# What we’re going to cover

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<th>Introduce presenters &amp; goals</th>
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<td>Defined Benefit (DB) &amp; Defined Contribution (DC) plans</td>
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Van Iwaarden Associates & Advanced Capital Group

Van Iwaarden Associates
- Local, independent actuarial firm since 1991
- Known for innovative DB & DC retirement plan design

ACG
- Local, independent Registered Investment Advisor since 1998
- Known for objective DC plan advice.

We’ve been asked to discuss DC plan possibilities

No financial interest in any particular DB or DC approach
Presentation Goals

- Introduce general principles
- Increase understanding
- Introduce some DC plan options
Recent LCPR Studies

- LCPR has given a lot of thought to plan design already
  - LCPR study October 2013
  - Statewide plans' report November 2013
  - LCPR study January 2014
  - NIRS presentation January 2014
  - Arnold Foundation presentation January 2014
  - NCSL report on national trends January 2014
Defined Benefit (DB) & Defined Contribution (DC) plans

- In a DB plan, the benefits are defined. The cost depends on how things play out.

- In a DC plan, the contributions are defined. The benefits depend on how things play out.

- Hybrid plans include characteristics of each.
  - Cash balance plans are the most common hybrid
  - Employer usually takes investment risk & reward
# Public & Private Sector Plans

<table>
<thead>
<tr>
<th>Public sector</th>
<th>Private sector</th>
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| ‣ DB plans more common  
  ‣ Some DC plans | ‣ DC plans more common  
  ‣ Some DB plans  
  ‣ 401(k) or 403(b) almost universal  
  ‣ Most match employee deferrals  
  ‣ Some discretionary contributions |
| ‣ Cost of living adjustments (COLAs) | ‣ COLAs are rare |
| ‣ Mandatory employee contributions | ‣ Optional 401(k) deferrals  
  ‣ Some auto-enrollment & auto-increase |
### Public & Private Sector Developments

<table>
<thead>
<tr>
<th><strong>Public sector</strong></th>
<th><strong>Private sector</strong></th>
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<tbody>
<tr>
<td>‣ Shift to more DC and hybrid plans</td>
<td>‣ DB plan freezes</td>
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<tr>
<td></td>
<td>‣ “hard freeze” – preserve benefits earned to date, no future accruals</td>
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<tr>
<td></td>
<td>‣ “soft freeze” – continue accruals for current employees, no new entrants</td>
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<td></td>
<td>‣ DB plan de–risking thru investments, lump sums &amp; annuities</td>
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<tr>
<td>‣ 50/50 ee/taxpayer cost sharing</td>
<td>‣ DC investment “glide paths”</td>
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<td>‣ Fewer “pick–ups” (i.e. employer “picks up” employee contribution)</td>
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<td></td>
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<tr>
<td>‣ Curbing “pension spiking” and other abuses</td>
<td>‣ DC guaranteed lifetime income</td>
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## Public & Private Sector Developments

<table>
<thead>
<tr>
<th>Why are DB plans changing?</th>
<th>Why are DC plans changing?</th>
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<tbody>
<tr>
<td>‣ Employers faced with increasing and volatile costs</td>
<td>‣ Focus on lifetime income</td>
</tr>
<tr>
<td>‣ Less perceived value by mobile workforce</td>
<td>‣ Put employees on right path with auto-enrollment and auto-escalation</td>
</tr>
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<td>‣ Increased scrutiny and media attention</td>
<td>‣ Better understanding of DC plan risks</td>
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Among the best governed public DB plans in the U.S.

Good results through State Board of Investment (SBI)

Stronger funded status than average

- 2014 average is about 70%, per Milliman survey of top 100 U.S. public pensions
- 2014 funding ratio is 82–92% for main plans
  (market assets/accrued liability)
Current Plans MSRS/PERA/TRA

- Lower cost (% of payroll) than average
  - 2014 actuarial contribution from 12.8% MSRS to 33.9% PERA police/fire
  - Less than many other states

- May need higher contributions or lower costs
  - MN statutory contributions not enough
    (short by about 2.6% of payroll, 2014 weighted average)
  - 2014 contribution deficiency about $360 million for all plans
Where does the money go?
- Current employees
- Past employees
- Future employees

Who takes the risk & reward?
- Employees
- Taxpayers

Is it sustainable?
Sustainable Retirement Plans

- Equity between generations of taxpayers
  - Focus $ on current employees, to the extent possible
  - Pay off unfunded liabilities (UL) as soon as feasible
  - Avoid generating new unfunded liabilities

- Cost control incentives (employee/taxpayer sharing)

- Fair sharing of risk & reward
  - Investment
  - Longevity
  - Inflation
Sustainable Retirement Plans

- Can be accomplished in a DB plan, with...
  - Fair benefit structure *(conscious decisions on who gets $)*
  - Disciplined contribution policy
  - Fair employee/taxpayer cost sharing

- Automatic, with a DC or hybrid plan
  - Need to decide where $ are focused (long or short service ees)
  - Need employee/taxpayer cost sharing
  - Need to decide who takes risk & reward
    - Investment (DC ➔ ee, hybrid ➔ taxpayers)
    - Longevity (DC ➔ ee, unless lifetime income is guaranteed)
    - Inflation (risk managed thru investment structure/choices)
## Current Plans’ Sustainability

<table>
<thead>
<tr>
<th>Equity between generations of taxpayers</th>
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<tbody>
<tr>
<td><strong>Focus contributions on current employees</strong></td>
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<tr>
<td>- Unfunded liabilities cause many new $ to go to former employees</td>
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<tr>
<td>- A large portion of total contribution goes toward paying off unfunded liabilities*</td>
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<td><em>(40–53% for main MSRS/PERA/TRA plans, per 7/1/14 valuations)</em></td>
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<tr>
<td><strong>Pay off unfunded liabilities as soon as feasible</strong></td>
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<tr>
<td>- Unfunded liabilities scheduled to be paid off in 19–27 years, varying by plan</td>
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<tr>
<td><strong>Avoid generating new unfunded liabilities</strong></td>
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<tr>
<td>- Contribution deficiencies create new unfunded liabilities</td>
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<td>- Total 2014 contribution deficiency ~$360 million</td>
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## Current Plans’ Sustainability

<table>
<thead>
<tr>
<th>Fair sharing of risk &amp; reward</th>
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<tbody>
<tr>
<td>Investment</td>
</tr>
<tr>
<td>Taxpayers take risk/reward on both employer &amp; employee contributions</td>
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<tr>
<td>Longevity</td>
</tr>
<tr>
<td>Taxpayers take longevity risk</td>
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<tr>
<td>Inflation</td>
</tr>
<tr>
<td>Taxpayers take inflation risk</td>
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<tr>
<td>COLAs (unrelated to CPI) &amp; augmentation</td>
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</table>
Sustainable DC/Hybrid Examples

- Simple DB/DC combination
  - **Employer** contributions continue toward DB plan
    - May need extra contributions to pay off unfunded liabilities
  - **Employee** contributions go to DC plan
    - Could allow annuity payouts
      - With or without COLA
      - At market rates or DB plan’s rates
### Sustainable DC/Hybrid Examples

- **Simple DB/DC combination**

DC account for employee starting at age 35, with constant $50k pay

<table>
<thead>
<tr>
<th>Employee Contribution Rate</th>
<th>DC Balance at Age 65</th>
<th>DC Annual Life Income Market Rate no COLA</th>
<th>DC Annual Life Income Plan Rates no COLA</th>
<th>DC Annual Life Income Plan Rates 2% COLA</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.5%</td>
<td>$311,000</td>
<td>$20,500</td>
<td>$32,300</td>
<td>$27,700</td>
</tr>
<tr>
<td>6.5%</td>
<td>368,000</td>
<td>24,200</td>
<td>38,200</td>
<td>32,800</td>
</tr>
<tr>
<td>7.5%</td>
<td>424,000</td>
<td>27,900</td>
<td>44,100</td>
<td>37,800</td>
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</tbody>
</table>

**Assumptions:**
- 8% investment return
- Fall 2015 Market Rates
- 8% interest, 2016 Applicable Mortality
- 8% interest, 2016 Applicable Mortality
Sustainable DC/Hybrid Examples

- DC / hybrid combination
  - **Employee** contributions go to DC plan
    - Employee takes investment risk & reward on own contributions
    - Can invest in SBI, age-based, risk-based or any other funds
    - Option to convert to guaranteed income each payroll or at retirement
  - **Employer** contributions go to DC or hybrid plan (after UL paid off)
    - Investment risk & reward: *employee if DC, usually taxpayers if hybrid*
    - Invest with SBI, or
    - Convert to guaranteed income each payroll
Sustainable DC/Hybrid Examples

- **DC / hybrid – employer contribution options**
  - **Employer** contributions – many possibilities
    - Same % of pay for all employees
    - Different %’s to replace DB future service benefits
    - Service weighted, e.g. increasing by 1% each year, up to a limit
    - Age weighted, e.g. increasing by 1% each year, up to a limit
    - Different %’s for different groups, as needed
Transition to DC or Hybrid

- Changes could apply only to new employees

- Or they could apply to current employees, to the extent allowed by MN law
  1. Preserve benefits earned to date
  2. Direct some or all contributions to DC or hybrid, immediately or gradually

- Any plan (DB, DC or hybrid) can guarantee lifetime income, lump sum or combination
Transition Issues

- Keeping/making compensation package competitive with public & private sector
- Affordability/cost alignment with taxpayer generations
- Workability of plan – how will it be administered?
- Communicating changes to employees & taxpayers
Topics for Further Study

- How can we improve the sustainability of current plans?
- Should we consider a new structure going forward?
  - For employer contributions?
  - For employee contributions?
- What might the plan look like?
  - Where do employer and employee contributions go?
  - Who takes the risk and reward?
  - How can we ensure a secure retirement?
Questions?