Guide to Retirement℠

2016 Edition
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Retirement landscape

Retirement is different now than it was in past generations. These days, individuals have varying expectations for how they wish to spend their retirement years. Many planning factors are interconnected, which require careful consideration when developing a retirement strategy.

COMMON MISCONCEPTIONS

“I’ll continue to work during retirement.”
- 67% of employed Americans plan to work beyond age 65—but only 23% of current retirees actually did.
- A number of factors can cause people to retire earlier than expected, including health problems, employer issues and family obligations. Page 8

“I need to claim my Social Security benefits as soon as I can.”
- Claiming Social Security before full retirement age can significantly reduce your benefits. Page 9
- Increasing life expectancies may make it beneficial to delay benefits. Page 10

“My spending patterns won’t change much when I retire.”
- The inflation rate is higher for retirement-age Americans who spend disproportionately more on items that rise fastest in price, such as health care. Pages 11 and 12
The retirement equation

A Sound Retirement Plan
Make the most of the things that you can control but be sure to evaluate factors that are somewhat or completely out of your control.

Life expectancy probabilities

If you’re 65 today, the probability of living to a specific age or beyond

Average life expectancy at age 65

<table>
<thead>
<tr>
<th>Year</th>
<th>Women</th>
<th>Men</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>84.1</td>
<td>80.1</td>
<td>4.0</td>
</tr>
<tr>
<td>2010</td>
<td>85.2</td>
<td>82.6</td>
<td>2.6</td>
</tr>
<tr>
<td>2090</td>
<td>89.6</td>
<td>87.7</td>
<td>1.9</td>
</tr>
</tbody>
</table>

Average life expectancy continues to increase and is a mid-point not an end-point. Plan on the probability of living much longer—perhaps 30 plus years in retirement—and invest a portion of your portfolio for growth to maintain your purchasing power over time.

Chart: Social Security Administration, Period Life Table, 2011 (published in 2015), J.P. Morgan Asset Management.
Table: Social Security Administration 2015 OASDI Trustees Report.
Older Americans in the workforce

More people are working later in life, motivated by the desire to do so.

### Percent of people in the civilian labor force 1994-2024

<table>
<thead>
<tr>
<th>Year</th>
<th>65-69</th>
<th>70-74</th>
<th>75-79</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>22%</td>
<td>12%</td>
<td>7%</td>
</tr>
<tr>
<td>2004</td>
<td>28%</td>
<td>15%</td>
<td>9%</td>
</tr>
<tr>
<td>2014</td>
<td>32%</td>
<td>19%</td>
<td>11%</td>
</tr>
<tr>
<td>2024</td>
<td>36%</td>
<td>23%</td>
<td>14%</td>
</tr>
</tbody>
</table>

Total civilian population 65+ (1994-2024):
- 1994: 31M
- 2004: 35M
- 2014: 45M
- 2024: 62M

### Major reasons why people work in retirement

- **Needs**
  - Buy extras: 26%
  - Make ends meet: 25%
  - Keep insurance or benefits: 23%
  - Decreased value of savings or investments: 21%

- **Wants**
  - Stay active and involved: 56%
  - Enjoy working: 54%
  - Job opportunity: 24%
  - Try new career: 8%


Managing expectations of ability to work

Expectations of workers vs. retirees: Retire at age 65 or older

- Current workers' expectations: 67%
- Experience of actual retirees: 23%

Median Retirement Age
65 = Workers (expected)
62 = Retirees (actual)

Reasons cited for retiring earlier than planned

- Health problems or disability: 60%
- Changes at company (downsizing/closing): 27%
- Other work-related reason: 22%
- Care for spouse or family member: 22%
- Outdated skills: 10%
- Able to afford early retirement: 31%
- Want to do something else: 17%


EARLY RETIREMENT

You may not have complete control over when you retire, so be sure to have a back-up plan. You may have to draw income earlier and make your portfolio last longer than you anticipate.
Social Security timing tradeoffs

For illustrative purposes only. For those born between 1943 and 1954, there is a 7.3% compound growth rate for each year of waiting to take benefits. For those born in or after 1960, that compound growth rate is 7.4%.

Source: Social Security Administration, J.P. Morgan Asset Management.

UNDERSTAND THE TRADEOFFS

Deciding when to claim benefits will have a permanent impact on the benefit you receive. Claiming before full retirement age can significantly reduce your benefit while delaying increases it.

7.3% compound growth rate for each year of waiting to take benefits
-6.25% average per year
+8% per year
100% benefit
132%
70% benefit
2.68% Average cost of living adjustment (1985-2016)
No cost of living adjustment for 2016 benefits

For 1955-1960, two months are added to the Full Retirement Age each year.
1955: 66 + 2 months
1956: 66 + 4 months
1957: 66 + 6 months
1958: 66 + 8 months
1959: 66 + 10 months

J.P.Morgan
Asset Management
Maximizing Social Security benefits

PLANNING OPPORTUNITY

Delaying benefits means increased Social Security income later in life, but your portfolio may need to bridge the gap and provide income until delayed benefits are received.

Cumulative benefit by claim age

- **Breakeven age**

Claim at 70: $4,574 per month

Claim at 66: $3,115 per month

Claim at 62: $2,092 per month

Source: Social Security Administration, J.P. Morgan.

Assumes maximum benefits are received for individuals born in 1954 and turning 62 and 1 month, 66 and 70 and assumes the benefit will increase each year based on the Social Security Administration 2015 Trustee's Report “intermediate” estimates (starting with a benefit increase of 3.1% in 2017 and 2.7% thereafter). Monthly amounts without the cost of living adjustments (not shown on the chart) are: $2,092 at age 62; $2,788 at age 66; and $3,680 at age 70. Breakeven age for choosing between claiming at 62 and 70 is age 78. Life expectancy per Social Security Administration and J.P. Morgan analysis.
Older individuals experience higher inflation

Comparison of inflation 1985-2015
1985 = 100

CPI-E is 5.5% over Headline CPI and 7.3% over CPI-W after 30 years

EROSION OF PURCHASING POWER

Older Americans experience a higher degree of inflation than both urban consumers (Headline CPI) and the inflation measure used to adjust Social Security benefits (CPI-W). Your investment strategy will need sufficient growth to outpace this higher inflation particularly as Social Security covers less over time.

Weighting and inflation by spending category (%)

<table>
<thead>
<tr>
<th></th>
<th>Health care</th>
<th>Housing</th>
<th>Food &amp; bev.</th>
<th>Transport.</th>
<th>Entertain.</th>
<th>Apparel</th>
<th>Edu.</th>
<th>Other</th>
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</thead>
<tbody>
<tr>
<td>Headline CPI</td>
<td>6.9</td>
<td>40.2</td>
<td>15.0</td>
<td>16.5</td>
<td>5.9</td>
<td>3.5</td>
<td>6.7</td>
<td>5.3</td>
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<tr>
<td>CPI-W</td>
<td>5.6</td>
<td>39.2</td>
<td>15.7</td>
<td>18.7</td>
<td>5.5</td>
<td>3.6</td>
<td>6.7</td>
<td>5.1</td>
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<tr>
<td>CPI-E</td>
<td>11.3</td>
<td>44.5</td>
<td>12.8</td>
<td>14.5</td>
<td>5.3</td>
<td>2.4</td>
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<td>Inflation</td>
<td>5.0</td>
<td>2.8</td>
<td>2.9</td>
<td>2.1</td>
<td>1.1</td>
<td>0.7</td>
<td>5.2</td>
<td>4.8</td>
</tr>
</tbody>
</table>

*CPI-E is an experimental index from BLS that is based on elderly households with the referenced individuals at age 62 and older. Headline CPI is also referred to as CPI-U, including food and energy.

Table: Weightings: BLS, as of December, 2011. Inflation: BLS, Consumer Price Index, J.P. Morgan Asset Management. Data represents annual percentage increase from December 1981 through December 2015 with the exception of entertainment and education, which date back to 1993. The inflation rate for the Other category is derived from personal care products and tobacco. Tobacco has experienced more than 7% inflation since 1986 but each age group only spends 0.5%-0.8% on tobacco (27%-37% of combined personal care products and tobacco), which is a lower proportion than represented in the Other inflation rate.
**Spending by age and category**

- **Health care**
  - 55-64 years of age: 10%
  - 65+ years of age: 14%

- **Education**
  - 55-64 years of age: 2%
  - 65+ years of age: 1%

- **Other**
  - 55-64 years of age: 4%
  - 65+ years of age: 4%

- **Food and beverage**
  - 55-64 years of age: 13%
  - 65+ years of age: 13%

- **Housing**
  - **Housing-Mortgage**
    - 55-64 years of age: 28%
    - 65+ years of age: 30%
  - **Housing-Nov-Mortgage**
    - 55-64 years of age: 11%
    - 65+ years of age: 7%

- **Transportation**
  - 55-64 years of age: 17%
  - 65+ years of age: 15%

- **Entertainment**
  - 55-64 years of age: 5%
  - 65+ years of age: 5%

- **Apparel**
  - 55-64 years of age: 3%
  - 65+ years of age: 3%

- **Charitable contributions and gifts**
  - 55-64 years of age: 6%
  - 65+ years of age: 6%

- **Travel**
  - 55-64 years of age: 4%
  - 65+ years of age: 3%

**Average inflation by spending category 1982-2015**

- **Health care**: 5.0%
- **Education**: 5.2%
- **Other**: 4.8%
- **Food and beverage**: 2.9%
- **Housing**: 2.8%
- **Transportation**: 2.1%
- **Entertainment**: 1.1%
- **Apparel**: 0.7%

**LOSING GROUND**

Inflation disproportionately affects older Americans due to differences in spending habits and price increases in those categories.

*There are no individual inflation measures for these specific subcategories.

Source (top chart): BLS, 2014 Consumer Expenditure Survey. Charitable contributions include gifts to religious, educational and political organizations, and other cash gifts. Spending percentages may not equal 100% due to rounding.

Source (bottom chart): BLS, Consumer Price Index, J.P. Morgan Asset Management. Data represent annual percentage increase from December 1981 through December 2015 with the exception of entertainment and education, which date back to 1993. The inflation rate for the Other category is derived from personal care products and tobacco. Tobacco has experienced more than 7% inflation since 1986 but each age group only spends 0.5% - 0.8% on tobacco (27%-37% of combined personal care products and tobacco), which is a lower proportion than represented in the Other inflation rate.
**Top marginal federal income tax rate**

Historical view of top income tax rate vs. top effective tax rate

**IMPORTANCE OF INCOME TAX PLANNING**

The top marginal bracket of 39.6%, when combined with the 3.8% Medicare surcharge tax, puts high earners at a 43.4% rate for each additional dollar of unearned (non-wage) income, which is below the long-term historical average. High earners pay on average almost 26 cents of every dollar of income to federal income taxes.

Source: IRS, The Tax Foundation, J.P. Morgan Asset Management. Data as of January 31, 2016. Average top effective tax rate based on highest household income quartile, 1979-2011, CBO Publication 49440. The presenter of this slide is not a tax or legal advisor. Clients should consult a personal tax or legal advisor prior to making any tax- or legal-related investment decisions.
Saving

The single most important decision individuals can make about retirement is to take responsibility for funding it themselves. Living expenses, health care costs, Social Security, pensions and future employment are all uncertain. But saving today is one way to prepare for a more stable tomorrow.

COMMON MISCONCEPTIONS

“I’ve already started saving a little—I should be okay.”

• In 2015, only 48% of workers (and/or spouses) had tried to calculate how much money they would actually need to save for a comfortable retirement.*
• Use the retirement savings checkpoint chart to see if you are on track to reach your goals. Page 15

“Retirement is so far away—I have plenty of time to think about it.”

• The sooner you begin, the more time you have to maximize the power of compounding. Page 16
• Start saving early and regularly. Early withdrawals, loans and missed contributions can result in lower savings, less compounding and fewer assets at retirement. Page 18

This chart is for illustrative purposes only and must not be relied upon to make investment decisions. J.P. Morgan's model is based on J.P. Morgan Asset Management's (JPMAM) proprietary long-term capital market assumptions (10-15 years). Household income replacement rates are derived from an inflation-adjusted analysis of: Consumer Expenditure Survey (BLS) data (2011-2014); Social Security benefits using modified scaled earnings in 2016 for a single wage earner at age 65 and a spousal benefit at age 62 reduced by Medicare Part B premiums; and 2016 OASDI and FICA taxes. Households earning $30,000 will need to replace at least 16% of their pre-retirement income; $50,000 23%; $75,000 34%; $100,000 38%; $150,000 45%; $200,000 51%; $250,000 55%; $300,000 57%. The income replacement needs may be lower for households in which both spouses are working and the second spouse's individual benefits are greater than their spousal benefit. Single household income replacement needs may vary as spending is typically less than a two-spouse household; however, the loss of the Social Security spousal benefit may offset the spending reduction. Consult with a Financial Advisor for a more personalized assessment. Allocations, assumptions and expected returns are not meant to represent JPMAM performance. Given the complex risk/reward tradeoffs involved, we advise clients to rely on judgment as well as quantitative optimization approaches in setting strategic allocations. References to future returns for either asset allocation strategies or asset classes are not promises or even estimates of actual returns a client portfolio may achieve.

<table>
<thead>
<tr>
<th>Current Age</th>
<th>$30,000</th>
<th>$50,000</th>
<th>$75,000</th>
<th>$100,000</th>
<th>$150,000</th>
<th>$200,000</th>
<th>$250,000</th>
<th>$300,000</th>
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<tr>
<td>30</td>
<td>-</td>
<td>0.4</td>
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<td>1.8</td>
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<td>35</td>
<td>0.3</td>
<td>0.8</td>
<td>1.6</td>
<td>1.9</td>
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<td>3.2</td>
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<td>40</td>
<td>0.6</td>
<td>1.2</td>
<td>2.2</td>
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<td>45</td>
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<td>50</td>
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<td>12.7</td>
<td>13.7</td>
<td>14.2</td>
</tr>
</tbody>
</table>

How to use:

• Go to the intersection of your current age and your closest household income.

• Multiply your household income by the checkpoint shown to get the total amount your household should have invested today, assuming you continue to save 5% going forward.

• Example: For a 40-year-old with a household income of $100,000: $100,000 x 2.6 = $260,000.
Quincy invests from ages 25 to 35 earning 6.5% ($100,000 total)

Lyla invests from ages 35 to 65 earning 6.5% ($300,000 total)

Chloe invests from ages 25 to 65 earning 6.5% ($400,000 total)

Noah saves from ages 25 to 65 in cash earning 2.25% ($400,000 total)

The above example is for illustrative purposes only and not indicative of any investment. Account value in this example assumes a 6.5% annual return and cash assumes a 2.25% annual return. Source: J.P. Morgan Asset Management, Long-Term Capital Market Assumptions. Compounding refers to the process of earning return on principal plus the return that was earned earlier.
**Personal savings rate**

Annual, % of disposable income

*Recommended savings rates are based on J.P. Morgan analysis of median and affluent households.

Source: J.P. Morgan Asset Management, the Bureau of Economic Analysis, the National Bureau of Economic Research. Personal savings rate is calculated as personal savings (after-tax income minus personal outlays) divided by after-tax income. Employer and employee contributions to retirement funds are included in after-tax income but not in personal outlays, and thus are implicitly included in personal savings. Savings rate data as of December 31, 2015.

**BEWARE THE WEALTH EFFECT**

During economic expansions when the value of stocks and homes increase, Americans tend to save less than during recessions. On average, Americans are saving well below the 10-15% consistent annual savings rate required to successfully fund retirement.*
The toxic effect of loans and withdrawals

Avoid Temptation
A 401(k) is for long-term retirement savings, not an emergency reserve fund. Investing with a steady contribution rate over time can maximize your account value. Taking loans and early withdrawals can drastically impact your total savings.

Growth of a 401(k) investment

Assumed 401(k) contributions

Source: J.P. Morgan Asset Management. For illustrative purposes only. Hypothetical portfolio is assumed to be invested 60% in the S&P 500 and 40% in the Barclays Capital U.S. Aggregate Index from 1975 to 2015. Starting salary of $30,000 increasing by 2.25% each year.
Evaluate a Roth

For illustrative purposes only. Hypothetical contribution to 401(k) accounts is assumed as an illustrative example. 401(k) pre-tax contributions: $10,000 is contributed and is taxed upon withdrawal. Roth 401(k): $10,000 is taxed at 25% resulting in a $7,500 annual contribution amount. This ensures a direct comparison of current and future income tax rates between the two account types. The assumed annual rate of return is 6.5% during accumulation and 5.0% in retirement. During retirement, the person withdraws $120,000 after tax ($120,000 for Roth in all scenarios, $141,176 in the 10% decrease scenario, $184,615 in the 10% increase scenario and $160,000 in the same tax rate scenario for the pre-tax 401(k) account) each year until the account is depleted. The breakeven point in the 10% rate increase scenario will change depending on the specific circumstances of the individual and tax rates.

Source: J.P. Morgan Asset Management. The presenter of this slide is not a tax or legal advisor. Clients should consult a personal tax or legal advisor prior to making any tax- or legal-related investment decisions.
The power of tax-deferred compounding

Taxable vs. tax-deferred investing over a 30-year timeframe

Source: J.P. Morgan Asset Management. Assumes $5,500 after-tax contributions at the beginning of each year for 30 years and 6.5% annual investment return that is assumed to be subject to ordinary income taxes (capital gains and qualified dividends are not considered in this analysis). Tax-deferred account balance is taken as lump sum and taxed at the 15%, 25% and 33% federal tax rate, respectively, at time of withdrawal. Taxable account contributions are after tax and assume a 33% federal tax rate during accumulation. This hypothetical illustration is not indicative of any specific investment and does not reflect the impact of fees or expenses. This chart is shown for illustrative purposes only. Past performance is no guarantee of future results.
Spending

Determining income needs during retirement is a complex equation. During working years, the goal was to save and accumulate as much as possible for the future. Now the challenge becomes managing a portfolio by withdrawing some money for today’s expenses and investing the rest for tomorrow.

COMMON MISCONCEPTIONS

“I’ve already hit my savings target. I should be fine in retirement with the lower cost of living.”
• Spending may not decrease at all in the first few years of retirement. Some expenses tend to decline with age—while others remain steady or increase. Page 23

“As long as I withdraw a steady amount, I will be okay.”
• Withdrawing assets in volatile markets early in retirement can ravage a portfolio. Adjust your plan and strategy regularly. Page 22
• There is potential danger in investing too conservatively or withdrawing too aggressively. Either may increase the risk of tapping into principal and running out of money. Page 24
**Dollar cost ravaging—timing risk of withdrawals**

**Growth of investment 1966-1995**

- 40/60 portfolio: Actual average annual return: 9.1%
- Assumed annual rate of return: 8%

Assumptions: Enter retirement at age 60 with $1,000,000. Start with a 5.4% withdrawal of $54,000. Increase dollar amount of withdrawal by overall rate of inflation (3%) each year, which is lower than the average inflation rate of the period between 1966-1995.

**Rate of return: actual vs. average 1966-1995**

- 40/60 portfolio: Actual average annual return: 9.1%
- Assumed annual rate of return: 8%

Source: J.P. Morgan Asset Management. Returns are based on a hypothetical portfolio, which is assumed to be invested 40% in the S&P 500 Total Return Index and 60% in the Barclays Capital U.S. Aggregate Index. The assumptions are presented for illustrative purposes only. They must not be used, or relied upon, to make investment decisions. There is no direct correlation between a hypothetical investment and the anticipated future return of an index. Past performance does not guarantee future results.
Changes in spending

Source: J.P. Morgan Asset Management. Estimates based on average consumer expenditure from the 2014 Consumer Expenditure Survey (BLS) for each age group excluding pension contributions. Average household size for age 45-54 is 2.8; age 55-64 is 2.2; age 65-74 is 1.9 and age 75+ is 1.6.

WHAT TO EXPECT

Household spending peaks at the age of 45, after which spending declines in all categories but health care and charitable contributions and gifts. Housing is the largest expense, even at older ages.
Effects of withdrawal rates and portfolio allocations

Years of sustainable withdrawals for a portfolio for typical markets (50th percentile)

Projected outcomes for 40/60 portfolio at various initial withdrawal rates

Projected outcomes for various portfolios at 4% initial withdrawal rate

ONE SIZE DOES NOT FIT ALL

Higher initial withdrawal rates or overly conservative portfolios can put your retirement at risk. However, setting your spending at retirement too low and not adjusting along the way may require unnecessary lifestyle sacrifices in retirement. Consider a dynamic approach that adjusts over time to more effectively use your retirement savings.

Spending

Projected outcomes for 40/60 portfolio at various initial withdrawal rates

Projected outcomes for various portfolios at 4% initial withdrawal rate

50th percentile means that 50% of the time you’ll have better outcomes. Based on the high percentage of outcomes that tend to be clustered near the median, this may be considered the most likely potential outcome.

These charts are for illustrative purposes only and must not be used, or relied upon, to make investment decisions. Portfolios are described using equity/bond denotation (e.g. a 40/60 portfolio is 40% equities and 60% bonds). Hypothetical portfolios are composed of US Large Cap for equity, Global Aggregate Hedged for fixed income and US Cash for cash, with compound returns projected to be 7.00%, 3.25% and 2.25%, respectively. J.P. Morgan’s model is based on J.P. Morgan Asset Management’s (JPMAM) proprietary Long-Term Capital Markets Assumptions (10–15 years). The resulting projections include only the benchmark return associated with the portfolio and does not include alpha from the underlying product strategies within each asset class. The yearly withdrawal amount is set as a fixed percentage of the initial amount of $1,000,000 and is then inflation adjusted over the period. Allocations, assumptions and expected returns are not meant to represent JPMAM performance. Given the complex risk/reward tradeoffs involved, we advise clients to rely on judgment as well as quantitative optimization approaches in setting strategic allocations. References to future returns for either asset allocation strategies or asset classes are not promises or even estimates of actual returns a client portfolio may achieve.
Rising annual health care costs in retirement (traditional Medicare)

Estimated median health care costs per person

- Uncertainties (health care inflation variability, Medicare solvency issues)
- Vision, dental & hearing
- Medigap Plan F (covers Parts A and B co-pays and deductibles)
- Part D premiums and prescription out-of-pocket costs (varies: may be up to approximately $4,000 in 2016)
- Part B (doctors, tests & outpatient hospital insurance)

A GROWING CONCERN

Given the variability of health care costs, it may be prudent to assume an inflation rate of 7.0%, which means that you may need growth as well as current income from your portfolio in retirement.

2016 additional premium per person for Modified Adjusted Gross Incomes (MAGI) of:

<table>
<thead>
<tr>
<th>FILING SINGLE</th>
<th>MARRIED FILING JOINTLY</th>
<th>ADDITIONAL PREMIUM</th>
<th>TOTAL MEDIAN COSTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; $85,000 - $107,000</td>
<td>&gt; $170,000 - $214,000</td>
<td>$737</td>
<td>$5,397</td>
</tr>
<tr>
<td>&gt; 107,000 - $160,000</td>
<td>&gt; $214,000 - $320,000</td>
<td>$1,855</td>
<td>$6,515</td>
</tr>
<tr>
<td>&gt; $160,000 - $214,000</td>
<td>&gt; $320,000 - $428,000</td>
<td>$2,972</td>
<td>$7,632</td>
</tr>
<tr>
<td>&gt; $214,000</td>
<td>&gt; $428,000</td>
<td>$4,091</td>
<td>$8,751</td>
</tr>
</tbody>
</table>

Notes: In most states, older individuals have higher Medigap premiums. Exceptions: AR, CT, MA, ME, MN, NY, VT and WA have the same Medigap premiums for all ages. Most Medigap policies in AZ, FL, ID and MO will have the same premium for all those who first purchased Medigap at the same age of first purchase. Analysis includes Medigap Plan F (the most comprehensive plan). Parts B and D premiums are calculated from federal tax returns 2 years prior; individuals may file for an exception if they reduce or stop work. Age 85 estimated total median cost in 2016 is $7,490 (includes more prescription expense and higher Medigap premiums based on age). Modified Adjusted Gross Income (MAGI) is calculated by taking Adjusted Gross Income (AGI) and adding back certain deductions such as foreign earned income, tax-exempt interest, taxable IRA contributions and Social Security payments.

Source: Employee Benefit Research Institute (EBRI) data as of December 31, 2015; SelectQuote data as of December 31, 2015; J.P. Morgan analysis.
Variation in Medicare Advantage costs

Spending

Total costs = annual premium + out-of-pocket costs for those with relatively low costs (those in the lowest third of the cost distribution), median costs and high costs (those in the highest third of the cost distribution).

Since plans are sold by private companies, premiums will vary based on geography and plan characteristics. Out-of-pocket expenses include co-pays and deductibles for Medicare Parts A & B, plus out-of-pocket prescription drug costs. By law, 2016 out-of-pocket costs may not exceed $6,700, but that does not include prescriptions. Those with high incomes pay higher premiums (above $85,000 single or $170,000 filing jointly). Age 85 estimated median cost in 2016 is $3,920. Cost estimates at age 85 in 2036 are adjusted for inflation and increased use of medical care at older ages.

Employee Benefit Research Institute (EBRI) data as of December 31, 2015; SelectQuote data as of December 31, 2015; J.P. Morgan analysis.
**Likelihood of needing long-term care (LTC)**

- **Married age 65:** 73%
- **All individuals age 75:** 72%
- **35%**
- **55%**
- **73%**
- **72%**
- **30%**
- **40%**
- **50%**
- **60%**
- **70%**
- **80%**

**2012 new LTC claims by type**
- **Home care:** 30.5%
- **Assisted living:** 18.5%
- **Nursing home:** 51.0%
- **Average age of first claim:** 79

**All LTC claims by type**
- **Home care:** 58.0%
- **Assisted living:** 25.0%
- **Nursing home:** 17.0%
- **Men**
- **Women**

---

**LONG-TERM VISION**

Many individuals will need long-term care, which often starts with home care and progresses to a nursing home.

- There is a 1 in 3 chance that a long-term care need will last less than 6 months, but there is a 1 in 10 chance it will last 5 or more years.

Annual cost of nursing home care (private room)

THE COST OF CARE

Many people realize nursing home care is expensive, but there is significant cost variation depending on where care is utilized.

Source: New York Life Insurance 2014 Cost of Care Survey developed in partnership with Univita. Average daily costs annualized over 365 days and weighted by city population for each state.
Investing

Invest for long-term growth potential and consider investing in a broader mix of assets. Financial risks don’t end when careers do. Individuals planning for a long, rewarding retirement must anticipate and overcome the obstacles that are likely to arise along the way.

COMMON MISCONCEPTIONS

“The market is too volatile. I’m going to sit on the sidelines for a bit so I don’t lose money.”

• Don’t avoid investing in volatile times. It can cause you to miss out on potential market rallies. Page 35
• Set specific retirement goals upfront—and keep focused on the long term during periods of volatility and uncertainty. Page 31

“I should invest conservatively so I don’t run the risk of losing my retirement assets.”

• Retirement-age investors have potentially long time horizons, due to rising life expectancies. By maintaining an exposure to equities in retirement, you may better keep pace with rising prices, protecting your standard of living throughout retirement. Page 36
• A well-diversified portfolio may provide a smoother ride over the long term. Pages 33 and 34
DIVIDE AND CONQUER
Aligning your investment strategy by goal can help you take different levels of risk based on varying time horizons and make sure you are saving enough to accomplish all of your goals—not just the ones that occur first.

Goals-based wealth management

Short-term needs
3-6 months, e.g. emergencies

Medium-term goals
5-10 years, e.g. college, home

Long-term goals
15+ years, e.g. retirement

Range of stock, bond and blended total returns
Annual total returns, 1950-2015

Source (top chart): J.P. Morgan Asset Management.

Note: Portfolio allocations are hypothetical and are for illustrative purposes only. They were created to illustrate different risk/return profiles and are not meant to represent actual asset allocation.
Structuring a portfolio to match investor goals in retirement

For illustrative purposes only. Source: J.P. Morgan Asset Management. Bonds are subject to interest rate risks. Bond prices generally fall when interest rates rise. The price of equity securities may rise or fall because of changes in the broad market or changes in a company’s financial condition, sometimes rapidly or unpredictably. Equity securities are subject to “stock market risk,” meaning that stock prices in general may decline over short or extended periods of time. Investing in alternative assets involves higher risks than traditional investments and is suitable only for the long term. They are not tax efficient and have higher fees than traditional investments. They may also be highly leveraged and engage in speculative investment techniques, which can magnify the potential for investment loss or gain.

* Equity, fixed income and cash are considered “traditional” asset classes. The term “alternative” describes all non-traditional asset classes. They include private and public equity, venture capital, hedge funds, real estate, commodities, distressed debt and more.

BUILDING YOUR PLAN

It may be useful to match dependable income sources with fixed retirement expenses, while coordinating other investments with more discretionary expenses.

<table>
<thead>
<tr>
<th>Considerations</th>
<th>Potential solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the time horizon and appropriate planning vehicle for your heirs and your estate planning goals?</td>
<td>Equities</td>
</tr>
<tr>
<td>What are your desires/wants?</td>
<td>Alternatives*</td>
</tr>
<tr>
<td>How much risk are you willing to take?</td>
<td>Equities</td>
</tr>
<tr>
<td>What are your basic needs?</td>
<td>Extended sector bonds</td>
</tr>
<tr>
<td>What income sources do you have or will you need to create?</td>
<td>Social Security</td>
</tr>
<tr>
<td></td>
<td>Pension</td>
</tr>
<tr>
<td></td>
<td>Annuities</td>
</tr>
<tr>
<td></td>
<td>High quality bonds</td>
</tr>
<tr>
<td></td>
<td>Cash and cash alternatives</td>
</tr>
</tbody>
</table>
Structuring a portfolio in retirement: The bucket strategy

For illustrative purposes only. Source: J.P. Morgan Asset Management. Bonds are subject to interest rate risks. Bond prices generally fall when interest rates rise. The price of equity securities may rise or fall because of changes in the broad market or changes in a company’s financial condition, sometimes rapidly or unpredictably. Equity securities are subject to “stock market risk,” meaning that stock prices in general may decline over short or extended periods of time. Investing in alternative assets involves higher risks than traditional investments and is suitable only for the long term. They are not tax efficient and have higher fees than traditional investments. They may also be highly leveraged and engage in speculative investment techniques, which can magnify the potential for investment loss or gain.

*Equity, fixed income and cash are considered “traditional” asset classes. The term “alternative” describes all non-traditional asset classes. They include private and public equity, venture capital, hedge funds, real estate, commodities, distressed debt and more.

TIME-BASED SEGMENTATION
Aligning your time horizon with an investment approach may help you be more comfortable with maintaining diversified portfolio allocations in retirement.
Maintain a diversified approach and rebalance

<table>
<thead>
<tr>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>10-years ’06–’15</th>
</tr>
</thead>
<tbody>
<tr>
<td>REITs 35.1%</td>
<td>EM Equity 39.8%</td>
<td>Fixed Income 5.2%</td>
<td>EM Equity 79.0%</td>
<td>REITs 8.3%</td>
<td>REITs 19.7%</td>
<td>Small Cap 38.8%</td>
<td>REITs 28.0%</td>
<td>REITs 7.4%</td>
<td>REITs 25.0%</td>
<td></td>
</tr>
<tr>
<td>EM Equity 32.6%</td>
<td>Cmdty 16.2%</td>
<td>Cash 1.8%</td>
<td>High Yield 59.4%</td>
<td>Small Cap 26.9%</td>
<td>High Yield 7.8%</td>
<td>Large Cap 13.7%</td>
<td>Large Cap 1.4%</td>
<td>Large Cap 7.3%</td>
<td>Cmdty 20.4%</td>
<td></td>
</tr>
<tr>
<td>DM Equity 26.9%</td>
<td>DM Equity 11.6%</td>
<td>Asset Alloc. 25.1%</td>
<td>DM Equity 32.5%</td>
<td>EM Equity 19.2%</td>
<td>High Yield 3.1%</td>
<td>EM Equity 18.6%</td>
<td>DM Equity 23.3%</td>
<td>Fixed Income 6.0%</td>
<td>Fixed Income 0.5%</td>
<td>High Yield 7.3%</td>
</tr>
<tr>
<td>Small Cap 18.4%</td>
<td>Asset Alloc. 7.1%</td>
<td>High Yield -26.9%</td>
<td>REITs 28.0%</td>
<td>Cmdty 16.8%</td>
<td>Large Cap 2.1%</td>
<td>DM Equity 17.9%</td>
<td>Asset Alloc. 14.9%</td>
<td>Asset Alloc. 5.2%</td>
<td>Cash 0.0%</td>
<td>Small Cap 6.8%</td>
</tr>
<tr>
<td>Large Cap 15.8%</td>
<td>Fixed Income 7.0%</td>
<td>Small Cap -33.8%</td>
<td>Small Cap 27.2%</td>
<td>Large Cap 15.1%</td>
<td>Cash 0.1%</td>
<td>Small Cap 16.3%</td>
<td>High Yield 7.3%</td>
<td>Small Cap 4.9%</td>
<td>DM Equity 10.4%</td>
<td>Asset Alloc. 5.6%</td>
</tr>
<tr>
<td>Asset Alloc. 15.3%</td>
<td>Large Cap 5.5%</td>
<td>Cmdty -35.6%</td>
<td>Large Cap 38.3%</td>
<td>High Yield 14.8%</td>
<td>Asset Alloc. 0.7%</td>
<td>Large Cap 16.0%</td>
<td>REITs 2.9%</td>
<td>Cash 0.0%</td>
<td>Asset Alloc. -2.0%</td>
<td>Fixed Income 4.5%</td>
</tr>
<tr>
<td>High Yield 13.7%</td>
<td>Cash 4.8%</td>
<td>Large Cap -37.0%</td>
<td>Asset Alloc. 25.0%</td>
<td>Asset Alloc. 13.3%</td>
<td>Small Cap -4.2%</td>
<td>Asset Alloc. 12.2%</td>
<td>Cash 0.0%</td>
<td>High Yield 0.0%</td>
<td>High Yield -2.7%</td>
<td>EM Equity 3.9%</td>
</tr>
<tr>
<td>Cash 4.8%</td>
<td>High Yield 3.2%</td>
<td>REITs -37.7%</td>
<td>Cmtdy 18.9%</td>
<td>DM Equity 8.2%</td>
<td>DM Equity -11.7%</td>
<td>Fixed Income 4.2%</td>
<td>Fixed Income -2.0%</td>
<td>EM Equity -1.8%</td>
<td>Small Cap -4.4%</td>
<td>DM Equity 3.5%</td>
</tr>
<tr>
<td>Fixed Income 4.3%</td>
<td>Small Cap -1.6%</td>
<td>DM Equity -43.1%</td>
<td>Fixed Income 5.9%</td>
<td>Fixed Income 6.5%</td>
<td>Cmtdy -13.3%</td>
<td>Cash 0.1%</td>
<td>EM Equity -2.3%</td>
<td>DM Equity -4.5%</td>
<td>DM Equity -14.6%</td>
<td>Cash 1.2%</td>
</tr>
<tr>
<td>Cmdty 2.1%</td>
<td>REITs -15.7%</td>
<td>EM Equity -53.2%</td>
<td>Cash 0.1%</td>
<td>Cash 0.1%</td>
<td>EM Equity -18.2%</td>
<td>Cmtdy -1.1%</td>
<td>Cmtdy -9.5%</td>
<td>Cmtdy -17.0%</td>
<td>Cmtdy -24.7%</td>
<td>Cmtdy -6.4%</td>
</tr>
</tbody>
</table>

Source: Barclays, Bloomberg, FactSet, MSCI, NAREIT, Russell, Standard & Poor’s, J.P. Morgan Asset Management.


Guide to the Markets—U.S. Data are as of December 31, 2015.

Maintain a Diversified Approach

The best and worst performing asset classes vary greatly year to year. Failure to rebalance the Asset Allocation portfolio over this time period would have resulted in an average annual return of 5.2%—0.4% lower than the annually rebalanced one.
Indexes and weights of the less diversified portfolio are as follows: U.S. stocks: 60.00% S&P 500; International stocks: 10.00% MSCI EAFE; U.S. bonds: 30.00% Barclays Capital Aggregate. More diversified portfolio is as follows: U.S. stocks: 32.50% S&P 500, 7.50% Russell 2000, 3.00% NAREIT Equity REIT Index; International stocks: 15.00% MSCI EAFE, 4.00% MSCI Emerging Markets; U.S. bonds: 28.25% Barclays Capital Aggregate, 7.00% Barclays U.S. High Yield; International bonds: 2.75% J.P. Morgan EMBI Global Diversified. Source: Bloomberg, J.P. Morgan Asset Management.

Charts are shown for illustrative purposes only. Past returns are no guarantee of future results. Diversification does not guarantee investment returns and does not eliminate risk of loss. Data as of December 31, 2015.
Impact of being out of the market

Returns of S&P 500
Performance of a $10,000 investment between January 2, 1996 and December 31, 2015

This chart is for illustrative purposes only and does not represent the performance of any investment or group of investments.

Source: J.P. Morgan Asset Management analysis using data from Morningstar Direct. 20-year annualized returns are based on the S&P 500 Total Return Index, an unmanaged, capitalization-weighted index that measures the performance of 500 large capitalization domestic stocks representing all major industries. Past performance is not indicative of future returns. An individual cannot invest directly in an index. Data as of December 31, 2015.
Past performance is no guarantee of future results. Hypothetical value of $1 invested at the beginning of 1950. Assumes reinvestment of income and no transaction costs or taxes. This is for illustrative purposes only and not indicative of any investment. An investment cannot be made directly in an index.

Small-cap stocks in this example are represented by the Ibbotson® Small Company Stock Index. Large-cap stocks are represented by the Standard & Poor’s 90® index from 1950 through February 1957 and the S&P 500 index thereafter, which is an unmanaged group of securities and considered to be representative of the U.S. stock market in general. Government bonds are represented by the 20-year U.S. government bond, Treasury bills by the 30-day U.S. Treasury bill, and inflation by the Consumer Price Index. Underlying data is from the Stocks, Bonds, Bills, and Inflation® (SBBI®) Yearbook, by Roger G. Ibbotson and Rex Sinquefield, updated annually. An investment cannot be made directly in an index.

Government Bonds and Treasury Bills are guaranteed by the full faith and credit of the United States government as to the timely payment of principal and interest, while stocks are not guaranteed and have been more volatile than the other asset classes. Small-capitalization stocks typically carry more risk than stock funds investing in well-established “blue-chip” companies since smaller companies generally have a higher risk of failure. Historically, smaller companies’ stock has experienced a greater degree of market volatility than the average stock.
Traditional IRAs vs. Roth IRAs—2015/2016

<table>
<thead>
<tr>
<th>Traditional IRA</th>
<th>Roth IRA conversion</th>
<th>Roth IRA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum contribution</td>
<td>No limit on conversions of Traditional IRAs, SEP IRAs, SIMPLE IRAs (if open 2+ years)</td>
<td>• $5,500 (earned income)</td>
</tr>
<tr>
<td>• $5,500 (earned income)</td>
<td></td>
<td>• $5,500 (earned income)</td>
</tr>
<tr>
<td>• $6,500 (age 50 and over)</td>
<td></td>
<td>• $6,500 (age 50 and over)</td>
</tr>
<tr>
<td>• Reduced by Roth IRA contributions</td>
<td></td>
<td>• Reduced by Traditional IRA contributions</td>
</tr>
<tr>
<td>Age limits to contribute</td>
<td>Under 70½ in the year of the contribution</td>
<td>None</td>
</tr>
<tr>
<td>Income phase-out ranges for contribution deductibility</td>
<td>N/A</td>
<td>All contributions are non-deductible</td>
</tr>
<tr>
<td>2015/2016</td>
<td></td>
<td>2015 Single: $116,000–$131,000</td>
</tr>
<tr>
<td>Single: $61,000–$71,000</td>
<td></td>
<td>Joint: $183,000–$193,000</td>
</tr>
<tr>
<td>Joint: $98,000–$118,000</td>
<td></td>
<td>2016 Single: $117,000–$132,000</td>
</tr>
<tr>
<td>Phase-out ranges for Roth contribution eligibility</td>
<td>N/A</td>
<td>Joint: $184,000–$194,000</td>
</tr>
<tr>
<td>Federal tax treatment</td>
<td>• Investment growth is tax deferred and contributions may be tax deductible. Deductible contributions and investment gains are taxed as ordinary income upon withdrawal.</td>
<td>• Qualiﬁed withdrawals of contributions at any time are tax free and IRS penalty free; converted amounts may be withdrawn tax free.</td>
</tr>
<tr>
<td>• If non-deductible contributions have been made, each withdrawal is taxed proportionately on a pro-rata basis, taking into consideration all contributions made to all Traditional IRAs owned.</td>
<td>• Taxes are due upon conversion of account balances not yet taxed.</td>
<td></td>
</tr>
<tr>
<td>• Multiple Roth IRAs are considered one Roth IRA for withdrawal purposes and distributions MUST be withdrawn in a specific order deemed by the IRS that applies regardless of which Roth IRA is used to take that distribution.</td>
<td>• Qualified withdrawals of earnings are tax free and IRS penalty free if taken after five years have passed since the account was initially funded and the account owner is age 59½ or older (other exceptions may be applicable).</td>
<td></td>
</tr>
<tr>
<td>Early withdrawals</td>
<td>Early withdrawals before age 59½ are generally subject to a 10% IRS penalty unless certain exceptions apply.</td>
<td>None for account owner</td>
</tr>
<tr>
<td>Mandatory withdrawals</td>
<td>Distributions must begin by April 1 of the calendar year following the year the account owner turns age 70½.</td>
<td>None for account owner</td>
</tr>
<tr>
<td>Deadline to contribute</td>
<td>2015: April 18, 2016*</td>
<td>2015: April 18, 2016*</td>
</tr>
<tr>
<td>2016: April 18, 2017</td>
<td>N/A</td>
<td>2016: April 18, 2017</td>
</tr>
</tbody>
</table>

* Residents of Maine and Massachusetts have until April 19, 2016 to make contributions because of the Patriots’ Day holiday in those states.

Source: IRS Publication 590

1Must be age 50 or older by December 31 of the contribution year.

2Assumes participation in an employer’s retirement plan. No income limits apply when investors and spouses are not covered by a retirement plan at work.

3Distributions from a conversion amount must satisfy a five-year investment period to avoid the 10% penalty. This pertains only to the conversion amount that was treated as income for tax purposes. The presenter of this slide is not a tax or legal advisor. Clients should consult a personal tax or legal advisor prior to making any tax- or legal-related investment decisions.
## Retirement plan contribution and deferral limits—2015/2016

<table>
<thead>
<tr>
<th>Type of Retirement Account</th>
<th>Specifics</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>401(k), 403(b), 457(b)</td>
<td>401(k) elective deferral limit/catch-up contribution (age 50 and over)</td>
<td>$18,000/$24,000</td>
<td>$18,000/$24,000</td>
</tr>
<tr>
<td></td>
<td>Annual defined contribution limit</td>
<td>$53,000</td>
<td>$53,000</td>
</tr>
<tr>
<td></td>
<td>Annual compensation limit</td>
<td>$265,000</td>
<td>$265,000</td>
</tr>
<tr>
<td></td>
<td>Highly compensated employees</td>
<td>$120,000</td>
<td>$120,000</td>
</tr>
<tr>
<td></td>
<td>403(b)/457 elective deferrals/catch-up contribution (age 50 and over)</td>
<td>$18,000/$24,000</td>
<td>$18,000/$24,000</td>
</tr>
<tr>
<td>SIMPLE IRA</td>
<td>SIMPLE employee deferrals/catch-up deferral (age 50 and over)</td>
<td>$12,500/$15,500</td>
<td>$12,500/$15,500</td>
</tr>
<tr>
<td>SEP IRA</td>
<td>Maximum contribution</td>
<td>$53,000</td>
<td>$53,000</td>
</tr>
<tr>
<td></td>
<td>SEP minimum compensation</td>
<td>$600</td>
<td>$600</td>
</tr>
<tr>
<td></td>
<td>SEP annual compensation limit</td>
<td>$265,000</td>
<td>$265,000</td>
</tr>
<tr>
<td>Health Savings Accounts (HSAs)</td>
<td>Maximum contribution amount/over age 55</td>
<td>Single: $3,350/$4,350 Family: $6,650/$7,650</td>
<td>Single: $3,350/$4,350 Family: $6,750/$7,750</td>
</tr>
<tr>
<td></td>
<td>Minimum deductible</td>
<td>Single: $1,300 Family: $2,600</td>
<td>Single: $1,300 Family: $2,600</td>
</tr>
<tr>
<td></td>
<td>Maximum out-of-pocket expenses</td>
<td>Single: $6,450 Family: $12,900</td>
<td>Single: $6,550 Family: $13,100</td>
</tr>
<tr>
<td>Social Security</td>
<td>Wage base</td>
<td>$118,500</td>
<td>$118,500</td>
</tr>
<tr>
<td></td>
<td>Maximum earnings test exempt amounts under FRA for entire calendar year/during year of FRA</td>
<td>$1,310 p/month ($15,720 p/year)/ $3,490 p/month</td>
<td>$1,310 p/month ($15,720 p/year)/ $3,490 p/month</td>
</tr>
<tr>
<td></td>
<td>Maximum Social Security benefit at FRA</td>
<td>$2,663 p/month</td>
<td>$2,639 p/month</td>
</tr>
<tr>
<td>Defined benefit—maximum annual benefit at retirement</td>
<td>$210,000</td>
<td>$210,000</td>
<td></td>
</tr>
</tbody>
</table>

1 Employer may either match employee’s salary reduction contributions dollar-for-dollar up to 3% of employee’s compensation or make non-elective contributions equal to 2% of compensation up to $265,000.

2 Employer contributions may not exceed $53,000 or 25% of compensation. Other rules apply for self-employed individuals.

3 In calendar years before FRA, benefit reduced $1 for every $2 of earned income above the limit; during year of FRA, benefit reduced $1 for every $3 of earned income in months prior to FRA.
Options to consider when retiring or changing jobs

There are typically four options to consider when leaving an employer’s retirement plan, each with its benefits and considerations. Converting a portion of tax-deferred assets to a Roth IRA may be a fifth option to consider in certain circumstances described below.

<table>
<thead>
<tr>
<th>Option</th>
<th>Potential Benefits</th>
<th>Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roll the retirement account into an IRA account (IRA rollover) (May also roll the Roth 401(k) portion of a retirement account into a Roth IRA)</td>
<td>• No income taxes or penalties for a direct rollover&lt;br&gt;• Assets maintain tax-deferred status&lt;br&gt;• Ability to make additional contributions subject to income limitations&lt;br&gt;• Potential for a broader range of investment choices&lt;br&gt;• Opportunity to consolidate multiple retirement accounts&lt;br&gt;• If balance includes employer stock, may be eligible for preferable tax treatment (Net Unrealized Appreciation)²</td>
<td>• Loans are not allowed&lt;br&gt;• Fees may vary, and may be higher than what is charged in an employer plan</td>
</tr>
<tr>
<td>Leave the money in former employer plan</td>
<td>• Not a taxable event&lt;br&gt;• Assets maintain tax-deferred status&lt;br&gt;• If you are between 55 and 59½ and are separated from service, you may be able to take withdrawals without penalties&lt;br&gt;• Fees may be lower depending on plan size</td>
<td>• Investment options vary according to the plan and may be more limited&lt;br&gt;• Assets are subject to policies and contractual limitations of previous employer plan</td>
</tr>
<tr>
<td>Move the assets into a new employer plan</td>
<td>• No taxes or penalties apply upon transfer&lt;br&gt;• Assets maintain tax-deferred status&lt;br&gt;• New employer plan may allow loans&lt;br&gt;• Ability to make additional contributions potentially with a company match&lt;br&gt;• Fees may be low based on plan and size of employer (number of participants)</td>
<td>• May require a waiting period to move assets&lt;br&gt;• Investment options vary according to the plan and may be more limited&lt;br&gt;• Assets are subject to policies or contractual limitations of new employer plan</td>
</tr>
<tr>
<td>Withdraw balance of assets or “cash out” of plan</td>
<td>• Individual may use remaining funds (after taxes and potential penalties) for other purposes</td>
<td>• Upon withdrawal, account balance is subject to ordinary income tax on pre-tax contributions and investment earnings&lt;br&gt;• 20% automatically withheld for taxes upon distribution&lt;br&gt;• Additional 10% withdrawal penalty tax may apply for owners younger than age 59½ Additional federal, state or local income taxes may apply&lt;br&gt;• Loss of tax-deferred growth of assets</td>
</tr>
<tr>
<td>Convert all or part of retirement account into Roth IRA (Roth IRA conversion)</td>
<td>• May provide income tax diversification in retirement&lt;br&gt;• After taxes are paid at conversion, future distributions are tax free⁴&lt;br&gt;• Required minimum distributions do not apply at 70½</td>
<td>• The pre-tax amount is included in gross income in the year of conversion (and is subject to the aggregation rule)&lt;br&gt;• Sufficient taxable assets to pay income taxes owed is strongly recommended</td>
</tr>
</tbody>
</table>

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¹ In a direct rollover, qualified retirement assets are transferred directly from the former employer plan to the institution holding the new IRA account, and no taxes or penalties will apply. If an owner chooses to receive the plan assets first, the distribution is subject to 20% mandatory withholding and the assets must be deposited into a new plan or IRA account within 60 days of receipt to avoid further potential taxes and penalties.

² Subject to IRA contribution limits: $5,500 / $6,500 in 2015 (if age 50 or older); single filers may make Roth contributions if MAGI is $116,000 or below; married filing jointly if MAGI is $183,000 or below; phase-outs on contributions thereafter.

³ With the Net Unrealized Appreciation (NUA) strategy, an employee may transfer the employer stock portion of a retirement account to a brokerage account. The employee pays ordinary income tax on the cost basis of the stock at the time of transfer, but will owe capital gains tax when he/she later sells the stock.

⁴ Subject to 5-year Roth account holding period and age requirements.
What is Medicare?

Medicare is a government health care program available to those who have paid Medicare taxes while working or to non-working spouses of such individuals. Medicare is available when these individuals reach age 65. Citizens who have never paid Medicare taxes may be eligible if they pay a Medicare premium. Individuals under age 65 may also be eligible if they are considered disabled by Social Security or the Railroad Retirement Board for more than 24 months.

<table>
<thead>
<tr>
<th>Traditional Medicare</th>
<th>Medicare Advantage (usually limited to a network of providers)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Part A: inpatient hospital insurance</strong></td>
<td>✓</td>
</tr>
<tr>
<td><strong>Part B: doctors, tests and outpatient hospital insurance</strong></td>
<td>✓</td>
</tr>
<tr>
<td><strong>Medigap: standardized plans that cover Part A and Part B co-pays and deductibles</strong></td>
<td>✓</td>
</tr>
<tr>
<td><strong>Part D: prescription drug insurance</strong></td>
<td>✓</td>
</tr>
<tr>
<td><strong>Prescription drug co-pays and deductibles</strong></td>
<td>Not covered</td>
</tr>
<tr>
<td><strong>Most vision, dental and hearing expenses</strong></td>
<td>Not covered</td>
</tr>
<tr>
<td><strong>Long-term care</strong></td>
<td>Not covered</td>
</tr>
</tbody>
</table>

*Medicare does not cover most long-term care costs. Medicare does pay for medically necessary skilled nursing facility or home health care on a very limited basis. Custodial care is not covered.*
Most employer coverage for <20 people will end at age 65 or become secondary after Medicare has paid. Late penalties will apply if you don’t sign up in your initial enrollment window and Medigap plans may deny coverage or underwrite after the initial enrollment period.

For more information see www.mymedicarematters.org/enrollment/am-i-eligible, sponsored by the National Council on Aging and Medicare.gov.
# Annuity basics

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What is an annuity?</strong></td>
<td>An annuity is a contract between the owner (investor) and an insurance company. The owner makes a lump-sum deposit or several purchase payments to the insurance company in order to secure the receipt of a series of periodic payments paid immediately or at some future date. Most annuities have a surrender charge, which is a penalty for making early withdrawals from the contract beyond the free withdrawal amount. Surrender charges typically diminish over 7 years.</td>
</tr>
<tr>
<td><strong>Why purchase an annuity?</strong></td>
<td>Annuities are generally purchased for a guarantee of income as part of an effective retirement income plan. They provide tax deferral, and distributions made prior to age 59 ½ may be subject to tax and penalties.</td>
</tr>
<tr>
<td><strong>How does an annuity work?</strong></td>
<td>There are 2 phases of an annuity contract: the accumulation (growth) phase and the distribution (payout) phase. The owner is the person who purchases the annuity contract and may make changes to the contract; the annuitant is the insured person/the “life” the contract is based on; and the beneficiary is the designated person who receives remaining proceeds of the annuity after the death of annuitant. Often, the owner and annuitant are the same person.</td>
</tr>
</tbody>
</table>
| **What are the most common types of annuities?** | **Fixed:** Investor makes a lump sum or series of payments, and money invested grows at a fixed interest rate during the accumulation phase of the contract. Investor is promised a fixed payment and principal guarantee.  
- May include life annuities that pay a specified amount to the investor at certain times until the death of annuitant (can also be joint life).  
- Term certain annuities are fixed annuities that pay a predetermined amount for a period certain, which could be before the death of annuitant.  

**Indexed** (also known as hybrid or equity-indexed): A type of fixed annuity, whereby the insurance company guarantees a minimum return or a return based on changes in a specific index, such as the S&P Composite Stock Price Index, whichever is greater.  
- A participation rate determines how much of the gain in an index will be credited to the annuity. Some indexed annuities also place a cap on the rate of interest the annuity will earn.  

**Immediate/Deferred:** Investor makes a lump sum payment or series of payments to the insurance company and receives a regular stream of payments until death or period certain.  
- With an immediate annuity, the owner receives periodic payments immediately, as early as 30 days after contract begins. With a deferred annuity, the owner begins receiving payment sometime in the future for life or for specified period of time.  

**Variable:** A type of deferred annuity in which the owner makes a series of purchase payments that are invested among a range of pooled investment options like mutual funds (subaccounts). The rate of return will be based on performance and market value of underlying subaccounts. Investor receives a stream of periodic payments for a term certain (i.e. for 20 years) or for an indefinite period of time like the life of investor and spouse.  
- An investment-only annuity is a low-cost variable annuity that invests in subaccounts but offers no additional living benefit add-ons.  
- A guaranteed living benefit (GLB) may be added to the contract for an additional fee that would provide a payout to the owner that is based on a minimum growth rate (usually 5%) or market value, whichever is greater.  
- A death benefit provision may be added to the contract, usually at an additional cost, that would pay a specific value (i.e. total purchase payments made, greater of account value or minimum amount) to beneficiaries at the death of owner(s). |

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Variable annuity guarantees are only as good as the insurance company that gives them. While it is an uncommon occurrence that the insurance companies that back these guarantees are unable to meet their obligations, it may happen. Annuity withdrawals prior to 59 ½ may be subject to tax penalties, are subject to market risk and may lose value. Riders have additional fees and costs associated with them and are subject to additional condition, restrictions and limitation.

US Securities and Exchange Commission  
FINRA Investor Education Series

1 Subject to the claims paying ability of the insurance company.  
2 Indexed annuities are not registered with the SEC.
A closer look at tax rates—2016

**Federal income tax rates applicable to taxable income**

<table>
<thead>
<tr>
<th>Tax rate</th>
<th>Single filers</th>
<th>Married filing jointly</th>
<th>Capital gains &amp; dividends</th>
<th>Medicare tax on earned income</th>
<th>Medicare tax on investment income</th>
<th>PEP and Pease limitations**</th>
</tr>
</thead>
<tbody>
<tr>
<td>10%</td>
<td>Up to $9,275</td>
<td>Up to $18,550</td>
<td>0%</td>
<td>2.90% (includes 1.45% employer portion and 1.45% employee portion)</td>
<td>0%</td>
<td>$259,400 single/$311,300 married AGI threshold</td>
</tr>
<tr>
<td>15%</td>
<td>$9,275-$37,650</td>
<td>$18,550-$75,300</td>
<td>0%</td>
<td>3.80% (includes 2.90% tax referenced above plus additional 0.90% tax for earned income above MAGI* $200,000/$250,000 threshold)</td>
<td>3.80% (additional tax will be levied on lesser of a) net investment income or b) excess MAGI above $200,000/$250,000 threshold)</td>
<td>Pease: Itemized deductions reduced by lesser of a) 3% of AGI above threshold or b) 80% of itemized deductions</td>
</tr>
<tr>
<td>25%</td>
<td>$37,650-$91,150</td>
<td>$75,300-$151,900</td>
<td>15%</td>
<td></td>
<td></td>
<td>PEP: Exemption reduced by 2% for every $2,500 above AGI threshold</td>
</tr>
<tr>
<td>28%</td>
<td>$91,150-$190,150</td>
<td>$151,900-$231,450</td>
<td>15%</td>
<td></td>
<td></td>
<td>PEP will end at $381,900 (singles)/$433,800 (married)</td>
</tr>
<tr>
<td>33%</td>
<td>$190,150-$413,350</td>
<td>$231,450-$413,350</td>
<td>15%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35%</td>
<td>$413,350-$415,050</td>
<td>$413,350-$466,950</td>
<td>20%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39.6%</td>
<td>$415,050 or more</td>
<td>$466,950 or more</td>
<td>20%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Modified Adjusted Gross Income (MAGI) is AGI plus amount excluded from income as foreign earned income.
** Itemized deduction limitation (Pease) and personal exemption phaseout (PEP). Does not apply to medical expenses and casualty or theft losses. Standard deduction is $6,300 single/$12,600 married couples. Personal exemption is $4,050.

**Top/tax rates for ordinary income, capital gains and dividend income**

<table>
<thead>
<tr>
<th>Type of gain</th>
<th>Maximum rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top rate for ordinary income &amp; non-qualified dividends</td>
<td>39.6%/43.4%*</td>
</tr>
<tr>
<td>Short-term capital gains (assets held 12 months or less)</td>
<td>39.6%/43.4%*</td>
</tr>
<tr>
<td>Long-term capital gains (assets held more than 12 months) &amp; qualified dividends</td>
<td>20%/23.8%*</td>
</tr>
</tbody>
</table>

*Includes top tax rate plus 3.8% Medicare tax on net investment income beyond MAGI threshold.
**The exemption amount is reduced .25 for every $1 of AMTI (income) above the threshold amount for the taxpayer’s filing status.

**Federal estate, Generation-Skipping Transfer (GST) tax & gift tax exemption**

<table>
<thead>
<tr>
<th>Type of gain</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top federal estate tax rate</td>
<td>40%</td>
</tr>
<tr>
<td>Federal estate, GST &amp; gift tax exemption</td>
<td>$5.45 million per individual</td>
</tr>
<tr>
<td>Annual gift tax exclusion</td>
<td>$14,000 ($28,000 per couple)</td>
</tr>
</tbody>
</table>

The presenter of this slide is not a tax or legal advisor. This slide is for informational purposes only and should not be relied on as tax or legal advice. Clients should consult their tax or legal advisor before making any tax- or legal-related investment decisions.
Top state income tax rates—2016

Highest marginal state income tax rates

Average: 6.5%*

**TOP 3 HIGHEST:**
- CA 13.3%
- NYC 12.7%
- OR 9.9%

- ▪ Tax on interest and dividends only
- ▪ No state income tax
- ▪ 3.0%-5.5%**
- ▪ 5.5%-8.0%
- ▪ 8.0%+

Represents top marginal state income tax rates. CA top rate applies to income above $1 million. AL, IA and LA allow federal income tax deduction for state income tax purposes. Map does not include state estate tax rates or state tax on investments or trust distributions.

*For states with income taxes. **ND state income tax is 2.90%.
Indexes are unmanaged and an individual cannot invest directly in an index. Index returns do not include fees or expenses.

The S&P 500 Index is widely regarded as the best single gauge of the U.S. equities market. This world-renowned index includes a representative sample of 500 leading companies in leading industries of the U.S. economy. Although the S&P 500 Index focuses on the large cap segment of the market, with approximately 75% coverage of U.S. equities, it is also an ideal proxy for the total market. An investor cannot invest directly in an index.

The S&P MidCap 400 Index tracks a diverse basket of medium-sized U.S. firms. A mid cap stock is broadly defined as a company with a market capitalization ranging from about $2 billion to $10 billion.

The S&P SmallCap 600 Index invests in a basket of small cap equities. A small cap company is generally defined as a stock with a market capitalization between $300 million and $2 billion.

The Russell 2000 Index measures the performance of the 2,000 smallest companies in the Russell 3000 Index.

The MSCI® EAFE (Europe, Australia, Far East) Net Index is recognized as the pre-eminent benchmark in the United States to measure international equity performance. It comprises 21 MSCI country indexes, representing the developed markets outside of North America.

The MSCI Emerging Markets Index is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets. As of June 2007, the MSCI Emerging Markets Index consisted of the following 25 emerging market country indices: Argentina, Brazil, Chile, China, Colombia, Czech Republic, Egypt, Hungary, India, Indonesia, Israel, Jordan, Korea, Malaysia, Mexico, Morocco, Pakistan, Peru, Philippines, Poland, Russia, South Africa, Taiwan, Thailand and Turkey.

The CS/Tremont Equity Market Neutral Index takes both long and short positions in stocks with the aim of minimizing exposure to the systematic risk of the market (i.e., a beta of zero).

*Market Neutral returns for November 2008 are estimates by J.P. Morgan Funds Market Strategy and are based on a December 8, 2008 published estimate for November returns by CS/Tremont in which the Market Neutral returns were estimated to be +0.85% (with 69% of all CS/Tremont constituents having reported return data). Presumed to be excluded from the November return are three funds, which were later marked to $0 by CS/Tremont in connection with the Bernard Madoff scandal. J.P. Morgan Funds believes this distortion is not an accurate representation of returns in the category. CS/Tremont later published a finalized November return of -40.56% for the month, reflecting this mark-down. CS/Tremont assumes no responsibility for these estimates.

The NCREIF Property Index is a quarterly time series composite total rate of return measure of investment performance of a very large pool of individual commercial real estate properties acquired in the private market for investment purposes only. All properties in the NPI have been acquired, at least in part, on behalf of tax-exempt institutional investors – the great majority being pension funds. As such, all properties are held in a fiduciary environment.

The FTSE NAREIT EQUITY REIT Index is designed to provide the most comprehensive assessment of overall industry performance and includes all tax-qualified real estate investment trusts (REITs) that are listed on the NYSE, the American Stock Exchange or the NASDAQ National Market List.

The Barclays Capital U.S. Aggregate Index represents securities that are SEC-registered, taxable and dollar denominated. The index covers the U.S. investment-grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities and asset-backed securities. These major sectors are subdivided into more specific indexes that are calculated and reported on a regular basis.

The HFRI Equity Market Neutral Index is an equally weighted performance index. The HFRI is broken down into 33 different categories by strategy. The strategy of this index seeks to profit by exploiting inefficiencies between related equity securities, neutralizing exposure to market risk by combining long and short positions. In many cases, portfolios are structured to be market, industry, sector and dollar neutral. One example of this strategy is to build portfolios made up of long positions in the strongest companies in several industries and take corresponding short positions in those showing signs of weakness. Due to the mutual agreements with the hedge fund managers listed in the HFRI database, the index is not at liberty to disclose the particular funds behind this index.

The Merrill Lynch Global Government Index tracks the performance of investment-grade sovereign debt publicly issued and denominated in the issuer’s own domestic market and currency. In order to qualify for inclusion in the Index, a country (i) must be an OECD member; (ii) must have an investment-grade foreign currency long-term sovereign debt rating (based on an average of Moody’s, S&P and Fitch); (iii) must have $50 billion (USD equivalent) outstanding face value of Index qualifying debt (i.e., after imposing constituent level filters on amount outstanding, remaining term to maturity, etc.) to enter the Index; (iv) must have at least $25 billion (USD equivalent) in outstanding face value of Index qualifying debt in order to remain in the Index; (v) must be available to foreign investors; and (vi) must have at least one readily available, transparent price source for its securities.

The Merrill Lynch U.S. High Yield Index tracks the performance of US dollar-denominated below-investment-grade corporate debt publicly issued in the U.S. domestic market. Qualifying securities must have a below-investment-grade rating (based on an average of Moody’s, S&P and Fitch) and an investment-grade-rated country of risk (based on an average of Moody’s, S&P and Fitch foreign currency long-term sovereign debt ratings).

The Dow Jones Industrial Average measures the stock performance of 30 leading blue-chip U.S. companies.

The Bloomberg Commodity Index is composed of futures contracts on physical commodities and represents twenty two separate commodities traded on U.S. exchanges, with the exception of aluminum, nickel, and zinc.
Unless otherwise indicated, all illustrations are shown in U.S. dollars. Past performance is no guarantee of comparable future results. Diversification does not guarantee investment returns and does not eliminate the risk of loss.

Bonds are subject to interest rate risks. Bond prices generally fall when interest rates rise. The price of equity securities may rise or fall because of changes in the broad market or changes in a company's financial condition, sometimes rapidly or unpredictably. These price movements may result from factors affecting individual companies, sectors or industries, or the securities market as a whole, such as changes in economic or political conditions. Equity securities are subject to “stock market risk,” meaning that stock prices in general may decline over short or extended periods of time.

Small capitalization investing typically carries more risk than investing in well-established “blue-chip” companies since smaller companies generally have a higher risk of failure. Historically, smaller companies’ stock has experienced a greater degree of market volatility than the average stock.

Mid capitalization investing typically carries more risk than investing in well-established “blue-chip” companies. Historically, mid cap companies’ stock has experienced a greater degree of market volatility than the average stock.

Real estate investments may be subject to a higher degree of market risk because of concentration in a specific industry, sector or geographical sector. Real estate investments may be subject to risks including, but not limited to, declines in the value of real estate, risks related to general and economic conditions, changes in the value of the underlying property owned by the trust and defaults by borrower.

International investing involves a greater degree of risk and increased volatility. Changes in currency exchange rates and differences in accounting and taxation policies outside the U.S. can raise or lower returns. Also, some overseas markets may not be as politically and economically stable as the United States and other nations.

Investments in emerging markets can be more volatile. As mentioned above, the normal risks of investing in foreign countries are heightened when investing in emerging markets. In addition, the small size of securities markets and the low trading volume may lead to a lack of liquidity, which leads to increased volatility. Also, emerging markets may not provide adequate legal protection for private or foreign investment or private property.

Investments in commodities may have greater volatility than investments in traditional securities, particularly if the instruments involve leverage. The value of commodity-linked derivative instruments may be affected by changes in overall market movements, commodity index volatility, changes in interest rates or factors affecting a particular industry or commodity, such as drought, floods, weather, livestock disease, embargoes, tariffs and international economic, political and regulatory developments. Use of leveraged commodity-linked derivatives creates an opportunity for increased return but, at the same time, creates the possibility for greater loss.

Investing in alternative assets involves higher risks than traditional investments and is suitable only for sophisticated investors. Alternative investments involve greater risks than traditional investments and should not be deemed a complete investment program. They are not tax efficient and an investor should consult with his/her tax advisor prior to investing. Alternative investments have higher fees than traditional investments and they may also be highly leveraged and engage in speculative investment techniques, which can magnify the potential for investment loss or gain. The value of the investment may fall as well as rise and investors may get back less than they invested.

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