82.36 83.34 1 51.62 53.26 56.07 62.44 68.17 72.13 74.36 87.19 87.33 80.31 83.34 1 51.62 54.83 66.16 64.27 74.19 77.38 87.36 87.36 87.39 87.39 87.39 87.39 87.39 87.39 87.39 87.39 87.39 <th>30</th> <th>37.27</th> <th>39.41</th> <th>41.73</th> <th>44.25</th> <th>46.99</th> <th>50.00</th> <th>52.23</th> <th>55.24</th> <th>58.43</th> <th>61.82</th> <th>65.46</th> <th>68.04</th> <th>70.61</th> <th>73.19</th> <th>75.76</th> <th>78.34</th>	30	37.27	39.41	41.73	44.25	46.99	50.00	52.23	55.24	58.43	61.82	65.46	68.04	70.61	73.19	75.76	78.34
39.75 42.04 44.51 77.20 50.33 55.72 58.92 62.33 65.95 69.83 75.32 78.07 80.62 43.35 45.90 86.7 50.05 57.46 60.76 64.27 68.01 72.01 74.36 80.51 83.34 47.30 80.51 53.26 56.67 59.20 62.61 66.22 70.07 74.19 77.68 80.51 83.34 51.62 53.16 56.67 59.20 62.61 66.22 70.13 76.38 85.39 80.53 88.39 1 1 1 72.13 66.16 64.45 68.11 72.13 76.38 85.39 89.39 89.39 1 1 1 72.13 76.34 64.45 68.11 72.13 87.38 87.39 89.34 89.34 89.34 89.34 89.34 1 1 1 1 1 1 1 80.35 88.39 99.34	31	38.51	40.72	43.12	45.72	48.56	51.67	53.98	57.08	60.38	63.89	67.65	70.31	72.97	75.63	78.29	80.95
43.35 45.90 48.67 51.00 57.46 60.76 64.27 68.01 72.19 77.16 80.51 83.34 47.29 50.15 53.26 56.67 59.20 62.61 66.22 70.07 74.19 77.11 80.03 82.35 85.31 51.62 54.83 58.33 60.94 64.45 68.17 72.13 76.38 82.38 85.39 88.39 61.67 54.83 58.33 60.94 64.45 68.17 72.13 76.38 87.39 87.39 88.39 61.67 54.83 50.36 67.10 74.10 77.13 87.49 87.39 87.39 87.39 87.39 87.39 87.39 87.39 87.39 87.39 87.34 87.39	32	39.75	42.04	44.51	47.20	50.13	53.33	55.72	58.92	62.33	65.95	69.83	72.58	75.32	78.07	80.82	83.56
47.29 50.15 53.26 56.61 59.20 62.61 66.22 70.07 74.19 77.11 80.03 82.95 85.83 51.62 54.83 58.33 60.94 64.45 68.17 71.3 76.38 79.38 85.39 85.39 85.39 51.62 54.83 58.33 60.94 64.45 68.17 71.3 76.38 87.09 87.39 85.39 85.39 56.39 60.00 62.68 66.29 70.12 74.19 78.56 81.65 81.73 90.92 90.42 61.67 63.33 66.16 69.97 74.01 78.31 82.92 87.09 90.27 93.44 7 51.6 67.91 71.81 75.96 81.43 83.45 91.80 91.90 91.67 65.00 65.10 67.91 71.81 75.91 82.43 89.45 91.40 91.90 91.91 65.01 65.01 71.81 75.91 82.43	33		43.35	45.90	48.67	51.69	55.00	57.46	60.76	64.27	68.01	72.01	74.84	77.68	80.51	83.34	86.17
51.62 54.83 58.33 60.94 64.45 68.17 72.13 76.38 79.38 85.39 86.39 86.39 56.39 60.00 62.68 66.29 70.12 74.19 78.56 84.74 87.33 90.92 61.67 61.67 64.42 68.13 72.06 76.25 80.74 87.99 97.27 93.44 61.67 64.42 68.13 72.06 76.25 80.74 83.95 97.92 93.44 61.67 61.67 67.91 74.01 78.31 82.43 87.29 97.55 93.44 65.00 67.91 71.81 75.96 77.91 78.31 87.29 97.55 94.49 65.01 65.05 77.91 77.91 87.43 97.55 97.49 97.59 97.59 97.59 97.59 97.59 97.59 97.59 97.59 97.59 97.59 97.59 97.59 97.50 97.55 97.50 97.50 97.55	34			47.29	50.15	53.26	56.67	59.20	62.61	66.22	70.07	74.19	77.11	80.03	82.95	85.87	88.79
56.39 60.00 62.68 66.29 70.12 74.19 78.56 84.74 87.83 90.92 61.67 64.42 68.13 72.06 76.25 80.74 83.92 87.09 90.27 93.44 61.67 64.42 68.13 72.06 76.25 80.74 83.92 87.09 90.27 93.44 63.33 66.16 69.97 74.01 78.31 82.92 86.18 90.72 91.79 95.97 95.97 65.00 67.91 71.81 75.96 80.37 85.10 86.45 91.69 97.59 90.70 69.65 73.65 77.91 82.49 89.47 90.72 94.15 97.59 100.00 75.49 79.65 77.91 82.49 89.47 92.71 97.59 97.59 97.59 97.59 97.59 97.59 97.59 97.59 97.59 97.59 97.59 97.59 97.59 97.59 97.59 97.59 97.56 97.56 97.56 97.56 97.56 97.56 97.56 97.56 97.56	35				51.62	54.83	58.33	60.94	64.45	68.17	72.13	76.38	79.38	82.38	85.39	88.39	91.40
61.67 64.42 68.13 72.06 76.25 80.74 83.92 87.09 90.27 93.44 63.33 66.16 69.97 74.01 78.31 82.92 86.18 92.71 95.97 63.33 66.16 69.97 74.01 78.31 82.92 86.18 92.71 95.97 65.00 67.91 71.81 75.96 80.37 85.10 88.45 91.80 95.15 98.49 65.01 67.91 71.81 75.96 80.37 87.29 91.61 97.90 97.91 69.65 73.65 77.91 89.43 87.49 99.47 92.99 97.50 100.00 70.10 80.17 81.80 86.55 91.65 91.65 91.65 100.00 71 75.49 79.85 91.65 91.65 91.65 91.65 100.00 80 80.17 80.27 91.65 91.65 91.65 91.65 91.65 91.65 91.65 91.65 91.65 91.65 91.65 91.65 91.65 91.65 <	36					56.39	60.00	62.68	66.29	70.12	74.19	78.56	81.65	84.74	87.83	90.92	94.01
63.33 66.16 69.97 74.01 78.31 82.42 89.45 92.71 95.97 65.00 67.91 71.81 75.96 80.37 85.10 88.45 91.80 95.15 98.49 65.00 67.91 71.81 75.96 80.37 85.10 88.45 91.80 95.15 98.49 69.65 73.65 77.91 82.43 87.29 90.72 94.15 97.59 100.00 75.49 79.85 84.49 89.47 92.99 96.51 100.00 96.51 100.00 76.49 79.85 84.49 89.45 97.52 98.86 97.52 100.00 76.49 76.49 78.65 97.52 97.52 100.00 97.51 100.00 76.40 76.41 86.55 97.52 97.52 97.52 100.00 100.00 76.41 76.41 76.42 97.83 97.52 97.52 100.00 100.00	37						61.67	64.42	68.13	72.06	76.25	80.74	83.92	87.09	90.27	93.44	96.62
65.00 67.91 71.81 75.96 80.37 85.10 88.45 91.80 95.15 98.49 80.75 73.65 73.65 77.91 82.43 87.29 90.72 94.15 97.59 100.00 75.49 79.65 79.65 81.49 89.47 92.99 96.51 100.00 75.49 79.85 84.49 89.47 97.52 98.86 97.52 100.00 76.00 88.65 91.65 97.52 100.00 97.52 100.00 97.52 97.52 97.52 100.00 76.00 88.65 91.65 97.52 97.52 97.52 97.52 100.00 97.52 97.52 100.00 97.52 100.00 97.52 100.00 97.52 97.55 100.00 97.52 100.00 97.52 100.00 97.55 100.00 97.55 100.00 97.55 100.00 97.55 100.00 97.55 100.00 97.55 100.00 97.55 100.00 97.55 100.00 100.00 97.55 100.00 100.00 100.00 100.0	38						63.33	66.16	69.97	74.01	78.31	82.92	86.18	89.45	92.71	95.97	99.23
69.65 73.65 77.91 82.43 87.29 90.72 94.15 97.59 75.49 79.85 84.49 89.47 92.99 96.51 100.00 76 79.85 84.49 89.47 92.99 96.51 100.00 76 79.85 84.65 91.65 95.26 98.86 98.86 76 79.85 86.55 91.65 95.26 98.86 98.86 76 79.75 88.62 93.83 97.52 100.00 97.95 76 79.75 71.71 96.02 99.79 100.00 100.00 77 79.71 71.71 71.71 100.00 100.00 100.00	39						65.00	67.91	71.81	75.96	80.37	85.10	88.45	91.80	95.15	98.49	100.00
75.49 79.85 84.49 89.47 92.99 96.51 81.60 81.80 86.55 91.65 95.26 98.86 81.60 81.80 86.55 91.65 95.26 98.86 81.60 81.61 81.62 93.83 97.52 100.00 81.61 81.62 93.83 97.52 90.00 97.52 100.00 81.61 81.62 81.62 93.83 97.52 100.00 97.55 100.00	40							69.65	73.65	77.91	82.43	87.29	90.72	94.15	97.59	100.00	
81.80 86.55 91.65 95.26 81.80 86.55 91.65 95.26 81.80 88.62 93.83 97.52 81.80 89.62 93.83 97.52 81.80 89.62 93.83 97.52 81.80 89.62 93.83 97.52 81.80 91.65 96.02 99.79 91.90 91.91 91.91 91.91	41								75.49	79.85	84.49	89.47	92.99	96.51	100.00		
88.62 93.83 97.52 96.02 99.79 100.00	42									81.80	86.55	91.65	95.26	98.86			
96.02	43										88.62	93.83	97.52	100.00			
	44											96.02	99.79				
	45												100.00				

Notes

 ······································



Classic Member Handbook

Marin County Employees' Retirement Association One McInnis Parkway, Suite 100 San Rafael, CA 94903-2764

(415) 473-6147 Main (415) 473-3612 Fax

www.mcera.org