

MILLIMAN REPORT

Long-term care rate increase survey

An industry survey of strategies and experiences with rate increases

March 2022

[Mike Bergerson](#), FSA, MAAA

[Missy Gordon](#), FSA, MAAA

[John Hebig](#), FSA, MAAA

Peer reviewed by [Robert Eaton](#), FSA, MAAA





Table of Contents

1.	OVERVIEW	1
1.1	SUMMARY OF PARTICIPATION	1
1.2	CHANGES IN THE RATE INCREASE ENVIRONMENT IN THE LTC INDUSTRY SINCE 2016 SURVEY	2
1.3	EXECUTIVE SUMMARY	2
2.	RATE INCREASE FILING OUTCOMES	4
2.1	APPROVAL PROCESS	4
2.1.1	Approval Experience	6
2.1.2	Phased-In Rate Increases	9
2.1.3	Rate Guarantees	9
2.1.4	Disapprovals	10
2.2	DEPARTMENT MEETINGS	10
2.3	RATE STABILITY APPROVALS	11
2.4	POLICYHOLDER OPTIONS	12
2.4.1	Reducing Inflation Protection	13
2.4.2	Landing Spots	13
2.4.3	Cash Buyouts	13
2.4.4	Contingent Benefit Upon Lapse	13
2.5	POLICYHOLDER NOTIFICATION	14
3.	APPROACH TO FILING A RATE INCREASE	15
3.1	RATE INCREASE FILING HISTORY	15
3.2	APPROACH TO DETERMINING A RATE INCREASE REQUEST	15
3.2.1	Actuarial Justification	16
3.2.2	Recouping Past Losses	16
3.2.3	Experience Pooling	16
3.3	INTERNAL AND EXTERNAL RESOURCES	17
3.3.1	Coordination with Outside Party	17
3.3.2	Filing Resources and Timing	17
3.4	RATE INCREASE STRATEGY	18
3.4.1	Rate Increase Request	18
3.4.2	Multiyear Rate Increase Requests	20
3.4.3	Varied Increases	20
3.4.4	Filing Exhibits	21
3.5	RATE STABILITY REQUESTS	21
4.	ASSUMPTIONS AND PROJECTIONS	22
4.1	GENERAL	22
4.2	MORTALITY	23
4.3	LAPSE RATE	23
4.4	MORBIDITY	25
4.5	INTEREST	25
4.6	POLICYHOLDER BEHAVIOR	26
4.7	MODELING	26
5.	APPENDICES	27

1. Overview

Milliman completed a survey in 2016 on premium rate increases for the long-term care (LTC) insurance industry (2016 Survey). This report documents the first full survey to follow the 2016 Survey. We expect to continue conducting this survey on a recurring basis every three to five years. Twenty companies participated in the survey. Note that differences in results from the 2016 Survey and this survey could be due to the mix of companies included in each survey.

This report provides a summary of the survey findings and assumes that the reader is familiar with LTC insurance and rate increase filings. We expect this survey report to be a valuable resource for understanding common practices and trends in LTC rate increase filings.

The results of this survey are intended to provide a summary of nationwide LTC rate increase filings that interested parties may use to form general strategies and approaches to filing LTC rate increases. In preparing this report, we relied on companies to accurately respond. While we reviewed the responses for general reasonableness, we included them as reported. It should also be noted that not all companies answered every question, resulting in the number of responses varying by question.

Commentary offered throughout this report includes the authors' opinions, which do not necessarily represent those of Milliman. The commentary in this report is based on recent LTC rate filing experience and the current regulatory environment, which is fluid and subject to change. As the responses to the survey are company-specific, the information provided in this report may not be true for all companies or situations.

Because the articles and commentary prepared by the professionals of our firm are often general in nature, we recommend that readers seek the advice of an actuary or attorney before taking any action. The authors of this study are associated with Milliman, Inc. and are members of the American Academy of Actuaries. The authors are qualified under the Academy's qualification standards to render the opinions with regard to the actuarial calculations set forth herein. The authors of this study would like to give a special thanks to Megan Anderson for her significant contribution in assembling and tabulating the results of this survey.

1.1 SUMMARY OF PARTICIPATION

The 20 companies participating in the survey represent \$7 billion in annualized premium (roughly 65% of the industry by premium volume¹). Participants include companies with large market shares as well as smaller companies. Of the survey participants, under a quarter are still issuing LTC insurance; the remainder of the companies only have closed blocks.

A partial list of participating companies (four respondents asked that their companies not be identified):

- Ability Insurance Company
- Allstate Life Insurance Company
- Bankers Life and Casualty Company
- Berkshire Life Insurance Company of America
- Continental LTC
- Genworth
- John Hancock
- Massachusetts Mutual Life Insurance Company
- MedAmerica Insurance Company
- MetLife Insurance Company
- Nassau Life Insurance Company of Texas / Nassau Life Insurance Company of Kansas
- New York Life
- Northwestern Long Term Care Insurance Company
- RiverSource Life Insurance Company
- The State Life Insurance Company
- Union Fidelity Life Insurance Company

¹ LTC premiums were collected from the year-end 2019 NAIC Experience Reporting Forms.

All but two of the blocks of business included in the survey represent individual policies.

Just over half of the participating companies are holding a premium deficiency reserve (PDR) or an additional asset adequacy reserve.

Of the 20 participating companies, 19 have filed at least one rate increase since the 2016 Survey. As some companies have performed more than one nationwide filing since the 2016 Survey, this survey allowed for multiple responses for each company. This report includes a summary of those companies that have filed at least one rate increase during the life of the business. We define a filing as a nationwide rate increase request. We define a submission as the rate increase requested in each separate jurisdiction. Of the 19 companies that filed at least one rate increase, one company did not provide a detailed summary of their recent rate increase filing. The other 18 companies provided responses detailing 35 recent rate increase filings representing over 1,000 submissions.

1.2 CHANGES IN THE RATE INCREASE ENVIRONMENT IN THE LTC INDUSTRY SINCE 2016 SURVEY

The National Association of Insurance Commissioners (NAIC) LTCi EX Task Force is developing a multi-state actuarial review process that is designed to improve uniformity and timeliness of rate increase approvals across jurisdictions. A draft exposure framework of this review process was released in the spring of 2021. The survey responses underlying this report do not capture any of the potential changes to the LTC rate increase environment as a result of these efforts. However, companies should consider this review process and how it may impact their future rate increase filings.

As part of the survey, participating companies were asked how the COVID-19 pandemic impacted their recent rate increase filings. A little over half of companies noted delays in either the approval or implementation of rate increases. Two companies mentioned that rate increases were disapproved in some jurisdictions due to the pandemic. The remaining companies saw little to no impact on rate increases. At the time of this survey, the pandemic's impact on each company's experience or assumptions had not yet been incorporated into rate increases filings.

1.3 EXECUTIVE SUMMARY

All but one company that participated in this survey have filed for at least one rate increase on their LTC business since the 2016 Survey. The following provides highlights of their experiences:

- *Rate increase approvals:* Where a rate increase has been submitted, 74% of the submissions received a full or partial rate increase approval with the remaining submissions still pending or having been disapproved. The average rate increase approved was 29%, which is lower than the average 42% approved in the 2016 Survey. In addition, companies needed to comply with various requirements, whether regulatory or not, from departments of insurance (departments). Some of the common department requests included reducing the increase amount, phasing in the increase, revising the policyholder notification letter, and offering a rate guarantee for a number of years. The average time to approval for submissions was seven months.
- *Jurisdictions with high approvals:* Where a disposition has been received, the jurisdictions where the average approval level is approximately equal to the average request level include Nebraska, Oregon, South Dakota, Wisconsin, and Wyoming. It should be noted that a limited number of dispositions in Oregon were reported and that no approval exceeded 50%. Jurisdictions reflected in the survey responses that have approved rate increases exceeding 100% are Illinois, Nebraska, Oklahoma, Texas, Virginia, West Virginia, and Wisconsin. We have also recently seen California approve rate increases exceeding 100%, although these are not reflected in the survey responses. In addition, Alaska does not review individual or group LTC rate increase filings.
- *Cumbersome Jurisdictions:* Requirements for rate increase filings vary by jurisdiction; companies ranked jurisdictions by how cumbersome the rate increase filing was to prepare. Among those noted as requiring the most effort are California, Florida, Indiana, New York, and Texas.
- *Department meetings:* Some companies organize meetings with departments, sometimes to aid in achieving any rate increase or a higher rate increase. Companies, on average, met with 40% of the jurisdictions in which they filed rate increases. Jurisdictions with the highest percentage of companies conducting meetings are California, Massachusetts, New Jersey, New York, and Virginia. Most meetings occur at the time of submission or as needed throughout the filing process and included either actuarial, managerial, or government relations representatives of the company.

- *Disapprovals or rate increase reductions:* Reasons a rate increase might be reduced or disapproved vary greatly, but the most common reason is due to a political cap or non-actuarial reason. Changes in the review process in departments are fluid which makes it difficult to predict the outcome of a rate increase request. Indiana disapproved half of the submissions that received a disposition, while Mississippi, Nevada, New Hampshire, and North Dakota all disapproved around a quarter of the submissions that received a disposition.
- *Policyholder options:* When a rate increase is approved, companies offer reduced benefit options (RBOs) to offset the rate increase. The most common RBOs provided by companies are lowering the daily or monthly benefit, lowering the benefit period, increasing the elimination period, and reducing or dropping inflation protection. The average benefit reduction election rate of impacted policyholders in this survey is 10.6%, which is higher than the average 8.9% election rate in the 2016 Survey. Landing spots and cash buyouts were offered in less than 10% of the filings.
- *Contingent benefit upon lapse:* Another option for insureds, if available, is a contingent benefit upon lapse (CBUL). All but two companies offer CBUL to all insureds voluntarily. The average election rate of impacted policyholders is 3.8%.
- *Driver of the rate increase request:* The justification of the rate increases needed was fairly consistent between all of the companies. Most often lower than anticipated voluntary lapse rates, higher than anticipated claim incidence, and longer than anticipated claim continuance were noted as the most relevant factors comprising the actuarial justification for the rate increase.
- *Setting the rate increase request:* The most common factors determining the generic rate increase approach include management strategy (e.g., requesting small rate increases or minimizing the possibility of future rate increases) and the actual-to-expected lifetime loss ratio.
- *Rate increase requests:* The minimum average rate increase request for a submission provided in the survey was 1% and the maximum was 362%. The average request for all submissions was 47%. The maximum increase is higher than that of the 2016 Survey; however, the average nationwide request is lower than the average nationwide request of 56% in the 2016 Survey.
- *Multiyear increases:* For three-quarters of the companies, the requested rate increase was phased in over multiple years in at least one jurisdiction. Additionally, departments may require a single rate increase to be phased in as a condition for approval. The jurisdictions for which approvals were most commonly phased in include Hawaii, Maine, and Minnesota.
- *Jurisdictions with rate guarantees:* The jurisdictions that most commonly require a rate guarantee from two years up to ten years as part of the approval of the requested rate increase include Florida, Kansas, Minnesota, New Jersey, and West Virginia.
- *Varied rate increases:* Similar to the 2016 Survey, just over half of the filings included in the survey included a request for a rate increase that varied across a variety of parameters. Where a varied increase is requested, inflation protection and benefit period were the most common variation (about 55% of these filings).
- *Recouping past losses:* A limiting factor that departments may impose on rate increase requests is whether the request attempts to “recoup past losses.” The most common method for companies to determine if a rate increase recoups past losses is based on the lifetime loss ratio, however, the Prospective Present Value and If Knew premium analyses are also used.
- *Rate stability:* Three-quarters of the companies that have filed for a rate increase had at least one submission subject to rate stability regulation. Most of the companies requested the same increase for policies subject to loss ratio regulation and rate stability regulation. For about a third of the submissions subject to rate stability, companies requested the amount needed to certify to rate stability under moderately adverse conditions. Jurisdictions requiring rate certification the most often are Florida, Nebraska, New Jersey, and Texas.
- *Projection assumptions:* Company experience is the most common source for the assumptions underlying the rate increase filings. The second most common source is industry data for the mortality assumption and consultant data for the morbidity assumption. We asked companies how the assumption used in the rate filings compare to those used in their cash flow testing (CFT). Around three-quarters of companies use the same assumptions as those used in CFT.

2. Rate Increase Filing Outcomes

This section discusses the details behind the outcomes of rate increases received by the companies in the survey. Outcomes from a rate increase filing can vary greatly across companies and jurisdictions. They depend on several factors including, but not limited to, the level of increase requested, the performance of the business relative to the increase requested, the age of the block, and jurisdiction requirements (whether prescribed by regulation or not). This section includes jurisdiction and policyholder responses to the rate increases. Additionally, this section contains a description and summary of the policyholder options to offset a rate increase.

2.1 APPROVAL PROCESS

Figure 2.1 shows how many months it took from submission to approval, on average for each filing, in the jurisdictions that approved an increase. The average timeframe for filings in this survey is seven months, however we recognize that some jurisdictions take years to provide an approval. Compared to the 2016 Survey, jurisdictions are taking longer to approve filings after they have been submitted.

FIGURE 2.1: AVERAGE APPROVAL TIME FRAME

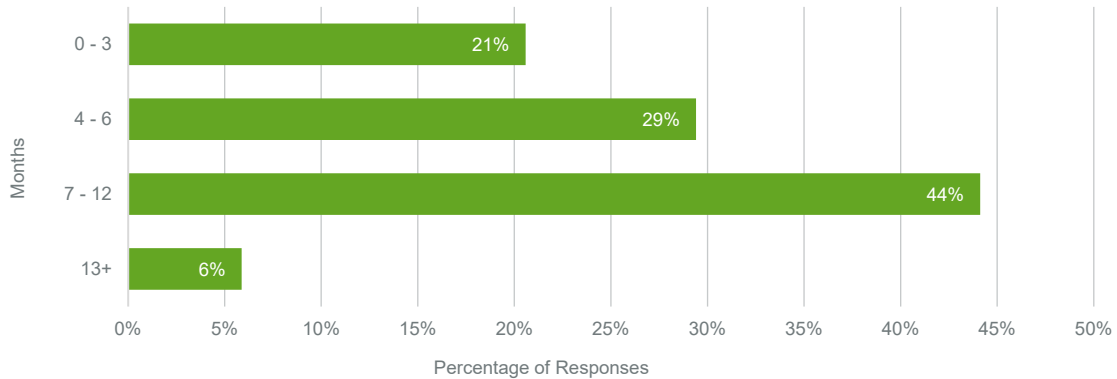


Figure 2.2 provides the top ten jurisdictions in terms of the longest average length of time to approval. It should be noted that these averages reflect the responses that we received as part of this survey and may not be indicative of the most recent experience or future experience to the extent that jurisdictions have changed their review processes. Appendix 2 provides additional detail regarding the average time to approval by jurisdiction.

FIGURE 2.2: JURISDICTIONS WITH LONGEST AVERAGE TIME TO APPROVAL

California	North Carolina
Hawaii	Rhode Island
Idaho	Vermont
Illinois	Virginia
Massachusetts	Washington

The rate increase process varies greatly between jurisdictions. Some departments approve rate increases with very little questioning while others have multiple objections, asking a variety of actuarial and non-actuarial questions. Figure 2.3 provides the top ten most “cumbersome” jurisdictions in terms of the filing process as noted by the respondents. Maine, Montana, and Washington are new to this list compared to the 2016 Survey, replacing Arizona, Massachusetts, and Minnesota. Although not specified by respondents, possible reasons a jurisdiction may be considered cumbersome include complexity of initial submission requirements, length of objections, and extent of non-actuarial requirements (e.g., policyholder options or notification letter).

FIGURE 2.3: TOP “CUMBERSOME” JURISDICTIONS FOR RATE FILINGS

California	Montana
Colorado	New York
Florida	Texas
Indiana	Virginia
Maine	Washington

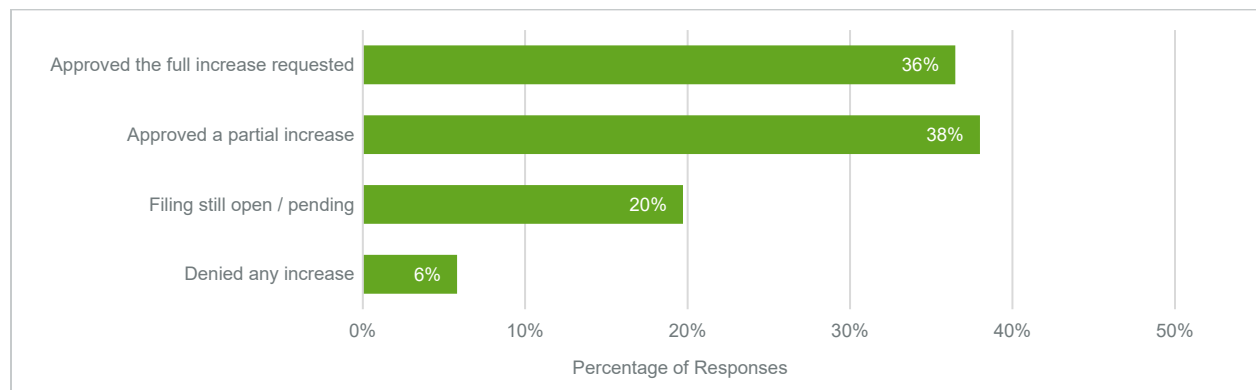
Changes in the review process in jurisdictions are often ongoing, which make it difficult to predict the outcome of a rate increase request. Figure 2.4 provides the most common reasons cited by the jurisdictions for reducing or denying a rate increase. Like the 2016 Survey, the most common reason for rate increase reduction or disapproval that companies cited was jurisdictions having a political or non-actuarial cap. The most common responses included as “Other” were that no reason for a reduction or disapproval was cited by the department.

FIGURE 2.4: JURISDICTION REASONS FOR RATE INCREASE REDUCTION OR DISAPPROVAL

REASON	PERCENTAGE OF RESPONSES
Political or non-actuarial cap	46%
Other	16%
Disagreement on justification of the rate increase	12%
Too few policies in force	7%
Request recoups past losses	5%
Subsidizing other jurisdictions	3%
Nationwide historical loss ratio too low	3%
Nationwide lifetime loss ratio too low	3%
Jurisdiction-specific historical loss ratio too low	2%
Jurisdiction-specific lifetime loss ratio too low	2%
Not enough time passed since last increase	1%

Figure 2.5 provides the distribution of department decisions on the submissions. Appendix 1 provides additional detail of the distribution of department decisions on submissions in each jurisdiction.

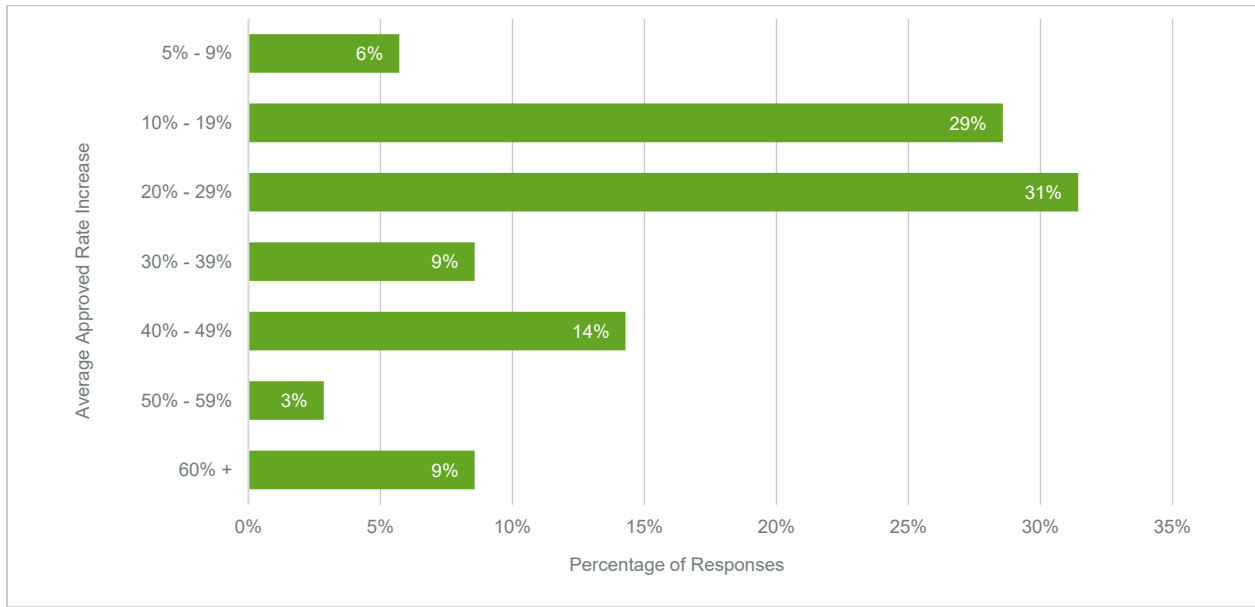
FIGURE 2.5: DISTRIBUTION OF DISPOSITOINS



2.1.1 Approval Experience

Figure 2.6 provides the distribution of nationwide average approved rate increases where a disposition was received (including 0% for disapprovals in the average). The minimum and maximum average approved rate increases are 5% and 102%, respectively. The average rate increase approved was calculated by premium-weighting across the jurisdictions where a disposition was received for each filing.

FIGURE 2.6 AVERAGE APPROVED INCREASE



The 2016 Survey had an average nationwide approval of 42% which is higher than the average of 29% in the current survey. This is not unexpected as the average request was also higher (2016 Survey 56% vs. current survey 47%) as shown in Section 3.4.1 below. The lower average request and approval level may be due to the following:

- Companies achieving rate increases since the 2016 Survey and, therefore, now requesting lower increases.
- A different mix of companies included in the surveys.
- Companies seeking smaller, more frequent rate increase approvals to comply with jurisdiction requirements.

Appendix 2 provides additional detail on approved submissions by jurisdiction including the minimum, maximum, and average approved rate increase where an approval was received.

Figure 2.7 provides the average nationwide rate increase request versus the average rate increase approved where a disposition has been received (including 0% for disapprovals in the average) for each filing. The average rate increase request and average rate increase approved were calculated by premium-weighting across the jurisdictions where a disposition was received. Note that jurisdictions may offer to approve a rate increase in excess of the request in exchange for a rate guarantee or phase-in, which is the case for the data point above the 100% approval line.

FIGURE 2.7: AVERAGE RATE INCREASE APPROVED BY AVERAGE REQUESTED INCREASE

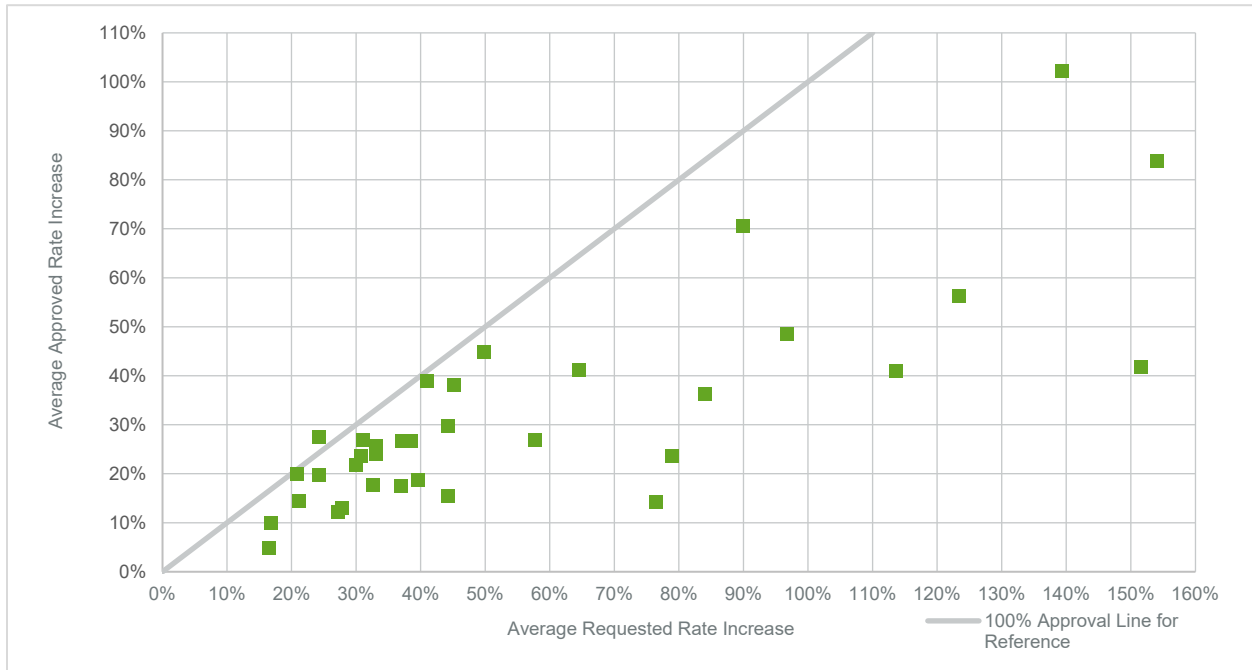


Figure 2.8 provides the jurisdictions with the highest ratio of average approved rate increase to average requested increase where a disposition has been received. Additional detail for all jurisdictions can be found in Appendix 2. Values provided in Figure 2.8 and Appendix 2 differ from those in Appendix 1 as all pending filings are removed from the results in Figure 2.8 and Appendix 2. In Nebraska, the average approved rate increases may have exceeded the average request due to negotiations with the department (e.g., modified request so future increases based on additional deterioration, actuarial equivalence for a phased-in increase). In Oregon and Rhode Island, no approval exceeded 50% and seven or fewer dispositions were reported. In Alaska, the department does not review LTC rate increase filings so the treatment of filings in Alaska varies by company.

FIGURE 2.8: JURISDICTIONS WITH HIGHEST APPROVAL RATIO

JURISDICTION	RATIO OF AVERAGE APPROVED TO REQUESTED INCREASE	PERCENTAGE OF DISPOSITIONS WITH FULL APPROVALS
Nebraska	1.04	68%
South Dakota	1.00	96%
Oregon	1.00	71%
Wisconsin	0.99	86%
Wyoming	0.99	80%
Nevada	0.98	58%
Delaware	0.97	71%
Rhode Island	0.97	50%
Illinois	0.91	83%
Michigan	0.88	83%

Figure 2.9 provides the top ten jurisdictions with the highest rate increase approved for a submission. Additional detail for all jurisdictions can be found in Appendix 2. The values in Figure 2.9 and Appendix 2 reflect the average rate increase approved for a given submission, not the maximum approved amount for varied rate increases.

FIGURE 2.9: JURISDICTIONS WITH HIGHEST APPROVALS

JURISDICTION	RATE INCREASE APPROVED
Illinois	174%
Wisconsin	148%
Texas	117%
Virginia	114%
Nebraska	113%
West Virginia	101%
Oklahoma	101%
Florida	100%
Missouri	97%
Nevada	97%

Figure 2.10 provides jurisdictions with consistent approval limits. Rate increase approvals in these jurisdictions may exceed the consistent limit due to reasons unique to each company (e.g., offering unique reduced benefit options, historical relationship with departments). Note, for most of the jurisdictions included in Figure 2.10, at least 70% of the approvals are under the limit shown. In some cases, the authors applied judgment based on experience with various jurisdictions when interpreting responses to develop this list.

FIGURE 2.10: JURISDICTIONS WITH CONSISTENT APPROVAL LIMIT

JURISDICTION	CONSISTENT APPROVAL LIMIT
Connecticut*	50%
New Hampshire**	50%
Massachusetts*	40%
Iowa*	30%
Pennsylvania	30%
Washington	30%
Arkansas	25%
Louisiana	25%
Mississippi***	25%
North Carolina****	25% annual regulatory cap
Indiana	20%
South Carolina	20%
Georgia	15%
Maryland****	15% annual regulatory cap
Minnesota****	15% annual cap
New Mexico	15%
New York	15%
Oklahoma****	15% annual cap
District of Columbia***	10%

* Jurisdiction requires that increases be phased in if over a certain threshold. Additional detail regarding phased-in increases is provided in section 2.1.2.

** Regulatory rate increase limit varies by attained age and was rescinded by the state supreme court in 2021. All increases are also subject to a 20% annual cap.

*** Based on regulatory rate increase limit.

**** Increases exceeding the annual cap may be approved, but the increase will be required to be phased in at no more than the specified cap each year.

It should be noted that the approval limits provided above are subject to ongoing changes in the review process for each jurisdiction, which make it difficult to predict the outcome of a rate increase request. One recent change that may impact the New Hampshire approval limit cited above is the supreme court decision rescinding the attained age rate increase caps of New Hampshire Administration Rule, Ins 3601.19(f).

2.1.2 Phased-In Rate Increases

While some jurisdictions will not pre-approve a rate increase that will be implemented more than 12 months from the approval date, other jurisdictions prefer to phase in large increases over several years. Figure 2.11 provides the jurisdictions in which the department most frequently pre-approved a phased-in increase, such that each phase did not need to be filed for approval, and the number of years over which the rate increase is phased in. More details regarding multi-year requests are in Section 3.4.2.

FIGURE 2.11: JURISDICTIONS WITH MAJORITY OF RATE INCREASES PHASED IN

JURISDICTION	PERCENTAGE OF APPROVALS WITH PHASED-IN RATE INCREASES	NUMBER OF YEARS OVER WHICH THE RATE INCREASE IS PHASED IN
Hawaii	100%	2 - 5
Maine	100%	2 - 3
Minnesota	100%	2 - 4
Nevada	87%	2 - 4
Massachusetts	83%	2 - 4
Rhode Island	83%	2 - 3
Colorado	80%	2 - 3
Maryland	76%	2 - 5
Vermont	71%	2 - 3
Florida	67%	3

Unique to Connecticut is the insurers' ability to "stack" phased-in rate increases on top of one another, such that the first and second phase of a recently approved rate increase may be layered on top of the second and third phases of a previously approved increase. However, the recent passing of Bill No. 1046 may inhibit an insurers' ability to stack future rate increases. In Connecticut, 57% of responses indicated that the approved rate increase was required to be phased in over two or three years.

2.1.3 Rate Guarantees

Figure 2.12 provides the jurisdictions in which the department most frequently required a rate guarantee as part of the approval of the requested rate increase and the number of years the rates are guaranteed.

FIGURE 2.12: JURISDICTIONS WITH RATE GUARANTEES

JURISDICTION	NUMBER OF YEARS WITH GUARANTEED RATES
Florida	5 - 10
Kansas	3 - 5
Minnesota	2 - 5
New Jersey	3
West Virginia	2 - 3

2.1.4 Disapprovals

Figure 2.13 provides the top jurisdictions with the highest occurrence of disapprovals for submissions that have received a disposition. Values provided in Figure 2.13 differ from those in Appendix 1 as all pending filings are removed from the results in Figure 2.13.

FIGURE 2.13: JURISDICTIONS WITH THE HIGHEST OCCURRENCE OF DISAPPROVALS

JURISDICTION	PERCENTAGE OF DISAPPROVED DISPOSITIONS	AVERAGE RATE INCREASE REQUEST FOR DISAPPROVALS	MINIMUM REQUEST DISAPPROVED	MAXIMUM REQUEST DISAPPROVED
Indiana	50%	53%	21%	228%
Mississippi	29%	12%	4%	21%
New Hampshire	23%	30%	13%	44%
North Dakota	22%	69%	32%	158%
Nevada	21%	67%	11%	108%

2.2 DEPARTMENT MEETINGS

Of the 35 filings represented in this survey, companies met with departments in at least one jurisdiction for 20 filings. Company representatives for nine of these filings visited over half of the departments in which a rate increase was submitted. Meetings with departments may occur in person, but more likely occur over the phone or through video conferencing. Most meetings included a combination of actuarial, managerial, and government relations representatives from the company. Department meetings can be beneficial as they may result in a higher approved increase or shorter time to approval. There may be other benefits to an in-person meeting, but we did not request respondents to clarify the benefits.

Figure 2.14 lists the ten jurisdictions where meetings were most frequently conducted.

FIGURE 2.14: TOP JURISDICTIONS WITH DEPARTMENT MEETINGS

California	Missouri
Colorado	New Jersey
Florida	New York
Maryland	Texas
Massachusetts	Virginia

The timing of the department meetings is summarized in Figure 2.15.

FIGURE 2.15: TIMING OF DEPARTMENT MEETINGS

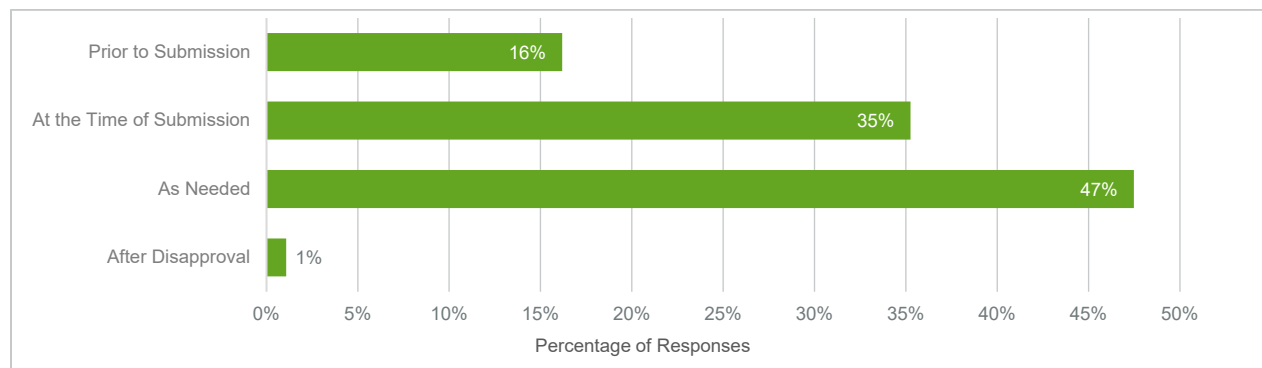
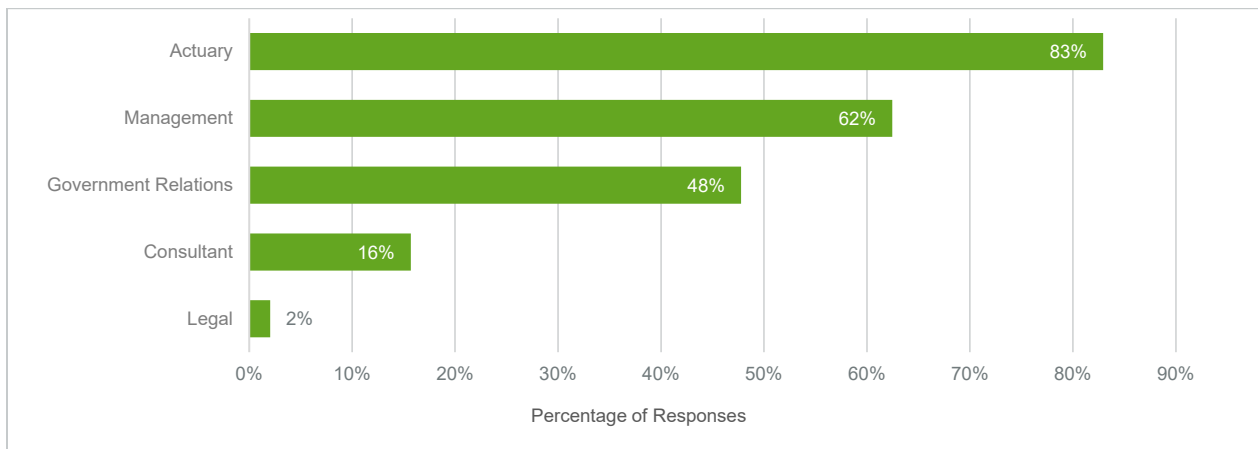


Figure 2.16 provides information about who attends the meetings with departments.

FIGURE 2.16: COMPANY ATTENDEES OF DEPARTMENT MEETINGS



Note: Responses total more than 100% as more than one may apply.

2.3 RATE STABILITY APPROVALS

For the 25 filings with at least one submission subject to rate stability regulation, 11 had over 90% of their respective submissions subject to rate stability regulation. Only five respondents indicated that the requested rate increase varied for policies subject to rate stability regulation compared to loss ratio regulation, and eight of the respondents made an effort to separate the business subject to loss ratio regulations compared to rate stability regulations by bifurcating the filing. Given that most submissions reflected in this survey did not differentiate between policies subject to loss ratio or rate stability regulation, we have not quantified the difference in their respective rate increase approvals.

For the submissions where rate stability regulation applied, Figure 2.17 provides the jurisdictions that most frequently required the rate increase to certify to rate stability. For all other jurisdictions, rate certification was required for less than half of submissions subject to rate stability regulation.

FIGURE 2.17: JURISDICTIONS THAT REQUIRED RATE STABILIZATION CERTIFICATION FOR APPROVAL

JURISDICTIONS	PERCENTAGE OF RESPONSES
New Jersey	75%
Texas	71%
Florida	71%
Nebraska*	58%

* While Nebraska has not enacted rate stability regulation the state has requested that rate increases reflect the amount needed so that future increases are only needed if there is additional deterioration.

2.4 POLICYHOLDER OPTIONS

The most common options available to insureds to reduce benefits to offset a rate increase are provided in Figure 2.18.

FIGURE 2.18: AVAILABILITY OF REDUCED BENEFIT OPTIONS

OPTION	PERCENTAGE OF RESPONSES
Reduced daily benefit	94%
Reduced benefit period	91%
Increased elimination period	79%
Dropping inflation protection	79%
Reducing inflation protection to another existing inflation protection option	68%
Landing spots*	9%
Cash buyouts**	6%
Coinsurance***	3%

Note: Responses total more than 100% as more than one may apply.

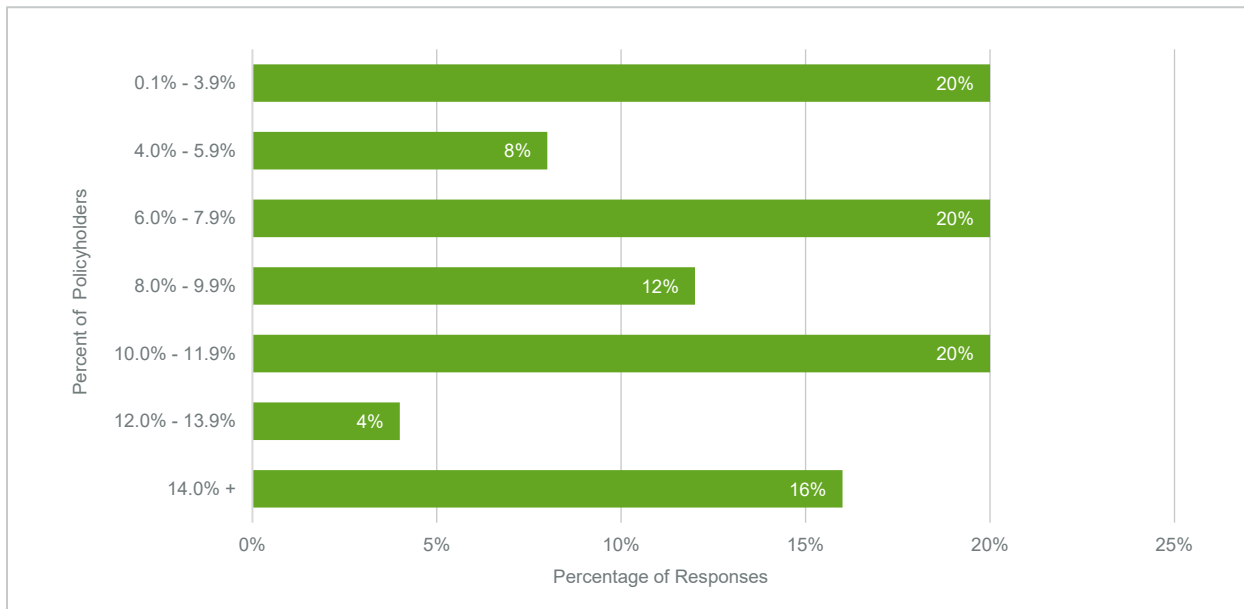
* Landing spots allow a policyholder to reduce benefits to a level that was not originally offered to offset the rate increase partially or fully.

** Cash buyouts allow a policyholder to receive a cash payment when forfeiting their policy.

*** Coinsurance allows a policyholder to reduce the portion of LTC expenses paid for by their policy.

Figure 2.19 provides the percentage of policyholders subject to a rate increase who chose to reduce benefits to offset a portion of their rate increase. The average benefit reduction election rate in this survey is 10.6%, which is slightly higher than the average 8.9% election rate in the 2016 Survey.

FIGURE 2.19: BENEFIT REDUCTION ELECTIONS



2.4.1 Reducing Inflation Protection

When a policyholder drops or reduces inflation protection to another existing inflation protection option (e.g., compound down to simple inflation or reduction of inflation percentage), companies handle the continuing or inflating daily benefit level differently. When policyholders retain inflated benefits, some companies require policyholders pay premium reflecting the no inflation rate for the current (inflated) daily benefit while others allow policyholders to pay the no inflation rate for the original daily benefit. Administration of changes in inflation protection is a sensitive topic and one of much discussion between companies and regulators.

2.4.2 Landing Spots

Landing spots allow a policyholder to reduce benefits to a level that is not already offered to offset the rate increase partially or fully. Less than 10% of companies surveyed offered landing spots, compared to about one-quarter of the companies in the 2016 Survey.

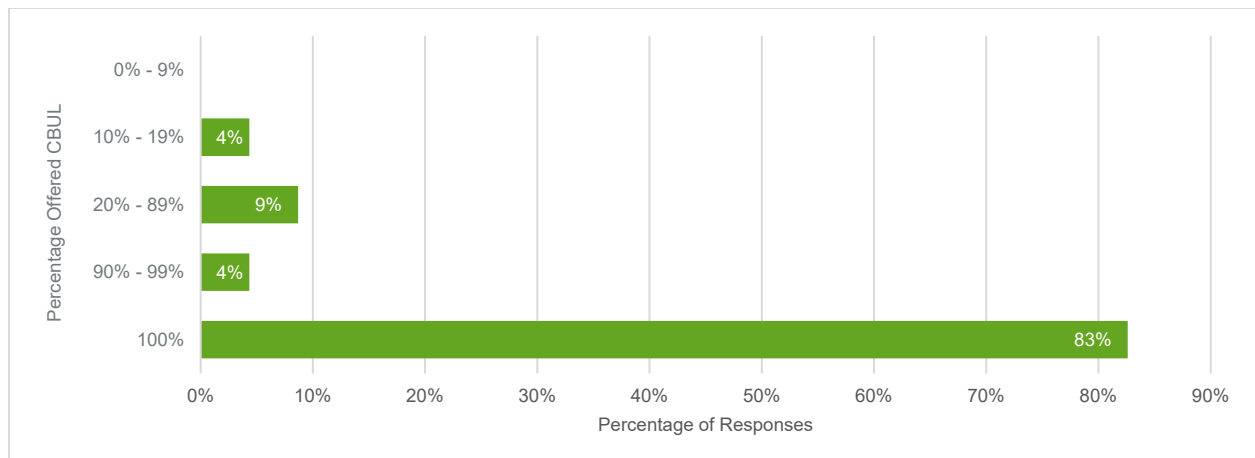
2.4.3 Cash Buyouts

An emerging option companies may offer to policyholders is a cash buyout, where a policyholder is compensated for lapsing their policy with a cash payment. Cash buyouts have been discussed at length over the past couple of years and several questions regarding them still exist, most notably, how they should be valued². Less than 10% of companies surveyed offered a cash buyout as part of a rate increase request, and in these filings, the cash buyouts were only offered in certain jurisdictions.

2.4.4 Contingent Benefit Upon Lapse

CBUL was voluntarily offered to all insureds in 83% of the filings. In the 2016 Survey, half of the respondents offered CBUL only when required by regulation or requested by a regulator as a condition for a rate increase approval. Figure 2.20 provides the percentage of insureds that were offered CBUL by the company.

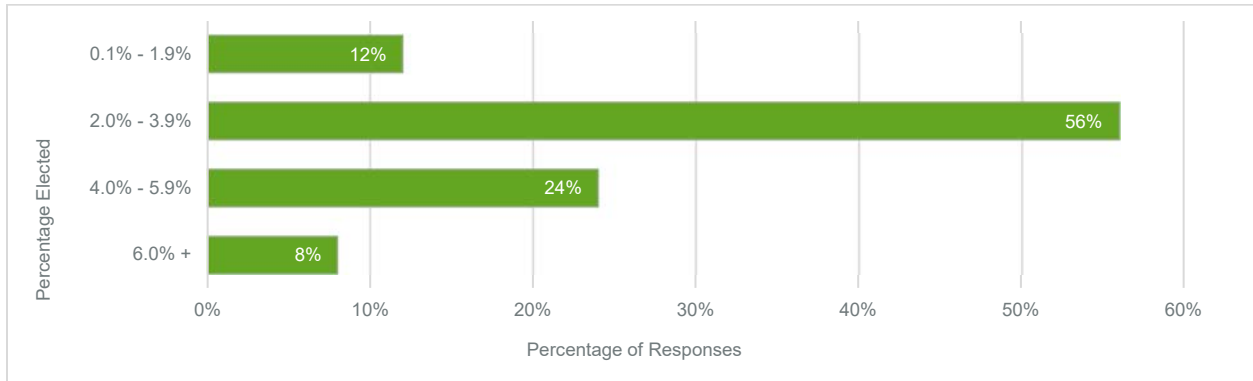
FIGURE 2.20: INSUREDS OFFERED CBUL



² Anderson & Bergerson (February 2020). Advantages, Disadvantages, and Considerations for LTC Policy Buyouts. SOA's Long-Term Care Section Newsletter, pp. 6-10

Figure 2.21 provides the percentage of policyholders impacted by a rate increase who chose to elect CBUL rather than receive the rate increase. The average CBUL election rate in this survey is 3.8%, which is lower than the average 5.7% election rate in the 2016 Survey. This reduction is partially driven by a lower average approval in this survey compared to the 2016 Survey. It may also be lower because policyholders most likely to elect a CBUL may have done so at the time of a prior rate increase captured in the 2016 Survey.

FIGURE 2.21: INSUREDS WHO ELECTED CBUL



2.5 POLICYHOLDER NOTIFICATION

The policyholder notification period requirements vary by jurisdiction; however, a company may choose to implement an increase later than required by the minimum notification period. Most commonly, companies use a 60-day notification period unless a longer time frame is required by a jurisdiction. However, the time frame varies from 30 to 120 days for the companies included in the survey.

Rate increases are implemented on a policyholder’s next policy anniversary for 56% of the filings, while the rate increases for the remaining 44% of filings are implemented on a policyholder’s next premium due date.

Departments required a policyholder notification letter be submitted for approval in 27% of submissions. Figure 2.22 provides a summary of the jurisdictions that required a notification letter be submitted for approval for over 50% of their respective filings. Of jurisdictions that have required a notification letter be submitted for approval in any filing, California, Massachusetts, Rhode Island, Texas, and Virginia were identified most often as requiring significant effort to achieve approval of the letter.

FIGURE 2.22: JURISDICTIONS REQUIRING POLICYHOLDER NOTIFICATION LETTERS BE SUBMITTED

Alabama	New Hampshire
Illinois	South Carolina
Maine	Texas
Nebraska	Virginia

3. Approach to Filing a Rate Increase

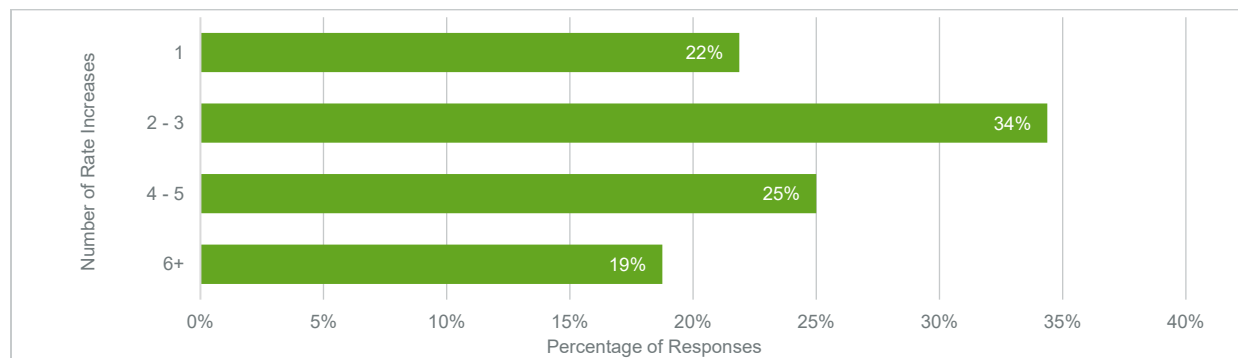
Obtaining LTC rate increases is challenging, and the approach can vary among companies and even across products within a company, as there is not a one-size-fits-all solution. This section provides a summary of how companies manage rate increases for their LTC blocks of business, including how the rate increase is determined. Additionally, a summary of the rate increase requested is included and whether it is uniform or varies.

Companies were asked to complete the survey based on recent rate increase requests where at least 50% of the jurisdictions had made a decision on the request. Some companies provided responses for multiple filings. The 18 companies that provided detail for a rate increase provided responses for 35 recent nationwide rate increase filings on various blocks of business. We define a filing as a nationwide rate increase request and a submission as each separate jurisdiction rate increase request. The majority of the submissions reflected in this survey were submitted in 2019 and 2020.

3.1 RATE INCREASE FILING HISTORY

Of the 20 participating companies, 19 provided responses related to recent rate increase filings. The company that responded that it had not submitted any recent filings indicated that it is planning to do so in the near future. Figure 3.1 provides the number of rate increases that have been implemented for the respondents represented in this survey, including the most recent filing.

FIGURE 3.1: NUMBER OF RATE INCREASES



Over half of the companies responded that they pursue rate actions either annually or continuously, while the other respondents indicated that they pursue rate actions less frequently.

3.2 APPROACH TO DETERMINING A RATE INCREASE REQUEST

Many factors can be considered when determining what increase to request for a nationwide rate filing. Figure 3.2 provides some of the common factors used by the participating companies.

FIGURE 3.2: FACTORS CONSIDERED WHEN DETERMINING RATE INCREASE STRATEGY

FACTOR	PERCENTAGE OF RESPONSES
Management strategy (e.g., request small rate increases)	56%
Actual-to-expected lifetime loss ratio	56%
The requested rate increase is calculated by targeting a lifetime loss ratio where only future premiums are increased	35%
The Prospective Present Value (a.k.a. Texas Method) analysis	29%
Actual-to-expected future loss ratio	21%
The requested rate increase is calculated by targeting a lifetime loss ratio assuming all premiums since inception are increased (i.e., "If-Knew" premium analysis)	15%
Profit measure	9%

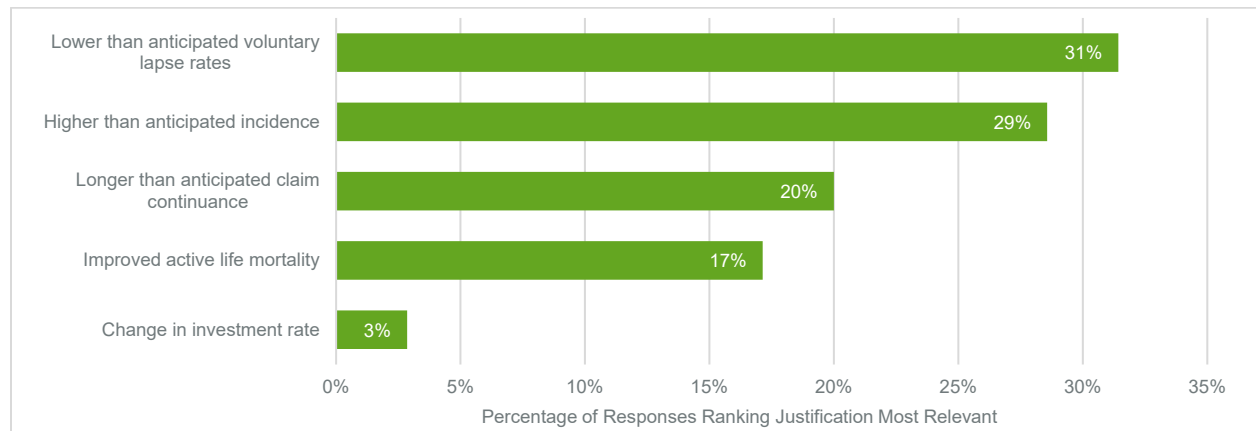
Note: Responses total more than 100% as more than one may apply.

Compared to the 2016 Survey, the largest change is that less consideration is given for lifetime loss ratios, with management strategy now one of the most common factors. The percentage of responses for actual-to-expected lifetime loss ratios decreased from 84% to 56% and actual-to-expected future loss ratios decreased from 56% to 21%.

3.2.1 Actuarial Justification

Companies were asked to rank common reasons for rate increases from the most to the least relevant. Figure 3.3 below provides the percentage of filings giving each reason as the most relevant factor for the justification of the rate increase. One filing indicated “Other” as the most relevant factor noting the reason was higher than anticipated claim costs.

FIGURE 3.3: FACTORS COMPRISING THE ACTUARIAL JUSTIFICATION



3.2.2 Recouping Past Losses

An emerging trend is that departments are limiting rate increases that they determine to be “recouping past losses.” There is no consensus on how to determine if a rate increase recoups past losses, but the most common method used by companies is based on the lifetime loss ratio, however, the Prospective Present Value and If Knew premium analyses are also used.

3.2.3 Experience Pooling

Three quarters of the filings included pooled experience of multiple policy forms. Figure 3.4 provides the reasons or criteria companies considered when pooling policy forms within a filing. If policy forms are pooled, the rate increase justification is based on the pooled experience, but the rate increase request may vary by policy form. Responses included as “Other” reflect pooling based on the underwriting and the reinsurance basis for the pooled policy forms.

FIGURE 3.4: REASONS FOR POOLING POLICY FORMS

CRITERIA	PERCENTAGE OF RESPONSES
Consistency with how the block is managed	100%
Similar benefits	80%
Similar original pricing assumptions	72%
Increased credibility	64%
Similar issue year era	28%
Other	12%

Note: Responses total more than 100% as more than one option may apply.

Based on our experience, certain departments may question or will not allow pooling of certain forms. Common reasons for department pushback are pooling different benefits (e.g., will not allow pooling of comprehensive policies with home care policies), pooling with policy forms not issued within the jurisdiction, or significant difference in issue year era.

3.3 INTERNAL AND EXTERNAL RESOURCES

Rate increase filings can require a wide range of resources. Based on the availability of resources and the use of outside parties, filings can take anywhere from several months to a year or more to complete.

3.3.1 Coordination with Outside Party

Oftentimes, a rate increase strategy involves coordination with a consultant, administrator, and/or reinsurer. This was the case for half of the responding companies. Where there was coordination with an outside party, reinsurers were the ones noted as “driving” the rate increase most often (i.e., the one pushing for the rate increase to be filed); however, companies were noted as determining the rate increase strategy most often. Figure 3.5 provides a comparison of who is driving the rate increase and who sets the rate increase strategy when coordinating with an outside party.

FIGURE 3.5: RATE INCREASE STRATEGY COORDINATION WITH OUTSIDE PARTY

PARTY	PERCENTAGE OF RESPONSES	
	DRIVING RATE INCREASE	SETTING RATE INCREASE STRATEGY
Reinsurer	47%	41%
Company	41%	59%
Administrator	12%	12%
Consultant	Not Applicable	24%

Note: Responses total more than 100% for setting rate increase strategy as more than one option may apply

Figure 3.6 provides a comparison of who is involved in preparing and/or submitting the rate increase submissions.

FIGURE 3.6: PARTY RESPONSIBLE FOR PREPARING AND/OR SUBMITTING RATE INCREASE FILINGS

PARTY	PERCENTAGE OF RESPONSES
Company	68%
Consultant	50%
Administrator	15%

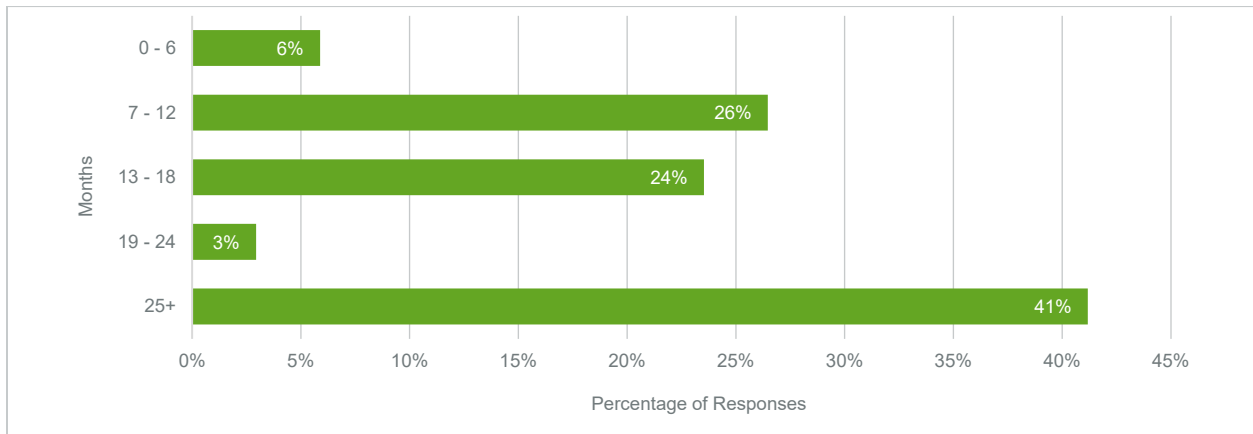
Note: Responses total more than 100% as more than one option may apply

3.3.2 Filing Resources and Timing

The median number of people on each respective filing team was 5, while responses ranged from 1 to 17 people. Typically, the number of people on a filing team is correlated with how much LTC business a company has and how quickly a company would like to have its filings submitted.

The time frame to get initial filings submitted can vary for a number of reasons including the number of jurisdictions being filed, available resources, and prior agreements with departments. A summary of the responses is provided in Figure 3.7. The majority of filings in the 2016 Survey were submitted within a six-month time frame compared to only 6% of filings in this survey. This could be driven by the fact that prior rate increase filings have caused for implementation schedule differences based on prior approval timing or agreements with departments.

FIGURE 3.7: NUMBER OF MONTHS TO GET INITIAL FILINGS SUBMITTED



3.4 RATE INCREASE STRATEGY

Rate increase filings are requested for a variety of reasons. As a result, the size and structure also vary by filing.

3.4.1 Rate Increase Request

Figure 3.8 summarizes the nationwide average cumulative rate increase request across the filings. The average nationwide cumulative rate increase request provided in Figure 3.8 was calculated by premium-weighting across the jurisdictions where a request was filed based on the previously approved increases and the current request in each jurisdiction. The minimum average cumulative rate increase request provided in the survey was 25% and the maximum was 644%.

FIGURE 3.8: NATIONWIDE AVERAGE CUMULATIVE RATE INCREASE REQUEST

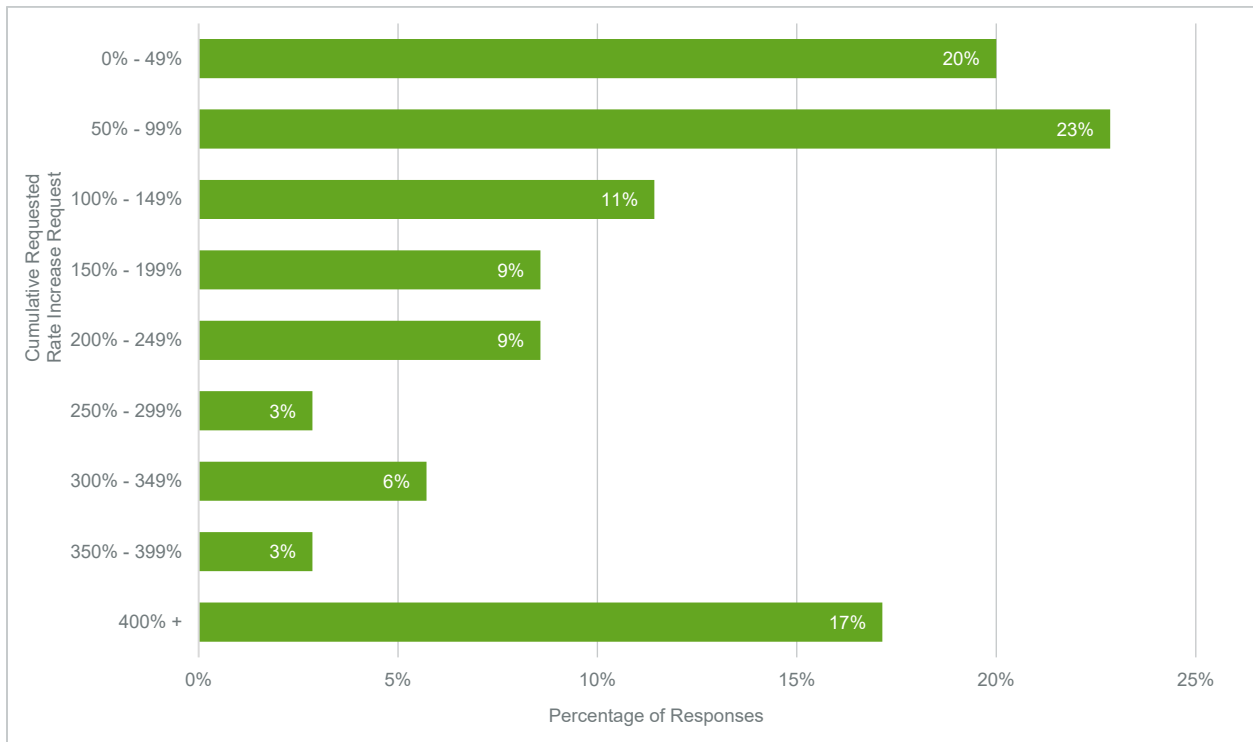
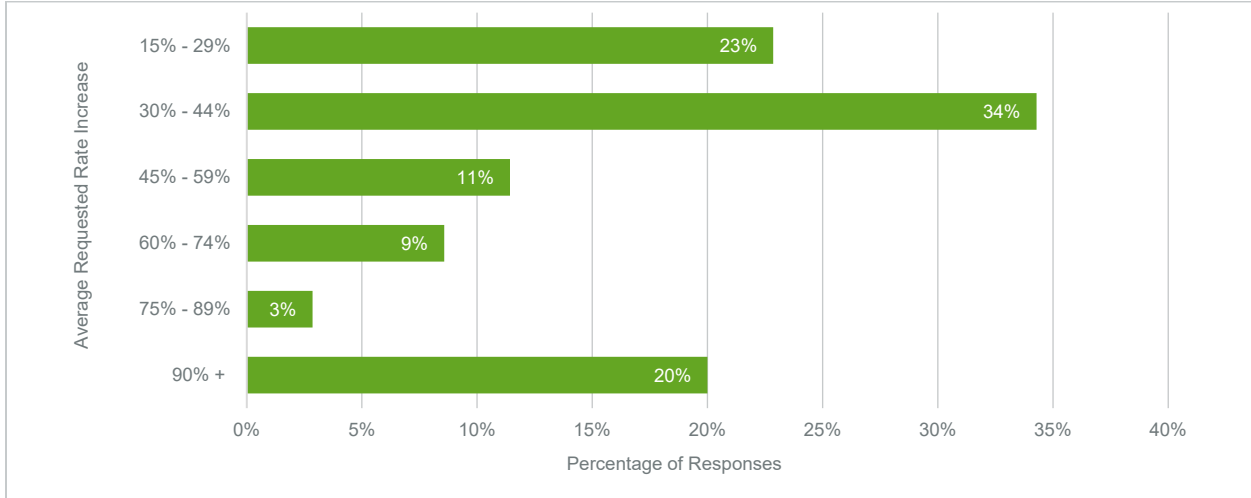


Figure 3.9 summarizes the average rate increase request calculated by premium-weighting across the jurisdictions where a request was filed. The minimum average rate increase request provided in the survey was 16% and the maximum was 202%.

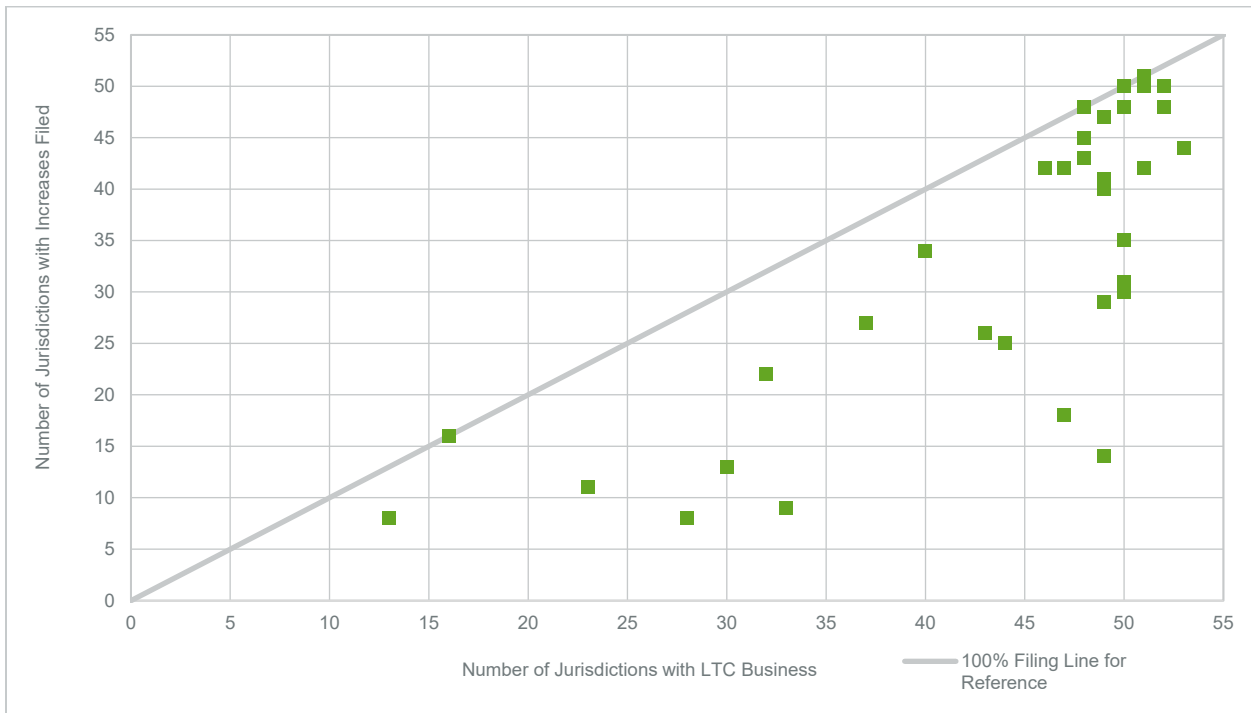
FIGURE 3.9: AVERAGE NATIONWIDE RATE INCREASE REQUEST FOR MOST RECENT FILING



The average nationwide request in the 2016 Survey was 56% with a maximum of 238%. The average nationwide request in the current survey is lower at 47%, however, the maximum increase is higher at 362%.

Figure 3.10 provides the number of jurisdictions the respondents have LTC business and how many jurisdictions in which a rate increase is planned to be filed.

FIGURE 3.10: JURISDICTION DISTRIBUTION



Although achieving rate equity across jurisdictions may be desirable, only ten of the filings included submissions for all jurisdictions in which they had LTC business in force. For others, it is not always feasible to file in every jurisdiction. The reasons a company may not file in a particular jurisdiction are provided in Figure 3.11. Common responses included as “Other” were rate guarantees or multi-year increases from prior approvals which restricted a company from submitting a rate increase.

FIGURE 3.11: REASONS TO NOT FILE IN A JURISDICTION

REASON	PERCENTAGE OF RESPONSES
Small amount of premium	43%
Other	41%
Difficulty in achieving approval	14%
Time to approval	2%

3.4.2 Multiyear Rate Increase Requests

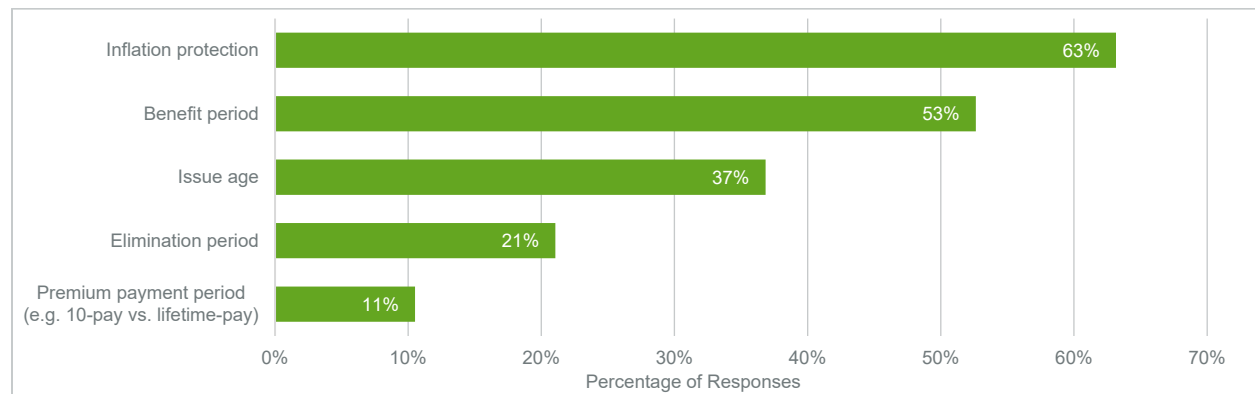
For 74% of the filings, the initial requested rate increase was phased in over multiple years for at least one jurisdiction. This is higher than in the 2016 Survey, where less than 20% of the filings requested a multiyear rate increase. In four of the filings, a multiyear increase was requested in more than 50% of the jurisdictions.

3.4.3 Varied Increases

The lifetime loss ratio for different rating cohorts (e.g., issue age, benefit periods, inflation protection options) depends, in part, on the reason for the rate increase. For example, deviations in persistency and interest can create more adverse projected experience for younger issue ages because of the longer projection period (i.e., the impact of persistency and interest discounting is key). On the other hand, projections for older issue ages are more sensitive to deviations in morbidity because the time until claim is shorter. While the impact of a rate increase can vary by issue age and/or benefits, companies are faced with additional considerations, such as credibility of the variations, administrative complexities, and definition of premium class to name a few. Some companies choose to vary the rate increase request to recognize differences in experience, while others request a uniform increase. In some cases, departments prefer the rate increase to vary. Like the 2016 Survey, over half of the filings included in the survey were for a varied requested rate increase.

Figure 3.12 provides the most common parameters by which the requested increase varies within a filing for the 19 filings with a varied increase. For the 19 filings that requested a varied increase, about two-thirds varied the request by more than one parameter. In the 2016 Survey, varying the rate increase by benefit period was most common (over 60% of the filings) whereas varying by inflation is the most common in the current survey.

FIGURE 3.12: VARIED RATE INCREASE REQUEST

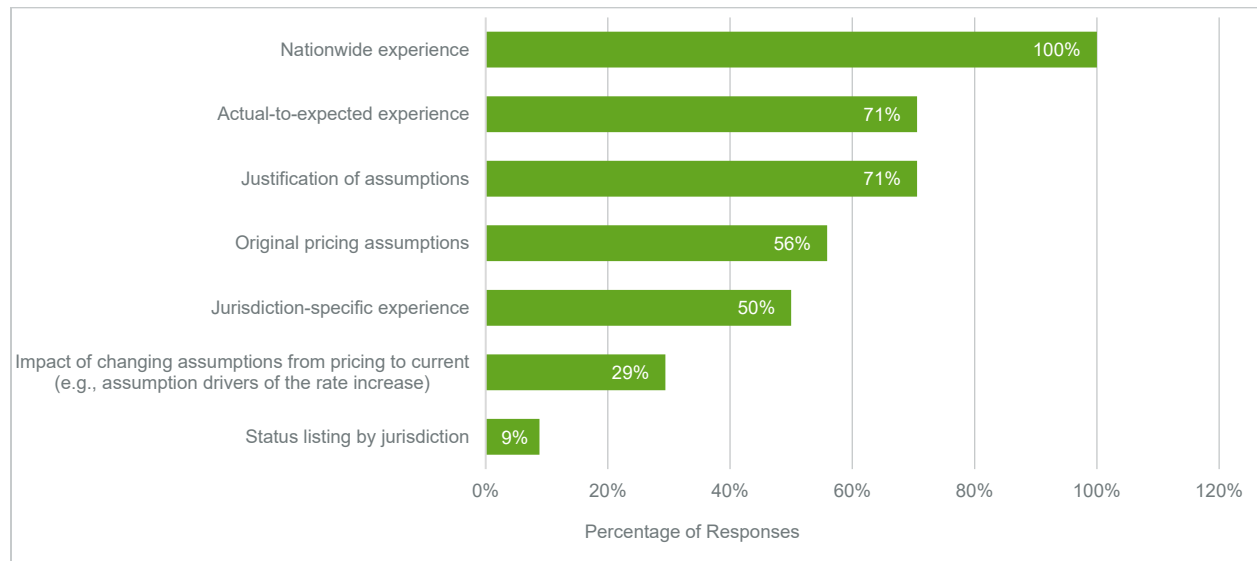


Note: Responses total more than 100% as more than one may apply.

3.4.4 Filing Exhibits

Figure 3.13 provides the exhibits that are included in a generic/standard filing. Additional exhibits included in the standard filing may head off objections from departments. However, including additional exhibits may increase the cost and time to file an increase. Compared to the 2016 Survey, the largest change is that including actual-to-expected experience in a generic filing increased from 49% to 71%. However, is it possible that this trend is a result of the mix of responding companies more than a change in industry norms.

FIGURE 3.13: STANDARD FILING EXHIBITS

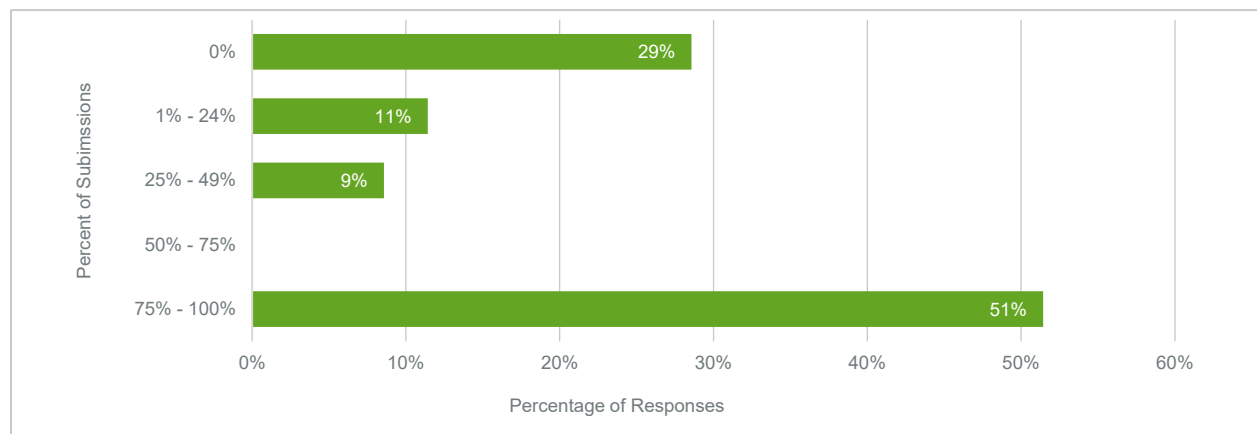


Note: Responses total more than 100% as more than one may apply.

3.5 RATE STABILITY REQUESTS

Figure 3.14 provides the percent of submissions in jurisdictions in which the filing is subject to rate stability regulation.

FIGURE 3.14: JURISDICTIONS WHERE FILING IS SUBJECT TO RATE STABILITY REGULATION



There are different approaches to rate filings wherein policies on a single policy form are subject to both loss ratio and rate stability regulation. A summary is provided in Figure 3.15 which represents the standard approach of the respondent. However, some filings may deviate from this approach and be bifurcated as required or requested by a jurisdiction.

FIGURE 3.15: RATE STABILITY FILING APPROACH

APPROACH	PERCENTAGE OF RESPONSES
File on all policies and comply with both loss ratio and rate stability regulation	44%
Bifurcate loss ratio and rate stability experience and file separately	32%
Treat all policies according to rate stability regulation	24%

For submissions subject to rate stability regulation, the respondents indicated that the requested increase certified to future rate stability for about half of the submissions.

4. Assumptions and Projections

This section describes the source of the projection assumptions used in the rate increase filings and how they compare with those used in the companies' cash flow testing (CFT). Additionally, a listing of the projection systems used in the rate increase filings is provided in this section. The survey did not request specific assumptions to comply with antitrust laws, but it included the approach to setting assumptions.

4.1 GENERAL

The assumptions for 76% of the respondents in this survey are reviewed annually, while the remaining 24% are reviewed every two or three years. For 88% of the respondents, the assumptions have changed in the last three years.

Commonly, assumptions for a rate filing are those considered most likely, as this is a consumer-friendly approach. Figure 4.1 provides a summary of the various assumptions that are considered most likely compared to those which include a provision for adverse deviation (PAD). Note that the PAD included in the assumptions is separate from margin for the moderately adverse experience (MAE) that is required for a rate stability filing.

FIGURE 4.1: SUMMARY OF ASSUMPTIONS

ASSUMPTION	PERCENTAGE OF RESPONSES	
	MOST LIKELY	INCLUDE PAD
Mortality	94%	6%
Morbidity	88%	12%
Lapse	94%	6%
Interest	94%	6%

4.2 MORTALITY

Figure 4.2 provides the source(s) used in the development of mortality assumptions. Three-quarters of respondents applied the mortality assumption on a total lives basis, while the remainder applied mortality separately for active and disabled lives. Future mortality improvement was included in the projection assumptions for 50% of the filings.

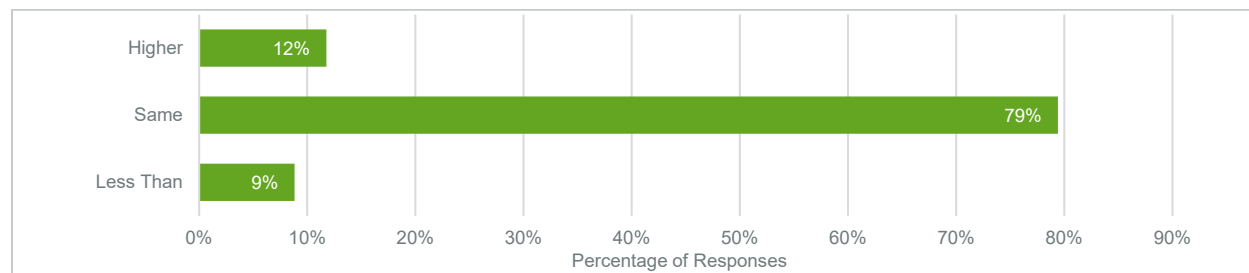
FIGURE 4.2: MORTALITY ASSUMPTION SOURCE

SOURCE	PERCENTAGE OF RESPONSES
Company experience	88%
Industry data	41%
Consultant data	26%
Administrator data	18%
Reinsurer data	15%

Note: Responses total more than 100% as more than one may apply.

Figure 4.3 provides whether the mortality assumption used in the rate filing is higher or lower than that used in the company's CFT.

FIGURE 4.3: MORTALITY ASSUMPTION IN RATE FILINGS VS. CFT



4.3 LAPSE RATE

Figure 4.4 provides the source(s) used in the development of the lapse rate assumption. Nearly 60% of respondents applied the lapse assumption to all lives, while the remainder applied lapse only to active lives.

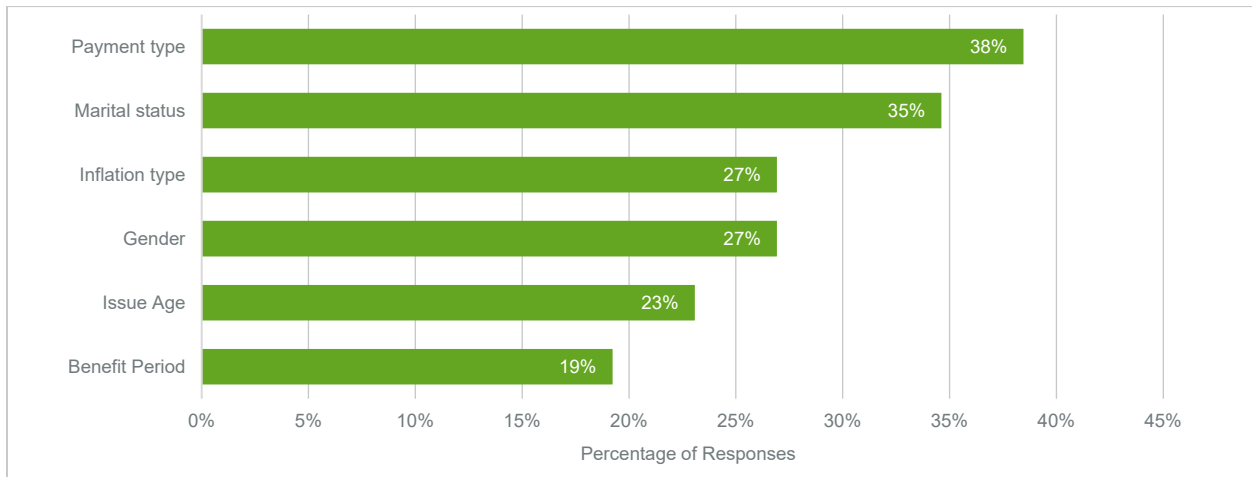
FIGURE 4.4: LAPSE RATE ASSUMPTION SOURCE

SOURCE	PERCENTAGE OF RESPONSES
Company experience	97%
Consultant data	29%
Administrator data	18%
Industry data	12%
Reinsurer data	12%

Note: Responses total more than 100% as more than one may apply.

For three-quarters of the filings, the lapse rate varied by one or more parameters, other than duration. A summary of the most common parameters by which the lapse rate varied is provided in Figure 4.5.

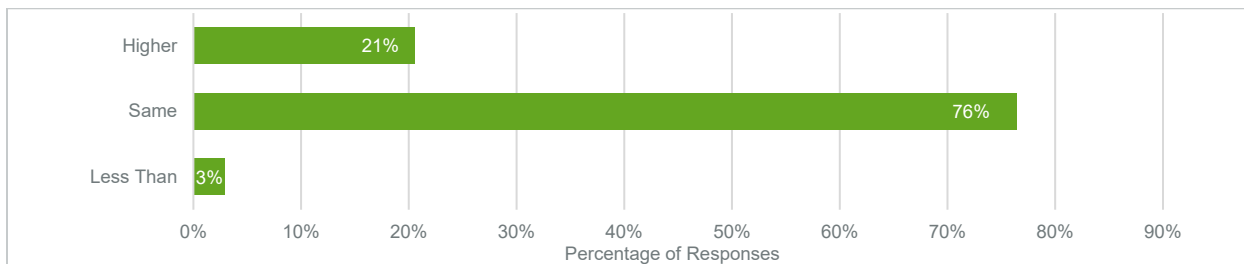
FIGURE 4.5: LAPSE RATE ASSUMPTION VARIATION PARAMETERS



Note: Responses total more than 100% as more than one may apply.

Figure 4.6 provides whether the lapse rate assumption used in the rate filing is higher or lower than that used in the company's CFT.

FIGURE 4.6: LAPSE RATE ASSUMPTION IN RATE FILING VS. CFT



In addition to lapsing a policy due to nonpayment, a policy may terminate due to exhausting the benefits for non-lifetime benefit periods. Most companies have a separate assumption for benefit expiry for non-lifetime benefit periods rather than include benefit expiry as part of the lapse rate assumption (i.e., it has a higher lapse rate assumption than if it was modeled separately). Figure 4.7 provides the approaches taken in the rate filings included in the survey. Compared to the 2016 Survey, far fewer companies are including benefit exhaustion as part of their lapse rate assumption. This is reasonable given the industry trend to use first principles modeling.

FIGURE 4.7: BENEFIT EXPIRY ASSUMPTION

MODELING APPROACH	PERCENTAGE OF RESPONSES
Modeled separately from lapse	50%
Not modeled due to first principles modeling	32%
Not considered	12%
Included in lapse assumption	6%

4.4 MORBIDITY

Figure 4.8 provides the source(s) used in the development of the morbidity assumption. Future morbidity improvement was included in the projection assumptions for 32% of the filings.

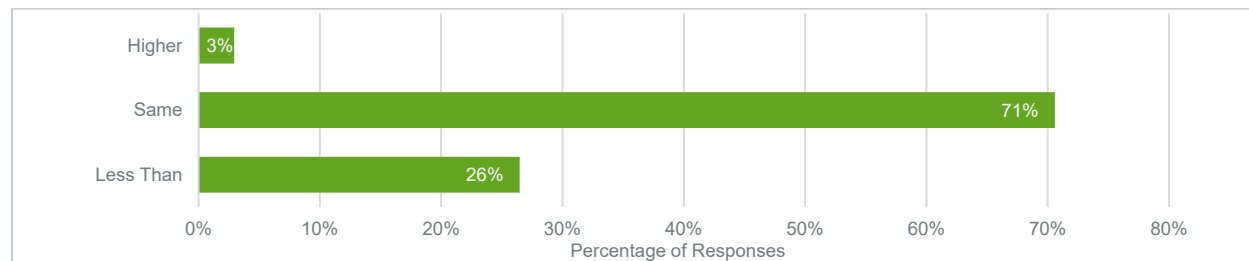
FIGURE 4.8: MORBIDITY RATE ASSUMPTION SOURCE

SOURCE	PERCENTAGE OF RESPONSES
Company experience	91%
Consultant data	56%
Industry data	38%
Administrator data	21%
Reinsurer data	12%

Note: Responses total more than 100% as more than one may apply.

Figure 4.9 provides whether the morbidity assumption used in the rate filing is higher or lower than that used in the company's CFT.

FIGURE 4.9: MORBIDITY ASSUMPTION IN RATE FILING VS. CFT



4.5 INTEREST

Figure 4.10 provides the source(s) used in the development of interest rate assumptions. A quarter of respondents used hedging programs. Three-quarters of the interest rates used in filings are pre-tax rates and the remainder are post-tax or were not provided. The interest rate is level across all historical and projected years for 82% of the filings. For those that varied the interest by experience year, all varied the historical interest rate and half varied the future interest rate. For submissions subject to rate stability regulation, the maximum valuation rate is required to be used in the 58%/85% test.

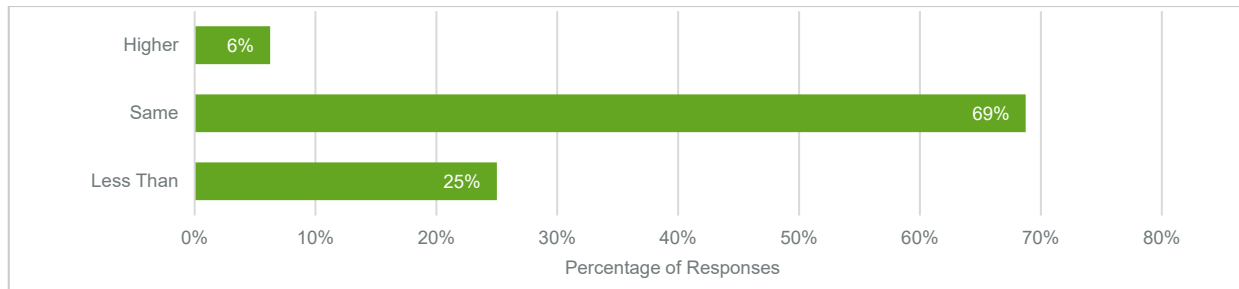
FIGURE 4.10: INTEREST RATE ASSUMPTION SOURCE

SOURCE	PERCENTAGE OF RESPONSES
Maximum valuation rate	68%
"Most likely" long-term expectation	47%
Historical earnings	21%
Average CFT Scenario	6%
Current portfolio	3%

Note: Responses total more than 100% as more than one may apply.

Figure 4.11 provides whether the interest rate assumption used in the rate filing is higher or lower than that used in the company's CFT.

FIGURE 4.11: INTEREST ASSUMPTION IN RATE FILING VS. CFT



4.6 POLICYHOLDER BEHAVIOR

A shock lapse assumption is modeled by 62% of the respondents; the others ignore the impact of shock lapse on the projected experience. The shock lapse assumption represents the policyholders who are assumed to lapse their policies instead of accepting a rate increase.

CBUL elections are modeled in a variety of ways, and in some cases, they are not modeled at all. For those who model CBUL elections, some are embedded as a lapse as part of the shock lapse assumption, while others reflect CBUL elections as a partial lapse with the remaining policyholder having reduced benefits.

Similarly, not all companies model RBO elections. The RBO assumption represents the policyholders that are assumed to choose to reduce benefits to offset all or some of the rate increase. Generally, those that model RBO elections do so as a partial lapse.

Like CBUL and RBO modeling, about half of the filings did not include an adverse selection assumption. For those filings that reflect adverse selection, the amount of increase to incurred claims is proportionate to the level of rate increase. The length of time the effects of adverse selection are assumed to last differs among the companies that model adverse selection. A permanent shift in morbidity due to adverse selection is the most common approach and was assumed by 60% of respondents that included adverse selection. The reasoning for a permanent shift is that the insureds remaining after the increase are those who chose to accept the rate increase (i.e., the insureds who think they will use the policy) and are a less healthy population (will use more benefits) than the pre-filing cohort. For those who lapse the policy, the assumption is that the insured is healthier and less likely to need the policy (as they do not value the policy enough to pay a higher premium). A shift in morbidity that wears off over time is assumed by the other 40% of respondents that include adverse selection. The reasoning for a temporary shift is that the insureds' ability to know their future health status is decreased over time.

4.7 MODELING

There are a variety of options for projection systems to be used in producing rate filings. The following is a list, in order of the number of responses, of the projections systems used by the participating companies.

- MG-ALFA
- Consultant Model
- In-House Developed System
- GGY Axis
- MG-Triton
- HealthMaster
- RiskAgility

Like the 2016 Survey, only a small number of filings used stochastic modeling for their filings. A little over half of the models use claim costs and the remainder use first principles (frequency and severity). This is a shift from the 2016 Survey where about three-quarters of the models used claim costs.

The incurral year claim definition (paid claims and claim reserve discounted to the year of incurral) is used by 85% of survey respondents while the remaining 15% use a financial year definition (paid claims plus change in claim reserve). In the 2016 Survey, all but one of the companies used the incurral year claim definition.

5. Appendices

APPENDIX 1: DISTRIBUTIONS OF DISPOSITIONS BY JURISDICTION

JURISDICTION	FILING COUNT	MINIMUM REQUEST	MAXIMUM REQUEST	AVERAGE REQUEST	PERCENTAGE OF FILINGS			
					APPROVED FULL REQUEST	APPROVED PARTIAL REQUEST	PENDING	DISAPPROVED
Alabama	23	4%	76%	32%	30%	35%	35%	0%
Alaska*	14	7%	328%	55%	79%	21%	0%	0%
Arizona	26	4%	286%	53%	27%	31%	31%	12%
Arkansas	30	3%	244%	51%	37%	47%	0%	17%
California	19	18%	300%	67%	11%	16%	68%	5%
Colorado	22	10%	146%	48%	14%	9%	73%	5%
Connecticut	22	4%	194%	49%	27%	68%	0%	5%
Delaware	26	6%	90%	37%	58%	23%	19%	0%
District of Columbia	20	10%	303%	39%	65%	35%	0%	0%
Florida	15	18%	185%	78%	33%	47%	7%	13%
Georgia	33	10%	178%	49%	12%	82%	6%	0%
Hawaii	15	10%	144%	44%	40%	27%	33%	0%
Idaho	20	10%	124%	44%	30%	35%	35%	0%
Illinois	27	1%	174%	48%	70%	15%	15%	0%
Indiana	23	21%	238%	69%	0%	48%	4%	48%
Iowa	27	7%	201%	50%	26%	56%	19%	0%
Kansas	24	18%	148%	55%	58%	25%	17%	0%
Kentucky	26	4%	90%	40%	42%	54%	0%	4%
Louisiana	24	15%	144%	51%	21%	54%	8%	17%
Maine	19	6%	78%	35%	21%	58%	5%	16%
Maryland	22	13%	149%	43%	32%	64%	5%	0%
Massachusetts	18	10%	175%	48%	0%	67%	28%	6%
Michigan	24	7%	185%	42%	83%	17%	0%	0%
Minnesota	23	19%	269%	63%	30%	65%	0%	4%
Mississippi	25	4%	94%	36%	8%	32%	44%	16%

APPENDIX 1: DISTRIBUTIONS OF DISPOSITIONS BY JURISDICTION (CONTINUED)

JURISDICTION	FILING COUNT	MINIMUM REQUEST	MAXIMUM REQUEST	AVERAGE REQUEST	PERCENTAGE OF FILINGS			
					APPROVED FULL REQUEST	APPROVED PARTIAL REQUEST	PENDING	DISAPPROVED
Missouri	28	4%	296%	48%	75%	21%	4%	0%
Montana	22	14%	134%	42%	14%	73%	5%	9%
Nebraska	24	10%	119%	51%	54%	25%	21%	0%
Nevada	21	6%	108%	41%	52%	19%	10%	19%
New Hampshire	13	13%	66%	36%	31%	46%	0%	23%
New Jersey	8	21%	145%	58%	0%	63%	38%	0%
New Mexico	28	10%	282%	64%	11%	71%	18%	0%
New York	15	2%	330%	70%	7%	20%	73%	0%
North Carolina	28	4%	91%	39%	18%	29%	46%	7%
North Dakota	27	10%	185%	46%	41%	37%	0%	22%
Ohio	31	11%	90%	31%	39%	29%	32%	0%
Oklahoma	30	10%	198%	52%	30%	70%	0%	0%
Oregon	27	10%	142%	49%	19%	7%	74%	0%
Pennsylvania	28	7%	196%	46%	29%	64%	0%	7%
Rhode Island	20	10%	116%	47%	15%	15%	70%	0%
South Carolina	29	4%	269%	48%	28%	66%	3%	3%
South Dakota	25	6%	92%	39%	96%	0%	0%	4%
Tennessee	26	7%	160%	40%	46%	38%	15%	0%
Texas	23	13%	362%	75%	52%	26%	4%	17%
Utah	26	13%	121%	42%	46%	38%	0%	15%
Vermont	15	16%	126%	47%	13%	33%	47%	7%
Virginia	24	21%	222%	60%	29%	21%	50%	0%
Washington	24	4%	83%	36%	13%	33%	50%	4%
West Virginia	23	10%	160%	45%	43%	22%	35%	0%
Wisconsin	31	4%	148%	37%	77%	13%	10%	0%
Wyoming	20	4%	90%	33%	80%	20%	0%	0%

*Alaska does not require rate increases to be filed so the treatment of filings in Alaska varies by company

APPENDIX 2: APPROVAL INFORMATION BY JURISDICTION

JURISDICTION	DISPOSITION COUNT	APPROVAL COUNT	AVERAGE MONTHS TO APPROVAL	REQUESTS FOR APPROVED FILINGS			APPROVAL AMOUNTS			RATIO OF AVERAGE APPROVED: REQUESTED
				MINIMUM	MAXIMUM	AVERAGE	MINIMUM	MAXIMUM	AVERAGE	
Alabama	15	15	11	17%	76%	40%	11%	49%	27%	0.68
Alaska*	14	14	2	7%	328%	55%	7%	62%	32%	0.60
Arizona	18	15	11	4%	286%	56%	4%	90%	32%	0.57
Arkansas	30	25	2	3%	244%	50%	3%	45%	22%	0.44
California	6	5	28	21%	97%	52%	10%	44%	30%	0.57
Colorado	6	5	6	27%	35%	30%	5%	35%	25%	0.81
Connecticut	22	21	7	4%	194%	47%	4%	50%	26%	0.55
Delaware	21	21	5	6%	90%	37%	6%	90%	36%	0.97
District of Columbia	20	20	4	10%	303%	39%	4%	28%	12%	0.31
Florida	14	12	13	18%	185%	78%	18%	100%	51%	0.65
Georgia	31	31	4	10%	178%	51%	3%	28%	14%	0.27
Hawaii	10	10	15	18%	144%	50%	18%	79%	37%	0.75
Idaho	13	13	26	10%	75%	34%	9%	40%	24%	0.72
Illinois	23	23	14	1%	174%	51%	1%	174%	46%	0.91
Indiana	22	11	6	29%	238%	87%	10%	20%	15%	0.17
Iowa	22	22	4	7%	201%	53%	7%	51%	24%	0.45
Kansas	20	20	4	18%	92%	48%	18%	75%	35%	0.73
Kentucky	26	25	4	4%	90%	39%	4%	73%	26%	0.68
Louisiana	22	18	11	17%	144%	54%	2%	29%	20%	0.37
Maine	18	15	5	6%	75%	34%	4%	61%	29%	0.84
Maryland	21	21	11	13%	149%	41%	10%	54%	25%	0.62
Massachusetts	13	12	17	27%	175%	54%	15%	40%	26%	0.48
Michigan	24	24	4	7%	185%	42%	7%	90%	37%	0.88
Minnesota	23	22	6	19%	269%	63%	19%	82%	39%	0.62
Mississippi	14	10	8	15%	94%	47%	4%	51%	23%	0.49
Missouri	27	27	6	4%	296%	49%	4%	97%	40%	0.82
Montana	21	19	6	14%	87%	35%	2%	73%	22%	0.64

APPENDIX 2: APPROVAL INFORMATION BY JURISDICTION (CONTINUED)

JURISDICTION	DISPOSITION COUNT	APPROVAL COUNT	AVERAGE MONTHS TO APPROVAL	REQUESTS FOR APPROVED FILINGS			APPROVAL AMOUNTS			RATIO OF AVERAGE APPROVED: REQUESTED
				MINIMUM	MAXIMUM	AVERAGE	MINIMUM	MAXIMUM	AVERAGE	
Nebraska**	19	19	7	10%	119%	49%	10%	113%	51%	1.04
Nevada	19	15	6	6%	83%	34%	6%	97%	33%	0.98
New Hampshire	13	10	4	22%	66%	38%	21%	66%	33%	0.87
New Jersey	5	5	9	21%	67%	46%	10%	30%	22%	0.48
New Mexico	23	23	7	10%	282%	57%	5%	28%	14%	0.25
New York	4	4	4	2%	78%	32%	2%	15%	8%	0.25
North Carolina	15	13	20	7%	91%	40%	7%	50%	27%	0.67
North Dakota	27	21	7	10%	185%	39%	9%	69%	28%	0.73
Ohio	21	21	7	11%	90%	31%	8%	90%	24%	0.77
Oklahoma	30	30	5	10%	198%	52%	6%	101%	24%	0.45
Oregon	7	7	10	10%	50%	28%	10%	50%	28%	1.00
Pennsylvania	28	26	6	7%	196%	46%	7%	60%	26%	0.56
Rhode Island	6	6	20	10%	49%	28%	10%	49%	28%	0.97
South Carolina	28	27	9	4%	269%	48%	4%	50%	19%	0.40
South Dakota	25	24	3	6%	92%	37%	6%	92%	37%	1.00
Tennessee	22	22	5	7%	160%	38%	7%	60%	29%	0.77
Texas	22	18	9	25%	362%	84%	24%	117%	55%	0.65
Utah	26	22	4	13%	121%	42%	9%	73%	32%	0.76
Vermont	8	7	25	16%	90%	39%	16%	48%	30%	0.76
Virginia	12	12	16	21%	222%	51%	10%	114%	40%	0.78
Washington	12	11	16	4%	80%	28%	4%	26%	20%	0.70
West Virginia	15	15	5	16%	160%	41%	16%	101%	36%	0.87
Wisconsin	28	28	3	4%	148%	36%	4%	148%	35%	0.99
Wyoming	20	20	2	4%	90%	33%	4%	90%	33%	0.99

*Alaska does not require rate increases to be filed so the treatment of filings in Alaska varies by company

**The approved rate increase may have exceeded the request due to negotiations with departments (e.g., actuarial equivalence for phased-in increase)



Milliman is among the world's largest providers of actuarial and related products and services. The firm has consulting practices in life insurance and financial services, property & casualty insurance, healthcare, and employee benefits. Founded in 1947, Milliman is an independent firm with offices in major cities around the globe.

[milliman.com](https://www.milliman.com)

CONTACT

Mike Bergerson
mike.bergerson@milliman.com

Missy Gordon
missy.gordon@milliman.com

John Hebig
john.hebig@milliman.com