

A banner for the 2017 SOA Annual Meeting & Exhibit. It features a silhouette of a person in a suit standing on a rooftop, looking out over a city skyline at night. The text "2017 SOA Annual Meeting & Exhibit" is on the left, and "Oct. 15-18, 2017 Boston, MA" is on the right.

2017 SOA
**Annual Meeting
& Exhibit**

Oct. 15-18, 2017
Boston, MA

Session 061 PD - Annuity Placements: The View from Both Sides of the Fence

Moderator:

Kevin Michael Morrison, ASA, EA, MAAA

Presenters:

David Jaffe, FSA, EA

Daniel N. Smith III

James Peter Walton, FSA

Annuity Placements: The View from Both Sides of the Fence

KEVIN MORRISON, P-SOLVE (MODERATOR)

JAMES WALTON, P-SOLVE

DAVID JAFFE, LEGAL AND GENERAL AMERICA

DAN SMITH, MUTUAL OF OMAHA

Session 061 PD

16 October 2017



SOCIETY OF ACTUARIES

Antitrust Compliance Guidelines

Active participation in the Society of Actuaries is an important aspect of membership. While the positive contributions of professional societies and associations are well-recognized and encouraged, association activities are vulnerable to close antitrust scrutiny. By their very nature, associations bring together industry competitors and other market participants.

The United States antitrust laws aim to protect consumers by preserving the free economy and prohibiting anti-competitive business practices; they promote competition. There are both state and federal antitrust laws, although state antitrust laws closely follow federal law. The Sherman Act, is the primary U.S. antitrust law pertaining to association activities. The Sherman Act prohibits every contract, combination or conspiracy that places an unreasonable restraint on trade. There are, however, some activities that are illegal under all circumstances, such as price fixing, market allocation and collusive bidding.

There is no safe harbor under the antitrust law for professional association activities. Therefore, association meeting participants should refrain from discussing any activity that could potentially be construed as having an anti-competitive effect. Discussions relating to product or service pricing, market allocations, membership restrictions, product standardization or other conditions on trade could arguably be perceived as a restraint on trade and may expose the SOA and its members to antitrust enforcement procedures.

While participating in all SOA in person meetings, webinars, teleconferences or side discussions, you should avoid discussing competitively sensitive information with competitors and follow these guidelines:

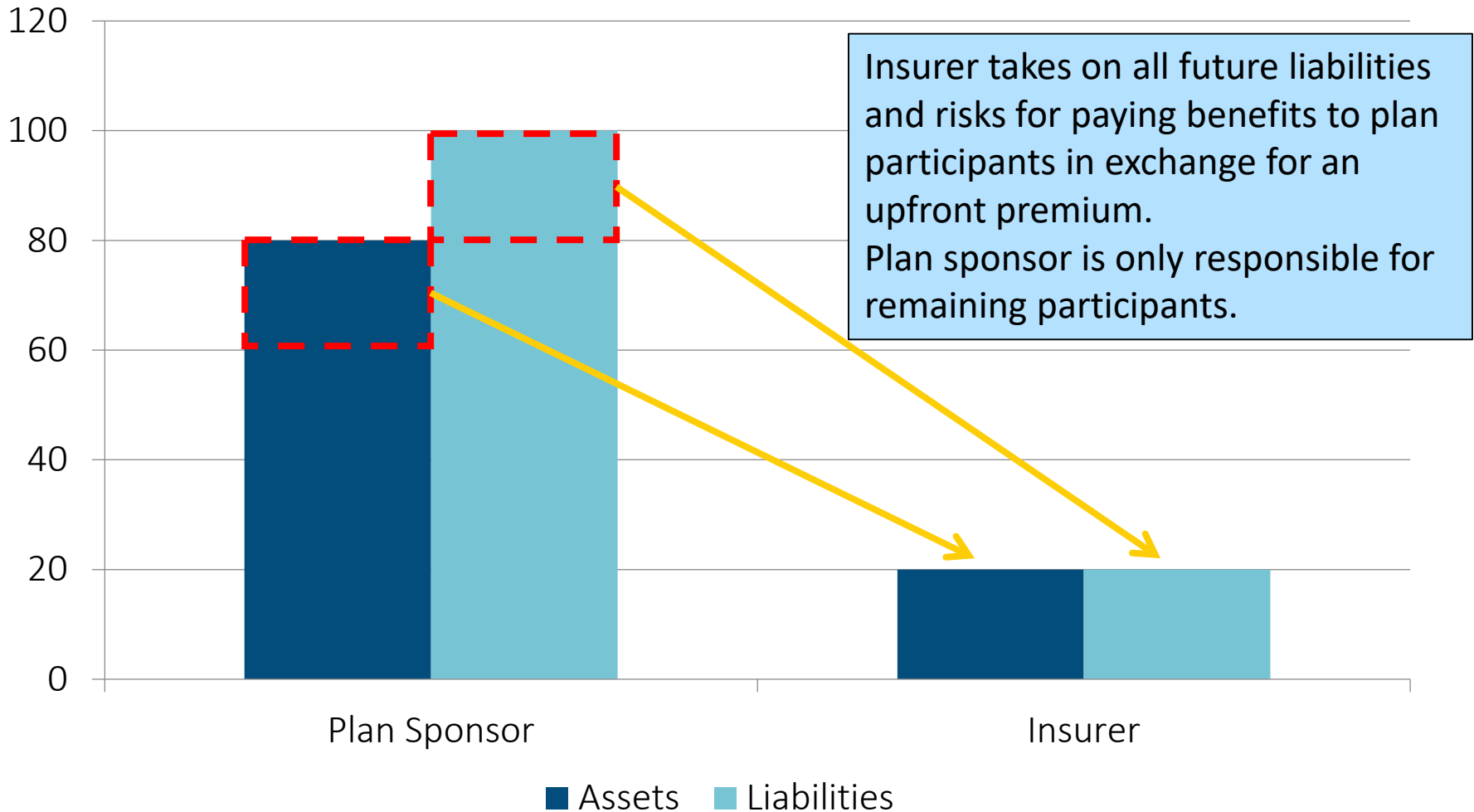
- **Do not** discuss prices for services or products or anything else that might affect prices
- **Do not** discuss what you or other entities plan to do in a particular geographic or product markets or with particular customers.
- **Do not** speak on behalf of the SOA or any of its committees unless specifically authorized to do so.
- **Do** leave a meeting where any anticompetitive pricing or market allocation discussion occurs.
- **Do** alert SOA staff and/or legal counsel to any concerning discussions
- **Do** consult with legal counsel before raising any matter or making a statement that may involve competitively sensitive information.

Adherence to these guidelines involves not only avoidance of antitrust violations, but avoidance of behavior which might be so construed. These guidelines only provide an overview of prohibited activities. SOA legal counsel reviews meeting agenda and materials as deemed appropriate and any discussion that departs from the formal agenda should be scrutinized carefully. Antitrust compliance is everyone's responsibility; however, please seek legal counsel if you have any questions or concerns.

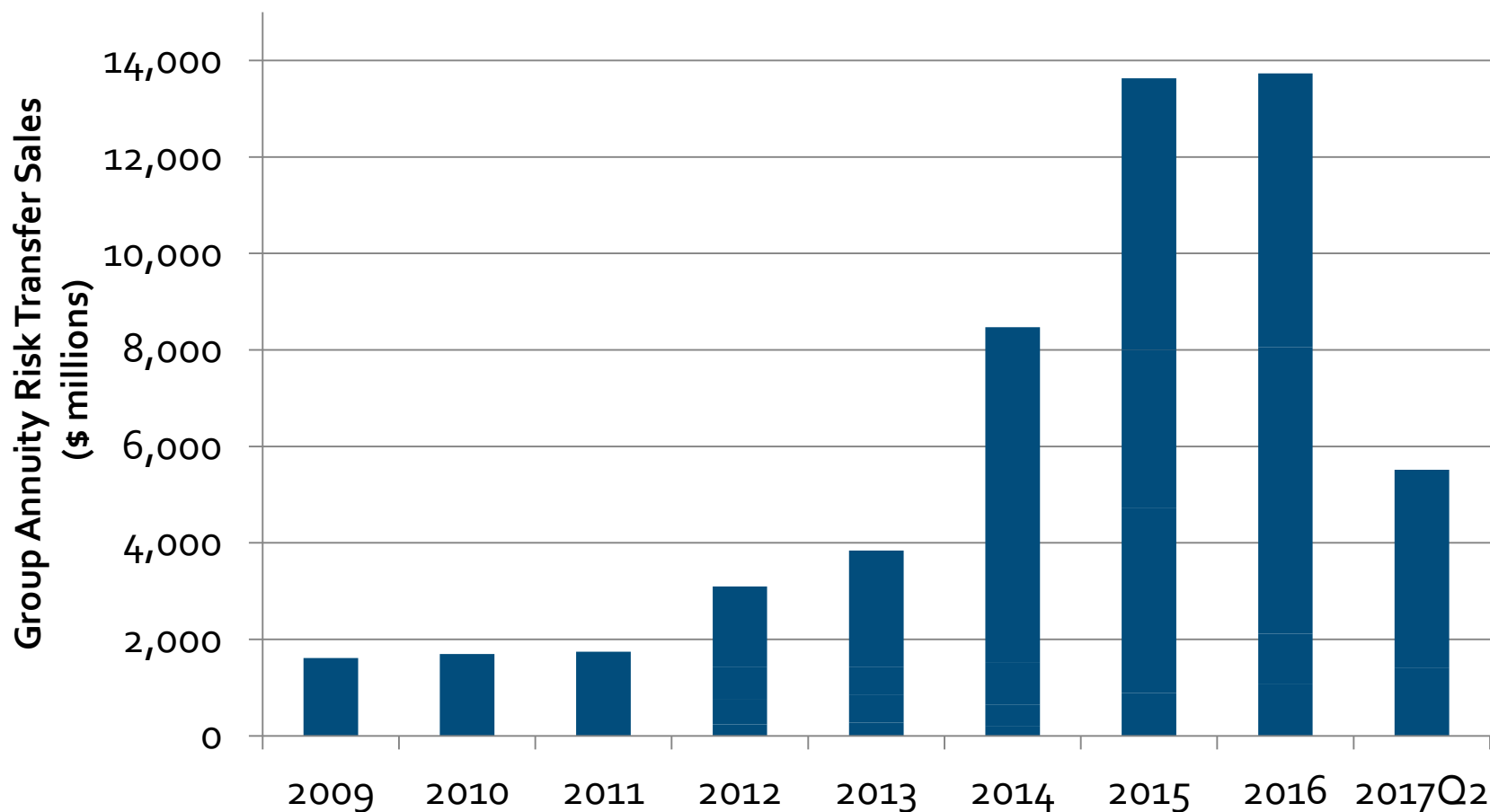
Presentation Disclaimer

Presentations are intended for educational purposes only and do not replace independent professional judgment. Statements of fact and opinions expressed are those of the participants individually and, unless expressly stated to the contrary, are not the opinion or position of the Society of Actuaries, its cosponsors or its committees. The Society of Actuaries does not endorse or approve, and assumes no responsibility for, the content, accuracy or completeness of the information presented. Attendees should note that the sessions are audio-recorded and may be published in various media, including print, audio and video formats without further notice.

What is an Annuity Purchase?



Historical PRT Volume



Source: LIMRA

2012 sales excludes GM/Verizon transactions totaling \$34.3bn

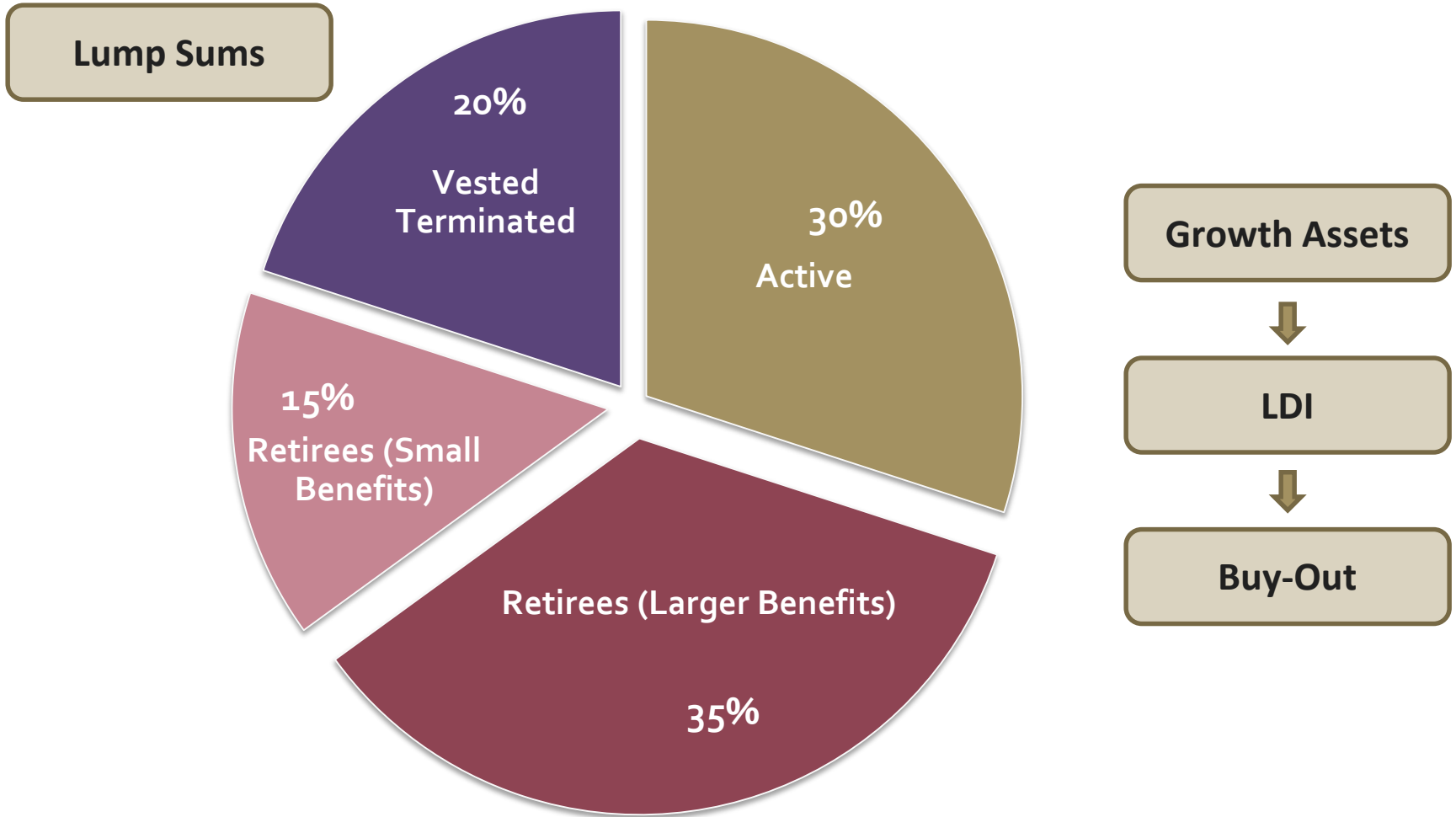


P-Solve

Annuity Placements: The Pension Plan Perspective

James Walton, FSA CERA

RIVER AND MERCANTILE
GROUP





- Annuity purchases are becoming commonplace
 - Rising PBGC premium costs
 - Rising administrative costs
 - Accounting impact now reduced
 - Plans looking to terminate

	2012	2015	2016	2017	2018	2019
Per participant	\$35	\$57	\$64	\$69	\$74	\$80
Variable rate percent of underfunded	0.9%	2.4%	3.0%	3.4%	3.9%*	4.4%*
Variable premium cap per participant	N/A	\$418	\$500	\$517	\$533*	\$549*
Maximum per participant premium	N/A	\$475	\$564	\$586	\$607*	\$629*

*Assumes 3% annual wage inflation



The table below shows the distribution of retirees by benefit amount

Annual benefit	Sample Client 1	Sample Client 2	Sample Client 3	Sample Client 4
< \$1,000	16%	6%	12%	1%
\$1,000 - \$5,000	52%	55%	62%	9%
\$5,000 - \$10,000	18%	22%	15%	14%
\$10,000 - \$15,000	7%	13%	4%	13%
\$15,000 - \$20,000	2%	3%	4%	14%
\$20,000 - \$25,000	2%	0%	1%	12%
\$25,000 - \$30,000	1%	1%	1%	7%
\$30,000 - \$35,000	1%	0%	0%	9%
\$35,000 - \$40,000	1%	0%	1%	4%
\$40,000+	1%	0%	1%	16%



Reasons To / Not To Implement Annuity Purchase

- **Reasons to implement annuity purchase**

- Reduce PBGC costs as premium rates continue to rise
- Eliminate future liability risks
- Lower headcount leads to easier administration
- “Shrinking the ball” to reduce overall funded status volatility
- May be close to balance sheet neutral.

- **Reasons not to implement annuity purchase**

- Plan termination in sight
- May trigger settlement accounting and require additional amount to run through P&L
- Minimum funding funded status will be worse (% and \$) and Minimum required contribution (MRC) may increase



P-Solve

The Annuitization Process

- The selection of an annuity provider is a fiduciary decision governed by ERISA
 - Fiduciaries must conduct an objective, thorough, and analytical search
 - Must evaluate a number of factors relating to an annuity provider's claims paying ability and creditworthiness
 - Reliance on ratings provided by insurance ratings services is not sufficient to meet this requirement

“A fiduciary may conclude, after conducting an appropriate search, that more than one annuity provider is able to offer the safest annuity available.”

- Considerations for selecting the safest available annuity provider:
 - Investment portfolio quality and diversification
 - Size of insurer
 - Capital and surplus
 - Lines of business of the insurer and exposure to liability
 - Structure of Annuity contract
 - State guarantees

- Other considerations:
 - Service levels
 - Plan participant support
 - Experience with providers
 - Name recognition



- Fiduciaries are **required to act in the best interest of plan participants** under a standard of care that has been described by the courts as the highest known to the law.
- The new Labor Department fiduciary regulations effective June 9, 2017 make it clear that **any pass/fail advice would be considered "investment advice"**
- Therefore, advisers giving pass/fail advice on insurers' status as '95-1 safest available provider' may be considered an ERISA fiduciary under section 3(21) of ERISA.

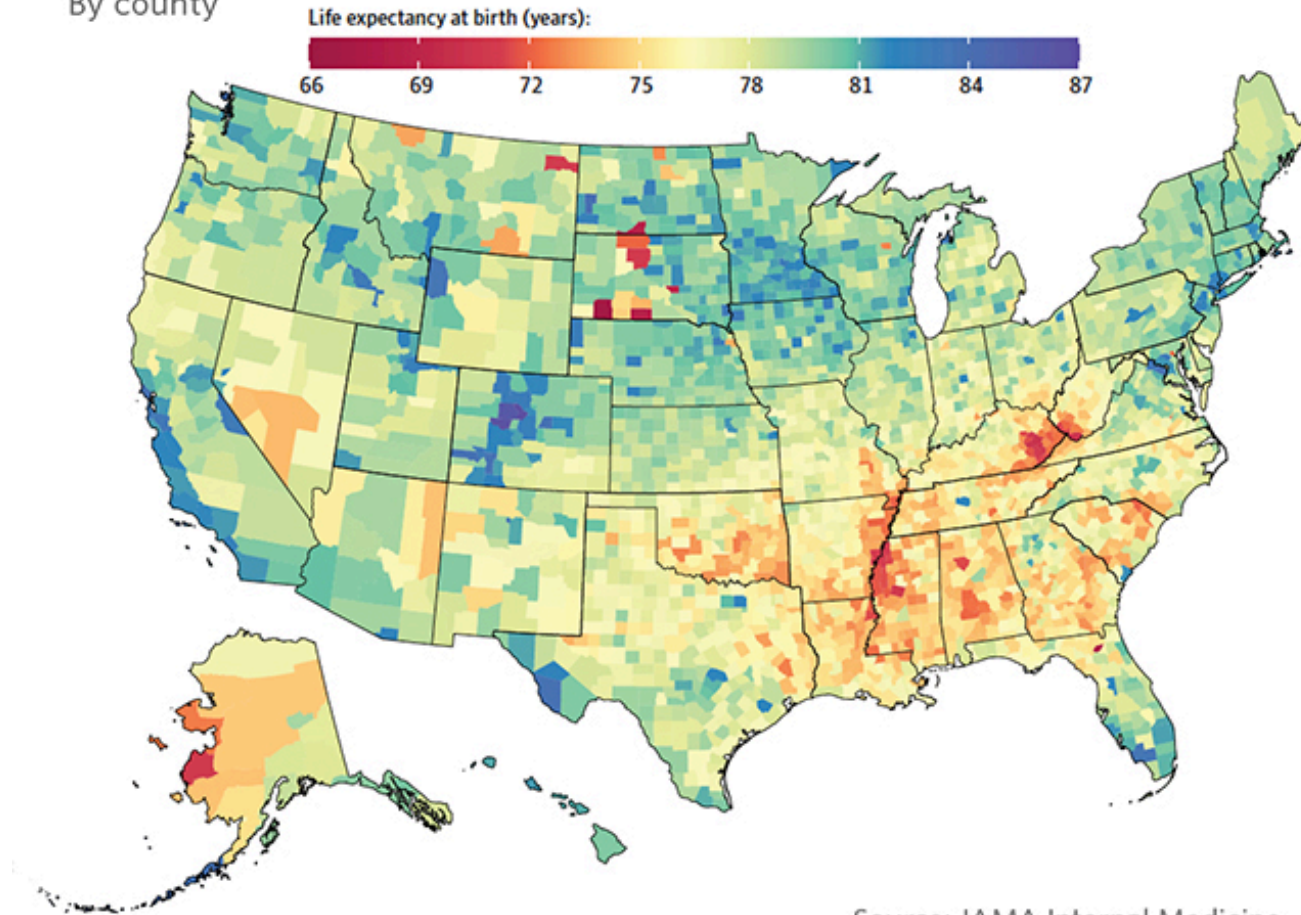


- Annuity quotes will vary based on many factors:
 - Blue collar vs. white collar (or mixed collar) workers
 - Benefit size
 - Age of annuitant
 - Geography
- Accounting liability does not make adjustments for each of these in the same way(s) that insurers do.
- Complete and accurate data gives insurers more confidence with your Plan and ultimately leads to more accurate pricing and a smoother transition.
 - Data such as location and job descriptions can lead to more rigorous pricing
 - Clean data initially will smooth and expedite transition process later on
 - Depending on Plan history, this can be time consuming but worthwhile

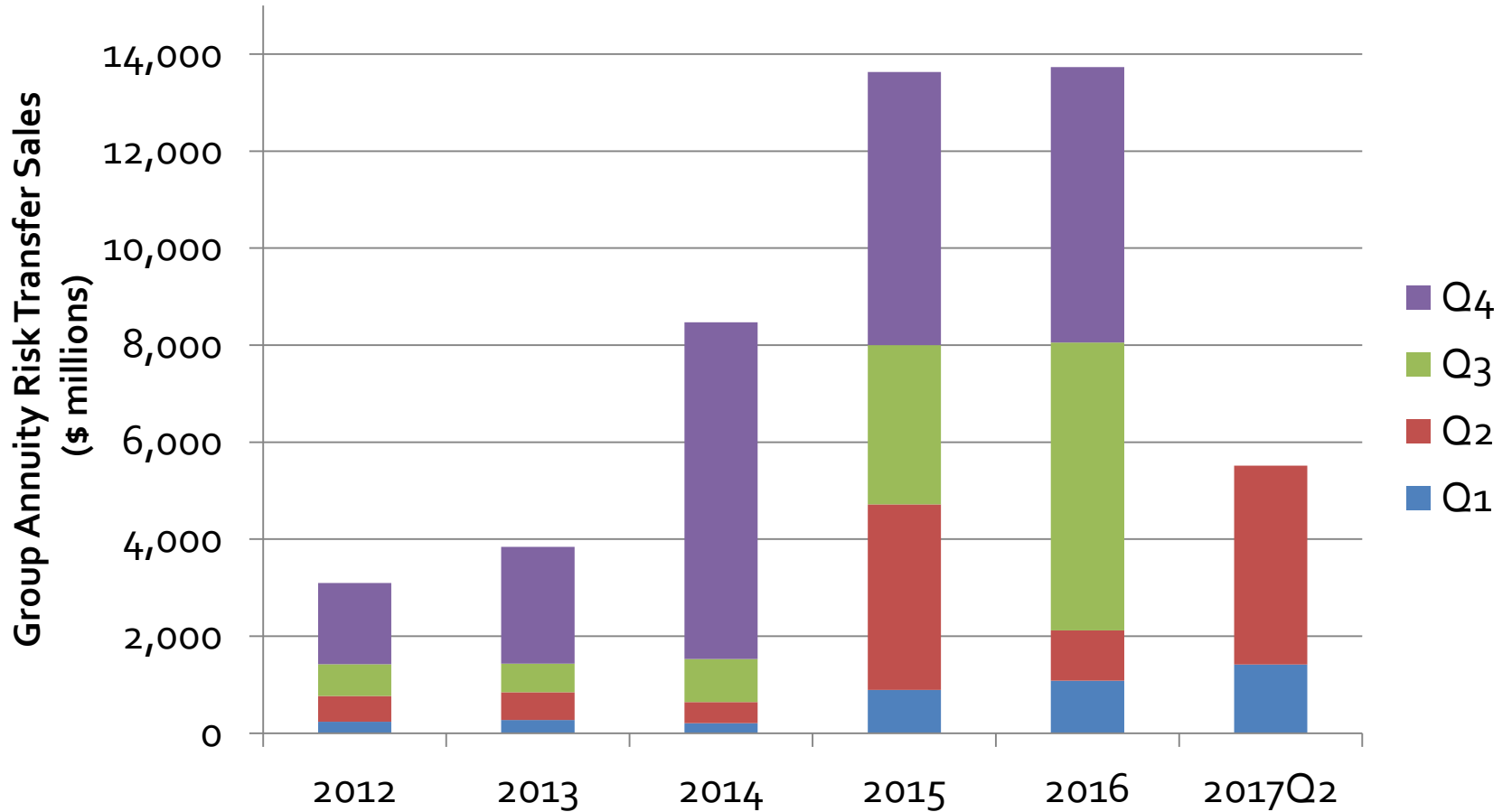


Life expectancy at birth

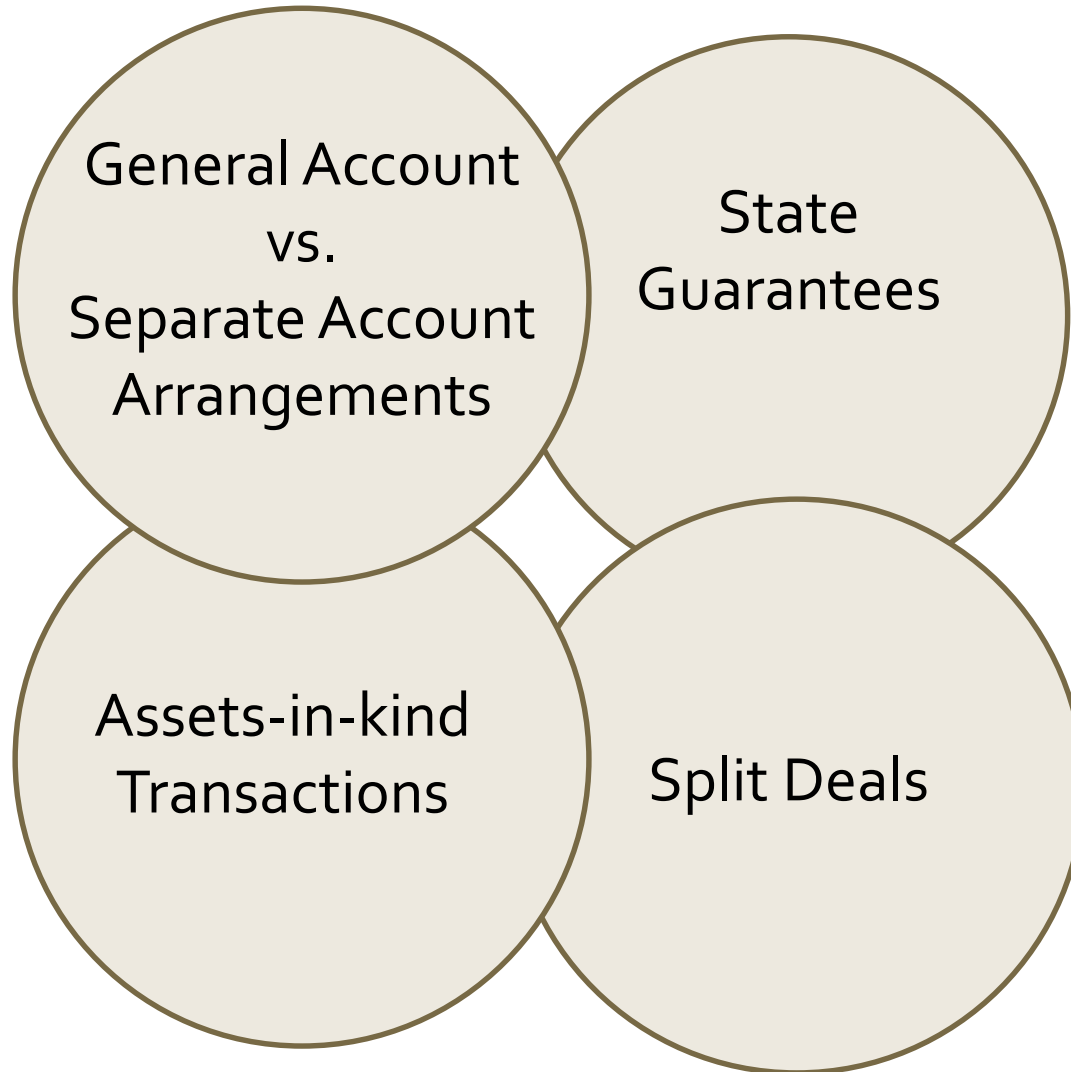
By county



Source: JAMA Internal Medicine



Source: LIMRA
2012 sales excludes GM/Verizon transactions totaling \$34.3bn





Plan Concerns Addressed

"It is an admin headache"



It's either now or later

"I think interest rates will rise"



Pay premium out of bond portfolio

"We are paternalistic"



*All that changes is the name on the check
State guarantees*

"It's expensive"



Pricing close to accounting for retirees

"Can participants opt out?"



*Unlike lump sums, participants have
no option*

"How long does it take?"



*3-6 months, with potentially minimal
management time*



- Risk and cost reduction make annuitization attractive for many plans
- Placement with an insurer can be relatively quick and simple, but does involve insurance company due diligence, data preparation and a bid process.

Important Legal Information

CONFIDENTIAL INFORMATION: The information herein has been provided solely to the addressee in connection with a presentation by P-Solve LLC, on condition that it not be shared, copied, circulated or otherwise disclosed to any person without the express consent of P-Solve LLC.

INVESTMENT ADVISOR: Investment advisory services are provided by P-Solve LLC, an investment advisor registered with the US Securities and Exchange Commission.



Issued by P-Solve LLC

A River and Mercantile Group Company

200 West Street, Waltham, MA 02451

Telephone: 781.373.6900

Facsimile: 781.373.6902

Email: usa@psolve.com

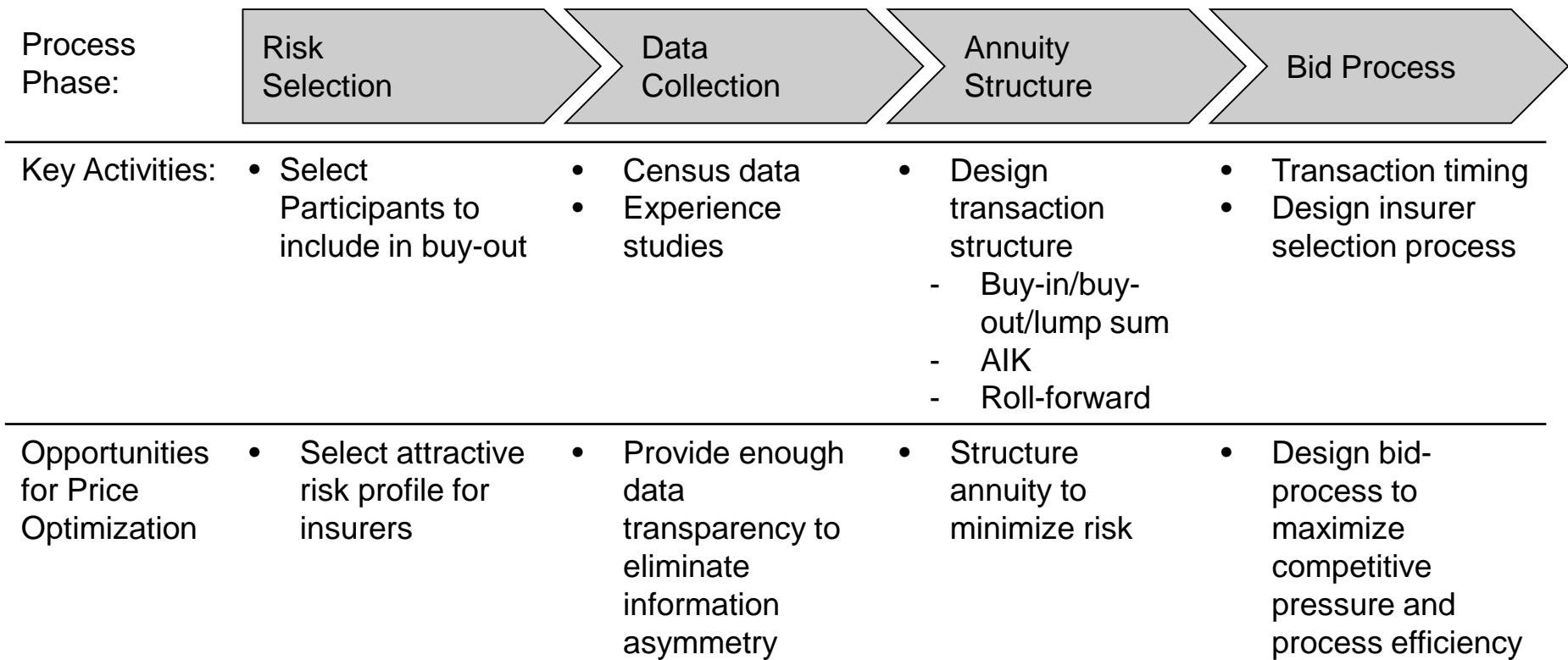
www.psolve.us

RIVER AND MERCANTILE
GROUP

Pension Plan Annuity Purchases: How Plan Sponsors can Optimize Pricing

October 2017

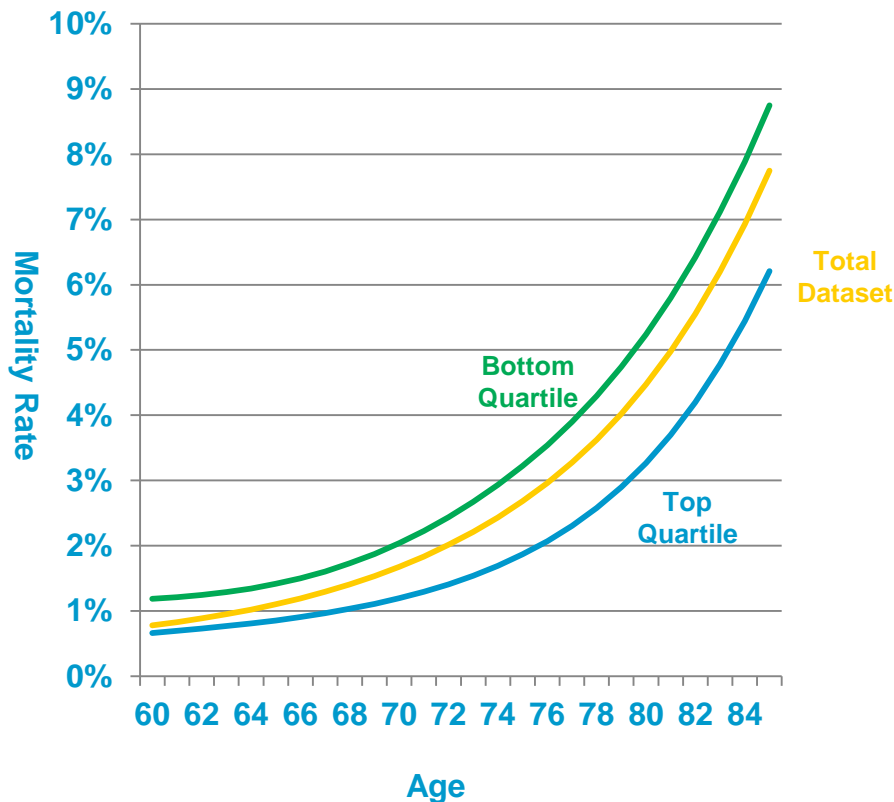
A well-designed buy-out process can optimize pricing for sponsors



Buying-out low dollar pensioners can materially improve pricing but leaves the pension plan with a toxic risk profile post-buy-out

RP 2014 Mortality Table¹

Males



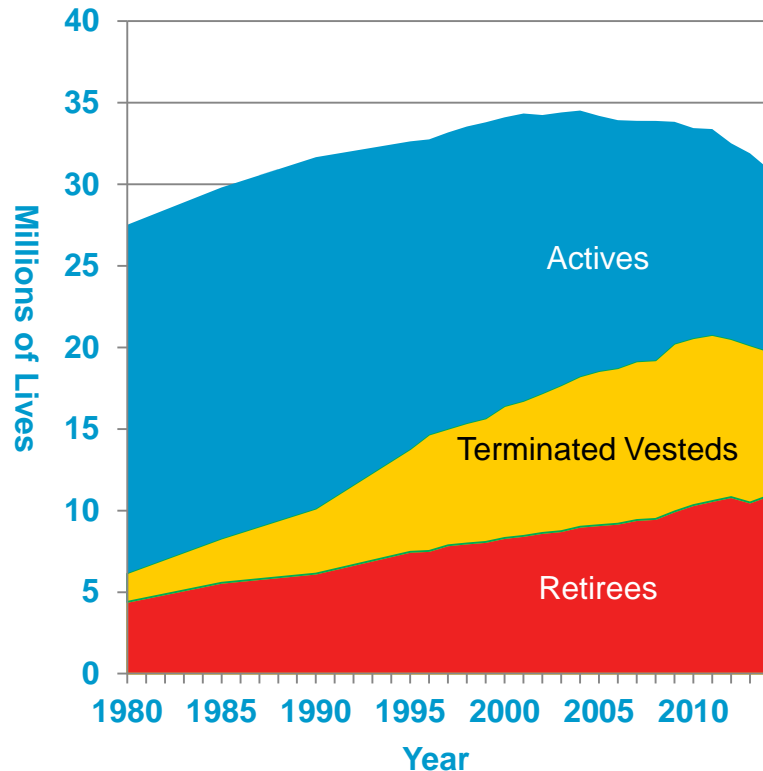
Observations

- SOA data support heavier mortality assumption for lower dollar benefit retirees which can improve pricings on small dollar retirees
- Buying-out lower dollar retirees can also maximize PBGC premium relief
- However, if the sponsor intends to later buy-out the high-dollar retirees, pricing will be more expensive on the second tranche due to the higher benefits
- The additional cost for the subsequent high-dollar buy-out can often eclipse the savings on the initial low-dollar tranche as insurers tend to price more conservatively when the population is segmented into different groups

1. Source: Society of Actuaries

Retiree-only transactions tend to command more attractive pricing but leave the pension plan with a toxic risk profile post-buy-out

US Pension Plan Lives¹ (Millions)



Observations

- Overtime, pension plans are increasingly dominated by retirees though the demographic profile can vary significantly from plan to plan. As of 2015²:
 - 13%³ of plans were below 25%⁴ retirees
 - 31%³ of plans were 25% - 50%⁴ retirees
 - 46%³ of plans were 50% - 75%⁴ retirees
 - 10%³ of plans were 75%+⁴ retirees
- Deferrals add significant complexity and risk to a transaction so executing a retiree-only buy-out can increase the number of insurers bidding on a case and thus improve pricing
- However, buying-out all or almost all of a plan's retirees leaves the plan with predominantly deferrals which can limit insurer appetite for a future buy-out

1. PBGC; Data linearly interpolated for gaps in PBGC dataset

2. DoL

3. Liability weighted percentage

4. Percentage defined on liability basis

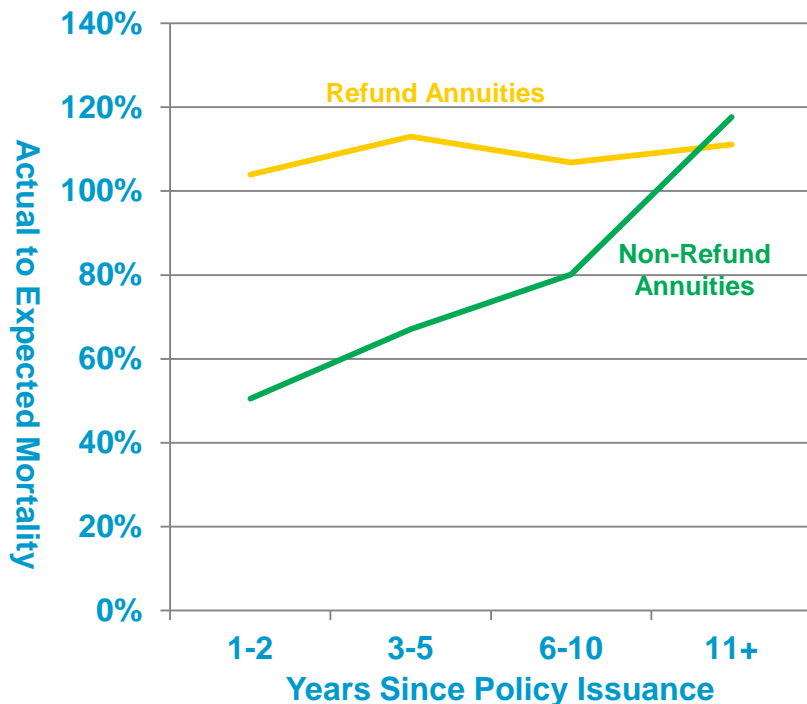
Providing more data reduces insurer risk and information asymmetry and thus improves pricing

	Data Item	Value to Insurer	Market practice
1	Basic Data (pension amount, DoB etc)	<ul style="list-style-type: none"> Required input into valuation model 	<ul style="list-style-type: none"> Always provided
2	Zip Code	<ul style="list-style-type: none"> Input into mortality underwriting model 	<ul style="list-style-type: none"> Often provided
3	Mortality Experience Study	<ul style="list-style-type: none"> Reduces mortality risk Eliminates information asymmetry and anti-selection risk that only healthy plans buy-out 	<ul style="list-style-type: none"> Often provided on large cases
4	Behavior Experience Study	<ul style="list-style-type: none"> Reduces behavior risk Eliminates information asymmetry and anti-selection risk that only plans with efficient behavior buy-out 	<ul style="list-style-type: none"> Rarely provided
5	Service History (DoH, DoT, DoR)	<ul style="list-style-type: none"> Input into mortality and behavior model 	<ul style="list-style-type: none"> Sometimes provided
6	Social Security Number	<ul style="list-style-type: none"> Input into mortality underwriting model Removes information asymmetry with sponsor 	<ul style="list-style-type: none"> Rarely provided

Providing a lump sum window along with a buy-out can materially erode pricing, especially for older participants

Ratio of Actual Mortality to Expected Mortality for Individual Annuities¹

2009 to 2013



Observations

- SOA data support that offering participants a lump sum option presents an anti-selection risk as participants rejecting the option would tend to be healthier than average
 - Data suggest that the anti-selection risk erodes over time, with the mortality experience of the two groups converging
- Offering a lump sum window to younger participants will not have a material impact on pricing since the anti-selection effect will have dissipated by the time the participants reach the ages with material mortality levels
- A lump sum window for older participants or an ongoing lump sum option will however materially erode pricing due to the anti-selection effect

1. Source: Society of Actuaries 2009 to 2013 Individual Payout Annuity Mortality Experience Report. Expected Mortality based on IAM 2012, basic table

Structuring a transaction with assets-in-kind can reduce insurer risk and thus optimize pricing

	Insurer Risk		Assets Used to Fund Buy-out Premium			
			Cash	Treasuries	Attractive Public Credit	Unattractive Public Credit
1	Bid Day Market Risk	<ul style="list-style-type: none"> Risk of interest rate decline between final quote and insurer selection 	x	✓	✓	✓
2	Interest Rate Risk	<ul style="list-style-type: none"> Risk of interest rate decline after insurer selection 	✓	✓	✓	✓
3	Credit Risk	<ul style="list-style-type: none"> Risk of credit tightening after insurer selection 	x	x	✓	✓ x
4	Bid-Ask Spread	<ul style="list-style-type: none"> Risk of purchasing bonds at ask price, reducing spread 	x	x	✓	x x x

How to Optimize the Bid Process

Separating Fact from Fiction

Optimization Approach		Fact or Fiction	Rationale
1	Avoid Q4	Fact	<ul style="list-style-type: none"> Volume tends to spike in Q4, reducing insurer capacity to quote
2	Monitor market conditions and time transaction to optimize price	Mostly fiction	<ul style="list-style-type: none"> Insurer pricing mostly tracks the price of investment grade credit so tends to move in tandem with PBO Some divergence between buy-out premium and PBO is expected since PBO tracks AA credit but insurer pricing tends to track BBB or A credit
3	Time transaction to optimize statutory interest rate	Mostly fiction	<ul style="list-style-type: none"> Statutory interest rate is one of many factors impacting insurer pricing and impact on pricing can vary
4	Provide Clean Data	Fact	<ul style="list-style-type: none"> Data-clean up is a considerable portion of underwriting process. Clean data can incentivize more insurers to bid
5	Streamline process	Fact	<ul style="list-style-type: none"> Fewer preliminary bids can incentivize more insurers to bid
6	Act now! Capacity is running out	Fiction	<ul style="list-style-type: none"> The top 100 US insurers have over \$6 trillion of assets on balance sheet. Annual PRT sales of ~\$16 billion will not make a dent

Key Takeaways

- ✓ **Think Ahead**
- ✓ **Think Holistically**
- ✓ **Think Collaboratively. We are here to help. Talk to us!**

› Micro Plans and the PRT Market

Observations on the characteristics and challenges for Micro Plan Pension Risk Transfer

Micro Plan Pension Risk Transfer Transaction Defined

- PRT transaction of 10 million and below.
- Typically less than 100 annuitants involved in the transaction.

Characteristics of Micro Plan PRT Market

- According to PBGC data tables, approximately 15,000 single employer plans with 100 participants or less are insured today with the PBGC. Approximately 75% of those plans have 25 participants or less.
- Insurance carrier interest in the Micro Market is generally declining.

Characteristics of Micro Plan PRT Market (cont.)

- Most cases are full plan terminations, the typical United of Omaha case has an annuity mix in the range of 75/25 immediates to deferreds.
- Strategies such as term vested windows and in-pay annuity carve outs are rare.
- Demand for PRT bids in this space are very strong.

Characteristics of Micro Plan Market (cont.)

- Approximately 400 plan termination placements in the 10 million and under premium market in 2016.
- Operational capacity and asset availability could be challenges in the Micro space going forward.

Characteristics of Micro Plan PRT Plan Sponsor

- Primarily private or family owned business.
- Full plan termination is the goal.
- Costs associated with DB Plan inhibit company growth and profitability.
- In some instances willing to borrow to cover premium shortfall

Characteristics of Micro Plan PRT Plan Sponsor (cont.)

- Often engages multiple intermediaries for advice and execution of PRT transaction.
- Generally expects high level of personal service to participants from selected PRT insurance carrier.

Final Observations

- Micro plan sponsors are primarily focused on full termination of their plans.
- As general PRT market grows, carrier participation in micro market has lessened.
- Operational capacity and asset availability may become issues in the micro plan space.

Contact Information

- Daniel N. Smith III
- Phone 763.473.1308 (office)
- Phone 612.306.2777 (mobile)

- Dan-pensions.smith@mutualofomaha.com