



28 - US GAAP Targeted Improvement – Accident and Health Insurance – Part 2 – Implementation Considerations

[SOA Antitrust Disclaimer](#)

[SOA Presentation Disclaimer](#)

2019 Valuation Actuary Symposium

TAMRA VANALLEN & TERRY SWOPE

TAMRA VANALLEN – TVanAllen@Unum.com

TERRY SWOPE – TSwope@Unum.com

Session 28 – US GAAP Targeted Improvement – Accident and Health Insurance –
Part 2 – Implementation Considerations

August 26, 2019



SOCIETY OF
ACTUARIES®

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.

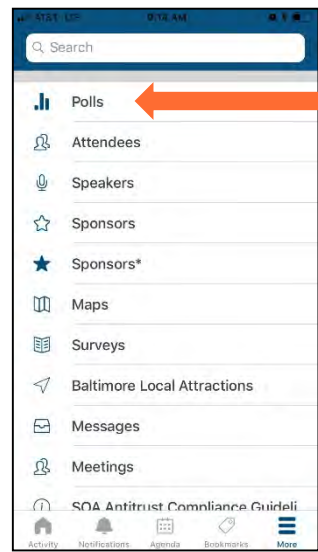
Adherence to these guidelines involves not only avoidance of antitrust violations, but avoidance of behavior which might be so construed. These guidelines only provide an overview of prohibited activities. SOA legal counsel reviews meeting agenda and materials as deemed appropriate and any discussion 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.

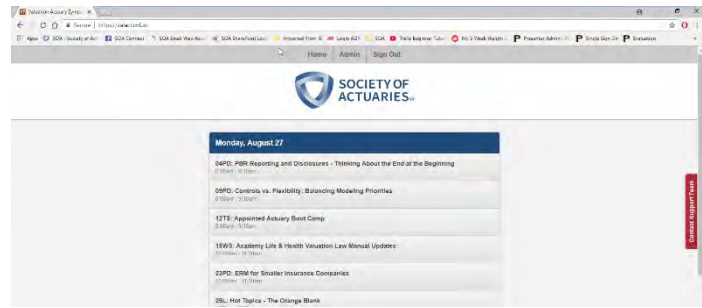
To Participate, look for Polls in the SOA Event App or visit valact.cnf.io in your browser

Find The Polls Feature Under **More** In The Event App



or

Type valact.cnf.io In Your Browser



Choose your session



Respond to Polls when they appear

LDTI Implementation Issues



An Insurer Perspective



- Implementation approach
 - Scope assessment & project planning
 - Product groups and cohorts
 - Assumption & history updates
 - DAC methodology
 - Implementation philosophy
- Technical considerations
 - Actuarial modeling platform
 - Data and Reporting requirements
- Impact assessment: key drivers of financial results
- Open issues

Individual Disability Income (and other longer-claim products like LTC) create unique challenges for LDTI interpretation and implementation.

- How do you retrospectively value claims which are still paying out?

Implementation Approach



Scope Assessment & Project Planning



- Identification of products in scope
- Adoption approach (Retrospective vs. Modified Retrospective)
- Data and model readiness
- Project and resource planning
 - Internal/external resources
 - Centralized vs. decentralized teams
 - Actuarial, Accounting and Project Management resources are critical
- Communication: internal and external

For Accident and Health (A&H) Products:

- ALR products are impacted by reserving changes
- DAC methodology impacts all long duration (e.g. Long Term Disability, if applicable)
- Market Risk Benefits generally not a concern (some good news!)

Product Groups and Cohorts

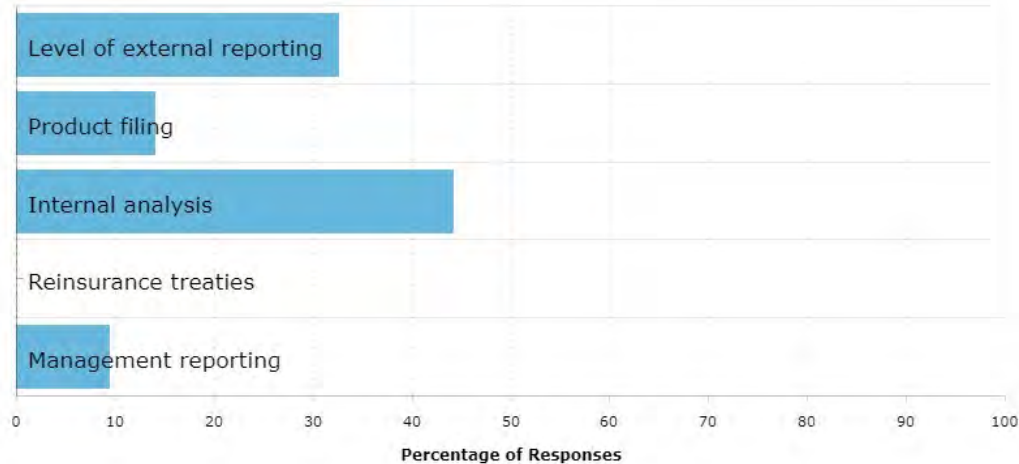
“In determining the level of aggregation at which reserves are calculated, an insurance entity shall not group contracts together from different issue years but shall group contracts into quarterly or annual groups.” ASU 2018 12

- “Cohorts” becomes an important concept for reserves:
 - Cohorts drive initial discount rate, net premium calculation
- Cohort concept also creates much of the complexity in implementing the Standard
 - Modeling cohort-level calculations – significant change from seriatim reserving
 - Net premium caps (100%) and reserve floors (\$0) at cohort level can create distortions in total
 - Cohort definition for reinsurance creates complex questions and challenges
- Broader cohorts (and grouping similar products) may be helpful
- Materiality of smaller/older issue years

For A&H:

- Future coverages create a cohort question
- Reinsurance may be complex

Poll: What attribute is the greatest consideration in the level of policy/product aggregation (cohorts)?



Assumption & History Updates



“The liability for future policy benefits shall then be updated for actual experience at least on an annual basis . . .” ASU 2018 12

- Net Premium Ratio needs to be updated at least annually to reflect historical experience
 - Benefit of trueing up: offsets variances in emerging claims experience
 - Frequent true-ups can create process/timing challenges with new data dependencies

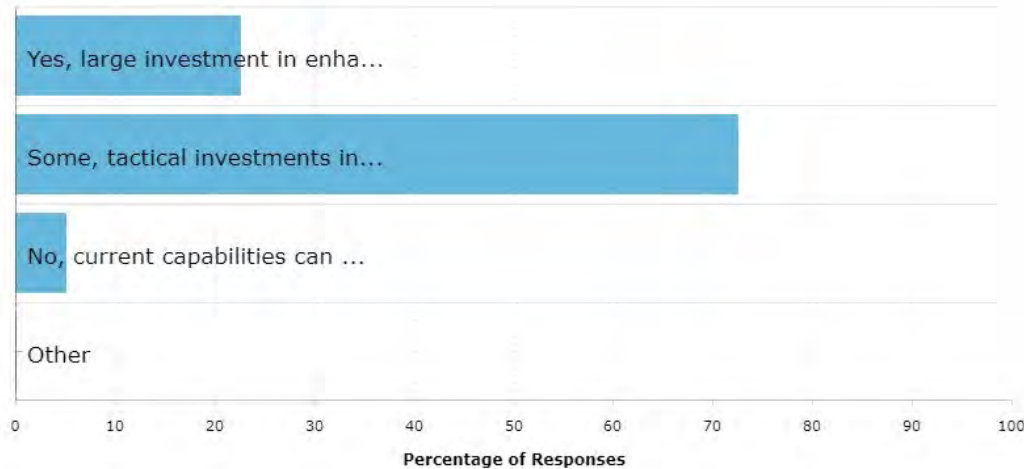
“Cash flow assumptions shall be reviewed—and if there is a change, updated—on an annual basis, at the same time every year.” ASU 2018 12

- Future assumptions need to be reviewed at least annually, and updated if necessary
 - How does this compare to current reserve adequacy testing?
 - Develop enhanced data and experience analysis capabilities, governance, controls?
 - Revise process/timing for reserve studies and updates?

For A&H:

- Consider interaction of emerging claims experience and ALR
- Consistency of ALR and DLR assumptions/bases
- Frequent true-ups may counter volatile claims experience

Poll: Given the greater sensitivity of earnings to assumption updates, do you expect your company invest more resources to enhance the rigor, quality, scope and depth of experience analytics?



DAC Methodology

“Capitalized acquisition costs shall be charged to expense using methods that include the same assumptions consistent with those used in estimating the liability for future policy benefits . . .” ASU 2018 12

- Alignment with valuation assumptions and models?

“Individual contracts. Capitalized acquisition costs shall be charged to expense on a straight-line basis.” ASU 2018 12

- “Straight line” is subject to interpretation
- Modeling on a seriatim basis may lead to unintended acceleration of amortization

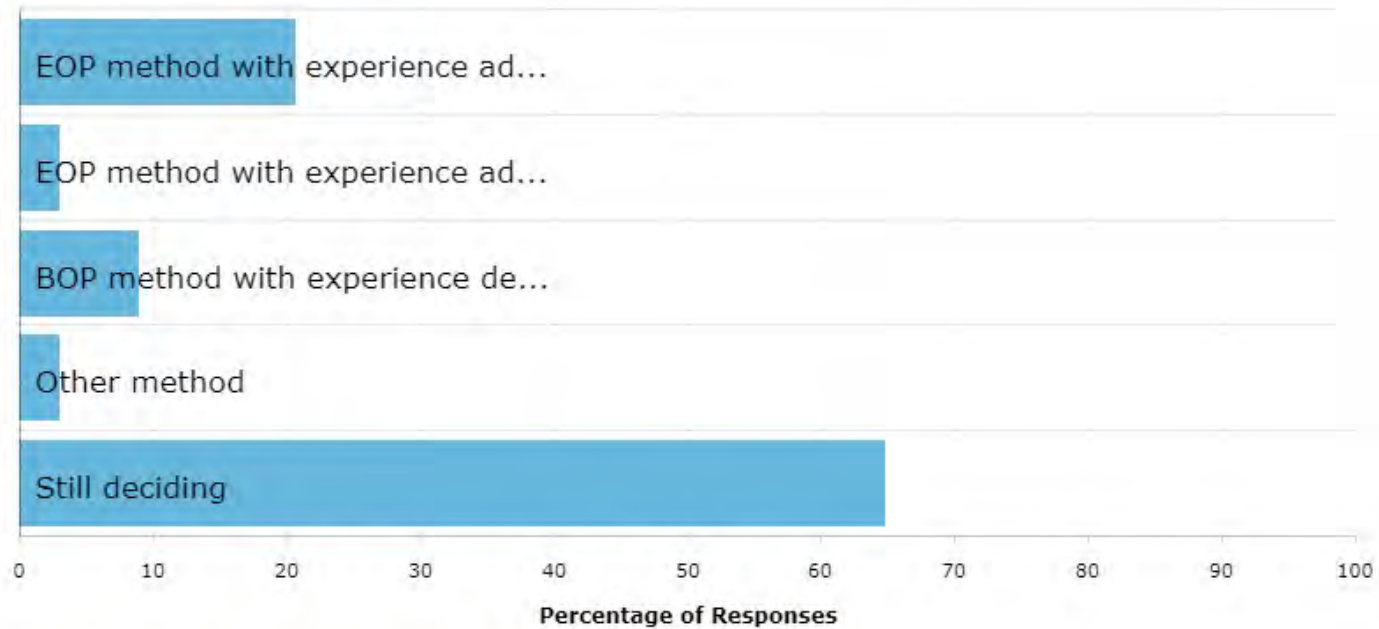
“Grouped contracts. Capitalized acquisition costs shall be charged to expense on a constant-level basis that approximates straight-line amortization on an individual contract basis.” ASU 2018 12

- A cohort approach may be better
- Approach to fit dynamics of business & valuation assumptions (and accounting rules . . .)

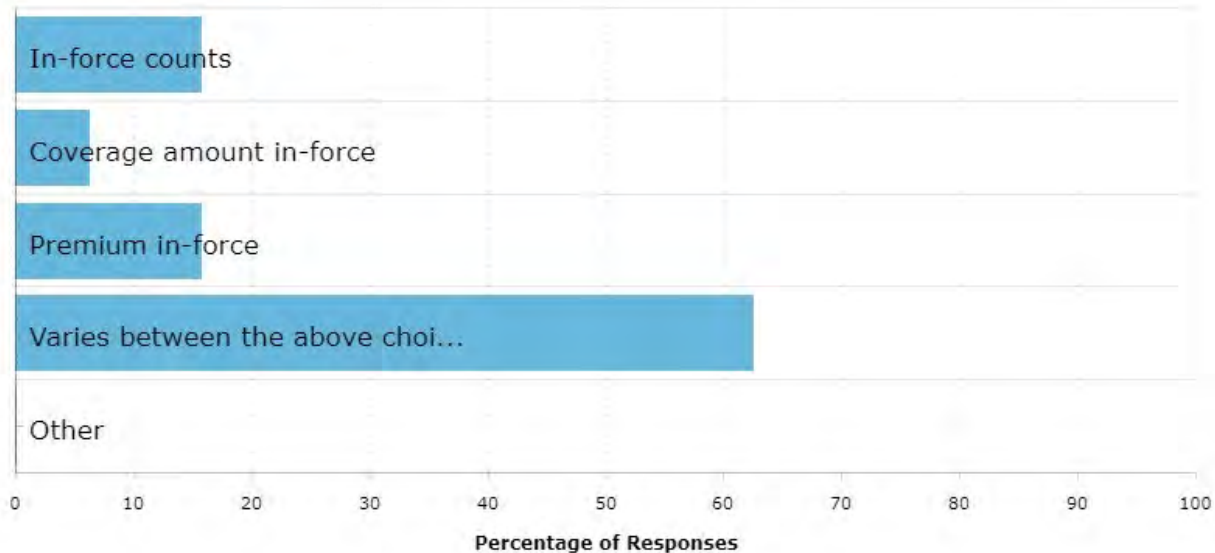
For A&H:

- Does contract boundary include claims-paying period?
- Approaches for products without ALR (e.g. LTD)

Poll: How do you plan to calculate DAC amortization?



Poll: What volume metric do you plan to use for your DAC amortization?



Implementation Philosophy



- LDTI is an investment
- Significant cost for compliance
- Synergies beyond pure compliance
 - Modernization: movement to new/common platforms for modeling and data processing
 - Enhanced systems and analytics to report and explain financial dynamics
- Complexity of LDTI and compressed timeline are challenges

For A&H:

- Should model development include claims models?
- Opportunity/challenge to build better analytics for claims and policy liabilities

Sample Project Timeline

		Original Plan	Deferral Plan
2018	4Q	PH1 - Impact Assessment, Design, Discovery	PH1 - Impact Assessment, Design, Discovery
2019	1Q		
	2Q	PH2 - Development	PH2 - Development
	3Q		
	4Q		
2020	1Q	PH3 - Unit Testing	
	2Q		
	3Q	PH4 - Integration Testing & Implementation	PH3 - Unit Testing & Analysis
	4Q		
2021	1Q	Go Live	PH4 - Integration & Analysis
	2Q		
	3Q		PH5 - Parallel Testing, Analysis & Implementation
	4Q		
2022	1Q	Go Live	

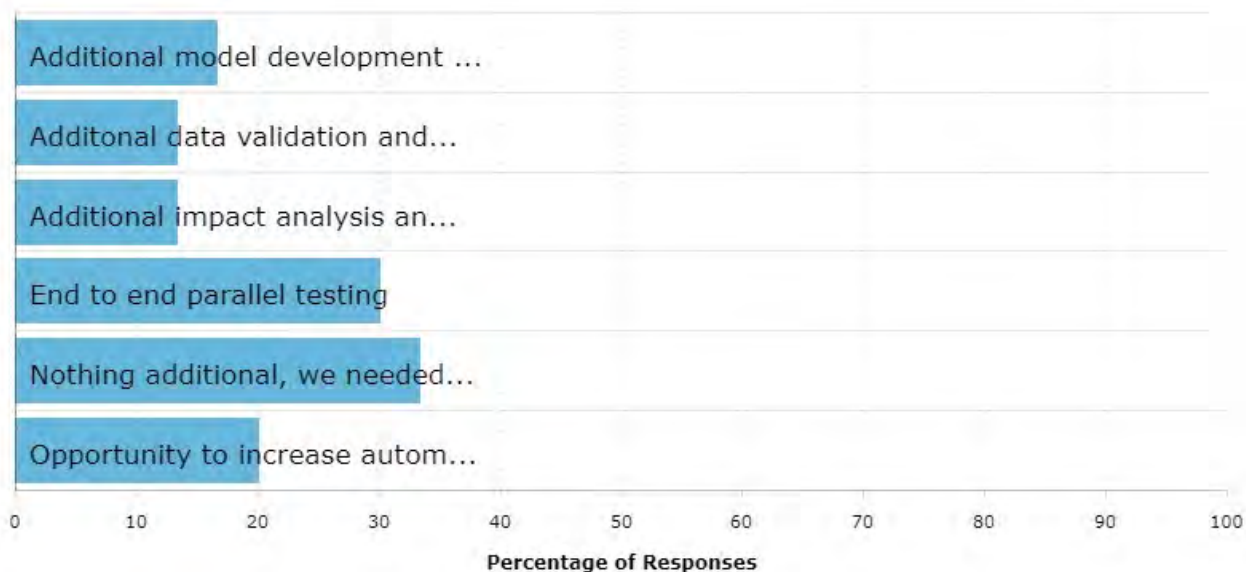
Original vs Deferral Plan:

- Development time extended by 2 quarters. This will time finish our baseline build, and explore potential enhancements where it makes the most sense.
- Increased emphasis and time spent testing processes & analyzing results. Increased time in the last few phases will include multiple quarters to parallel test, and review results to develop methods to better understand & explain results under LDTI.

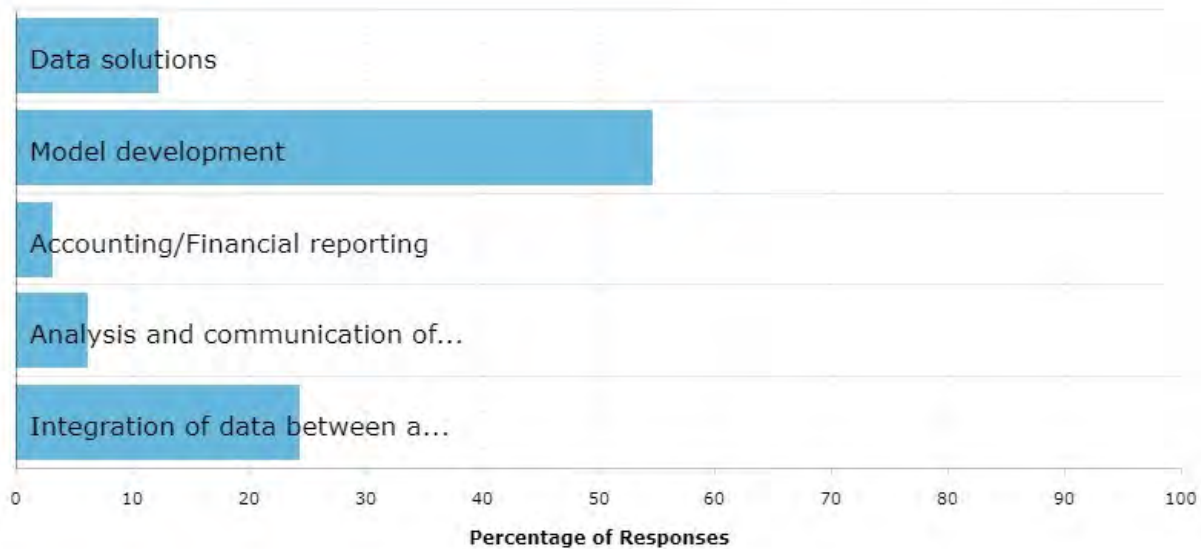
Sample Project Workstream Map – Deferred Timeline

Workstreams		PH1 Plan		PH2 Development				PH3 Test		PH4 Analysis		PH5 Runs		Go Live	
		2018		2019		2020				2021				2022	
Track	Sub-Track	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q
Corporate Strategy	Project Management														
	Policy & Strategy														
Actuarial	Experience Analysis														
	Data - Historic														
	Model Development														
	Discount Rate Development														
	Disclosure Inputs														
Accounting	Reserve Accounting														
	DAC														
	Reinsurance														
Reporting	Financial Statements														
Corporate Actuarial & Financial Planning	Financial Analysis														
	Internal Communication & Education														
	External Communication & Education														

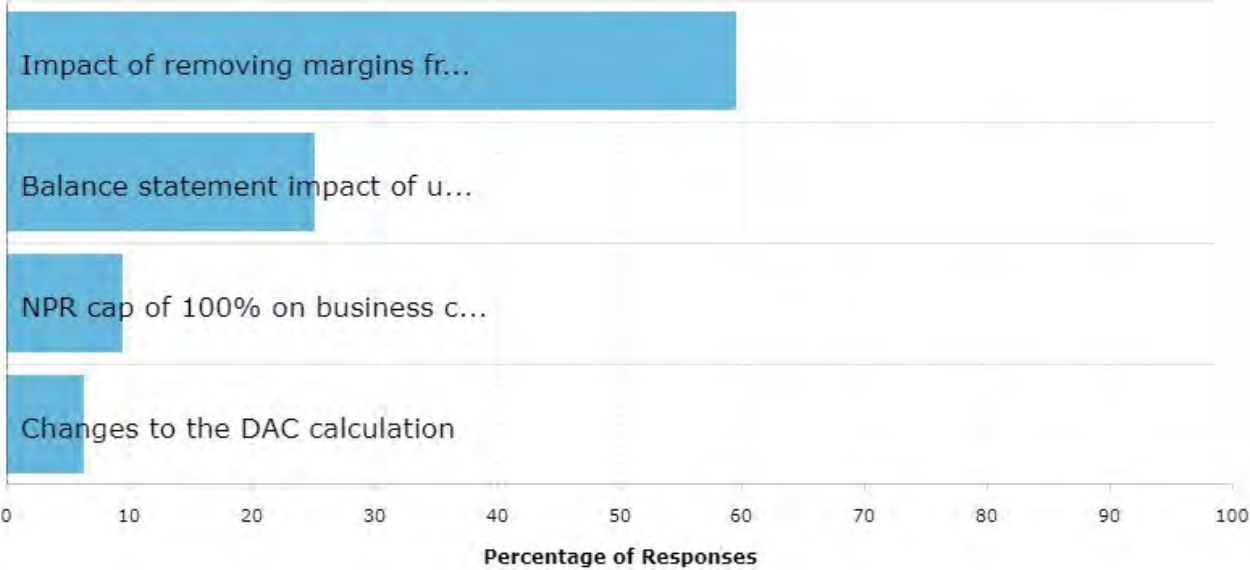
Poll: How do you plan to optimize the additional time related to the proposed change to GAAP LDTI effective dates?



Poll: Which work stream has proven to be the most difficult during your implementation process?



Poll: What aspect of the LDTI standard do you expect to have the largest financial impact?



Technical Considerations



Actuarial Modeling Platform

- Adapt current software
 - Vendor solutions: may be simplest option, but also may delay project and may not fit business or planned interpretation LDTI
 - Develop adaptations in house: may not be possible, or may be time consuming for limited resource pool
- Migrate to new platform(s)
 - Expands scope of project
 - LDTI may be a catalyst for broader technology strategy
- Include/incorporate DAC into reserving model?

For Disability products:

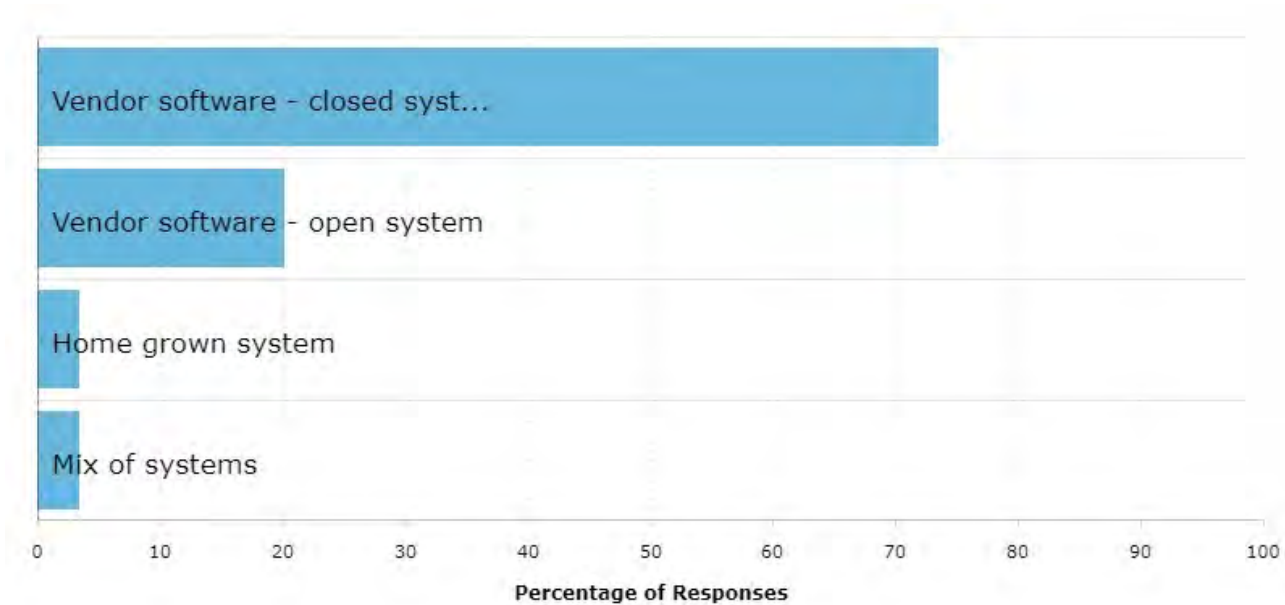
- DLR: are updates required by Standard, or sensible as part of broader technology modernization?
- Do software solutions fit unique product dynamics?

For level benefit products (Accident):

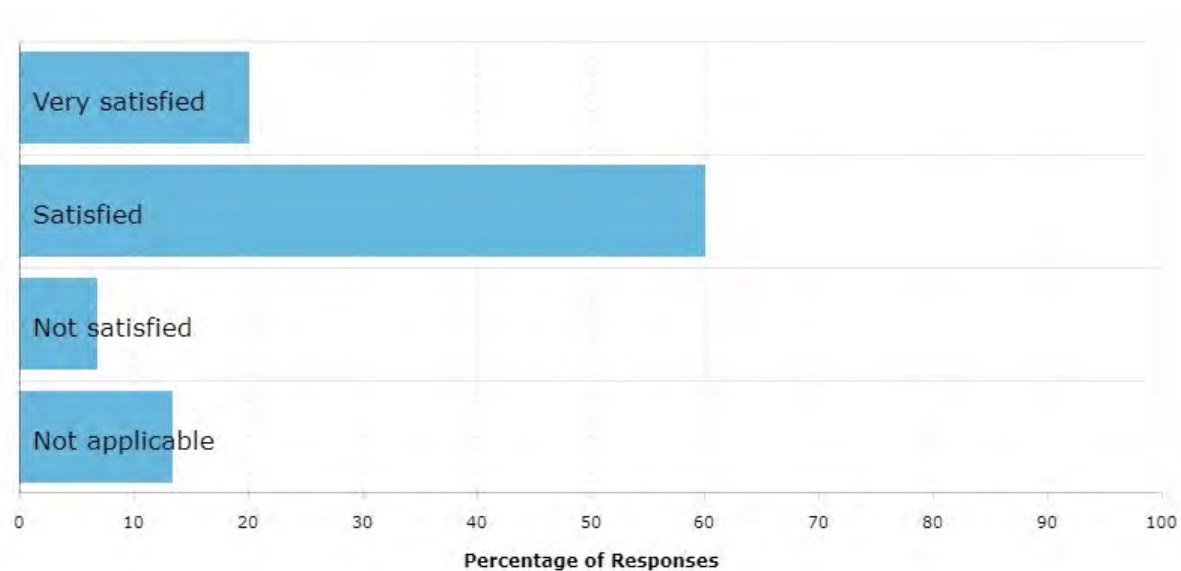
- Do you need to build into valuation model?



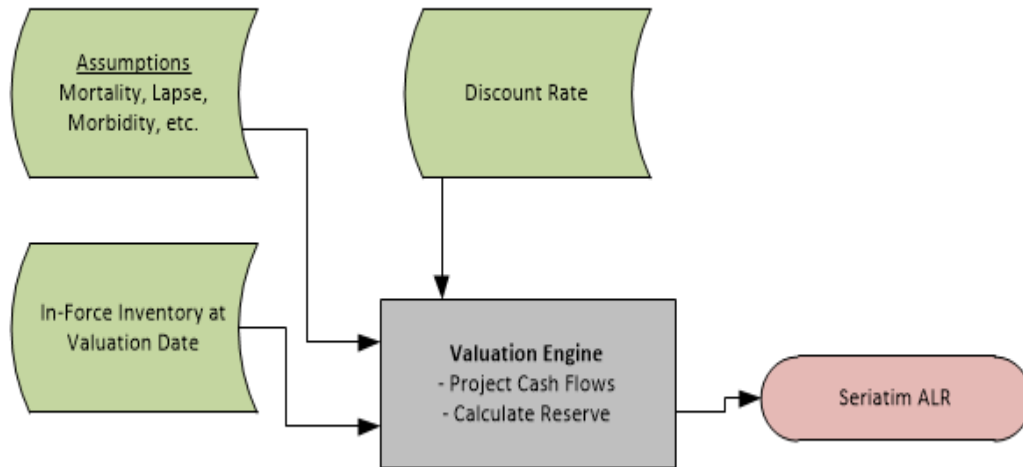
Poll: Which tools do you plan to primarily use for projecting cash flows and calculating reserves under the LDTI standard?



Poll: How satisfied are you with your actuarial software vendor's response to LDTI?

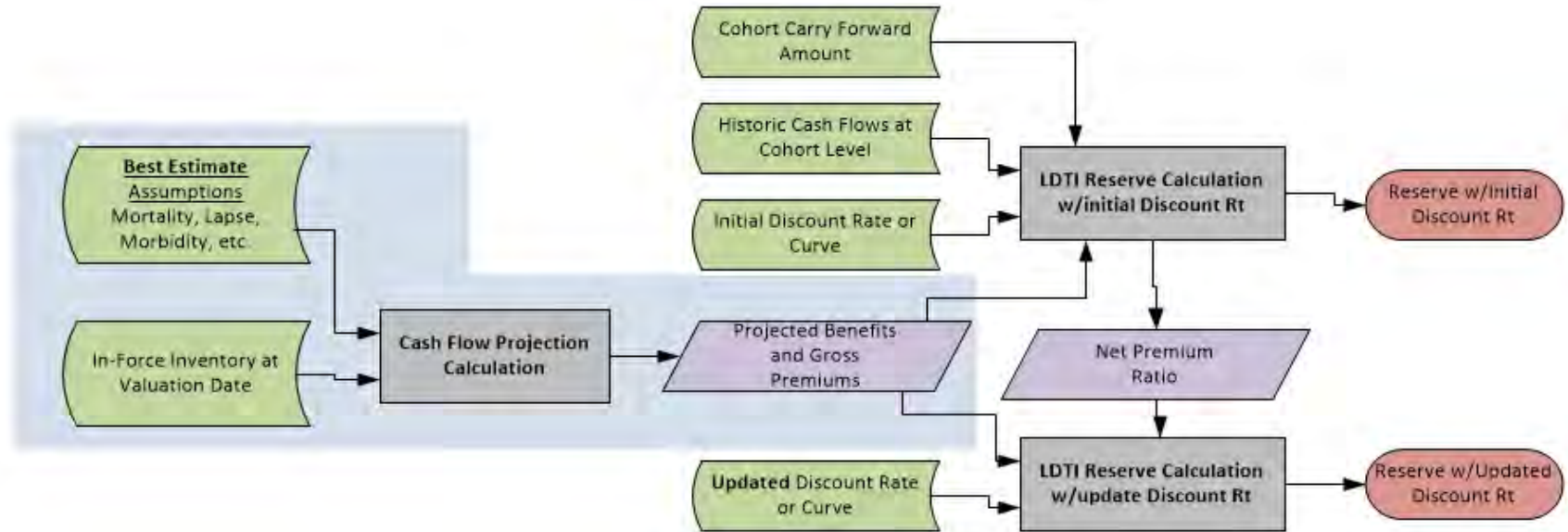


Current ALR Models



- Inputs
 - In-Force Inventory
 - Cash Flow Assumptions
 - Discount Rate
- Valuation Engine
 - Projects Inventory run-off & Cash Flows
 - Calculates NPR and Reserve
- Output
 - Active Life Reserve

LDTI Reserve Calculation



- Shaded seriatim portion is limited to projecting cash flows.
 - Best Estimate Assumptions
 - No discount rate needed

- Additional Cohort Level Inputs
 - Carry Forward Amounts
 - Historic Cash Flows
 - Initial & Updated discount rates

- Two reserve calculations
 - NPR & Reserve with initial Discount Rate
 - Reserve with updated Discount Rate using NPR from first calculation

Roll-Forward Disclosure Requirement for Reserves

Present Value of Expected Net Premiums

Balance, beginning of period

Beginning balance at original discount rate

Effect of changes in cash flow assumptions

Effect of actual variances from expected experience

Adjusted beginning of period balance

Interest Accrual

Net Premiums Collected

Issuances

Derecognition

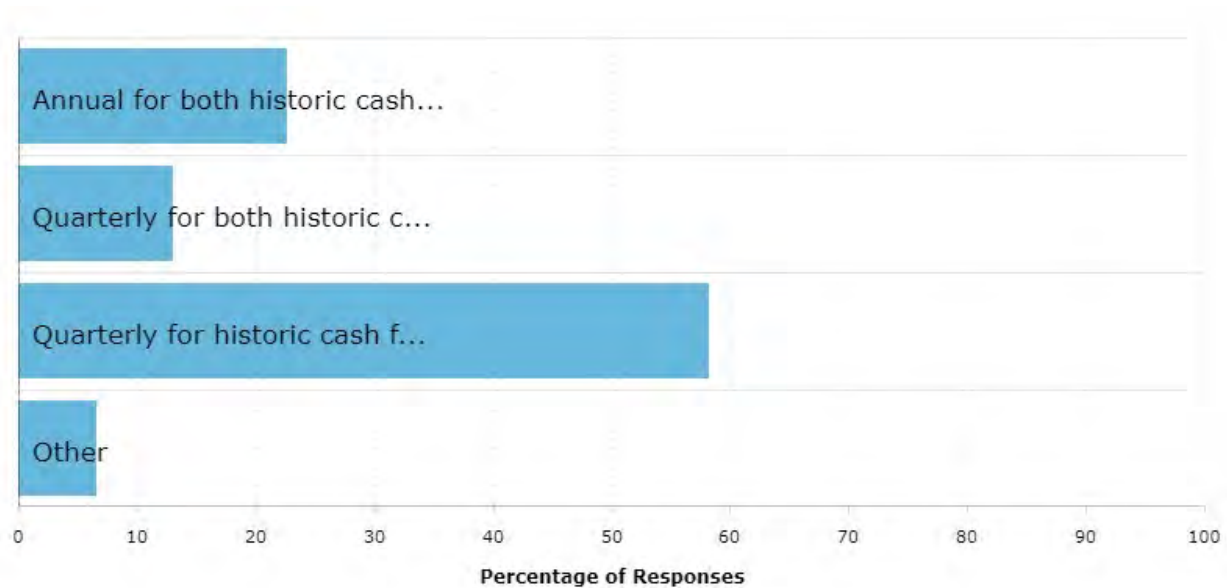
Ending balance at original discount rate

Effect of changes in discount rate assumptions

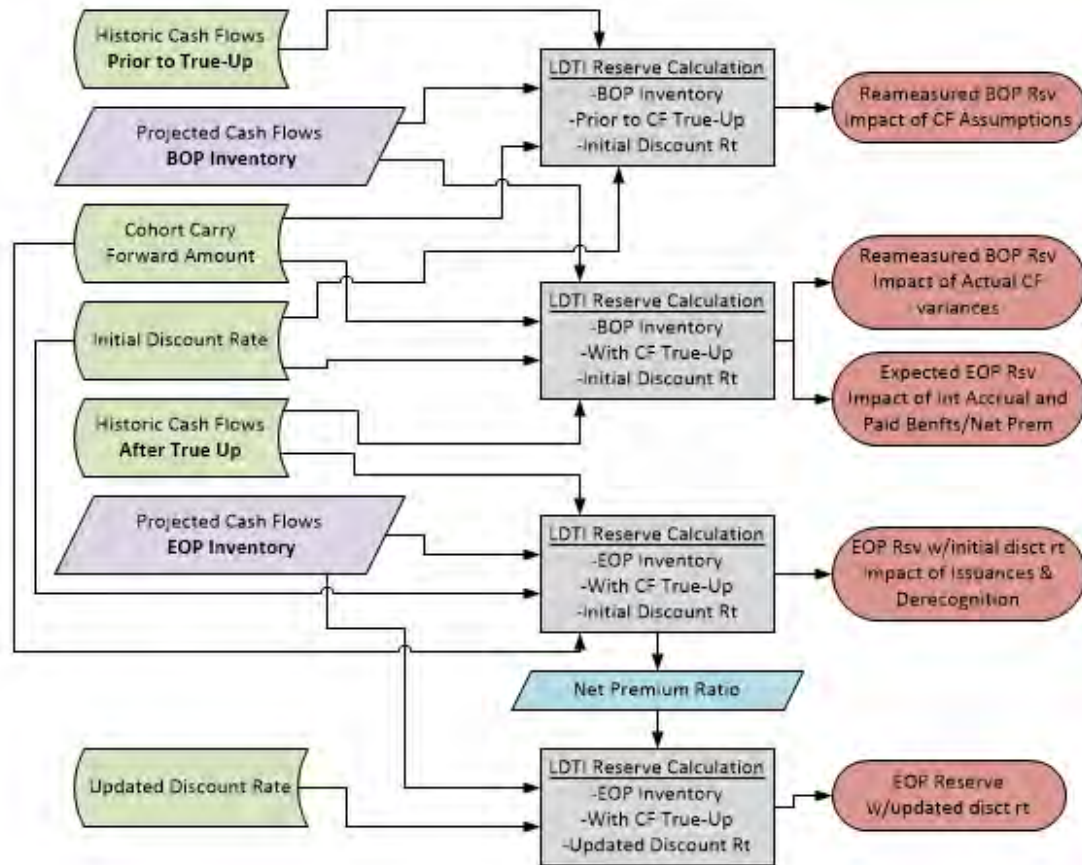
Balance, end of period

- It's not enough to just calculate two reserves.
- Remeasurement of prior period reserve
 - With assumptions updated
 - With historical true-up
- “Expected” elements to roll forward to current period.
 - Interest Accrued
 - Modeled payments (claims & net premium)
- Reserve with updated inventory
 - New Issues
 - Derecognition

Poll: What frequency do you plan to update historic actual cash flows and prospective cash flow assumptions?



LDTI Reserve Calculation with Roll Forward Elements



- Two serialtim projections are required.
 - BOP inventory
 - EOP inventory
- Five LDTI reserves calculated (Roll-Forward Layers)
 - BOP (new assumptions)
 - BOP (history update)
 - EOP (expected)
 - EOP (inventory update)
 - EOP (disct rt update)

**Poll: How is the implementation of LDTI
driving technological improvements in
your company?**

Data Considerations



- Several new data requirements
 - Historical experience for retrospective true-up of Net Premium Ratio
 - Data processing and warehousing for reserve & DAC reporting including detailed disclosures
 - Data to support experience analysis & assumption development may need to be refined
- Development of data
 - At cohort level for true-ups, may require additional granularity (e.g. for IBNR)
- Storage & retention (i.e. long term storage needed for aspects like retrospective true-up)
- Reporting systems need to be enhanced given new disclosure needs
 - Likely significant changes for systems and ongoing closing processes

For Individual Disability Income products:

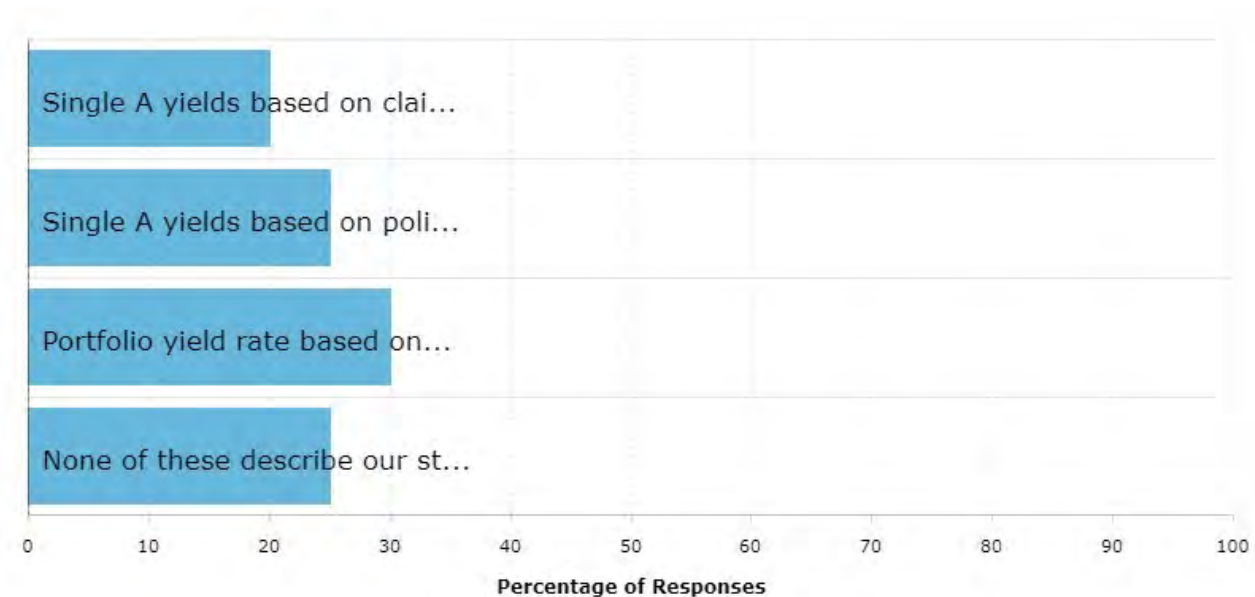
- Historical true-up data can be complex given emerging claims
- Discount rate: use DLR rate, or LDTI ALR rate
- Remeasurement: attribute updates to claim cost to incurral date?

Retrospective Cash Flows – Data Components

Earned Premium	Incurred Claims
Collected Premium	Paid Claims (discounted back to incurral date)
Change in Due Premium	Disabled Life Reserves (discounted back to incurral date)
Change in Advanced Premium	IBNR/ICOS (allocated and discounted back to previous incurral dates)
Change in Unearned Premium Reserve	
Returned Premium/Waived Premium	

- Ongoing claim development may mean that you need to refresh your entire history when you perform a retrospective true-up.
- You need to determine the discount rate for calculating the Present Values of the paid claims and claim reserves as of the claim incurral date (ALR rate or DLR rate).
 - Do you rethink your DLR calculations to align the discount rates used for determining your ALR and DLR?
- Other methods? – Locked Claim Reserve at Incurral, Paid Basis, Single Liability

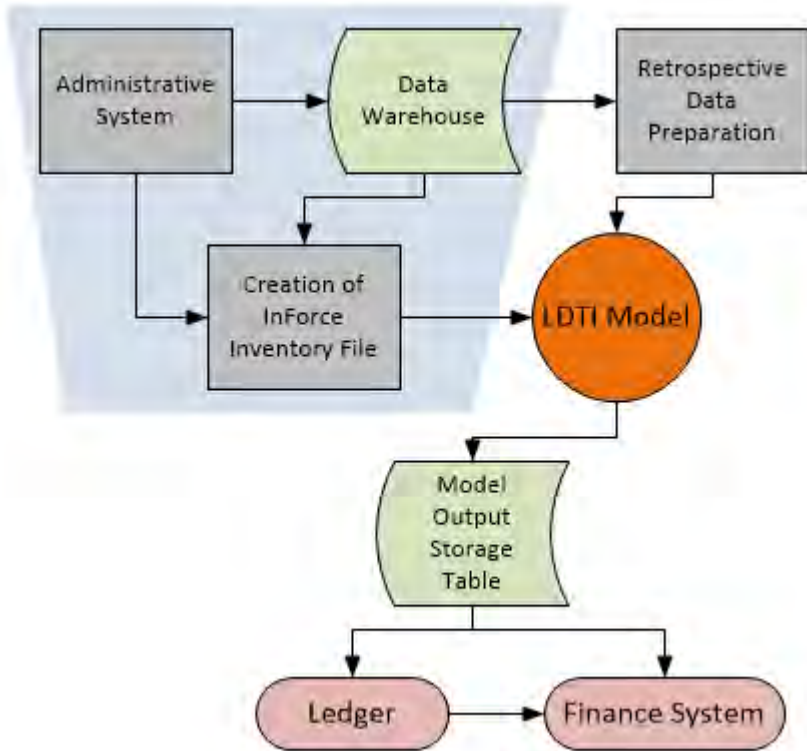
Poll: How do you plan on setting discount rates for disabled life reserves?



Data Challenges

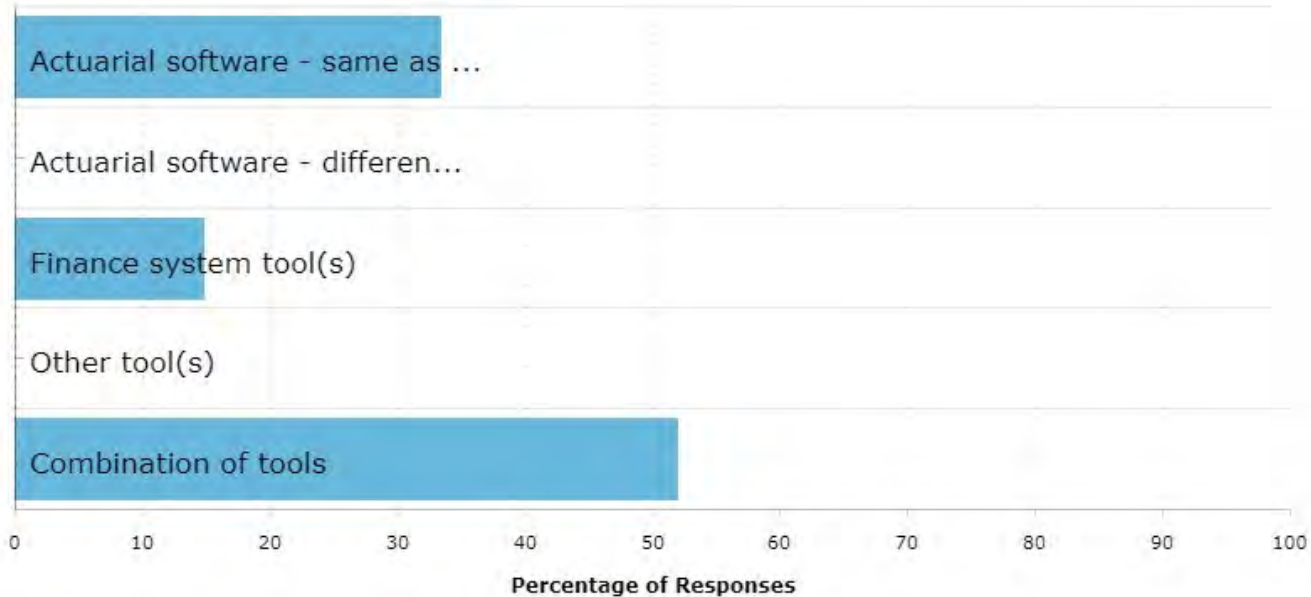
- Accessibility at cohort level – do you have what you need for the true-up? Can you produce it in a way that can be used by the model?
- Storage – Historic data is now part of the reserve calculation. Does that change your data storage solution?
- Timing – Can you produce real time data through the valuation date, get it in the model, and calculate the reserve in the limited time of a closing cycle? Can the whole process be automated?
- Data flow mechanics – Consider the mechanics of data outflow from model as well. How does data flow from the model to the reporting system? Are new storage solutions needed?
- Validations – Each step of the data flow process needs to have controls in place to ensure accuracy and no data loss.

LDTI Reserve – Sample Data Flow

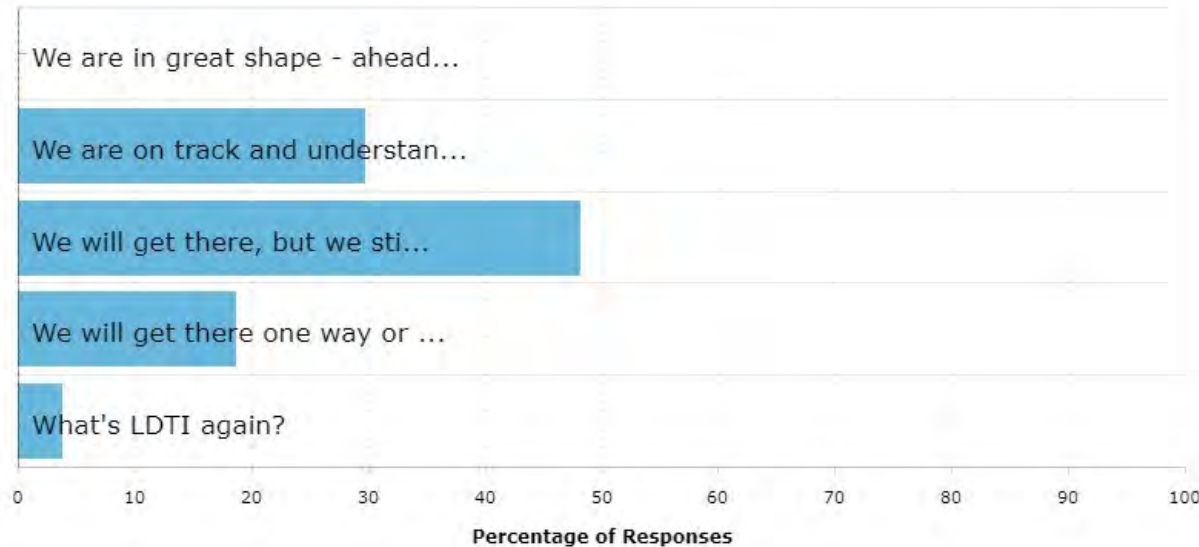


- Probably already have the shaded part, but adjustments will be required.
- The mechanics of the links are as important as the boxes.
 - Automation
 - Validation
 - Controls

Poll: Which tools do you plan to use to prepare the required disclosures?



Poll: Which best describes your feelings about your company's readiness to meet the LDTI implementation date?



Q & A





**SOCIETY OF
ACTUARIES®**