Three sources of retirement income, sometimes called the three legged stool of retirement:

- Social Security
- Employer sponsored defined benefit (DB) plan
- Personal savings

Some abbreviations:
- DB is defined benefit pension plan (traditional pension plan)
- DC is defined contribution plan (like 401(k) or 403(b))
According to EBRI (Employee Benefits Research Institute) retirement plans have completely missed over half of the private-sector workforce, nationally.

<table>
<thead>
<tr>
<th>Year</th>
<th>DB Only</th>
<th>DB and DC</th>
<th>DC Only</th>
<th>With retirement plan (DB and/or DC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>28%</td>
<td>11%</td>
<td>8%</td>
<td>47%</td>
</tr>
<tr>
<td>1990</td>
<td>13%</td>
<td>17%</td>
<td>15%</td>
<td>45%</td>
</tr>
<tr>
<td>2000</td>
<td>7%</td>
<td>13%</td>
<td>30%</td>
<td>50%</td>
</tr>
<tr>
<td>2010</td>
<td>3%</td>
<td>11%</td>
<td>31%</td>
<td>45%</td>
</tr>
</tbody>
</table>

According to NIRS (National Institute on Retirement Security), Washington State does a bit better than average. In 2012, 48% of private sector employees participated in employer-sponsored retirement plans.

This means 52% of private sector workers either did not have a plan available to them or did not participate in the plan they did have.
<table>
<thead>
<tr>
<th></th>
<th>Public Sector</th>
<th>Private Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sector</strong></td>
<td>State Sponsored / Civil Service Retirement / Military Retirement</td>
<td>Corporate</td>
</tr>
<tr>
<td><strong>Covers</strong></td>
<td>State government employees Federal government employees, Post Office, military, etc.</td>
<td>Private companies</td>
</tr>
<tr>
<td><strong>Plan Types</strong></td>
<td>Mostly DB</td>
<td>DB prevalent among large employers in older industries (wood, industrial, manufacturing, utilities, hospitals)</td>
</tr>
<tr>
<td></td>
<td>Some DC</td>
<td>DC prevalent in newer industries (software, on-line retailers)</td>
</tr>
<tr>
<td>**Discount Rate /  **</td>
<td>Set by Board Median is 7.5%</td>
<td>Bond yield curve, varies from year to year, sometimes substantially</td>
</tr>
<tr>
<td><strong>Interest Rate Assumption</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Corporate DB

- Characteristics
  - IRS Funding Requirements
    - Asset values volatile, some smoothing
    - Liability values volatile
  - Contributions typically ER only
  - Accounting under FASB
    - Asset values volatile
    - Liability values volatile
  - Benefit typically paid as lifetime annuity or lump sum
Corporate DB (continued)

- Difficulties
  - Cash contribution volatility
    - Contributions difficult to predict/plan for from year to year
    - Contribution requirements can change significantly from year to year
    - Onerous on employers, especially in mature plans (where plan is large compared to company)
  - Income Statement / Balance Sheet Volatility
    - Change in yield curve can move company from profit to loss position, without any change in asset values
    - Can disrupt ability to get loans and fund projects
  - PBGC variable rate premiums
    - Flat rate paid by all
    - Variable rate onerous if underfunded
  - If lump sum is taken, participant runs real risk of outliving retirement asset
Multiemployer DB

- Characteristics
  - IRS Funding Requirements
    - Asset values smoothed
    - Liability values stable, at 7.0% or 7.5% typically
  - Contributions typically ER only
  - Accounting under FASB
    - Contributing employers expense their actual contributions
    - More complicated if employer is withdrawing and the plan is underfunded
  - Benefit paid as lifetime annuity (lump sums very rare)
Multiemployer DB (continued)

- **Difficulties**
  - Cash contributions set by collective bargaining, funding requirements are more volatile due to asset gains and losses
  - Plan’s slow to respond to market changes
  - Union membership is down, so plans are mature
    - Contribution requirements onerous on current employers, funding liability for past employers as well
  - Many plans have not yet recovered from 2008
DC

- **Characteristics**
  - Employer makes a set contribution and/or a match of employee contribution
  - Employer obligation ends
  - Accounting under FASB
    - Contributing employers expense their actual contributions
  - Benefit is account balance at retirement

- **Difficulties**
  - Participants have to manage money throughout working years
  - DC participants typically get 1% less return than professionally managed assets, resulting in 10% fewer assets at retirement
  - Participant runs real risk of outliving retirement asset
How does WA State stack up?

NIRS Financial Security Scorecard:
- WA is doing better than many states. WA in the top 10 of all states according to 2012 Financial Security Scorecard.

Some statistics:
- 48% of private sector employees participating in retirement Plan (ranked 22\textsuperscript{nd} among states), states range from 35\% to 55\%.
- The average DC balance: $35,000 (ranked 10\textsuperscript{th} among states), states range from $20K to $40K.
- If a 65 year old were to annuitize this balance to provide monthly income for life, it would produce $233 a month of income for life. If we experience 3\% inflation per year, the purchasing power will be $173 a month 10 years from now.
- Average Washington worker made $56K in 2012. Need $45K to maintain standard of living in retirement. That is $3,700 per month.
How easy is it to live in WA as a retiree?

<table>
<thead>
<tr>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>No income tax</td>
<td>Housing costs higher than average</td>
</tr>
<tr>
<td>Hourly wages for older works higher than</td>
<td>Unemployment among older workers higher than average</td>
</tr>
<tr>
<td>average</td>
<td></td>
</tr>
<tr>
<td>Lower than average Medicare costs</td>
<td></td>
</tr>
</tbody>
</table>
Washington Plan Specifics

- Boeing’s transition to DC
  - 2009: Closed nonunion salaried plan to new hires
  - 2013: Closed SPEEA engineers plan to new hires
  - 2014: Machinists to move to DC
  - 2014: Nonunion salaried to move to DC
  - Many other union workers also to DC
Possible Solutions for Retirement Security

- **Two major hurdles:**
  - More workers need access to retirement plans.
  - DB Plans should be brought back into favor. Retirees do best when they have employer sponsored DB plans and personal savings (through DC plans) in addition to Social Security.

- **U.S. Senator, Tom Harkin, of Iowa, Chairman of the HELP Committee in “The Retirement Crisis and a Plan to Solve it,” outlines his USA Retirement Funds.**
  - Professional asset management
  - Lifetime income benefit
  - Eliminates employer risk
  - Benefit amounts could change
  - Available to workers without other plan options
Possible Solutions for Retirement Security

- Variable Annuity Pension Plans (modified defined benefit plan)
  - Predictable contributions like DC
  - Life long income like DB
  - Professional asset management
  - Expected inflation protection
  - Balance sheet stability