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MISSOURI PETROLEUM STORAGE TANK INSURANCE FUND

LOSS AND LOSS ADJUSTMENT EXPENSE RESERVE ANALYSIS AS OF JUNE 30, 2025

AUGUST 2025

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Taylor&Mulder
Property and Casualty Consulting Actuaries

August 13, 2025

Ms. Kelley J. Ogletree
Executive Director
Petroleum Storage Tank Insurance Fund
P.O. Box 836
Jefferson City, MO 65102

RE: ACTUARIAL ANALYSIS OF THE PETROLEUM STORAGE TANK INSURANCE FUND AS OF JUNE 30, 2025

Dear Ms. Ogletree:
Enclosed is the actuarial review of the loss and allocated loss adjustment expense reserves of the Missouri Petroleum Storage Tank Insurance Fund as of June 30, 2025

The first section in the text of our report is the Executive Summary section. This section presents our Conclusions and Recommendations. It also describes the Purpose and Scope of our report, explains the Distribution and Use of our report, and provides the Conditions and Limitations underlying our work. This section of our report includes the Background section which provides information about the PSTIF program history.

The next section of the text of our report is the Actuarial Analysis section that describes the sources of data, our overall methodology, the selection of factors and specific methodologies and considerations by line of business. It also describes the selection of ultimate losses, and loss reserve discounting. The Exhibits section of our report follows the text of the report and includes all of our analyses.

Please feel free to call if you have any questions regarding any aspect of our report.

Sincerely,

Bobby J. Jaegers, ACAS, MAAA, CSPA, FCA

Daniel W. Lupton, FCAS, MAAA, CSPA, MBA

E. Toni Mulder, FCAS, MAAA, FCA
Enclosures

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Missouri Petroleum Storage Tank Insurance Fund
Loss and Loss Adjustment Expense Reserve
Analysis as of June 30, 2025

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Executive Summary

Purpose and Scope

Taylor & Mulder, Incorporated (“T&M”) was requested by the Board of Trustees ("Board") of the Missouri Petroleum Storage Tank Insurance Fund (“PSTIF”) to conduct an actuarial review of the PSTIF's loss and loss adjustment expenses reserves as of June 30, 2025. This report contains our summary, conclusions and recommendations along with a description of the analysis underlying our conclusions.

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Specifically, T&M was asked by the Board to conduct an actuarial analysis to include within its scope the following tasks:

- A review and opinion on the adequacy of current claim reserves of PSTIF,
- A projection of PSTIF's future claim liabilities, including an estimate on future claim severity and frequency, separately for each claim type, and
- An analysis of PSTIF's large loss claims, including:
    - Information on the typical lag time between the time when a claim is opened and the time it is identified as a “large loss claim,”
    - The history of losses and reserving practices on “large loss claims,” and
    - Information on how “large loss claims” are expected to impact the PSTIF’s future finances.
- An estimation of the claims impact on PSTIF's financial position of the December 31, 2030 sunset provision in the enabling legislation.

This report presents the results of those analyses. This report was prepared by Bobby J. Jaegers, ACAS, MAAA, CSPA, FCA, Vice President and Consulting Actuary, Daniel W. Lupton, FCAS,

MAAA, CSPA, MBA, Vice President and Consulting Actuary, and E. Toni Mulder, FCAS, MAAA, FCA, President and Principal and Consulting Actuary.

In accordance with the requirements of the Actuarial Standards of Practice in making statements of actuarial opinion, we provide the following statements:

> *I, Bobby J. Jaegers, am a Consulting Actuary in the firm of Taylor & Mulder, Inc. I am an Associate of the Casualty Actuarial Society in good standing and qualified to issue a Statement of Actuarial Opinion. I am also a Member of the American Academy of Actuaries.*

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Background

In the early 1980s, the federal government recognized that an underground storage tank ("UST") could present an environmental hazard. At the time, many underground petroleum tanks were fabricated of unprotected steel which was subject to corrosion and deterioration leading to contamination of the surrounding soil and, perhaps more importantly, nearby groundwater. By 1984, legislation was in place to permit the Environmental Protection Agency ("EPA") to set standards for tank design, installation, and protection to minimize the danger of future releases of petroleum or other hazardous chemicals stored underground. Over the years since, there have been additional EPA standards and regulations for tanks to further strengthen measures to protect the environment and groundwater. Included in these rules are requirements for tank owners/operators to have minimum levels of financial resources to deal with leaks and spills that might occur. In Missouri, this financial requirement is generally met by the purchase of commercial insurance, participation in PSTIF, or both.

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Missouri responded to the federal actions and established the Underground Storage Tank Insurance Fund in 1989, which preceded the creation of the PSTIF, to assist owners/operators of underground storage tanks in meeting federal financial responsibility rules. In 1992, the PSTIF began offering contractual coverage to underground tank owners/operators to pay for the costs associated with petroleum leaks and spills in the state of Missouri. This coverage is provided on a claims-made basis.

The initial legislation enabling the PSTIF had a sunset date of December 31, 1998. Additional legislative actions have moved the date to 2003, 2010, 2020, 2025, and finally to the current

December 31, 2030 sunset date. Consequently, all projections performed by T&M in this report assume a December 31, 2030 sunset date. PSTIF will be responsible for the cost of claims reported to it as of December 31, 2030. Claims reported after that date will not be handled by PSTIF without further legislation extending the sunset date.

In 1995, the PSTIF's mandate was expanded to include cleanup of petroleum contamination from certain uninsured leaks and spills. Uninsured risks included operations that had been closed prior to December 31, 1997. Therefore, the PSTIF pays for remediation costs associated with uninsured aboveground and underground storage tanks that were taken out of use by December 31, 1997, even when the tanks were never covered by the PSTIF. In some cases, petroleum releases went undetected (for example, at old gas stations) for many years. When soil or water tests reveal petroleum contamination as a result of such disused sites and a party is identified who is willing to assume responsibility for directing remediation efforts, PSTIF will pay for the remediation associated with that leak or spill subject to certain criteria and after a deductible.

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In 1996, PSTIF was opened to aboveground storage tank ("AST") owners/operators to voluntarily purchase protection. Then in 2008, the Missouri legislature mandated that AST owners/operators demonstrate financial responsibility for liability arising from any leak or spill beginning in 2011. This increased the number of ASTs covered by PSTIF.

Extended reporting endorsements permit the reporting of claims for a period of up to five (5) years after the tank is retired from service or sold. PSTIF began offering extended reporting endorsements for AST owners/operators taking tanks out of service in 2002. Beginning in 2004,

UST owners/operators have been able to buy an extended reporting endorsement. However, no extended reporting endorsements will cover claims reported after December 31, 2030, the sunset date in the most recent legislation.

In contrast to many such state funds, which often act more as government grant programs than risk shifting programs, the PSTIF requires tanks owners/operators to complete an application and be approved to receive a coverage document. The coverage document is either the Underground Storage Tank Participation Agreement or the Aboveground Storage Tank Pollution Liability Participation Agreement depending on the type of tank provided coverage. The application and approval process allows PSTIF to enforce compliance with ever-developing standards for tanks and the associated piping.

In the event that a release is discovered after the retroactive date of the PSTIF coverage (the date at which coverage initially attaches), PSTIF will pay for the first $1,000,000 of the costs per event, subject to a $2,000,000 annual aggregate. Each event carries a $10,000 deductible.

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For purposes of this report, PSTIF storage tank claims are categorized into the following groups:

- Insurance UST – Release: Underground storage tank petroleum releases from contractually covered tanks;
- Insurance UST – Closure: Underground storage tank petroleum releases from contractually covered tanks that were discovered when the tank was being removed from an contractually covered site;

- Insurance UST – Other: Underground storage tank petroleum releases from contractually covered tanks that do not fit into either of the above categories;
- Remedial UST: Cleanup costs associated with remediation of uninsured underground storage tank sites that were taken out of use prior to the deadline set by the Missouri Legislature;
- Insurance AST: Aboveground storage tank petroleum spills from contractually covered tanks, and
- Remedial AST: Cleanup costs associated with remediation of uninsured aboveground storage tank sites that were taken out of use prior to the deadline set by the Missouri Legislature.

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Terms Defined

ALAE Allocated Loss Adjustment Expense ("ALAE") is the amount of money spent on a particular claim to the benefit of an insured, the amount that can be allocated to a single claim. These expenses include the attorneys' fees, expert witnesses, collection and protection of material germane to the claim, etc. For the PSTIF, ALAE does not include contracted fund administration expenses.

Claims-Made Claims-made coverage is a type of insurance coverage that provides protection for the participant on claims reported during the coverage period given that the incident giving rise to the claim occurred on or after the Retroactive Date ("retro date"). The retro date is usually the date the first claims-made coverage was

issued to the participant. Coverage provided by PSTIF attaches on a claims-made basis.

Claims-made coverage may be contrasted to occurrence coverage, which responds to claims brought against the insured given that the incident giving rise to the claim occurred during the coverage period. Both private passenger automobile and homeowners' policies are written on an occurrence basis.

Claim Frequency Claim frequency is the average number of claims per contractually covered exposure. For PSTIF, an contractually covered exposure is one tank contractually covered for one year. For example, if 250 claims are reported in a year with 10,000 contractually covered tanks, the claim frequency (average number of claims per contractually covered exposure) is 250 / 10,000 covered tanks = 0.025 claim per tank.

IBNR Incurred But Not Reported ("IBNR"), strictly speaking, is a reserve derived by actuaries for claims not as yet reported to the insurer for which premium has been earned and for which the insurer is responsible. Under this narrow definition of IBNR, claims-made coverages would not have IBNR as all claims are known at the end of the coverage period (or soon thereafter). However, the term IBNR for claims-made coverage is used in a broad sense and includes changes in incurred amounts (i.e., paid plus case reserves) for known claims.

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Claim estimates done by a claim department or fund administrator must rely on information about the claim at a point in time. The available information may be lacking in important details that will greatly impact the ultimate cost of the claim. Actuaries review the data from the aggregated claims data by year as it changes over time, from the first report of the claim to settlement. From these reviews, the actuary can calculate factors to apply to current case data to estimate the ultimate costs of a body of claims. The difference between estimated ultimate values and current case incurred is IBNR.

Because coverage provided by the PSTIF is claims-made rather than occurrence, all references to IBNR in this report will typically refer exclusively to development on known claims unless otherwise noted.

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LAE Loss Adjustment Expense ("LAE") is the sum of Allocated Loss Adjustment Expense ("ALAE") and Unallocated Loss Adjustment Expenses ("ULAE") and represents the total costs of handling and defending claims.

LDF A Loss Development Factor ("LDF") is calculated by an actuary from historical claim data and applied to current paid or incurred values to estimate ultimate claim costs for an insurer.

Pure Premium Pure Premium is the average cost of insurance per covered exposure. For PSTIF, a covered exposure is one tank contractually covered for one year. An

example might help clarify the concept. If two tanks are covered and one has a claim for $100, then the pure premium (average loss per covered exposure) is $100 / 2 covered tanks = $50

Severity Severity is the average size of claim for a given collection of claims. For instance, if the total cost for three claims is $45,000, the claim severity (average size of claim) is $45,000 / 3 claims = $15,000 severity.

ULAE Unallocated Loss Adjustment Expense ("ULAE") represents the expenses. For the Fund, ULAE represents costs associated with fund administration.

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Conclusions

Loss and Allocated Loss Adjustment Expense Reserve Adequacy

T&M analyzed loss and loss adjustment expense reserves for the six broad categories of claims enumerated above. The following table shows the results of our analysis for these categories:

Missouri Petroleum Storage Tank Insurance Fund
Undiscounted Unpaid Loss & ALAE as of June 30, 2025

Claim Type	Case Outstanding	IBNR	Unpaid ALAE	Unpaid Loss & ALAE
Insurance UST - Release	6,595,328	6,087,641	72,806	12,755,775
Insurance UST - Closure	9,196,731	8,079,228	99,172	17,375,132
Insurance UST - Other	5,617,681	6,280,644	68,302	11,966,627
Remedial UST	13,846,658	2,474,264	93,690	16,414,611
Insurance AST	16,032,510	10,997,810	155,167	27,185,486
Remedial AST	2,157,551	87,397	12,887	2,257,835
Total	**53,446,459**	**34,006,984**	**502,023**	**87,955,466**

Projected investment income for this report was 1.5%, based on historical investment yields earned by the State. Investment income amounts to approximately 8.9% of undiscounted losses. Improvements in investment yield will increase this amount.

The following table shows the results of our analysis taking into account the effect of investment income:

Missouri Petroleum Storage Tank Insurance Fund
Discounted Unpaid Loss & ALAE as of June 30, 2025

Claim Type	Undiscounted Unpaid Loss & ALAE	Discount	Discounted Unpaid Loss & ALAE
Insurance UST – Release	12,755,775	1,005,806	11,749,969
Insurance UST – Closure	17,375,132	1,421,215	15,953,916
Insurance UST – Other	11,966,627	956,128	11,010,499
Remedial UST	16,414,611	1,538,904	14,875,707
Insurance AST	27,185,486	2,715,980	24,469,507
Remedial AST	2,257,835	165,550	2,092,285
Total	**87,955,466**	**7,803,583**	**80,151,883**

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The majority of case reserves and IBNR are held by contractually covered events such Insurance UST – Other, Insurance UST – Closure, Insurance UST – Release, and Insurance AST. There has been a large decrease in case reserves for the Insurance UST – Release, Insurance UST- Closure, and Remedial UST claims with an overall decrease in case reserves of $4,698,826. This decrease, however is partially offset by an increase in IBNR of $2,986,173.

Missouri Petroleum Storage Tank Insurance Fund
Comparison of Case Reserves at June 30, 2024 and June 30, 2025

Claim Type	Case Reserves 2024 Study	Case Reserves 2025 Study	Change in Case Reserves
Insurance UST – Release	7,819,497	6,595,328	-1,224,169
Insurance UST – Closure	10,298,865	9,196,731	-1,102,134
Insurance UST – Other	5,474,909	5,617,681	142,773
Remedial UST	16,010,020	13,846,658	-2,163,363
Insurance AST	16,163,366	16,032,510	-130,856
Remedial AST	2,378,627	2,157,551	-221,077
Total	**58,145,285**	**53,446,459**	**-4,698,826**

Missouri Petroleum Storage Tank Insurance Fund
Comparison of IBNR at June 30, 2024 and June 30, 2025

Claim Type	IBNR 2024 Study	IBNR 2025 Study	Change in IBNR
Insurance UST – Release	5,505,595	6,087,641	582,046
Insurance UST – Closure	6,864,470	8,079,228	1,214,758
Insurance UST – Other	5,124,536	6,280,644	1,156,107
Remedial UST	3,227,072	2,474,264	-752,808
Insurance AST	10,214,600	10,997,810	783,210
Remedial AST	68,209	87,397	19,188
Total	**31,004,483**	**34,006,984**	**3,002,502**

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As of June 30, 2025, the PSTIF held $84,990,912 in reserves for claims payable. This is $2,964,554 deficient when compared with the undiscounted unpaid loss and ALAE, and $4,839,029 redundant when compared with the discounted unpaid loss and ALAE.

Note that the reserves in the above table do not include a provision for claims not yet reported to the PSTIF as of June 30, 2025.

Unallocated Loss Adjustment Expense Reserve

If PSTIF were a commercial insurance company, statutory insurance accounting rules would require that all estimated future costs for claims administration for open claims be held as reserves. T&M has estimated those additional costs for Williams & Company Consulting, Inc. ("Williams"), the PSTIF fund administrator, to handle all open claims until final settlement at $17,187,966 on an undiscounted basis and $15,663,015 on a discounted basis. This amount is not included in the tables above. This amount reflects the extended time horizon over which PSTIF claims are paid. The following chart shows the total liability including unallocated loss adjustment expense:

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Missouri Petroleum Storage Tank Insurance Fund
Discounted Unpaid Loss & LAE as of June 30, 2025

	Undiscounted Reserve	Discount	Discounted Reserve
Loss & Allocated Loss Adjustment Expense	87,955,466	7,803,583	80,151,883
Unallocated Loss Adjustment Expense	17,187,966	1,524,950	15,663,015
Total	105,143,432	9,328,534	95,814,898

Loss and Loss Adjustment Expense Reserves (Including Unallocated) Needed at Sunset Date

If the sunset date of the PSTIF is not changed by the legislature, the ability for filing new claims will sunset on December 31, 2030. In order to estimate the reserve position of PSTIF as of December 31, 2030, T&M made several assumptions. The first assumption was that there would not be any increase in the rate at which releases are reported as the sunset date approaches, see Exhibits E-15 and E-19.

T&M also assumed that the releases reported from June 30, 2025 through December 31, 2030 will have the same average frequency and severity as the historical data, adjusted for trends in the data. Payment patterns by type of release were applied to the data to produce the needed reserves. The following table summarizes the anticipated reserve required to run off all claims reported as of the anticipated fund sunset date:

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Missouri Petroleum Storage Tank Insurance Fund
Unpaid Loss & LAE on December 31, 2030
Assuming No Increase in the Rate of Reported Releases
Reserve Study as of June 30, 2025

	Undiscounted	Discounted
Unpaid Claim Expense	$76,084,230	$69,333,886
Unpaid Allocated Loss Adjustment Expense	436,759	398,009
Unpaid Unallocated Loss Adjustment Expense	14,953,478	13,626,776
Total	91,474,466	83,358,671

As discussed above, these unpaid claim amounts do not take into account the possibility of increased claim reporting in the period leading up to the fund sunset, nor do the above reserves include amounts required for overhead expenses such as salaries of fund personnel or the PSTIF Board's annual contributions to support the Department of Natural Resources' regulatory program. Discounted losses are calculated using an investment yield of 1.5% which is consistent with historical financial documents prepared by PSTIF.

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Reserving Practices

Claims handling and underwriting is provided by Williams under a contract with the PSTIF. Much of the Williams' staff has a technical background in engineering or geology and significant experience in handling claims for the PSTIF.

Williams' claim philosophy entails providing a swift response to reports of covered releases in order to minimize further contamination and the associated increased liability. A swift response also enables the claim department to secure pertinent physical evidence (such as damaged piping, valves, etc.) before it is discarded. Discussions during the preparation of this report

indicate that there have been several changes to the claims philosophy since the last report. Prior to this year, PSTIF would open a claim at any location where a suspected leak had occurred. This year, the Fund implemented a new practice where they will only open a claim if there is reasonable chance that a leak has occurred at that location. PSTIF conducted a review of currently reported claims and changed claims that had no claims form filed to an incident report. If a claims form was filed and no action has been taken over an extended time period (e.g. no claim payment in 20 years), the claim was closed.

Claims handling is somewhat different than that of an insurance company in that the PSTIF was created to protect the environment and the citizens of Missouri from the impact of petroleum releases. Therefore, the claims handling effort is focused on reasonable and necessary costs for effective response to reach the cleanup standards required by the MoDNR. The number of PSTIF lawsuits appears relatively modest when compared to commercial general liability insurers. Those claims involving lawsuits have defense counsel assigned as would be expected.

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Claims are handled by having the contractor or the consultant hired by the owner/operator submit a proposed work plan and estimated costs to the PSTIF. The planned costs may be challenged by the claims adjustor and proposed costs must be deemed “reasonable” to be approved. Once the project is started, invoices are submitted to the PSTIF for reimbursement.

Remedial claims present a unique situation that would not be encountered in a commercial insurance company. Often the site has been abandoned completely or converted to a different

use. Remedial claims generally move forward only when a party is willing to step forward and participate in the remediation process, which usually includes paying the first $10,000 of cleanup costs.

Adjustors are also charged with establishing appropriate case reserves for the PSTIF. In insurance companies, aggregate incurred values (paid plus case reserves) tend to increase over time as more information regarding claims becomes known. Overall, PSTIF incurred values produce low loss development factors, which indicates that the case incurred values are a reasonable indicator of the ultimate cost of PSTIF claims, particularly for the UST Closure and UST Remedial claims.

When the proposed work plan for the release site has been completed and all monitoring results are within required limits, the claimant's environmental consultant informs the Missouri DNR that the impact of the release meets the DNR's remediation standards. Once the DNR concurs with the consultant's conclusions, they will then issue a "No Further Action" ("NFA") letter. Some activities must be completed after an NFA is issued, and once all costs have been submitted and reimbursed, the claim is closed. Claims not actively being managed by the owner/operator (i.e., cleanup activities have been abandoned, or monitoring is not in place) are placed in suspense. Essentially, this means that the claim is not progressing toward the issuance of an NFA letter by the Missouri DNR. These stalled claims are removed from the suspense list and handled in a normal manner if someone again takes an interest in completing the cleanup at a future date.

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Underwriting

Williams also provides underwriting services as part of its fund administration function. An application for coverage with the PSTIF must be filled out by the tank owner/operator along with a method of securing payment of the $10,000 deductible. In addition, the tank owners/operators must demonstrate that the tanks and associated piping under their control are not currently leaking and are in compliance with state regulations.

Coverage attaches on a claims-made basis which means that claims must be reported during the coverage period in order to be covered. Remedial claims are covered as reported without the requirement that coverage was in effect at the time of the release.

Data required on the application for participation in PSTIF for UST installations include such items as the installation date, the tank capacity, the type of product contained, type of tank (e.g., single walled, double walled, fiberglass, etc.), type of piping, and details on overfill and leak protection. The PSTIF application for AST's requires similar documentation requirements along with information on the secondary containment system in place.

Applications for coverage with the PSTIF are reviewed by Williams' personnel and deficiencies are noted. Coverage documents are only issued if the application information is found to be satisfactory.

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Projection of Future Loss and Loss Adjustment Expense, Claim Severity, and Frequency

T&M was asked to estimate costs for claims to be reported in 2025 and subsequent years, i.e., claims that have not yet been reported to PSTIF. To perform this projection, T&M applied several methodologies to estimate future loss and loss adjustment expenses based on claim frequency and claim severity for each claim category. For purposes of our initial projection of reserves needed as of December 31, 2030, we assumed that claims reporting would proceed as normal with no increase in reporting due to the impending sunset date. In addition, T&M created scenarios that might represent an expected influx of claims should the program not have its termination date extended.

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Projection of Frequency and Severity

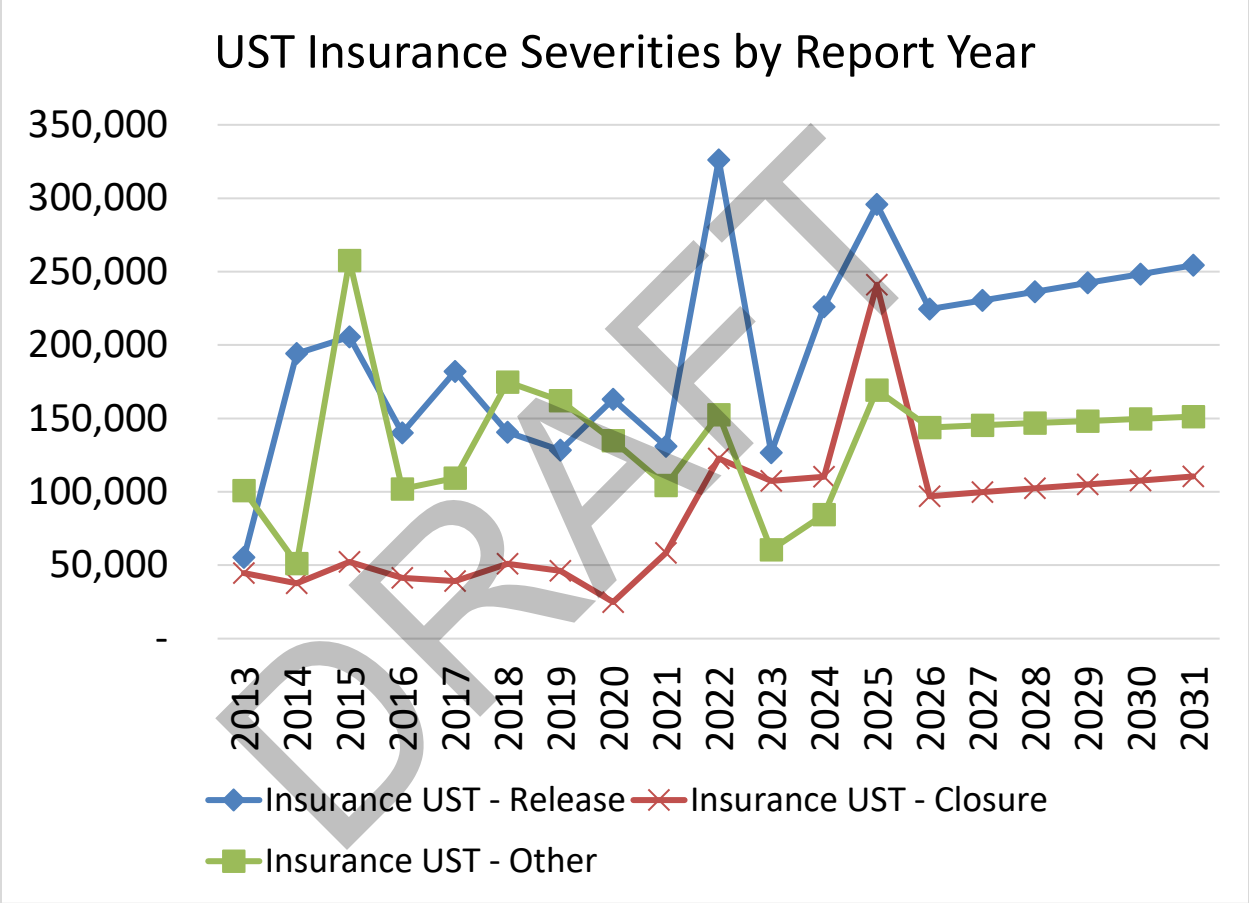
As part of projecting the financial condition of the PSTIF through December 31, 2030, we estimated (1) future claim severity and (2) future claims reporting for each claim category.

Analysis of coverage in-force indicates a modest negative trend in the number of UST and AST tanks with in-force coverage. In the case of UST coverage, we have projected modest declines in the future based on this recent trend. In the case of in-force AST coverage, the PSTIF previously provided a likely maximum penetration of 80% to 85% of ASTs. The number of AST policies in force have been decreasing since 2014 and we expect the number of AST policies to continue to decrease by roughly 1.5% per year.

The current analysis of average claim severities this year suggests that Insurance UST – Release, Insurance UST – Other, and Insurance AST claims will increase over time, while

Insurance UST – Closure and remedial claims of all types will tend to stay at about the same average severity level over time.

The following four charts show claim severities over time. The first chart displays the Insurance UST claim severities over time from Report Year 2013 to Report Year 2031:

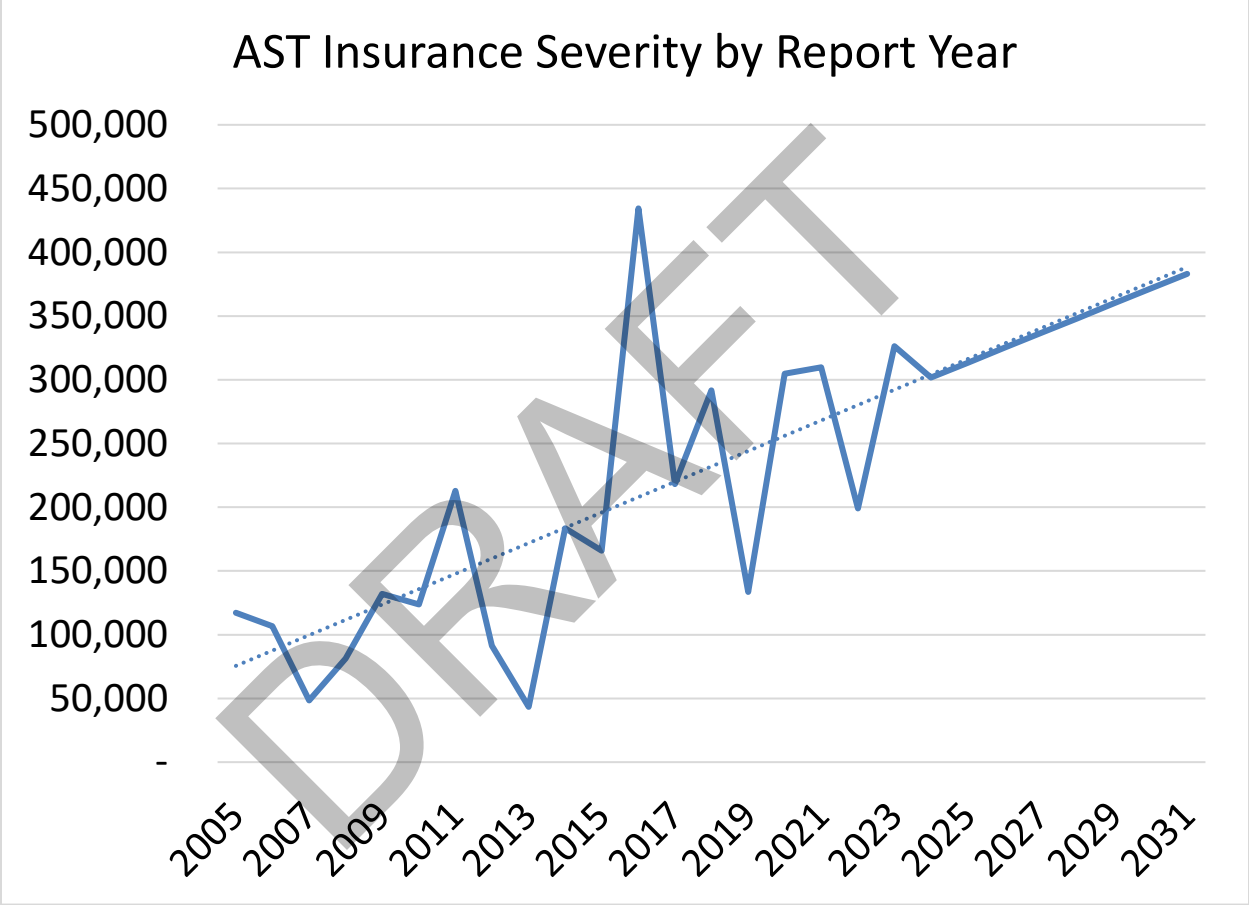


Note that everywhere they are discussed in this report, Report Years are based on the fiscal year in which a claim was opened. For example, a claim that was opened between July 2024 and June 2025 will have a Report Year of 2025 to match the fiscal year ending June 30, 2025.

As this graph shows, the average severity for the "Release" and "Other" claim types have generally fluctuated between $50,000 and $250,000, while the "Closure" claim type has shown

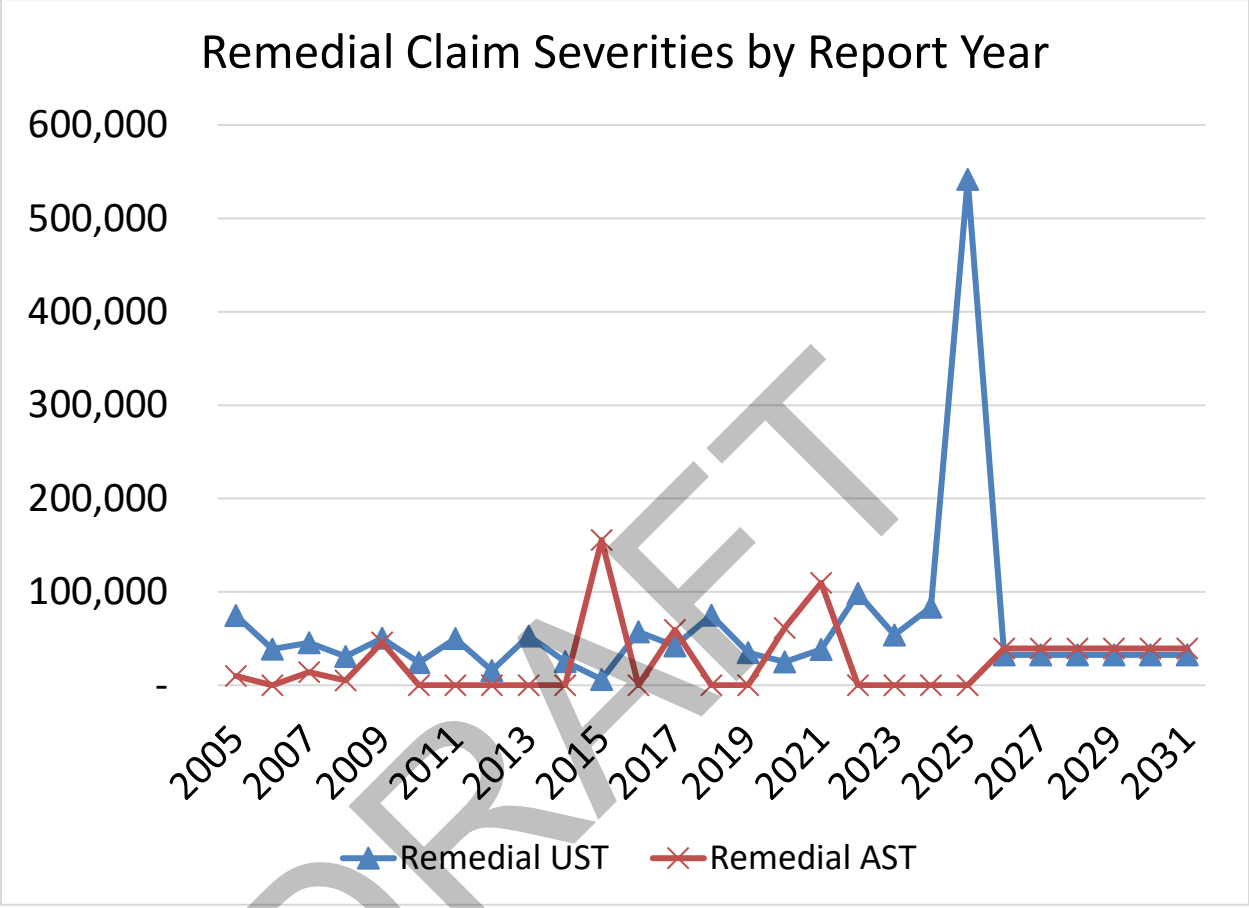
very stable average severity over time. This stability may be attributed to the higher number of "Closure" claims compared to other Insurance UST claim types, which creates lower volatility.

The following chart shows the average claim severity from Report Year 2005 to Report Year 2031 for Insurance AST claims:



As this chart shows, the average severity of Insurance AST claims has shown significant volatility over time. Recent years have shown continued upward trend, leading us to project continued increases in average severity over time.

Finally, the following chart shows the average severity of Remedial UST and AST claims from Report Year 2005 to Report Year 2031:



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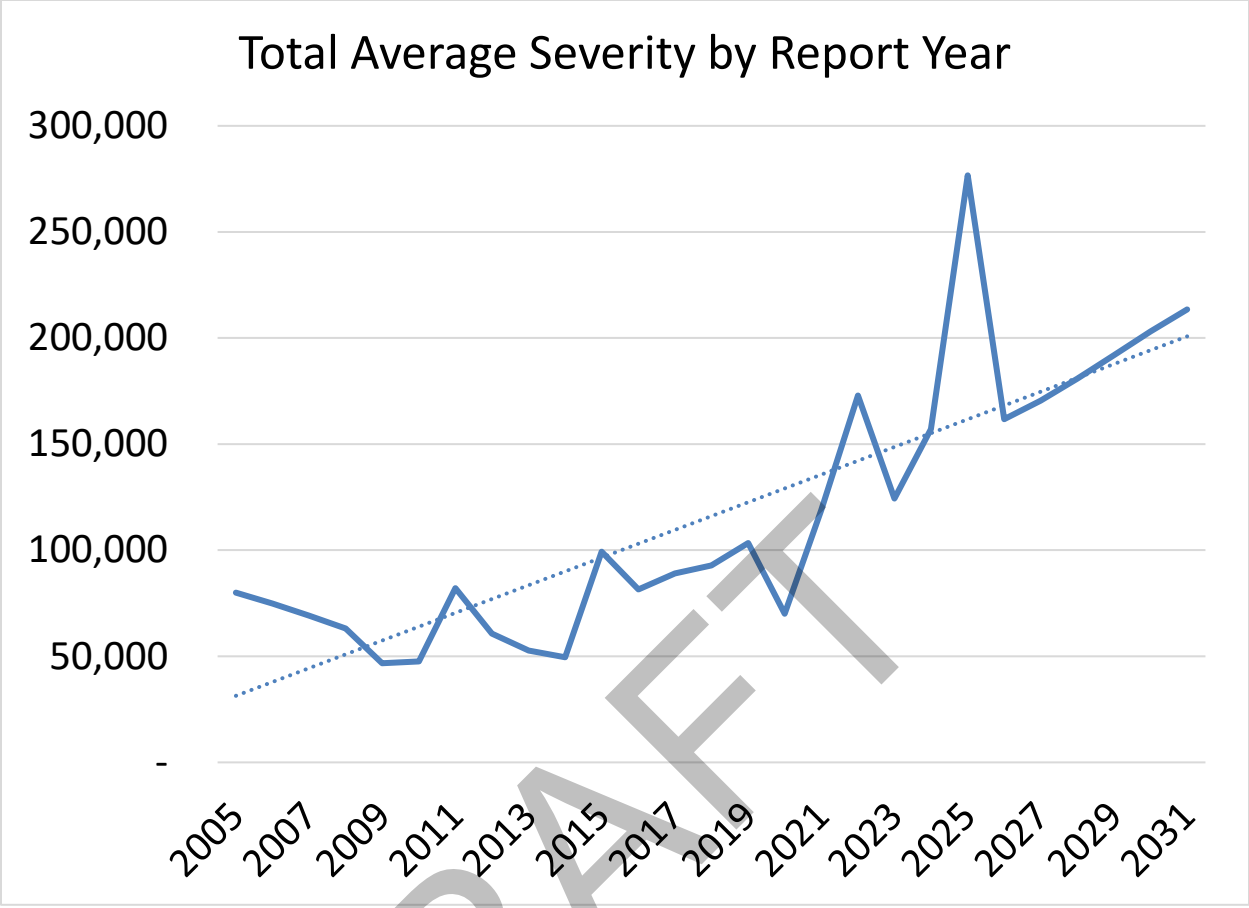
As this chart shows, the remedial UST claim severities have remained relatively stable over time. Remedial AST frequencies show a similar pattern on an individual claim basis but show greater volatility in this chart because claim volumes are much lower, and a small number of large claims can cause severity to appear to have spiked, when this is really a result of normal variation in claim severities.

Finally, the following chart shows the combined total average severity over time:



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As this graph shows, the overall average severity has increased since the mid-2000s. This is likely caused by several trends. First, it is expected that increasing DNR requirements over time will have the effect of increasing the cost to remediate, all else remaining equal. In addition, we observe a changing mix of claim types over time. As claim types with higher average severities make up a larger percentage of total claims and claim types with lower average severities make up a smaller share, the average severity has drifted upward over time.

Finally, note that the spike in 2021-2022 and 2025 may be driven in part by lower-than-expected claim counts during that period on a combined basis. Because of the immaturity of these years, ultimate loss projections remained at levels consistent with the recent past. This, combined with the decrease in claim counts, led to a spike in severity. Subsequent analyses

may see that spike reduce considerably as claims mature, either as incident reports are reclassified as normal insurance claims or as more mature claims development information supports a decrease in the ultimate losses for these years.

In addition, we performed an analysis of claim frequencies over time. To project future reported claims counts, T&M used a variety of regression techniques. The results from those analyses led us to project relatively flat claim count patterns in the future for most claim types and modest declines in claim counts for Insurance UST – Closure and Insurance UST – Release claim types.

The following chart displays historical and projected claim counts by UST claim type:

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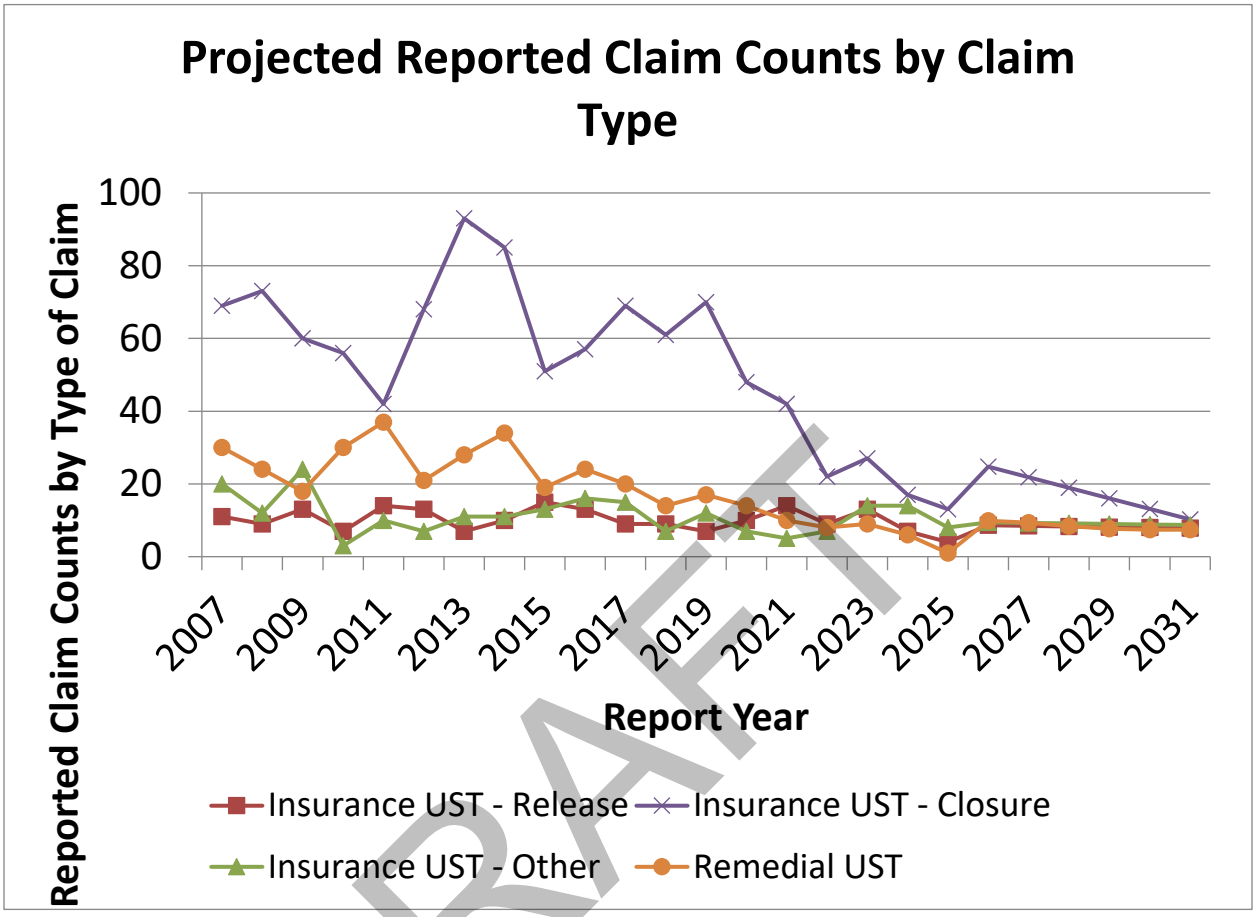

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Note that for consistency, the 2031 year shows the projected overall claim frequency for a full report year; however, if the fund sunsets at December 31, 2030 then the total number of anticipated claims in the 2031 report year would be half the number projected on this chart.

It will be noted that the number of Closure and Other claims declined markedly in 2021-2022 as compared to recent years. The number of claim reports in 2021-2022 was equivalent to recent years, but many of those claim reports are categorized as “incident reports” rather than Closure or Other claims at present. It is possible that in future years, some of those incidents will be reclassified as claims, which would reduce the magnitude of the dip in claim counts in 2021-2022.

As this chart shows, the "Insurance UST – Closure" claim type has dominated since 2003, but generally slopes modestly downward over time. The second most common claim type, "Remedial UST," appears to also be in slow decline. All other claim types appear to have leveled off by 2020, with the exception of some expected annual volatility, and therefore we anticipate that these claims will continue at roughly the same frequency levels in the future.

Similarly, the following chart shows the historical and projected claim counts by AST claim types:

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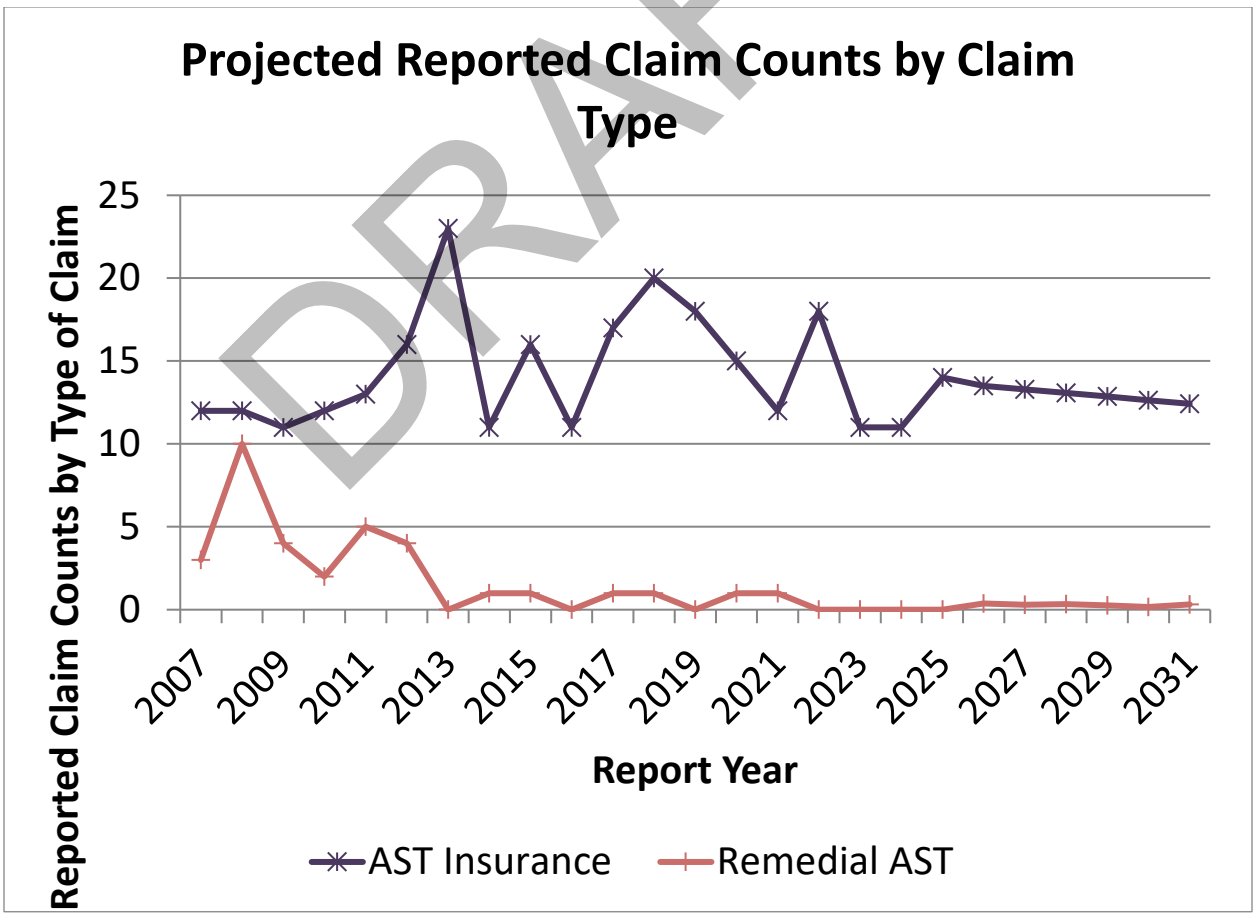
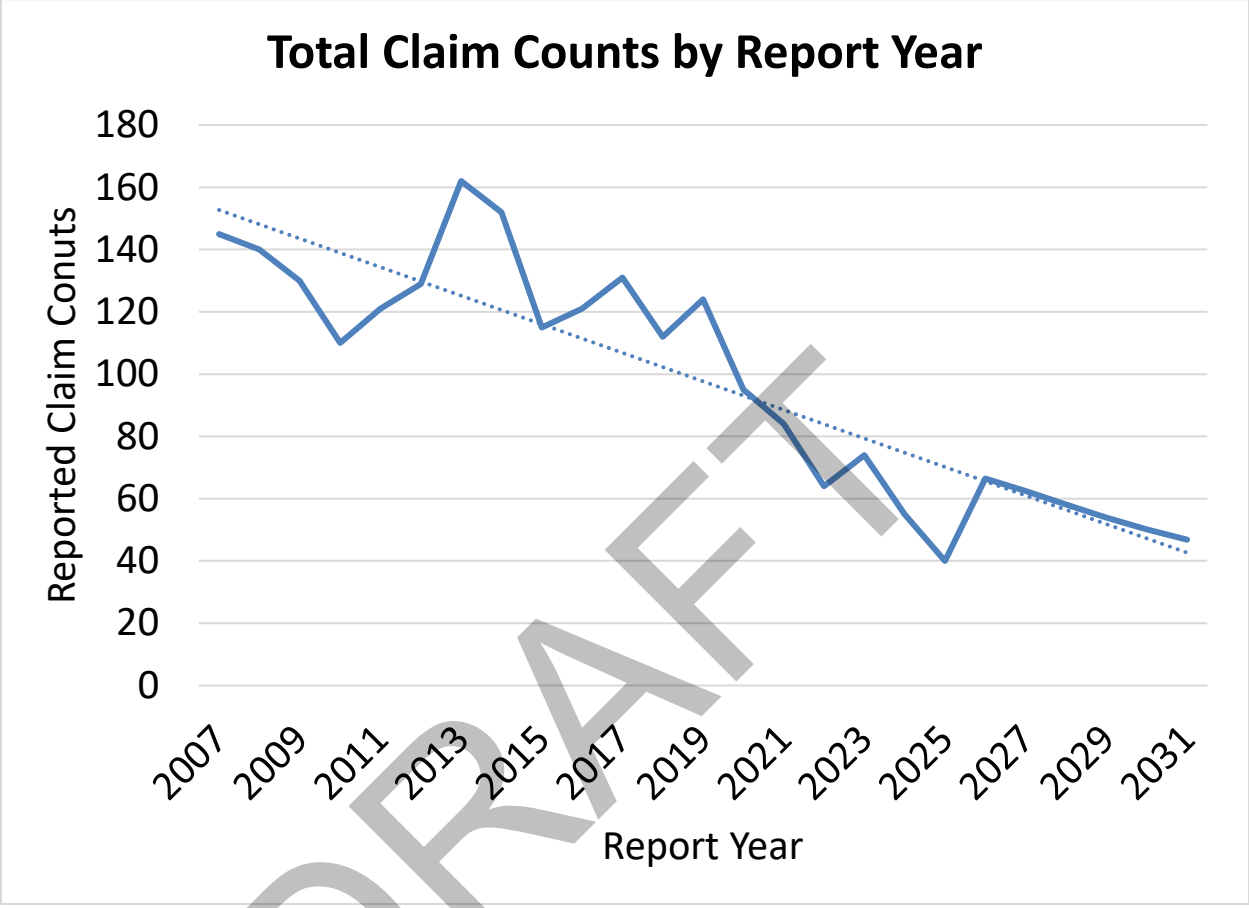


The following chart shows the total claim counts by Report Year:



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This chart shows some modest if volatile decline in reported claim counts through 2025. As noted above, the 2022-2025 years are outliers in terms of recent years; however, this may change in subsequent years if incident reports are reclassified as insurance claims. Projected future years continue under the assumption of a modest decline in total claim counts.

Projection of Revenues

The PSTIF has two primary sources of revenue: transport load fees ("TLF") and participation fees, which is the actual fee charged to participants for the contractually covered risks.

Transport load fees are charged to transporters of petroleum on a per load basis. TLF make up the majority of the PSTIF revenues. From 2001 until September 1, 2008, TLF fees were $40 for 8,000 gallons of petroleum product transported. On September 1, 2008, the TLF fee was reduced to $20 per 8,000 gallons of petroleum product transported. On January 1, 2019, the TLF was increased to $28 per 8,000 gallons. It was increased again to $32 per 8,000 gallons effective January 1, 2023. Enabling legislation grants PSTIF the authority to raise and lower the TLF as needed, within statutory limits. The overall maximum TLF is set at $60 per 8,000 gallons of petroleum product by legislation.

In fiscal years 2025 and 2024, the TLF has accounted for 87.27% and 86.00% of PSTIF revenue respectively. The number of gallons transported over the last four fiscal years has remained relatively level aside from some normal volatility. Even after the TLF fee increase in January of 2023, the gallons transported has remained level which could be an indicator that the TLF is not a significant burden to those who are subject to the TLF. The following chart shows the number of gallons in millions transported each month since July of 2021.

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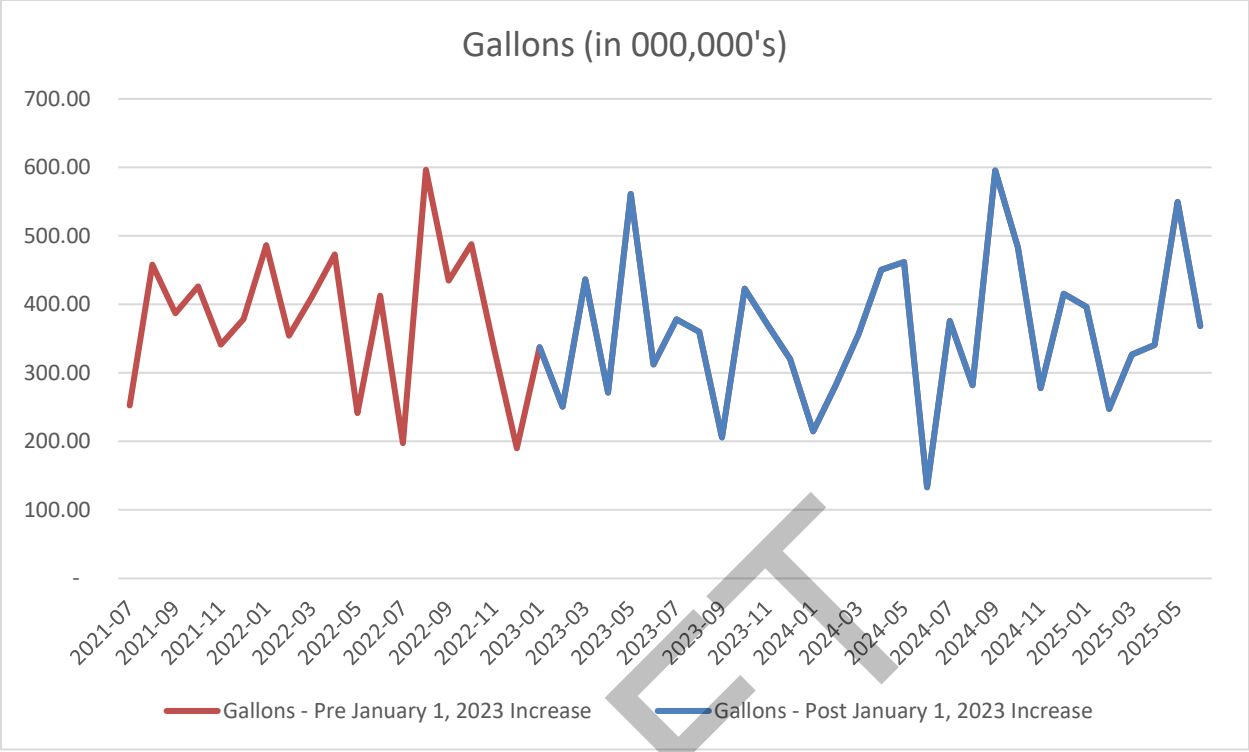

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Given that the TLF accounts for the majority of PSTIF revenue, any increase or decrease to the TLF would have a direct impact on the net position of the Fund. The empirical data presented in the chart above shows that utilization does not change materially after a TLF increase is implemented.

Participation fees are charged annually to tank owners/operators on the basis of the categories of tanks covered. For USTs, the participation fee is $100 per tank for double-walled tanks, and $125 per tank for single-walled. For ASTs, the fee is $100 per tank for tanks with a capacity less than 25,000 gallons and $200 per tank of 25,000 gallons or more. A “new tank” charge of $100 per tank is a one-time fee in addition to the participation fee for both UST and AST tanks, payable during the first year of contractual coverage with PSTIF.

T&M has relied on projections of future revenues provided by the PSTIF. We have reviewed these projected revenues for reasonableness and found they are reasonable based on current economic conditions. However, T&M has not attempted to quantify the potential impact on PSTIF revenue of the COVID-19 pandemic, its effects on fuel consumption or the economy broadly, or the move to more fuel-efficient vehicles and to alternative vehicle fuels. In addition, no attempt has been made to quantify the impact of significant changes in fuel prices on the TLF revenue stream.

Projection of Future Cash Flows

T&M was asked to project cash flows to the PSTIF to the current proposed sunset date of December 31, 2030, or 5.5 fiscal years. To perform this analysis, we combined projections of future claim frequencies and severities, projections of future revenues, and projections of future expenses associated with the PSTIF's fund administrator.

Future paid losses were simulated based on assumed probability distributions for frequency, severity, and claim payment speeds. Simulated claim payment speeds also affected the payout speeds of unpaid claims from historical Report Years.

The following page shows the projected cash flows from July 1, 2025 through December 31, 2030 assuming no influx of claims due to the sunset of the PSTIF program:

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Financial Projections Based on PSTIF 2025 Projections

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
	Annual Revenues Fiscal Year:	2026	2027	2028	2029	2030	2031 (1/2)	Totals
(1)	Transport load fees	16,000,000	15,950,000	15,900,000	15,850,000	15,800,000	7,875,000	87,375,000
(2)	100 Initial tank fees	12,000	12,000	12,000	12,000	12,000	6,000	66,000
(3)	UST participation fees	775,000	775,000	775,000	775,000	775,000	387,500	4,262,500
(4)	AST participation fees	307,000	307,000	307,000	307,000	307,000	153,500	1,688,500
(5)	Interest income	1,493,700	746,639	727,809	709,659	692,767	337,757	4,708,331
(6)	Total Revenues	18,587,700	17,790,639	17,721,809	17,653,659	17,586,767	8,759,757	98,100,331
	Administrative Expenses Fiscal Year:	2026	2027	2028	2029	2030	2031 (1/2)	Totals
(7)	Contracted Fund Administrator Expenses	1,633,185	1,600,521	1,568,511	1,537,141	1,506,398	738,135	8,583,891
(8)	Contingency & Special Projects	75,000	75,000	75,000	75,000	75,000	37,500	412,500
(9)	Office of Administration	125,328	129,088	132,960	136,949	141,058	72,645	738,028
(10)	OA State Accounting Software	76,439	-	-	-	-	-	76,439
(11)	Section 319.107 Expenses	10,000	10,300	10,609	10,927	11,255	5,796	58,888
(12)	Underwriting	695,100	715,953	737,432	759,555	782,341	402,906	4,093,286
(13)	Inspections	386,550	469,642	302,742	361,544	481,842	155,244	2,157,563
(14)	Training & Loss Prevention Services	6,000	6,180	6,365	6,556	6,753	3,478	35,333
(15)	Other Legal and Litigation Costs	50,000	51,500	53,045	54,636	56,275	28,982	294,439
(16)	Other Contract Administrative Costs	434,940	447,988	461,428	475,271	489,529	252,107	2,561,263
(17)	Audit	22,525	23,201	23,897	24,614	25,352	13,056	132,645
(18)	Actuarial Analyses	17,350	17,350	17,350	17,350	17,350	17,350	104,100
(19)	Department of Revenue	62,420	64,293	66,221	68,208	70,254	36,181	367,577
(20)	Attorney General's Office	55,503	57,168	58,883	60,650	62,469	32,172	326,845
(21)	PSTIF Board/Staff	527,647	543,476	559,781	576,574	593,871	305,844	3,107,193
(22)	Department of Natural Resources	2,592,088	2,669,851	2,749,946	2,832,445	2,917,418	1,502,470	15,264,217
(23)	Total Administrative Expenses	6,770,075	6,881,510	6,824,170	6,997,419	7,237,165	3,603,865	38,314,206
	Claim Payments Fiscal Year:	2026	2027	2028	2029	2030	2031 (1/2)	Totals
(24)	Average / Expected	13,056,158	12,181,228	12,045,615	11,760,484	11,545,764	8,264,369	68,853,619
(25)	Cash balance @ 6/30/25	50,395,197						
	Funds Available at Fiscal Year-End:	2026	2027	2028	2029	2030	2031 (1/2)	
(26)	Average / Expected	49,156,664	47,884,564	46,736,588	45,632,343	44,436,181	41,327,703	

Notes: Rows (1) through (22) from Financial Projections provided by PSTIF with some minor differences due to rounding.

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This chart shows projected revenues, projected expenses, projected claim payments, and projected cash available at year-end. For example, the actuarial central estimate is that $13 million in losses will be paid in fiscal year 2026 in addition to $6.77 million in administrative expenses. Revenues are expected to total $18.5 million, leaving a cash balance of $53.2 million at fiscal year-end 2026. As of December 31, 2030, the actuarial central estimate suggests that there will be a remaining cash balance of approximately $49.2 million. This balance assumes that the fund will sunset on December 31, 2030 and that there will be no increase in claim reporting as the fund sunset date approaches.

Exhibit E-19 expands on this chart by showing claim payments and the resulting cash balances at various confidence levels. For example, there is a 50% probability that the cash balance as of December 31, 2030 will be greater than or equal to $49.4 million.

Exhibits E-20 through E-22 show alternative cash flow scenarios based on the possibility that claim reporting will increase if the fund approaches the sunset date. In these cases, we projected increases in remedial, closure, and "other" claims leading to increased claim costs in the first half of the 2030 fiscal year (at which time the fund is projected to be sunset). The financial results of these scenarios are also shown graphically in Exhibits E-15 through E-18.

The "Low Scenario" shown in Exhibit E-20 represents a small amount of claims ramp-up, while the "High Scenario" shown in Exhibit E-22 represents a large amount of claims ramp-up. Note that the payment streams under these scenarios are not markedly different since they reflect an anticipated ramp-up in claim reporting close to the fund sunset date, so there is not

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much time for claims to be paid out. Where these scenarios will primarily differ is in the final liability as of the sunset date, for which the ramp-up scenarios will have a higher remaining unpaid liability.

Exhibit E-23 provides the total projected claim payments for future fiscal years assuming no increase in claim activity. The first section of this exhibit displays future anticipated claim payments arising from currently reported claims (i.e., Report Years 2025 and prior). The second section displays claim payments arising from claims that will be reported in the future (Report Years 2025 and after). The third section displays the total of these two amounts.

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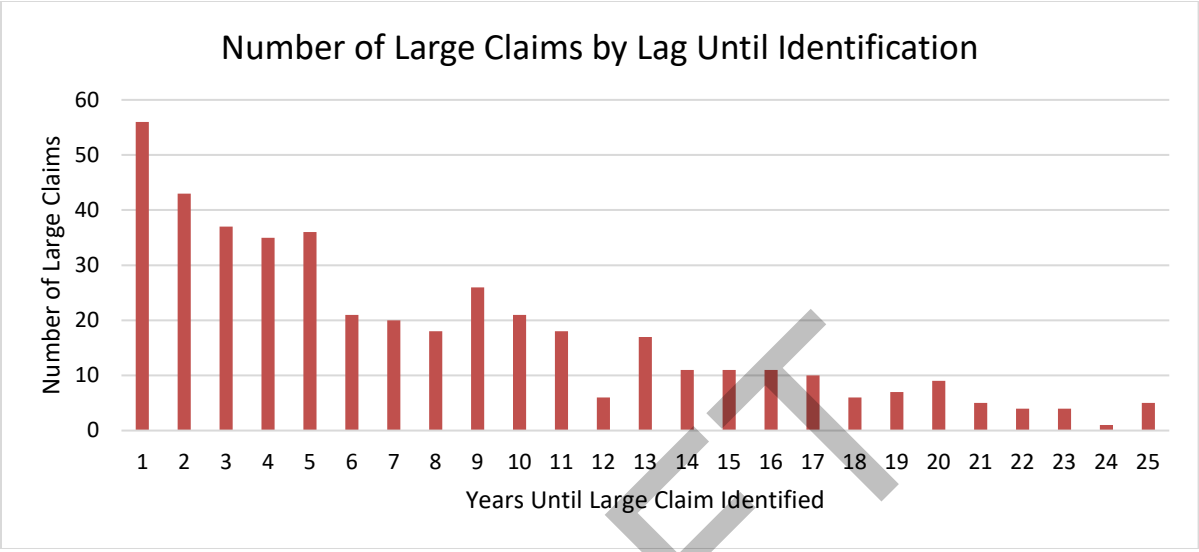
Large Loss Claims

Large loss claims are defined as claims that meet or exceed the level of $250,000. T&M performed several analyses of large loss claims. These analyses included (1) calculation of the amount of time after a claim is reported for it be identified as "large," (i.e., for the sum of paid loss plus case reserves exceed the large claim threshold) (2) consideration of factors that increase the likelihood of a claim being a large claim, (3) consideration of reserving practices for large claims, and (4) consideration of the financial impact of large claims.

Using net incurred losses, T&M examined the current set of claims that have been identified as large. On average, these claims passed the $250,000 incurred threshold right after the 8th report year. Specifically, the claims were identified as large on average at 97.41 months. The

following chart shows the number of large claims by the time it took to identify the claims as "large":



This length of time is not unexpected. Development on storage tank claims is slow as compared with many other insured lines of business. There can be a significant period of gathering more information, remediating, of testing and monitoring sites, of further remediation, of possibly re-opening claims, etc., which can lead to a long time period between the initial report of the claim and a determination of the ultimate liability.

Additionally, it is often the case that reserving is performed based on what is the "most likely" outcome (i.e., the mode of the distribution of potential reserves). As a result of this, initial reserves for any line will tend to resemble the most common claims, with large claims identified only as information allows the adjuster to distinguish less common features of claims that might lead to a large claim. The following chart shows claims currently identified as large as a percent of total reported claims by Report Year:

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Missouri Petroleum Storage Tank Insurance Fund
Large Claims as a Percent of Total Claims by Report Year
As of June 30, 2025

Report Year	Total Claims	Large Claims	Percent Large
1993	3	0	0.0%
1994	71	3	4.2%
1995	70	4	5.7%
1996	1,199	83	6.9%
1997	256	18	7.0%
1998	421	28	6.7%
1999	408	28	6.9%
2000	489	41	8.4%
2001	484	24	5.0%
2002	247	12	4.9%
2003	194	14	7.2%
2004	184	18	9.8%
2005	134	10	7.5%
2006	104	8	7.7%
2007	139	11	7.9%
2008	127	10	7.9%
2009	123	2	1.6%
2010	93	6	6.5%
2011	85	9	10.6%
2012	94	6	6.4%
2013	123	8	6.5%
2014	105	8	7.6%
2015	99	8	8.1%
2016	101	13	12.9%
2017	112	10	8.9%
2018	97	12	12.4%
2019	102	13	12.7%
2020	80	5	6.3%
2021	68	9	13.2%
2022	58	7	12.1%
2023	56	4	7.1%
2024	49	4	8.2%
2025	40	6	15.0%
Total	6,015	442	7.3%

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Note that this chart does not include incident reports in the total number of claims.

In addition, the following breakdown shows the anticipated large losses and average lag time to identification of the claims as large by claim type:

Missouri Petroleum Storage Tank Insurance Fund
Large Losses by Claim Type as of June 30, 2025

Claim Type	Total Claims	Large Claims	Percent Large	Average Lag
Insurance UST - Release	344	46	13.4%	63
Insurance UST - Closure	1,817	83	4.6%	80
Insurance UST - Other	630	73	11.6%	121
Remedial UST	2,571	142	5.5%	126
Insurance AST	386	81	21.0%	53
Remedial AST	267	16	6.0%	139
Total	**6,015**	**441**	**7.3%**	**99**

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The percentages in the above chart do not necessarily reflect the true risk that a claim may become large over time. For instance, Remedial UST claims make up the largest category of large claims but one of the smallest categories by percentage. This may partly be a reflection of the fact that many such sites had already been partly remediated before the PSTIF began issuing payments. As a result, the percentage may understate the true riskiness by claim type going forward.

It is anticipated that remediations associated with tank closures ("Insurance UST – Closure") will continue to show relatively low risk of becoming large claims. Newer sites without legacy pollution and for which leak prevention has always been used will tend to have less catastrophic releases (if any) that went undetected. Therefore, tank closures at such sites are unlikely to lead to discovery of large losses. By contrast, many older sites with legacy pollution issues have already undergone remediation efforts since the PSTIF became active. Therefore,

tank closures at those sites may be less likely to result in large losses because the site has already been remediated recently.

Large losses account for approximately $215.34 million in incurred losses, or approximately 50.9% of incurred losses, despite accounting for only 7.3% of claims. These values are slightly higher than those determined at the time of the previous analysis but continue to be consistent with expectations and historical numbers.

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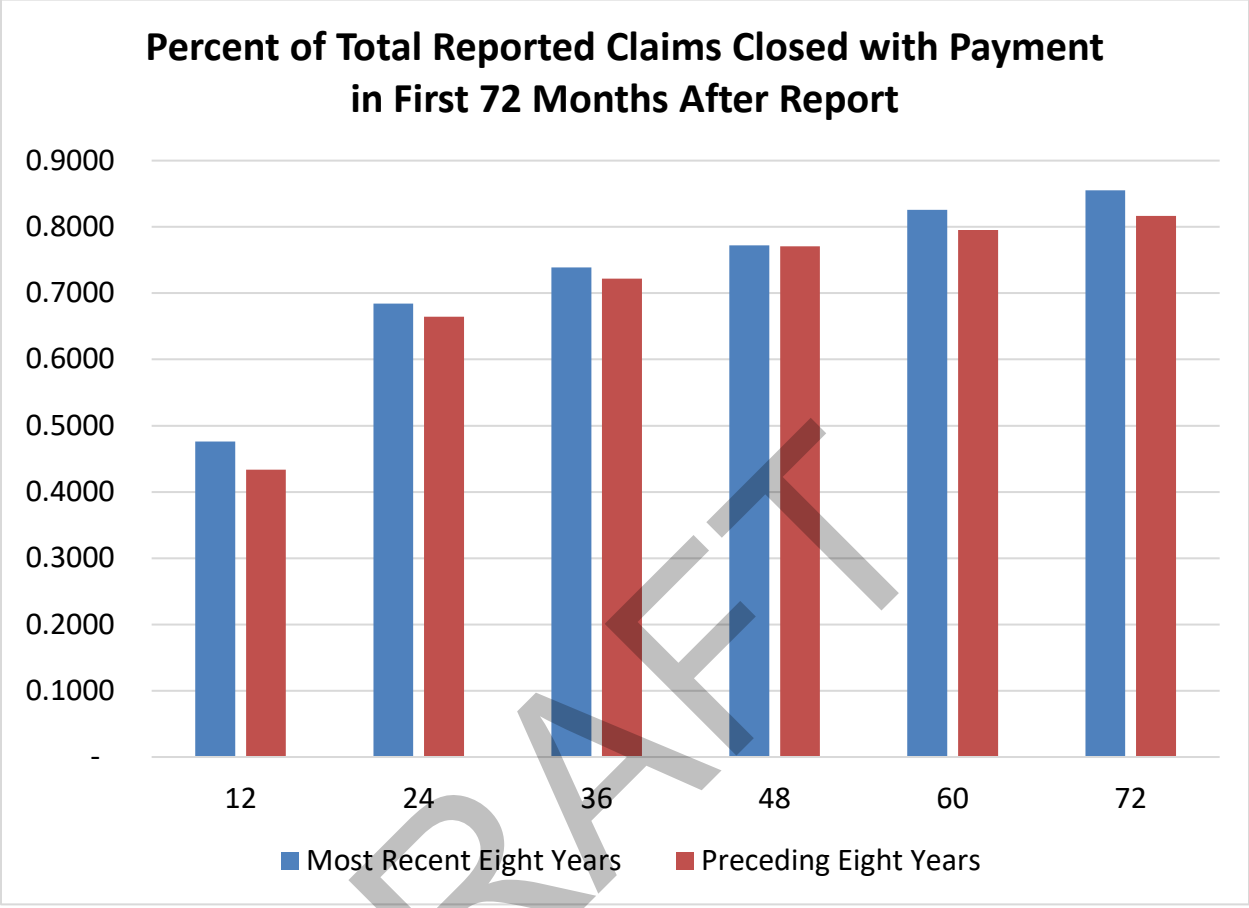
Settlement Speed

The Board's staff has undertaken significant efforts to improve the speed with which claims come to closure in recent years. However, because such changes are always incremental in nature, it often takes a long time to see them borne out in data. It is worth noting that the time to settlement is contingent on many factors and several of these factors are outside the control of the PSTIF. For example, PSTIF does not make the final determination that a cleanup is complete, but rather, this decision is made by the MoDNR.

This year, Taylor & Mulder reviewed the rate at which claims are closed. It is our conclusion that claim closure rates for newly reported claims have generally improved over time.

The following chart shows the percent of claims closed at each maturity for the first 72 months for the most recent eight calendar years (2018 – 2025) and for the preceding eight years (2010 – 2017):



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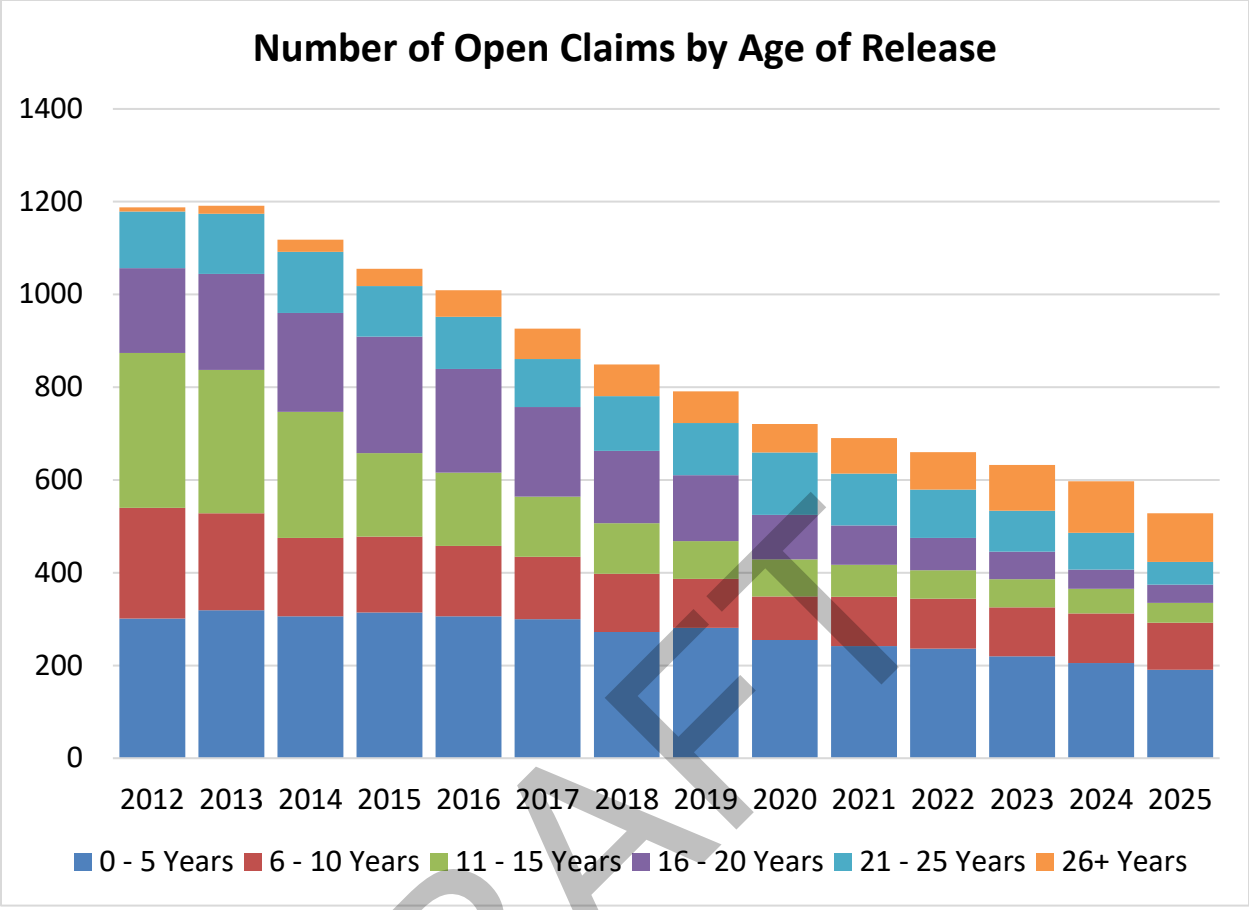
This chart shows that in the most recent eight fiscal years, the percentage of claims closed at each age is higher than for the preceding eight fiscal years.

This speedup in claim closures has apparently accelerated the reduction in open claims over time. The following chart shows the number of open claims by age of release:



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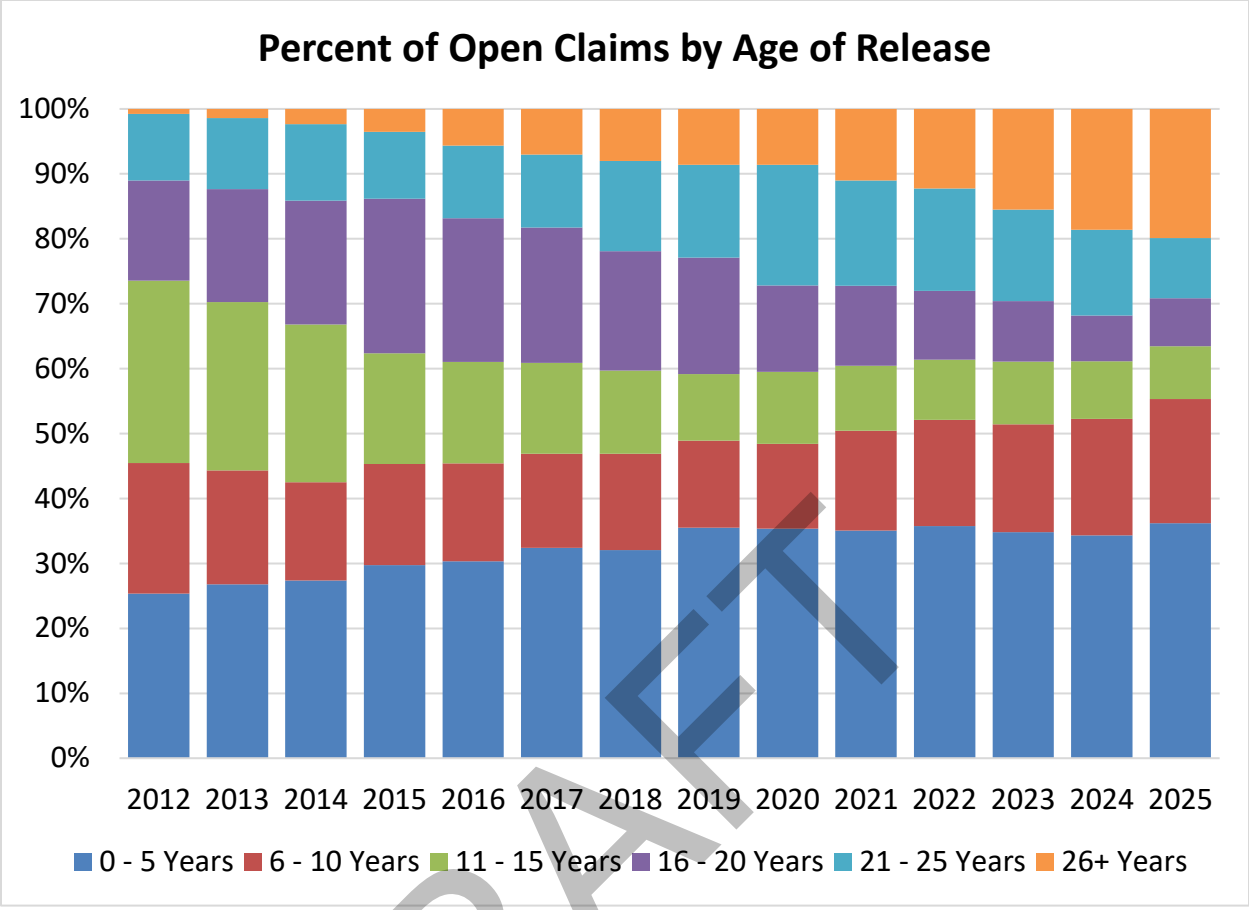
Evidently, the number of claims between 0-5 years old has declined modestly in recent years, as have all categories of claims under 20 years old. However, the number of claims greater than 20 years old has increased modestly over the most recent five years and have appeared to level off in 2025, as claims appear to "age into" that category at a rate slightly faster than the rate at which the claims are closed.

As a result of this decrease in overall volume of open claims, coupled with the stable or slightly growing number of claims greater than 20 years old, the relative proportion of claims greater than 20 years old has increased in recent years, but decreased in 2025:



The decrease in claims greater than 20 years old in 2025 can be attributed to the efforts of PSTIF staff to close claims where there have been no activity on the claim in the 20 years since the claim has been open.

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Report Distribution and Use

This report has been prepared for internal use by the management of PSTIF, their accountants, auditors, and attorneys. This report may be reproduced only in its entirety. The Exhibits and Appendices are integral parts of this report. Other distribution or use of this report by the PSTIF management or related parties described above is not authorized without the prior written permission of Taylor & Mulder, Incorporated. The PSTIF is not authorized to include this report

in any marketing or request for proposal solicitations. In addition, it should be understood that T&M consultants are available to respond to any questions by authorized third parties with respect to this report.

Conditions and Limitations

The analyses contained in this report were performed using accepted loss and loss adjustment expense reserving methods adjusted to the special needs of the PSTIF and in conformance with sound actuarial standards and principles. T&M introduced assumptions and judgments that we considered appropriate in the circumstances.

With regard to projections of ultimate values, it should be understood that the emergence and settlement of claims are subject to uncertainty. While we have used our best professional judgment in all instances, projections of future ultimate losses and loss expenses are inherently uncertain because of the random nature of claims occurrences. They are also dependent upon future contingent events and are affected by many additional factors.

PSTIF claim reserving procedures and settlement philosophy, current and perceived social and economic inflation, current and future court and jury attitudes, legislative changes affecting the PSTIF, improvements in technology, and many other economic, legal, political, legislative and social factors all can have significant effects on ultimate claim costs. Therefore, we cannot warrant that actual developments will not differ from current projections. Such differences could be upward or downward and could be significant.

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In summary, the ultimate loss and loss adjustment expense levels estimated in this report are subject to potential variations in estimation due to:

(1) the fact that the ultimate liability of PSTIF is subject to the outcome of events yet to occur;

(2) the unanticipated changes in the legal, economic, legislative or claims adjudication environments;

(3) statistical fluctuation in losses around the estimated or expected values when all other factors remain constant; and

(4) the fact that the actual future loss and loss payment and reporting patterns may differ from those applied in the determination of the expected losses or there may be unanticipated changes in the loss and expense loss and expense payment and reporting patterns;

Accordingly, no assurance can be given that future loss emergence will not deviate from the estimated ultimate loss and loss adjustment expenses. However, the ultimate loss and loss adjustment expense estimates were based on a reasonable application of generally accepted actuarial procedures and techniques applied to the information available.

We reviewed the information for overall reasonableness and presented any irregularities to the PSTIF contracted fund administrator for edification and clarification.

T&M relied without audit or verification on historical loss, loss adjustment expense, exposure data, and other information provided by the PSTIF and its employees. T&M has relied upon the data provided and on the oral and/or written statements made regarding the quality, accuracy, and completeness of the data and information supplied. Any inaccuracies or inconsistencies in the data could have a significant effect on the conclusions drawn.

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Should any inaccuracies be found in the data, T&M should be notified immediately so that the analysis can be adjusted accordingly.

With regard to projections of estimated revenues, it should be understood that the revenue streams are subject to uncertainty. While we have used our best professional judgment in all instances, projections of future revenues are inherently uncertain due to potential changes in technology, the implementation of environmental requirements, the introduction of alternative vehicle fuels, and changes in the economy among others. While T&M has used its best judgment is selecting trend values for each category of revenue, actual revenue collected is dependent upon unknown future events and may be affected by additional factors outside of PSTIF control.

T&M reflected anticipated investment income in the reserves assuming a 1.5% annual rate of return on investments. We did not independently verify the ability of the PSTIF to match this assumed rate.

The analysis in this report was limited to the loss and loss adjustment expense items noted in the scope of this project. This report does not include an examination of the assets of the PSTIF, nor did we form any opinion as to the value or validity of the assets. This report does not include a review or analysis of any income statement or other balance sheet items. This analysis with respect to loss and loss adjustment expense reserves is based upon the assumption that all reserves are backed by valid assets and that these assets reflect suitably scheduled maturities and/or sufficient liquidity to meet cash flow requirements.

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This report is limited in scope to the estimate of the level of reserve adequacy at the evaluation date of the report. It also includes projections regarding cash flow of the operations of the PSTIF under certain narrow assumptions and conditions.

This report was prepared for use by persons technically competent in insurance financial matters. Persons receiving this report should be made aware of the availability of T&M, Inc. personnel to answer questions and/or amplify on any matter addressed therein.

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Actuarial Analysis

Sources of Data

Data was provided by Ms. Kelley Ogletree with the PSTIF and Ms. Dorcee Lauen with Williams & Company Consulting, Inc., PSTIF's contracted fund administrator, in the form of several files. A full description of the names and contents of these files may be found as an appendix at the end of this report. In addition, we received additional information from interviews with PSTIF management and Williams' personnel, as well as from the PSTIF website, www.pstif.org.

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Overall Methodology

Selection of Factors

In each of the methods described below, our selections of development factors were based on the evaluation of the predictive value of the various historical averages and the perceived presence or absence of trends and singularities. Apparent statistical aberrations were eliminated either judgmentally or by selecting a longer experience period to increase the credibility of the experience, whichever we believed more appropriate in the particular circumstances.

Paid Development Method

The paid development method uses historical loss payment patterns to project actual payments as of a given valuation date to ultimate. The PSTIF's historical payment patterns or the fitted loss development factors were relied upon in selecting the expected payment patterns at each evaluation. The difference between the projected ultimate losses and the losses and allocated

loss adjustment expenses paid through the evaluation date is the estimated reserve as of the evaluation date.

Estimates produced using the paid development method are not affected by changes in the case reserve position of the PSTIF which might have occurred during the review period, but may be understated since they ignore large unpaid claims. Also, this method may be susceptible to any changes in case settlement philosophy and/or speed of payment.

Incurred Development Method

The incurred, or reported, development method is similar to the paid development method and uses historical reporting patterns to project actual reported amounts (excluding IBNR) as of a given evaluation date to ultimate. The difference between the projected ultimate losses and the losses paid through the evaluation date is the estimated reserve as of the evaluation date.

In many situations, the incurred development method is preferred over the paid method since large open but unpaid claims are considered. This method is more responsive to changes in the external business environment, since changes in liability laws, legislative changes affecting the PSTIF, court decisions and other external factors are generally reflected in the case reserves as soon as claims management becomes aware of them. As a result, the incurred loss development factors at each stage of development tend to be lower, and more stable, than those of the corresponding paid development method. However, the incurred development method may be affected by changes in case reserving practices over time and, to a lesser extent, also may be affected by changes in claims settlement rates.

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Bornhuetter-Ferguson Methods

Loss development methods may be affected by changes in the reporting and payment of claims. Random fluctuations in the reporting and payment of claims (such as may result from a single unusually large claim) are magnified by the development factors, potentially resulting in biased estimates and wide changes in the estimates from one evaluation to the next. To minimize such fluctuations, we applied the Bornhuetter-Ferguson method to incurred losses and to paid losses. The Bornhuetter-Ferguson method is particularly suited for projecting loss reserves for longer-tailed business with volatile or limited development patterns. The Bornhuetter-Ferguson method represents a compromise between traditional loss development methods such as the incurred and paid loss development methods and an expected loss ratio method.

For the incurred Bornhuetter-Ferguson method, initial expected losses are established for each accident year to be consistent with projected pure premium amounts, i.e. projected losses divided by an exposure base (in this case, covered tanks in-force for insurance claims or remaining potential remediation sites for remedial claims). These initial expected losses are then split into two components: expected reported losses and expected unreported losses. The expected unreported losses, which comprise the IBNR and bulk reserves for each accident year, are calculated as a function of the earned premium, the initial expected loss ratio, and the expected portion of ultimate losses that remains unreported or unreserved as of the evaluation date.

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For the paid Bornhuetter-Ferguson method, initial expected losses are also derived from projected pure premium amounts. These initial expected losses are then split into two components: expected paid losses and expected unpaid losses. The expected unpaid losses, which comprise the IBNR and case reserves for each accident year, are calculated as a function of the initial expected loss ratio, the initial expected ultimate losses, and the expected portion of ultimate losses that remains unpaid as of the evaluation date.

Projection Methodologies for Cash Flow Analysis

Several overlapping projection methodologies were used to perform the cash flow analysis. First, regression techniques were used to project claim frequency and severity into future periods. These projections were then converted into parameters for a simulation model.

The simulation model used a Poisson distribution to predict the number of claims of each category for each Report Year. For each predicted claim, a lognormal distribution was then generated as the prediction of the ultimate size of that claim. For example, one trial of the simulation might predict that there would be 10 UST Insurance (Release) claims in a given Report Year. Each of those 10 claims would have a simulated claim size drawn from the lognormal distribution.

Repeating this process 10,000 times for each claim type and for each Report Year from 2026 to 2032, we obtained a set of potential ultimate losses that represent a probability distribution of outcomes, where more common answers represent more likely outcomes.

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Historical losses were simulated using incurred loss development triangles. For each triangle, the loss development factors were simulated using normal distributions for each development period. The mean for each development period was selected to be the actuarial central estimate, while the standard deviation was selected to be the standard deviation of the historical LDFs.

For both historical and future claims, anticipated future payments by fiscal year were determined by applying fixed projected payment patterns to unpaid losses to determine the anticipated timing of future payments.

Combining these projections, we obtained an estimate of the range of possibilities for loss payments over time. We compared these loss payment projections to revenue projections to obtain an estimate of the range of possible outcomes for cash flows over time.

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Methodology by Claim Type

Long-tailed lines of business have some important properties. These are lines of business for which claim payments can extend over a very long period (10 years or more) before closure. As claim payments are made over a long-time horizon, the first few years after a claim is reported may have little or no actual claim payments. This produces relatively low paid losses at early maturities, and as a result, payment patterns can be strongly affected by small random fluctuations in payments from year to year.

The long payment pattern has a substantial effect on most categories of PSTIF claims. Paid losses at early maturities have shown extreme volatility, and as a result, paid losses have very low credibility (i.e., statistical stability) for some categories of claims.

By contrast, incurred losses have shown greater stability. When a claim is reported to the PSTIF, a reserve is established based on the expected ultimate loss for the claim. As the claim matures and losses are paid out, the incurred loss may be increased or decreased commensurate with the adjuster's interpretation of the ultimate value of the claim. In this case, the first estimate by the adjusters is close enough to the ultimate loss that development is low when compared to paid losses. Because development patterns for incurred losses were more stable over time, incurred loss development methods received greater relative weight in our analysis.

Incurred loss development, by contrast, is stable. Incurred losses do not undergo the same extreme changes as paid losses, making estimates from incurred losses more credible. In some cases, incurred loss development is modestly negative, implying that early reserve estimates are slightly over-stated. However, these trends seem to reverse at later maturities, returning incurred losses on average to slightly higher than the initial reserves as of 12 months.

When relatively little credibility could be placed in the loss development patterns observed in paid or incurred losses, higher reliance was placed on the Bornhuetter-Ferguson methods. These methods produce estimates that are not as significantly influenced by random variations in claim payout or reporting speeds, but are highly stable from year to year and are a reflection of the overall level of exposure.

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Selections of Ultimate Losses

Generally, the selection of ultimate losses was based on selecting incurred loss development method for older years, as this method seemed to give the best result. In years where there was great variability, particularly more recent Report Years, we selected a combination of methods (including the Bornhuetter-Ferguson method) to provide greater stability in results.

Any exceptions to the above description were based on our review of the methods combined with our knowledge of specific accident years and other considerations as described in the background section of our report.

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Loss Reserve Discounting

T&M reflected anticipated investment income on reserves using an assumed discount rate of 1.5%. This rate was based on historical yields by the State as of June 30, 2025. We did not independently verify the ability of the PSTIF to match these rates at June 30, 2025.

The undiscounted reserves and the discounted reserves are shown in the summary section of our report. The future payout of the undiscounted recommended reserve from 2026 to 2034 separately and for years subsequent to fiscal year 2034 on a combined basis is also provided in this section.

Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
All Claim Types
Executive Summary - Unpaid Losses & ALAE

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Claim Type	Case Reserve	IBNR	Unpaid ALAE	Undiscounted Unpaid Loss & ALAE	Discount	Discounted Unpaid Loss & ALAE
Insurance UST - Release	6,595,328	6,087,641	72,806	12,755,775	1,005,806	11,749,969
Insurance UST - Closure	9,196,731	8,079,228	99,172	17,375,132	1,421,215	15,953,916
Insurance UST - Other	5,617,681	6,280,644	68,302	11,966,627	956,128	11,010,499
Remedial UST	13,846,658	2,474,264	93,690	16,414,611	1,538,904	14,875,707
Insurance AST	16,032,510	10,997,810	155,167	27,185,486	2,715,980	24,469,507
Remedial AST	2,157,551	87,397	12,887	2,257,835	165,550	2,092,285
Total	**53,446,459**	**34,006,984**	**502,023**	**87,955,466**	**7,803,583**	**80,151,883**

Notes: Col (5) = (2) + (3) + (4)
Col (7) = (5) - (6)

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
All Claim Types
Summary of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)
	PAID LDM	INC LDM	PAID BF	INC BF	SELECTED
RY	ULTIMATE	ULTIMATE	ULTIMATE	ULTIMATE	ULTIMATE
1994	4,778,222	4,778,222	-	-	4,778,222
1995	4,458,526	4,458,526	-	-	4,458,526
1996	78,507,300	78,507,300	-	-	78,507,300
1997	19,598,535	19,461,610	-	-	19,461,610
1998	30,833,752	30,446,110	-	-	30,446,110
1999	25,629,522	25,595,712	-	-	25,595,712
2000	35,324,283	35,228,341	-	-	35,228,341
2001	16,801,653	16,768,724	-	-	16,768,724
2002	15,459,209	15,280,135	-	-	15,280,135
2003	12,674,124	12,576,156	-	-	12,576,156
2004	16,446,510	16,390,909	-	-	16,443,547
2005	11,690,588	11,672,486	-	-	11,672,486
2006	9,195,409	8,979,907	-	-	8,979,907
2007	10,403,476	10,029,173	-	-	10,029,173
2008	8,917,970	8,839,763	-	-	8,839,763
2009	6,174,901	6,016,798	6,497,549	6,066,221	6,074,416
2010	5,163,195	5,240,217	5,180,378	5,357,873	5,240,217
2011	9,772,464	9,944,706	9,005,601	9,793,528	9,944,706
2012	8,341,521	7,642,935	8,594,564	7,735,686	7,823,586
2013	8,570,602	8,369,172	8,562,801	8,329,894	8,535,156
2014	7,392,153	7,470,031	7,345,317	7,588,969	7,533,157
2015	11,851,160	11,320,197	11,158,899	11,022,673	11,413,962
2016	9,365,291	9,730,868	9,008,764	9,653,556	9,854,971
2017	12,229,422	11,942,437	11,033,525	11,637,022	11,655,580
2018	10,291,185	10,531,949	9,944,751	10,313,409	10,404,020
2019	12,990,210	12,660,618	11,375,368	11,942,422	12,816,291
2020	5,604,437	6,201,914	7,220,462	6,862,710	6,649,836
2021	9,332,684	10,322,749	9,290,634	10,099,312	9,983,058
2022	11,765,008	10,353,449	10,342,281	10,119,203	11,068,141
2023	8,658,475	8,564,251	9,230,051	8,929,044	9,208,961
2024	8,849,113	7,481,042	9,148,170	8,250,991	8,645,648
2025	13,058,665	13,753,115	10,081,590	11,096,965	11,075,736
TOTAL	460,129,562	456,559,523	153,020,705	154,799,477	456,993,155

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
All Claim Types
Summary of Case & IBNR Reserves

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
RY	SELECTED ULTIMATE	PAID LOSS	INCURRED LOSS	CASE RESERVE	IBNR RESERVE	UNPAID LOSS	PAID ALAE	UNPAID ALAE	ULTIMATE ALAE	ULTIMATE LOSS & ALAE	UNPAID LOSS & ALAE
1994	4,778,222	4,497,996	4,778,222	280,226	-	280,226	-	-	-	4,778,222	280,226
1995	4,458,526	4,334,953	4,458,526	123,572	-	123,572	9,764	709	10,474	4,468,999	124,282
1996	78,507,300	72,676,341	78,507,300	5,830,959	-	5,830,959	141,118	33,472	174,590	78,681,890	5,864,431
1997	19,461,610	18,896,776	19,461,610	564,835	-	564,835	44,586	3,242	47,829	19,509,439	568,077
1998	30,446,110	28,353,862	30,446,110	2,092,249	-	2,092,249	88,811	12,010	100,821	30,546,932	2,104,259
1999	25,595,712	24,435,721	25,595,712	1,159,990	-	1,159,990	80,060	6,659	86,719	25,682,431	1,166,649
2000	35,228,341	32,044,291	35,228,341	3,184,050	-	3,184,050	94,982	18,278	113,260	35,341,601	3,202,328
2001	16,768,724	14,870,897	16,761,121	1,890,224	7,603	1,897,827	57,617	10,894	68,512	16,837,235	1,908,721
2002	15,280,135	14,506,621	15,265,133	758,512	15,002	773,514	50,027	4,440	54,467	15,334,602	777,954
2003	12,576,156	11,735,844	12,545,696	809,852	30,460	840,312	56,795	4,824	61,618	12,637,775	845,136
2004	16,443,547	14,661,582	16,317,995	1,656,413	125,551	1,781,965	139,364	10,229	149,593	16,593,140	1,792,194
2005	11,672,486	9,942,782	11,574,114	1,631,332	98,371	1,729,704	111,469	9,929	121,399	11,793,885	1,739,633
2006	8,979,907	8,097,030	8,816,526	719,496	163,382	882,877	66,987	5,068	72,055	9,051,963	887,945
2007	10,029,173	9,535,168	9,891,121	355,953	138,052	494,005	98,631	2,836	101,467	10,130,640	496,841
2008	8,839,763	8,188,354	8,601,044	412,690	238,719	651,410	40,829	3,739	44,568	8,884,331	655,149
2009	6,074,416	5,545,843	5,835,076	289,233	239,340	528,574	30,250	3,034	33,284	6,107,701	531,608
2010	5,240,217	4,115,927	5,091,632	975,706	148,585	1,124,291	33,122	6,454	39,576	5,279,793	1,130,744
2011	9,944,706	7,711,242	9,441,619	1,730,378	503,087	2,233,465	39,776	12,821	52,598	9,997,304	2,246,286
2012	7,823,586	7,058,880	7,272,901	214,021	550,685	764,706	33,932	4,390	38,321	7,861,908	769,096
2013	8,535,156	6,787,355	7,769,435	982,081	765,721	1,747,801	30,794	10,033	40,827	8,575,984	1,757,834
2014	7,533,157	5,306,638	6,821,197	1,514,559	711,959	2,226,518	30,359	12,781	43,141	7,576,297	2,239,300
2015	11,413,962	8,898,125	10,144,970	1,246,845	1,268,992	2,515,837	47,842	14,442	62,284	11,476,246	2,530,279
2016	9,854,971	6,437,662	8,651,260	2,213,597	1,203,711	3,417,309	27,672	19,617	47,289	9,902,260	3,436,925
2017	11,655,580	8,065,506	10,449,749	2,384,242	1,205,832	3,590,074	44,831	20,609	65,440	11,721,020	3,610,683
2018	10,404,020	6,614,933	8,718,204	2,103,272	1,685,816	3,789,087	32,098	21,751	53,849	10,457,869	3,810,838
2019	12,816,291	7,688,162	10,177,472	2,489,310	2,638,819	5,128,129	45,293	29,438	74,730	12,891,022	5,157,567
2020	6,649,836	3,065,270	4,771,930	1,706,660	1,877,906	3,584,566	20,840	20,577	41,417	6,691,253	3,605,143
2021	9,983,058	4,386,763	7,654,294	3,267,531	2,328,764	5,596,295	24,981	32,125	57,106	10,040,164	5,628,420
2022	11,068,141	4,799,181	7,277,316	2,478,135	3,790,825	6,268,961	29,457	35,987	65,444	11,133,585	6,304,947
2023	9,208,961	2,865,610	5,518,539	2,652,929	3,690,422	6,343,351	23,226	36,414	59,640	9,268,601	6,379,765
2024	8,645,648	1,709,975	4,136,492	2,426,517	4,509,156	6,935,672	17,531	39,814	57,345	8,702,992	6,975,486
2025	11,075,736	1,704,424	5,005,512	3,301,088	6,070,224	9,371,312	9,048	53,796	62,844	11,138,580	9,425,108
TOTAL	456,993,155	369,539,712	422,986,171	53,446,459	34,006,984	87,453,443	1,602,092	500,415	2,102,506	459,095,661	87,953,857

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance UST - Release
Summary of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)
	PAID LDM	INC LDM	PAID BF	INC BF	SELECTED
RY	ULTIMATE	ULTIMATE	ULTIMATE	ULTIMATE	ULTIMATE
1994	246,661	246,661	-	-	246,661
1995	241,953	241,953	-	-	241,953
1996	2,255,030	2,255,030	-	-	2,255,030
1997	1,995,927	1,995,927	-	-	1,995,927
1998	1,346,789	1,346,789	-	-	1,346,789
1999	142,573	142,573	-	-	142,573
2000	1,817,407	1,817,407	-	-	1,817,407
2001	1,084,144	1,084,144	-	-	1,084,144
2002	713,587	713,587	-	-	713,587
2003	1,980,868	1,980,868	-	-	1,980,868
2004	1,308,541	1,308,541	-	-	1,308,541
2005	1,680,933	1,680,933	-	-	1,680,933
2006	161,243	161,243	-	-	161,243
2007	2,490,497	2,484,630	-	-	2,484,630
2008	2,104,008	2,035,269	-	-	2,035,269
2009	879,624	886,897	893,951	891,500	886,897
2010	674,592	680,191	584,925	686,531	680,191
2011	2,306,671	2,238,449	2,213,404	2,218,915	2,238,449
2012	1,076,913	1,026,368	1,131,337	1,053,044	1,026,368
2013	323,372	320,310	515,913	388,600	387,049
2014	1,912,060	1,977,224	1,829,982	1,937,610	1,942,298
2015	3,359,972	3,102,248	2,927,327	2,947,027	3,084,143
2016	1,717,676	1,922,736	1,667,388	1,875,635	1,820,206
2017	1,773,597	1,536,993	1,706,006	1,538,246	1,638,711
2018	1,157,199	1,180,209	1,291,405	1,238,063	1,264,734
2019	588,156	698,350	949,370	847,627	898,499
2020	1,388,571	1,727,942	1,469,099	1,693,151	1,630,064
2021	1,732,917	2,023,032	1,661,745	1,915,832	1,833,382
2022	3,329,377	2,538,986	2,284,221	2,268,683	2,934,182
2023	1,431,901	1,653,462	1,559,234	1,638,421	1,645,942
2024	1,362,988	862,019	1,581,757	1,194,704	1,581,757
2025	175,602	610,008	1,583,463	1,356,203	1,183,224
TOTAL	44,761,349	44,480,979	25,850,527	25,689,791	46,171,649

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance UST - Release
Summary of Case & IBNR Reserves

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	SELECTED	PAID	INCURRED	CASE	IBNR	UNPAID
RY	ULTIMATE	LOSS	LOSS	RESERVE	RESERVE	LOSS
1994	246,661	246,661	246,661	-	-	-
1995	241,953	241,953	241,953	-	-	-
1996	2,255,030	1,400,389	2,255,030	854,640	-	854,640
1997	1,995,927	1,995,927	1,995,927	-	-	-
1998	1,346,789	1,346,789	1,346,789	-	-	-
1999	142,573	142,573	142,573	-	-	-
2000	1,817,407	1,779,094	1,817,407	38,313	-	38,313
2001	1,084,144	1,067,005	1,084,144	17,138	-	17,138
2002	713,587	644,203	713,587	69,383	-	69,383
2003	1,980,868	1,980,868	1,980,868	-	-	-
2004	1,308,541	1,308,541	1,308,541	-	-	-
2005	1,680,933	1,009,263	1,680,933	671,670	-	671,670
2006	161,243	161,243	161,243	-	-	-
2007	2,484,630	2,399,071	2,481,747	82,676	2,883	85,559
2008	2,035,269	1,995,967	2,021,507	25,540	13,762	39,303
2009	886,897	794,324	879,624	85,300	7,273	92,572
2010	680,191	462,377	674,592	212,214	5,599	217,814
2011	2,238,449	2,047,949	2,181,164	133,216	57,284	190,500
2012	1,026,368	937,188	968,116	30,928	58,252	89,180
2013	387,049	271,046	301,974	30,928	85,075	116,003
2014	1,942,298	1,510,905	1,805,599	294,694	136,699	431,393
2015	3,084,143	2,569,731	2,797,827	228,096	286,316	514,412
2016	1,820,206	1,249,850	1,690,349	440,499	129,857	570,356
2017	1,638,711	1,246,295	1,328,971	82,676	309,740	392,416
2018	1,264,734	781,754	1,005,422	223,667	259,312	482,980
2019	898,499	367,186	575,886	208,700	322,612	531,312
2020	1,630,064	779,810	1,341,805	561,995	288,259	850,254
2021	1,833,382	828,427	1,514,515	686,089	318,866	1,004,955
2022	2,934,182	1,316,891	1,807,853	490,962	1,126,328	1,617,290
2023	1,645,942	411,637	1,073,125	661,488	572,817	1,234,305
2024	1,581,757	193,760	482,674	288,914	1,099,083	1,387,997
2025	1,183,224	-	175,602	175,602	1,007,622	1,183,224
TOTAL	46,171,649	33,488,680	40,084,008	6,595,328	6,087,641	12,682,969

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance UST - Closure
Summary of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)
	PAID LDM	INC LDM	PAID BF	INC BF	SELECTED
RY	ULTIMATE	ULTIMATE	ULTIMATE	ULTIMATE	ULTIMATE
1994	1,128,314	1,128,314	-	-	1,128,314
1995	830,629	830,629	-	-	830,629
1996	3,877,028	3,877,028	-	-	3,877,028
1997	4,643,906	4,643,906	-	-	4,643,906
1998	5,964,475	5,964,475	-	-	5,964,475
1999	9,651,795	9,651,795	-	-	9,651,795
2000	5,579,749	5,483,807	-	-	5,483,807
2001	2,277,020	2,252,659	-	-	2,252,659
2002	4,449,420	4,449,420	-	-	4,449,420
2003	3,707,756	3,729,632	-	-	3,729,632
2004	2,419,322	2,433,850	-	-	2,433,850
2005	2,828,604	2,775,028	-	-	2,775,028
2006	1,554,313	1,566,642	-	-	1,566,642
2007	4,088,350	4,057,224	-	-	4,057,224
2008	3,001,472	3,059,823	-	-	3,059,823
2009	2,218,730	2,085,518	2,279,614	2,105,613	2,085,518
2010	2,073,191	2,137,385	2,153,152	2,156,267	2,137,385
2011	1,780,922	1,647,517	1,914,569	1,696,401	1,647,517
2012	2,794,058	2,554,347	2,789,042	2,565,408	2,554,347
2013	4,019,909	4,161,506	3,798,856	4,055,426	4,161,506
2014	3,178,330	3,329,545	3,090,823	3,274,428	3,199,566
2015	2,566,553	2,751,785	2,588,045	2,743,261	2,662,411
2016	2,346,469	2,327,115	2,418,629	2,364,027	2,364,060
2017	2,697,578	2,739,169	2,678,377	2,723,999	2,709,781
2018	3,291,127	3,059,462	3,091,638	2,996,297	3,109,631
2019	3,373,246	3,279,543	3,099,569	3,164,294	3,229,163
2020	978,552	978,591	1,567,102	1,255,221	1,194,866
2021	2,086,763	2,576,999	2,215,078	2,569,422	2,453,833
2022	3,101,540	2,438,997	2,794,196	2,453,505	2,697,060
2023	3,396,472	3,010,154	2,844,707	2,846,522	2,900,461
2024	1,495,773	1,564,640	2,197,343	1,929,228	1,874,115
2025	3,640,066	3,428,612	2,670,622	2,798,420	3,134,430
TOTAL	101,041,430	99,975,114	44,191,362	43,697,740	100,019,879

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance UST - Closure
Summary of Case & IBNR Reserves

(1)	(2)	(3)	(4)	(5)	(6)	(7)
RY	SELECTED ULTIMATE	PAID LOSS	INCURRED LOSS	CASE RESERVE	IBNR RESERVE	UNPAID LOSS
1994	1,128,314	848,088	1,128,314	280,226	-	280,226
1995	830,629	830,629	830,629	-	-	-
1996	3,877,028	3,877,028	3,877,028	-	-	-
1997	4,643,906	4,549,960	4,643,906	93,945	-	93,945
1998	5,964,475	5,269,003	5,964,475	695,472	-	695,472
1999	9,651,795	9,448,098	9,651,795	203,698	-	203,698
2000	5,483,807	5,442,164	5,483,807	41,643	-	41,643
2001	2,252,659	2,217,747	2,252,659	34,913	-	34,913
2002	4,449,420	4,257,908	4,449,420	191,511	-	191,511
2003	3,729,632	3,536,302	3,707,756	171,454	21,876	193,330
2004	2,433,850	2,294,455	2,419,322	124,867	14,527	139,394
2005	2,775,028	2,699,442	2,754,676	55,234	20,352	75,586
2006	1,566,642	1,390,513	1,554,313	163,800	12,329	176,129
2007	4,057,224	3,802,372	4,012,126	209,753	45,099	254,852
2008	3,059,823	2,687,058	3,001,472	314,414	58,351	372,765
2009	2,085,518	1,989,601	2,027,535	37,933	57,983	95,917
2010	2,137,385	1,826,075	2,073,191	247,117	64,194	311,310
2011	1,647,517	1,539,584	1,575,584	36,000	71,933	107,933
2012	2,554,347	2,372,394	2,417,514	45,121	136,833	181,953
2013	4,161,506	3,322,331	3,849,626	527,295	311,880	839,175
2014	3,199,566	2,578,827	3,031,218	452,391	168,348	620,739
2015	2,662,411	2,028,326	2,468,325	439,999	194,086	634,085
2016	2,364,060	1,782,848	2,058,489	275,640	305,571	581,212
2017	2,709,781	1,976,124	2,372,691	396,567	337,090	733,657
2018	3,109,631	2,307,469	2,616,008	308,538	493,624	802,162
2019	3,229,163	2,257,806	2,764,559	506,753	464,604	971,357
2020	1,194,866	609,790	805,254	195,465	389,612	585,077
2021	2,453,833	1,100,207	2,086,763	986,556	367,070	1,353,626
2022	2,697,060	1,513,440	1,871,084	357,644	825,976	1,183,619
2023	2,900,461	1,360,538	2,088,057	727,519	812,403	1,539,923
2024	1,874,115	391,932	917,728	525,797	956,386	1,482,183
2025	3,134,430	635,861	1,185,329	549,467	1,949,101	2,498,569
TOTAL	100,019,879	82,743,919	91,940,651	9,196,731	8,079,228	17,275,960

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance UST - Other
Summary of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)
	PAID LDM	INC LDM	PAID BF	INC BF	SELECTED
RY	ULTIMATE	ULTIMATE	ULTIMATE	ULTIMATE	ULTIMATE
1994	3,403,247	3,403,247	-	-	3,403,247
1995	3,165,091	3,165,091	-	-	3,165,091
1996	2,547,508	2,547,508	-	-	2,547,508
1997	3,678,448	3,678,448	-	-	3,678,448
1998	3,020,235	3,020,235	-	-	3,020,235
1999	2,722,748	2,722,748	-	-	2,722,748
2000	4,406,695	4,406,695	-	-	4,406,695
2001	1,071,352	1,055,182	-	-	1,055,182
2002	4,573,844	4,581,721	-	-	4,581,721
2003	3,575,741	3,581,828	-	-	3,581,828
2004	4,745,410	4,706,651	-	-	4,706,651
2005	2,147,591	2,148,585	-	-	2,148,585
2006	4,334,556	4,085,206	-	-	4,085,206
2007	945,931	906,577	-	-	906,577
2008	2,473,753	2,369,357	-	-	2,369,357
2009	943,108	1,007,078	1,129,504	1,025,146	1,007,078
2010	223,439	242,085	435,025	321,911	242,085
2011	2,494,564	2,726,846	1,937,300	2,604,055	2,726,846
2012	1,167,108	1,094,926	1,192,870	1,111,471	1,094,926
2013	1,189,551	1,110,068	1,212,593	1,127,961	1,110,068
2014	409,264	397,439	631,234	491,850	561,542
2015	3,867,217	3,347,359	3,092,219	3,087,464	3,348,565
2016	1,631,800	1,459,366	1,506,313	1,429,651	1,631,800
2017	1,854,464	1,439,411	1,625,145	1,409,459	1,639,673
2018	1,212,842	1,181,078	1,233,634	1,197,525	1,223,238
2019	2,329,514	1,898,223	1,823,853	1,731,841	1,945,858
2020	825,953	837,951	1,039,839	957,029	944,940
2021	351,037	244,699	902,342	595,156	523,308
2022	1,270,138	794,141	1,240,989	975,135	1,070,101
2023	492,799	626,851	1,026,297	901,981	851,710
2024	610,353	1,264,287	1,108,609	1,237,509	1,186,448
2025	665,703	2,376,340	1,178,564	1,549,720	1,364,142
TOTAL	68,351,001	68,427,225	22,316,328	21,754,866	68,851,403

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance UST - Other
Summary of Case & IBNR Reserves

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	SELECTED	PAID	INCURRED	CASE	IBNR	UNPAID
RY	ULTIMATE	LOSS	LOSS	RESERVE	RESERVE	LOSS
1994	3,403,247	3,403,247	3,403,247	-	-	-
1995	3,165,091	3,041,518	3,165,091	123,572	-	123,572
1996	2,547,508	2,269,676	2,547,508	277,832	-	277,832
1997	3,678,448	3,678,448	3,678,448	-	-	-
1998	3,020,235	2,628,924	3,020,235	391,311	-	391,311
1999	2,722,748	2,722,748	2,722,748	-	-	-
2000	4,406,695	4,247,876	4,406,695	158,819	-	158,819
2001	1,055,182	1,031,527	1,055,182	23,655	-	23,655
2002	4,581,721	4,332,343	4,573,844	241,501	7,877	249,378
2003	3,581,828	3,122,179	3,575,741	453,562	6,087	459,649
2004	4,706,651	4,478,491	4,669,533	191,042	37,118	228,160
2005	2,148,585	1,989,976	2,116,803	126,827	31,782	158,609
2006	4,085,206	3,937,251	3,955,672	18,421	129,533	147,955
2007	906,577	845,022	864,373	19,351	42,204	61,555
2008	2,369,357	2,166,592	2,239,328	72,736	130,029	202,765
2009	1,007,078	943,108	943,108	-	63,970	63,970
2010	242,085	223,439	223,439	-	18,646	18,646
2011	2,726,846	1,700,374	2,494,564	794,190	232,282	1,026,472
2012	1,094,926	920,105	1,001,501	81,396	93,425	174,821
2013	1,110,068	912,130	998,657	86,527	111,411	197,938
2014	561,542	304,917	354,917	50,000	206,625	256,625
2015	3,348,565	2,715,575	2,929,629	214,053	418,936	632,990
2016	1,631,800	1,080,239	1,241,258	161,019	390,542	551,561
2017	1,639,673	1,142,980	1,203,383	60,403	436,290	496,693
2018	1,223,238	700,060	941,091	241,031	282,147	523,178
2019	1,945,858	1,257,606	1,425,164	167,558	520,693	688,251
2020	944,940	393,204	586,122	192,919	358,817	551,736
2021	523,308	133,043	158,434	25,391	364,874	390,266
2022	1,070,101	403,883	462,388	58,505	607,713	666,218
2023	851,710	131,787	336,602	204,815	515,107	719,922
2024	1,186,448	94,811	610,353	515,542	576,095	1,091,637
2025	1,364,142	-	665,703	665,703	698,439	1,364,142
TOTAL	68,851,403	56,953,079	62,570,760	5,617,681	6,280,644	11,898,325

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Remedial UST
Summary of Ultimate Losses

(1) RY	(2) PAID LDM ULTIMATE	(3) INC LDM ULTIMATE	(4) PAID BF ULTIMATE	(5) INC BF ULTIMATE	(6) SELECTED ULTIMATE
1994	-	-	-	-	-
1995	114,027	114,027	-	-	114,027
1996	69,718,278	69,718,278	-	-	69,718,278
1997	9,280,255	9,143,330	-	-	9,143,330
1998	19,361,582	18,973,941	-	-	18,973,941
1999	8,658,081	8,624,271	-	-	8,624,271
2000	16,237,801	16,237,801	-	-	16,237,801
2001	3,403,926	3,411,528	-	-	3,411,528
2002	3,356,577	3,196,851	-	-	3,196,851
2003	1,246,618	1,120,688	-	-	1,120,688
2004	2,421,212	2,442,481	-	-	2,442,481
2005	2,800,137	2,834,617	-	-	2,834,617
2006	793,457	814,977	-	-	814,977
2007	1,555,214	1,365,382	-	-	1,365,382
2008	705,588	742,165	-	-	742,165
2009	909,114	890,012	928,890	896,454	909,114
2010	757,968	730,904	800,125	743,620	730,904
2011	1,722,861	1,848,437	1,397,904	1,782,803	1,848,437
2012	305,720	330,875	538,315	368,785	330,875
2013	1,693,311	1,481,410	1,419,335	1,422,439	1,481,410
2014	1,047,794	864,369	947,853	852,172	864,369
2015	161,451	118,548	338,601	173,283	118,548
2016	1,236,738	1,376,272	1,025,874	1,297,984	1,376,272
2017	1,019,739	762,785	860,603	742,086	841,536
2018	1,174,605	928,385	930,211	868,904	1,051,495
2019	577,246	607,244	559,680	594,866	593,119
2020	289,211	356,075	370,981	384,249	350,129
2021	271,811	208,026	382,140	263,333	382,140
2022	633,454	830,965	516,672	739,992	785,479
2023	485,478	356,099	440,647	375,752	485,478
2024	474,162	500,695	409,371	464,950	500,695
2025	310,787	741,483	371,695	512,619	541,932
TOTAL	152,724,201	151,672,921	12,238,895	12,484,292	151,932,270

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance AST
Summary of Ultimate Losses

(1) RY	(2) PAID LDM ULTIMATE	(3) INC LDM ULTIMATE	(4) PAID BF ULTIMATE	(5) INC BF ULTIMATE	(6) SELECTED ULTIMATE
1994	-	-	-	-	-
1995	-	-	-	-	-
1996	-	-	-	-	-
1997	-	-	-	-	-
1998	478,042	478,042	-	-	478,042
1999	2,689,230	2,689,230	-	-	2,689,230
2000	1,195,793	1,195,793	-	-	1,195,793
2001	6,675,614	6,675,614	-	-	6,675,614
2002	2,126,290	2,099,064	-	-	2,099,064
2003	1,607,917	1,607,917	-	-	1,607,917
2004	3,424,778	3,424,778	-	-	3,424,778
2005	2,153,485	2,153,485	-	-	2,153,485
2006	2,351,840	2,351,840	-	-	2,351,840
2007	1,281,735	1,173,609	-	-	1,173,609
2008	581,362	581,362	-	-	581,362
2009	1,040,668	963,638	1,076,304	963,852	1,002,153
2010	1,434,006	1,449,652	1,200,548	1,449,544	1,449,652
2011	1,467,447	1,483,458	1,534,615	1,489,962	1,483,458
2012	2,997,721	2,636,418	2,934,222	2,635,562	2,817,070
2013	1,344,459	1,295,878	1,606,197	1,333,958	1,395,123
2014	844,706	901,454	834,409	1,029,310	965,382
2015	1,740,457	1,823,079	2,044,784	1,911,663	2,044,784
2016	2,432,608	2,645,380	2,374,677	2,679,887	2,662,633
2017	4,824,686	5,389,013	4,085,862	5,155,930	4,766,520
2018	3,455,412	4,182,813	3,376,940	4,004,522	3,754,922
2019	6,122,048	6,177,257	4,919,427	5,594,239	6,149,653
2020	2,060,993	2,218,282	2,686,470	2,501,284	2,468,679
2021	4,815,156	5,160,232	4,079,579	4,667,573	4,680,635
2022	3,430,498	3,750,359	3,475,902	3,668,523	3,581,321
2023	2,851,825	2,917,686	3,325,372	3,152,737	3,325,372
2024	4,905,836	3,289,401	3,811,884	3,406,614	3,502,633
2025	8,266,508	6,596,673	4,235,256	4,852,007	4,852,007
TOTAL	78,601,119	77,311,410	47,602,447	50,497,167	75,332,732

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance AST
Summary of Case & IBNR Reserves

(1) RY	(2) SELECTED ULTIMATE	(3) PAID LOSS	(4) INCURRED LOSS	(5) CASE RESERVE	(6) IBNR RESERVE	(7) UNPAID LOSS
1994	-	-	-	-	-	-
1995	-	-	-	-	-	-
1996	-	-	-	-	-	-
1997	-	-	-	-	-	-
1998	478,042	478,042	478,042	-	-	-
1999	2,689,230	2,532,831	2,689,230	156,399	-	156,399
2000	1,195,793	1,195,793	1,195,793	-	-	-
2001	6,675,614	6,311,605	6,675,614	364,009	-	364,009
2002	2,099,064	2,020,996	2,099,064	78,068	-	78,068
2003	1,607,917	1,432,117	1,607,917	175,800	-	175,800
2004	3,424,778	2,780,056	3,424,778	644,722	-	644,722
2005	2,153,485	1,772,836	2,153,485	380,649	-	380,649
2006	2,351,840	2,098,796	2,351,840	253,044	-	253,044
2007	1,173,609	1,173,608	1,173,609	1	-	1
2008	581,362	581,362	581,362	-	-	-
2009	1,002,153	923,112	963,112	40,000	39,041	79,041
2010	1,449,652	1,021,835	1,434,006	412,171	15,647	427,818
2011	1,483,458	1,251,474	1,467,447	215,973	16,012	231,984
2012	2,817,070	2,523,473	2,580,049	56,577	237,021	293,597
2013	1,395,123	1,096,165	1,262,213	166,048	132,910	298,958
2014	965,382	195,732	844,706	648,974	120,676	769,650
2015	2,044,784	1,321,825	1,686,521	364,696	358,263	722,959
2016	2,662,633	1,530,087	2,432,608	902,522	230,025	1,132,547
2017	4,766,520	3,015,311	4,824,686	1,809,375	(58,165)	1,751,209
2018	3,754,922	2,127,503	3,382,293	1,254,790	372,629	1,627,419
2019	6,149,653	3,486,879	4,913,212	1,426,333	1,236,441	2,662,774
2020	2,468,679	1,100,406	1,688,380	587,974	780,299	1,368,273
2021	4,680,635	2,178,304	3,654,450	1,476,145	1,026,186	2,502,331
2022	3,581,321	1,322,847	2,502,537	1,179,690	1,078,784	2,258,473
2023	3,325,372	818,036	1,771,154	953,118	1,554,218	2,507,336
2024	3,502,633	953,763	1,797,737	843,974	1,704,896	2,548,870
2025	4,852,007	1,057,619	2,699,078	1,641,459	2,152,929	3,794,388
TOTAL	75,332,732	48,302,412	64,334,922	16,032,510	10,997,810	27,030,320

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Remedial AST
Summary of Ultimate Losses

(1)	(2)	(3)	(4)	(5)	(6)
	PAID LDM	INC LDM	PAID BF	INC BF	SELECTED
RY	ULTIMATE	ULTIMATE	ULTIMATE	ULTIMATE	ULTIMATE
1994	-	-	-	-	-
1995	106,826	106,826	-	-	106,826
1996	109,456	109,456	-	-	109,456
1997	-	-	-	-	-
1998	662,628	662,628	-	-	662,628
1999	1,765,095	1,765,095	-	-	1,765,095
2000	6,086,837	6,086,837	-	-	6,086,837
2001	2,289,597	2,289,597	-	-	2,289,597
2002	239,493	239,493	-	-	239,493
2003	555,224	555,224	-	-	555,224
2004	2,127,247	2,074,609	-	-	2,127,247
2005	79,838	79,838	-	-	79,838
2006	-	-	-	-	-
2007	41,750	41,750	-	-	41,750
2008	51,787	51,787	-	-	51,787
2009	183,657	183,657	189,286	183,657	183,657
2010	-	-	6,603	-	-
2011	-	-	7,810	1,391	-
2012	-	-	8,779	1,416	-
2013	-	-	9,907	1,509	-
2014	-	-	11,017	3,599	-
2015	155,510	177,179	167,923	159,975	155,510
2016	-	-	15,885	6,371	-
2017	59,359	75,066	77,532	67,302	59,359
2018	-	-	20,923	8,098	-
2019	-	-	23,469	9,554	-
2020	61,158	83,073	86,972	71,775	61,158
2021	75,000	109,760	49,752	87,994	109,760
2022	-	-	30,299	13,364	-
2023	-	-	33,795	13,632	-
2024	-	-	39,207	17,985	-
2025	-	-	41,989	27,996	-
TOTAL	14,650,462	14,691,874	821,147	675,621	14,685,222

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Remedial AST
Summary of Case & IBNR Reserves

(1) RY	(2) SELECTED ULTIMATE	(3) PAID LOSS	(4) INCURRED LOSS	(5) CASE RESERVE	(6) IBNR RESERVE	(7) UNPAID LOSS
1994	-	-	-	-	-	-
1995	106,826	106,826	106,826	-	-	-
1996	109,456	109,456	109,456	-	-	-
1997	-	-	-	-	-	-
1998	662,628	662,628	662,628	-	-	-
1999	1,765,095	1,611,477	1,765,095	153,618	-	153,618
2000	6,086,837	4,786,957	6,086,837	1,299,880	-	1,299,880
2001	2,289,597	1,776,397	2,289,597	513,200	-	513,200
2002	239,493	239,493	239,493	-	-	-
2003	555,224	555,224	555,224	-	-	-
2004	2,127,247	1,937,099	2,074,609	137,511	52,637	190,148
2005	79,838	79,838	79,838	-	-	-
2006	-	-	-	-	-	-
2007	41,750	41,750	41,750	-	-	-
2008	51,787	51,787	51,787	-	-	-
2009	183,657	183,657	183,657	-	-	-
2010	-	-	-	-	-	-
2011	-	-	-	-	-	-
2012	-	-	-	-	-	-
2013	-	-	-	-	-	-
2014	-	-	-	-	-	-
2015	155,510	155,510	155,510	-	-	-
2016	-	-	-	-	-	-
2017	59,359	59,359	59,359	-	-	-
2018	-	-	-	-	-	-
2019	-	-	-	-	-	-
2020	61,158	61,158	61,158	-	-	-
2021	109,760	21,658	75,000	53,342	34,760	88,102
2022	-	-	-	-	-	-
2023	-	-	-	-	-	-
2024	-	-	-	-	-	-
2025	-	-	-	-	-	-
TOTAL	14,685,222	12,440,274	14,597,825	2,157,551	87,397	2,244,948

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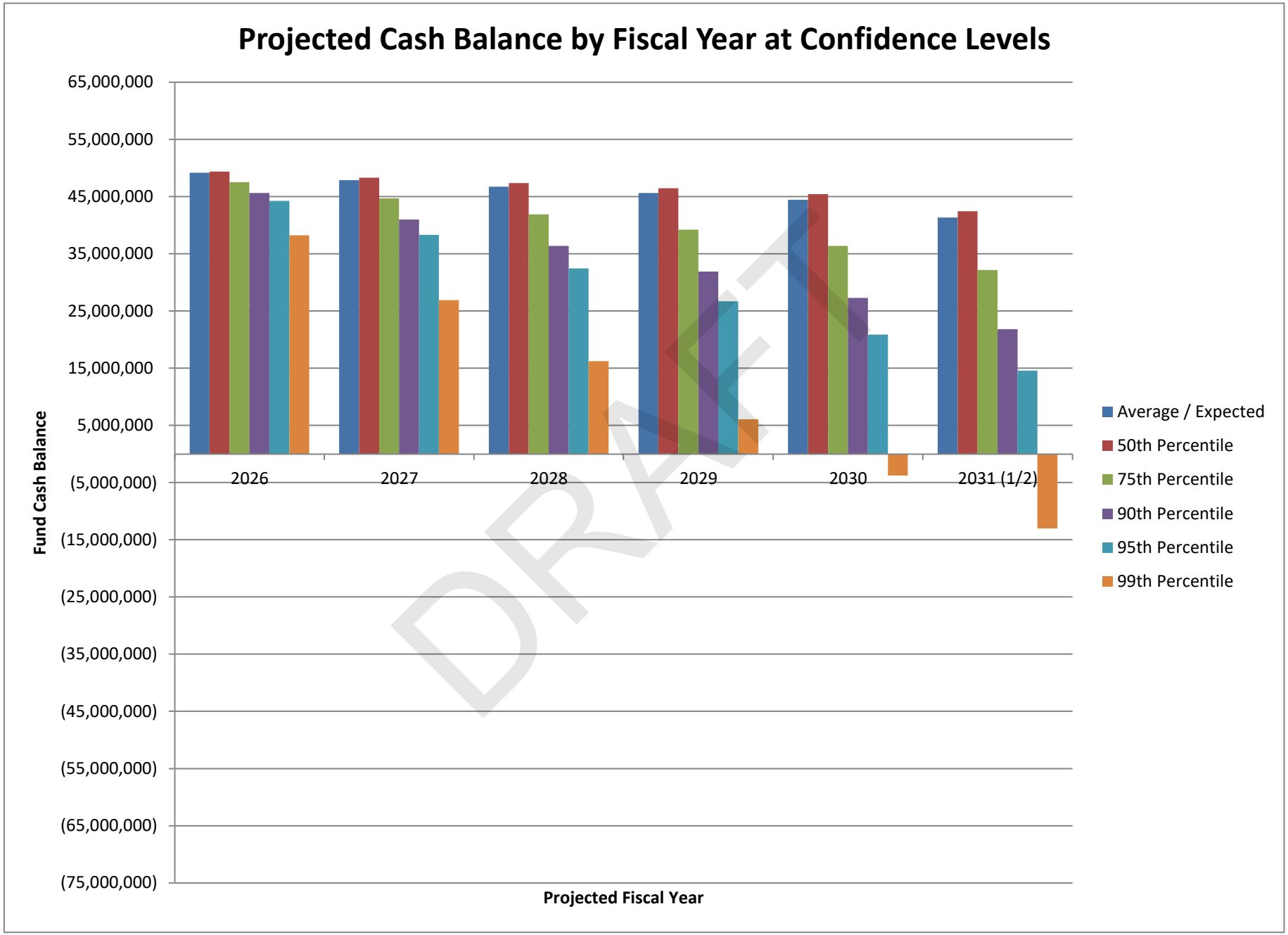
Projected Cash Balance by Fiscal Year at Confidence Levels
65,000,000
55,000,000
45,000,000
35,000,000
25,000,000
15,000,000
5,000,000
(5,000,000)
(15,000,000)
(25,000,000)
(35,000,000)
(45,000,000)
(55,000,000)
(65,000,000)
(75,000,000)
Fund Cash Balance
2026
2027
2028
2029
2030
2031 (1/2)
Projected Fiscal Year
Average / Expected
50th Percentile
75th Percentile
90th Percentile
95th Percentile
99th Percentile
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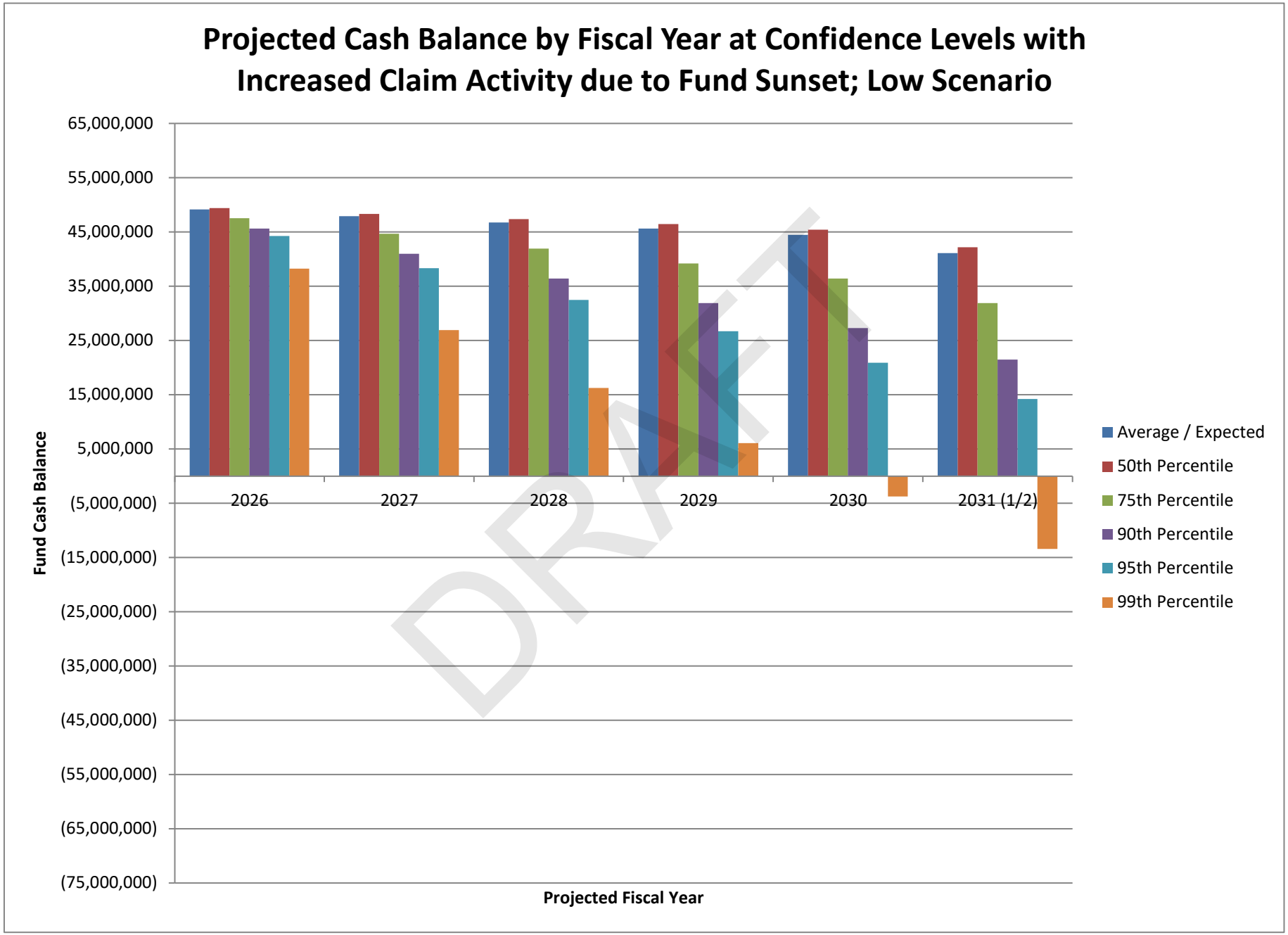
Projected Cash Balance by Fiscal Year at Confidence Levels with Increased Claim Activity due to Fund Sunset; Low Scenario
65,000,000
55,000,000
45,000,000
35,000,000
25,000,000
15,000,000
5,000,000
(5,000,000)
(15,000,000)
(25,000,000)
(35,000,000)
(45,000,000)
(55,000,000)
(65,000,000)
(75,000,000)
Fund Cash Balance
2026
2027
2028
2029
2030
2031 (1/2)
Projected Fiscal Year
Average / Expected
50th Percentile
75th Percentile
90th Percentile
95th Percentile
99th Percentile
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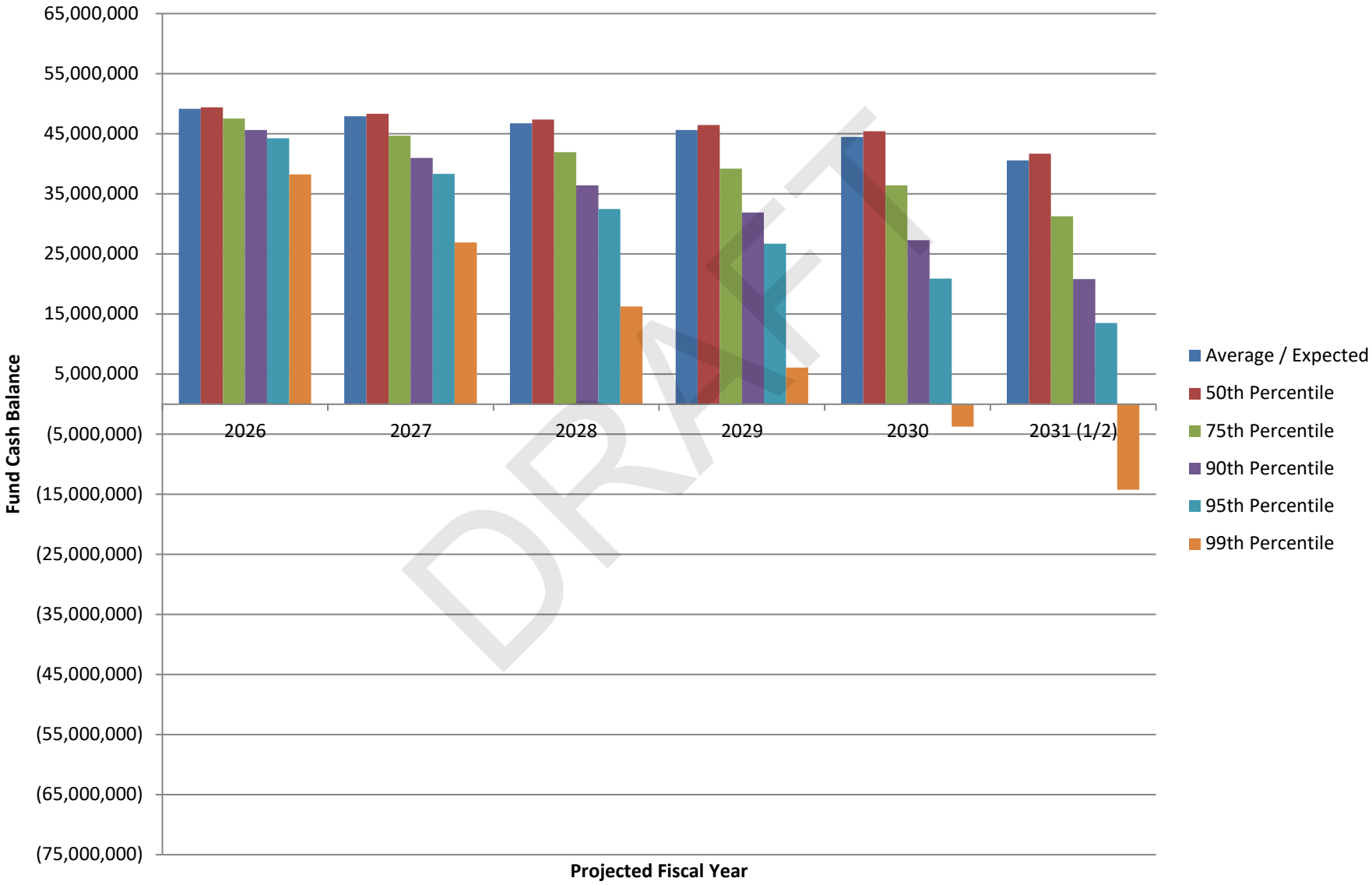
Projected Cash Balance by Fiscal Year at Confidence Levels with Increased Claim Activity due to Fund Sunset; Middle Scenario



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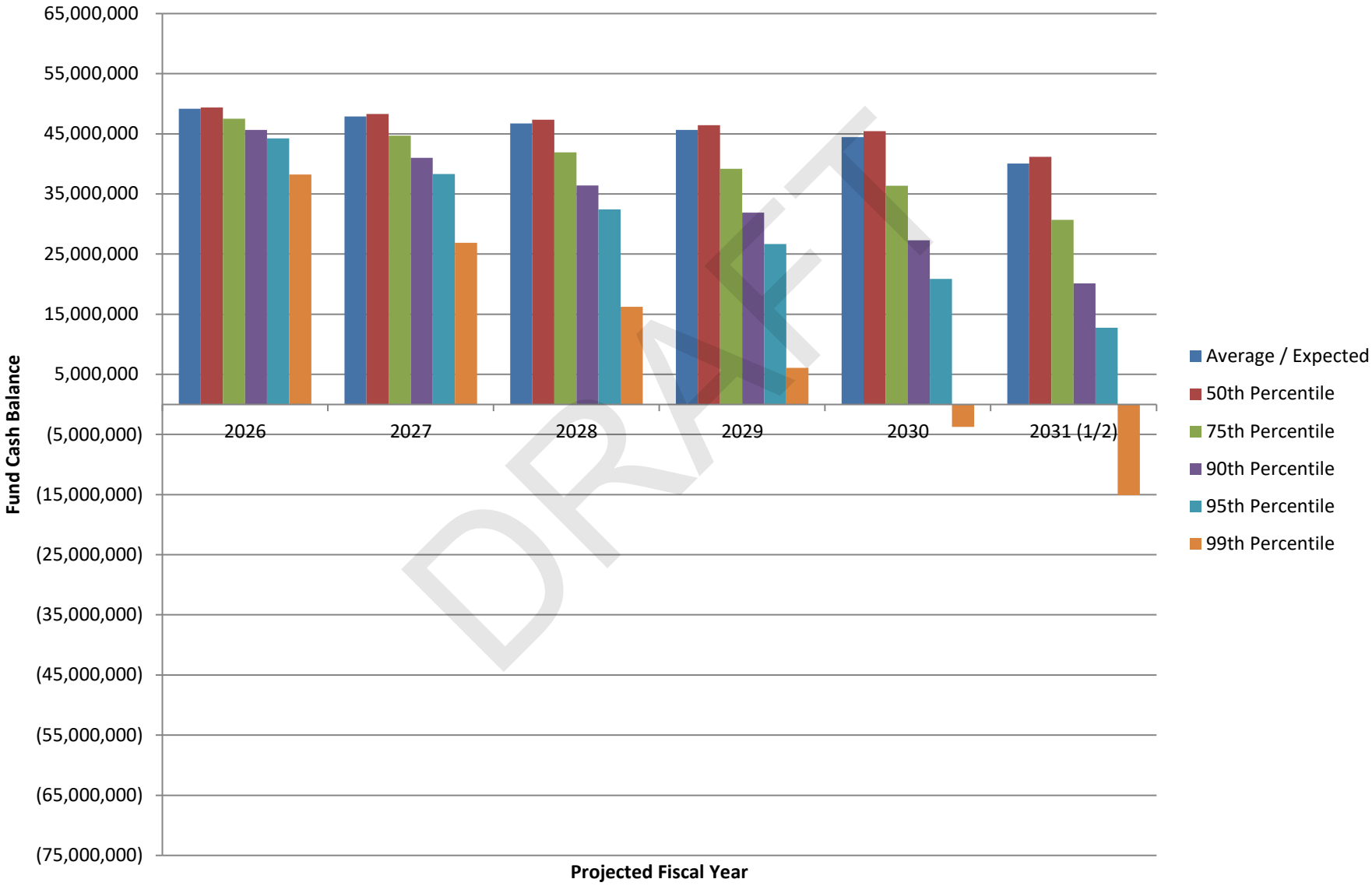
Projected Cash Balance by Fiscal Year at Confidence Levels with Increased Claim Activity due to Fund Sunset; High Scenario



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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
All Claim Types
Financial Projections Based on PSTIF 2025 Projections

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
	Annual Revenues Fiscal Year:	2026	2027	2028	2029	2030	2031 (1/2)	Totals
(1)	Transport load fees	16,000,000	15,950,000	15,900,000	15,850,000	15,800,000	7,875,000	87,375,000
(2)	100 Initial tank fees	12,000	12,000	12,000	12,000	12,000	6,000	66,000
(3)	UST participation fees	775,000	775,000	775,000	775,000	775,000	387,500	4,262,500
(4)	AST participation fees	307,000	307,000	307,000	307,000	307,000	153,500	1,688,500
(5)	Interest income	1,493,700	746,639	727,809	709,659	692,767	337,757	4,708,331
(6)	Total Revenues	18,587,700	17,790,639	17,721,809	17,653,659	17,586,767	8,759,757	98,100,331
	Administrative Expenses Fiscal Year:	2026	2027	2028	2029	2030	2031 (1/2)	Totals
(7)	Contracted Fund Administrator Expenses	1,633,185	1,600,521	1,568,511	1,537,141	1,506,398	738,135	8,583,891
(8)	Contingency & Special Projects	75,000	75,000	75,000	75,000	75,000	37,500	412,500
(9)	Office of Administration	125,328	129,088	132,960	136,949	141,058	72,645	738,028
(10)	OA State Accounting Software	76,439	-	-	-	-	-	76,439
(11)	Section 319.107 Expenses	10,000	10,300	10,609	10,927	11,255	5,796	58,888
(12)	Underwriting	695,100	715,953	737,432	759,555	782,341	402,906	4,093,286
(13)	Inspections	386,550	469,642	302,742	361,544	481,842	155,244	2,157,563
(14)	Training & Loss Prevention Services	6,000	6,180	6,365	6,556	6,753	3,478	35,333
(15)	Other Legal and Litigation Costs	50,000	51,500	53,045	54,636	56,275	28,982	294,439
(16)	Other Contract Administrative Costs	434,940	447,988	461,428	475,271	489,529	252,107	2,561,263
(17)	Audit	22,525	23,201	23,897	24,614	25,352	13,056	132,645
(18)	Actuarial Analyses	17,350	17,350	17,350	17,350	17,350	17,350	104,100
(19)	Department of Revenue	62,420	64,293	66,221	68,208	70,254	36,181	367,577
(20)	Attorney General's Office	55,503	57,168	58,883	60,650	62,469	32,172	326,845
(21)	PSTIF Board/Staff	527,647	543,476	559,781	576,574	593,871	305,844	3,107,193
(22)	Department of Natural Resources	2,592,088	2,669,851	2,749,946	2,832,445	2,917,418	1,502,470	15,264,217
(23)	Total Administrative Expenses	6,770,075	6,881,510	6,824,170	6,997,419	7,237,165	3,603,865	38,314,206
	Claim Payments Fiscal Year:	2026	2027	2028	2029	2030	2031 (1/2)	Totals
(24)	Average / Expected	13,056,158	12,181,228	12,045,615	11,760,484	11,545,764	8,264,369	68,853,619
(25)	50th Percentile Losses	12,841,519	11,981,722	11,849,820	11,570,216	11,360,863	8,137,968	67,742,108
(26)	75th Percentile Losses	14,695,854	13,757,082	13,664,647	13,370,490	13,156,231	9,373,303	78,017,607
(27)	90th Percentile Losses	16,584,471	15,554,334	15,490,784	15,174,318	14,948,156	10,612,650	88,364,713
(28)	95th Percentile Losses	17,968,055	16,846,251	16,765,555	16,414,028	16,159,183	11,461,011	95,614,084
(29)	99th Percentile Losses	23,985,671	22,245,434	21,555,741	20,815,221	20,180,089	14,426,004	123,208,160
(30)	Cash balance @ 6/30/25	50,395,197						
	Funds Available at Fiscal Year-End:	2026	2027	2028	2029	2030	2031 (1/2)	
(31)	Average / Expected	49,156,664	47,884,564	46,736,588	45,632,343	44,436,181	41,327,703	
(32)	50th Percentile	49,371,303	48,298,710	47,346,528	46,432,552	45,421,291	42,439,215	
(33)	75th Percentile	47,516,968	44,669,015	41,902,007	39,187,756	36,381,126	32,163,715	
(34)	90th Percentile	45,628,351	40,983,146	36,390,001	31,871,922	27,273,367	21,816,609	
(35)	95th Percentile	44,244,767	38,307,644	32,439,727	26,681,938	20,872,357	14,567,238	
(36)	99th Percentile	38,227,151	26,890,845	16,232,744	6,073,762	(3,756,726)	(13,026,838)	

Notes: Rows (1) through (22) from Financial Projections provided by PSTIF with some minor differences due to rounding.

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
All Claim Types
Financial Projections Based on PSTIF 2025 Projections w/Increased Activity due to Sunset, Low Scenario

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
	Annual Revenues Fiscal Year:	2026	2027	2028	2029	2030	2031 (1/2)	Totals
(1)	Transport load fees	16,000,000	15,950,000	15,900,000	15,850,000	15,800,000	7,875,000	87,375,000
(2)	100 Initial tank fees	12,000	12,000	12,000	12,000	12,000	6,000	66,000
(3)	UST participation fees	775,000	775,000	775,000	775,000	775,000	387,500	4,262,500
(4)	AST participation fees	307,000	307,000	307,000	307,000	307,000	153,500	1,688,500
(5)	Interest income	1,493,700	746,639	727,809	709,659	692,767	337,757	4,708,331
(6)	Total Revenues	18,587,700	17,790,639	17,721,809	17,653,659	17,586,767	8,759,757	98,100,331
	Administrative Expenses Fiscal Year:	2026	2027	2028	2029	2030	2031 (1/2)	Totals
(7)	Contracted Fund Administrator Expenses	1,633,185	1,600,521	1,568,511	1,537,141	1,506,398	738,135	8,583,891
(8)	Contingency & Special Projects	75,000	75,000	75,000	75,000	75,000	37,500	412,500
(9)	Office of Administration	125,328	129,088	132,960	136,949	141,058	72,645	738,028
(10)	OA State Accounting Software	76,439	-	-	-	-	-	76,439
(11)	Section 319.107 Expenses	10,000	10,300	10,609	10,927	11,255	5,796	58,888
(12)	Underwriting	695,100	715,953	737,432	759,555	782,341	402,906	4,093,286
(13)	Inspections	386,550	469,642	302,742	361,544	481,842	155,244	2,157,563
(14)	Training & Loss Prevention Services	6,000	6,180	6,365	6,556	6,753	3,478	35,333
(15)	Other Legal and Litigation Costs	50,000	51,500	53,045	54,636	56,275	28,982	294,439
(16)	Other Contract Administrative Costs	434,940	447,988	461,428	475,271	489,529	252,107	2,561,263
(17)	Audit	22,525	23,201	23,897	24,614	25,352	13,056	132,645
(18)	Actuarial Analyses	17,350	17,350	17,350	17,350	17,350	17,350	104,100
(19)	Department of Revenue	62,420	64,293	66,221	68,208	70,254	36,181	367,577
(20)	Attorney General's Office	55,503	57,168	58,883	60,650	62,469	32,172	326,845
(21)	PSTIF Board/Staff	527,647	543,476	559,781	576,574	593,871	305,844	3,107,193
(22)	Department of Natural Resources	2,592,088	2,669,851	2,749,946	2,832,445	2,917,418	1,502,470	15,264,217
(23)	Total Administrative Expenses	6,770,075	6,881,510	6,824,170	6,997,419	7,237,165	3,603,865	38,314,206
	Claim Payments Fiscal Year:	2026	2027	2028	2029	2030	2031 (1/2)	Totals
(24)	Average / Expected	13,056,158	12,181,228	12,045,615	11,760,484	11,545,764	8,521,672	69,110,922
(25)	50th Percentile Losses	12,841,519	11,981,722	11,849,820	11,570,216	11,360,863	8,391,475	67,995,615
(26)	75th Percentile Losses	14,695,854	13,757,082	13,664,647	13,370,490	13,156,231	9,669,906	78,314,210
(27)	90th Percentile Losses	16,584,471	15,554,334	15,490,784	15,174,318	14,948,156	10,950,796	88,702,859
(28)	95th Percentile Losses	17,968,055	16,846,251	16,765,555	16,414,028	16,159,183	11,824,592	95,977,665
(29)	99th Percentile Losses	23,985,671	22,245,434	21,555,741	20,815,221	20,180,089	14,841,735	123,623,891
(30)	Cash balance @ 6/30/25	50,395,197						
	Funds Available at Fiscal Year-End:	2026	2027	2028	2029	2030	2031 (1/2)	
(31)	Average / Expected	49,156,664	47,884,564	46,736,588	45,632,343	44,436,181	41,070,400	
(32)	50th Percentile	49,371,303	48,298,710	47,346,528	46,432,552	45,421,291	42,185,707	
(33)	75th Percentile	47,516,968	44,669,015	41,902,007	39,187,756	36,381,126	31,867,112	
(34)	90th Percentile	45,628,351	40,983,146	36,390,001	31,871,922	27,273,367	21,478,463	
(35)	95th Percentile	44,244,767	38,307,644	32,439,727	26,681,938	20,872,357	14,203,657	
(36)	99th Percentile	38,227,151	26,890,845	16,232,744	6,073,762	(3,756,726)	(13,442,569)	

Notes: Rows (1) through (22) from Financial Projections provided by PSTIF with some minor differences due to rounding.

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
All Claim Types
Financial Projections Based on PSTIF 2025 Projections w/Increased Activity due to Sunset, Middle Scenario

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
	Annual Revenues Fiscal Year:	2026	2027	2028	2029	2030	2031 (1/2)	Totals
(1)	Transport load fees	16,000,000	15,950,000	15,900,000	15,850,000	15,800,000	7,875,000	87,375,000
(2)	100 Initial tank fees	12,000	12,000	12,000	12,000	12,000	6,000	66,000
(3)	UST participation fees	775,000	775,000	775,000	775,000	775,000	387,500	4,262,500
(4)	AST participation fees	307,000	307,000	307,000	307,000	307,000	153,500	1,688,500
(5)	Interest income	1,493,700	746,639	727,809	709,659	692,767	337,757	4,708,331
(6)	Total Revenues	18,587,700	17,790,639	17,721,809	17,653,659	17,586,767	8,759,757	98,100,331
	Administrative Expenses Fiscal Year:	2026	2027	2028	2029	2030	2031 (1/2)	Totals
(7)	Contracted Fund Administrator Expenses	1,633,185	1,600,521	1,568,511	1,537,141	1,506,398	738,135	8,583,891
(8)	Contingency & Special Projects	75,000	75,000	75,000	75,000	75,000	37,500	412,500
(9)	Office of Administration	125,328	129,088	132,960	136,949	141,058	72,645	738,028
(10)	OA State Accounting Software	76,439	-	-	-	-	-	76,439
(11)	Section 319.107 Expenses	10,000	10,300	10,609	10,927	11,255	5,796	58,888
(12)	Underwriting	695,100	715,953	737,432	759,555	782,341	402,906	4,093,286
(13)	Inspections	386,550	469,642	302,742	361,544	481,842	155,244	2,157,563
(14)	Training & Loss Prevention Services	6,000	6,180	6,365	6,556	6,753	3,478	35,333
(15)	Other Legal and Litigation Costs	50,000	51,500	53,045	54,636	56,275	28,982	294,439
(16)	Other Contract Administrative Costs	434,940	447,988	461,428	475,271	489,529	252,107	2,561,263
(17)	Audit	22,525	23,201	23,897	24,614	25,352	13,056	132,645
(18)	Actuarial Analyses	17,350	17,350	17,350	17,350	17,350	17,350	104,100
(19)	Department of Revenue	62,420	64,293	66,221	68,208	70,254	36,181	367,577
(20)	Attorney General's Office	55,503	57,168	58,883	60,650	62,469	32,172	326,845
(21)	PSTIF Board/Staff	527,647	543,476	559,781	576,574	593,871	305,844	3,107,193
(22)	Department of Natural Resources	2,592,088	2,669,851	2,749,946	2,832,445	2,917,418	1,502,470	15,264,217
(23)	Total Administrative Expenses	6,770,075	6,881,510	6,824,170	6,997,419	7,237,165	3,603,865	38,314,206
	Claim Payments Fiscal Year:	2026	2027	2028	2029	2030	2031 (1/2)	Totals
(24)	Average / Expected	13,056,158	12,181,228	12,045,615	11,760,484	11,545,764	9,036,279	69,625,528
(25)	50th Percentile Losses	12,841,519	11,981,722	11,849,820	11,570,216	11,360,863	8,898,490	68,502,630
(26)	75th Percentile Losses	14,695,854	13,757,082	13,664,647	13,370,490	13,156,231	10,263,111	78,907,415
(27)	90th Percentile Losses	16,584,471	15,554,334	15,490,784	15,174,318	14,948,156	11,627,088	89,379,151
(28)	95th Percentile Losses	17,968,055	16,846,251	16,765,555	16,414,028	16,159,183	12,551,753	96,704,825
(29)	99th Percentile Losses	23,985,671	22,245,434	21,555,741	20,815,221	20,180,089	15,673,197	124,455,353
(30)	Cash balance @ 6/30/25	50,395,197						
	Funds Available at Fiscal Year-End:	2026	2027	2028	2029	2030	2031 (1/2)	
(31)	Average / Expected	49,156,664	47,884,564	46,736,588	45,632,343	44,436,181	40,555,794	
(32)	50th Percentile	49,371,303	48,298,710	47,346,528	46,432,552	45,421,291	41,678,692	
(33)	75th Percentile	47,516,968	44,669,015	41,902,007	39,187,756	36,381,126	31,273,907	
(34)	90th Percentile	45,628,351	40,983,146	36,390,001	31,871,922	27,273,367	20,802,171	
(35)	95th Percentile	44,244,767	38,307,644	32,439,727	26,681,938	20,872,357	13,476,497	
(36)	99th Percentile	38,227,151	26,890,845	16,232,744	6,073,762	(3,756,726)	(14,274,031)	

Notes: Rows (1) through (22) from Financial Projections provided by PSTIF with some minor differences due to rounding.

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
All Claim Types
Financial Projections Based on PSTIF 2025 Projections w/Increased Activity due to Sunset, High Scenario

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
	Annual Revenues Fiscal Year:	2026	2027	2028	2029	2030	2031 (1/2)	Totals
(1)	Transport load fees	16,000,000	15,950,000	15,900,000	15,850,000	15,800,000	7,875,000	87,375,000
(2)	100 Initial tank fees	12,000	12,000	12,000	12,000	12,000	6,000	66,000
(3)	UST participation fees	775,000	775,000	775,000	775,000	775,000	387,500	4,262,500
(4)	AST participation fees	307,000	307,000	307,000	307,000	307,000	153,500	1,688,500
(5)	Interest income	1,493,700	746,639	727,809	709,659	692,767	337,757	4,708,331
(6)	Total Revenues	18,587,700	17,790,639	17,721,809	17,653,659	17,586,767	8,759,757	98,100,331
	Administrative Expenses Fiscal Year:	2026	2027	2028	2029	2030	2031 (1/2)	Totals
(7)	Contracted Fund Administrator Expenses	1,633,185	1,600,521	1,568,511	1,537,141	1,506,398	738,135	8,583,891
(8)	Contingency & Special Projects	75,000	75,000	75,000	75,000	75,000	37,500	412,500
(9)	Office of Administration	125,328	129,088	132,960	136,949	141,058	72,645	738,028
(10)	OA State Accounting Software	76,439	-	-	-	-	-	76,439
(11)	Section 319.107 Expenses	10,000	10,300	10,609	10,927	11,255	5,796	58,888
(12)	Underwriting	695,100	715,953	737,432	759,555	782,341	402,906	4,093,286
(13)	Inspections	386,550	469,642	302,742	361,544	481,842	155,244	2,157,563
(14)	Training & Loss Prevention Services	6,000	6,180	6,365	6,556	6,753	3,478	35,333
(15)	Other Legal and Litigation Costs	50,000	51,500	53,045	54,636	56,275	28,982	294,439
(16)	Other Contract Administrative Costs	434,940	447,988	461,428	475,271	489,529	252,107	2,561,263
(17)	Audit	22,525	23,201	23,897	24,614	25,352	13,056	132,645
(18)	Actuarial Analyses	17,350	17,350	17,350	17,350	17,350	17,350	104,100
(19)	Department of Revenue	62,420	64,293	66,221	68,208	70,254	36,181	367,577
(20)	Attorney General's Office	55,503	57,168	58,883	60,650	62,469	32,172	326,845
(21)	PSTIF Board/Staff	527,647	543,476	559,781	576,574	593,871	305,844	3,107,193
(22)	Department of Natural Resources	2,592,088	2,669,851	2,749,946	2,832,445	2,917,418	1,502,470	15,264,217
(23)	Total Administrative Expenses	6,770,075	6,881,510	6,824,170	6,997,419	7,237,165	3,603,865	38,314,206
	Claim Payments Fiscal Year:	2026	2027	2028	2029	2030	2031 (1/2)	Totals
(24)	Average / Expected	13,056,158	12,181,228	12,045,615	11,760,484	11,545,764	9,550,885	70,140,134
(25)	50th Percentile Losses	12,841,519	11,981,722	11,849,820	11,570,216	11,360,863	9,405,505	69,009,645
(26)	75th Percentile Losses	14,695,854	13,757,082	13,664,647	13,370,490	13,156,231	10,856,317	79,500,621
(27)	90th Percentile Losses	16,584,471	15,554,334	15,490,784	15,174,318	14,948,156	12,303,380	90,055,443
(28)	95th Percentile Losses	17,968,055	16,846,251	16,765,555	16,414,028	16,159,183	13,278,913	97,431,986
(29)	99th Percentile Losses	23,985,671	22,245,434	21,555,741	20,815,221	20,180,089	16,504,658	125,286,814
(30)	Cash balance @ 6/30/25	50,395,197						
	Funds Available at Fiscal Year-End:	2026	2027	2028	2029	2030	2031 (1/2)	
(31)	Average / Expected	49,156,664	47,884,564	46,736,588	45,632,343	44,436,181	40,041,188	
(32)	50th Percentile	49,371,303	48,298,710	47,346,528	46,432,552	45,421,291	41,171,677	
(33)	75th Percentile	47,516,968	44,669,015	41,902,007	39,187,756	36,381,126	30,680,701	
(34)	90th Percentile	45,628,351	40,983,146	36,390,001	31,871,922	27,273,367	20,125,879	
(35)	95th Percentile	44,244,767	38,307,644	32,439,727	26,681,938	20,872,357	12,749,336	
(36)	99th Percentile	38,227,151	26,890,845	16,232,744	6,073,762	(3,756,726)	(15,105,492)	

Notes: Rows (1) through (22) from Financial Projections provided by PSTIF with some minor differences due to rounding.

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
All Claim Types
Financial Projection Cash Flow Detail

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(J)
	Claim Payments Arising from Current Reserves (Report Years 2025 and Prior)							
		2026	2027	2028	2029	2030	2031 (1/2)	Totals
(1)	50th Percentile Losses	11,680,489	9,939,323	8,631,300	7,447,963	6,575,384	5,632,105	49,906,563
(2)	75th Percentile Losses	13,335,560	11,347,610	9,860,442	8,500,108	7,502,489	6,410,827	56,957,035
(3)	90th Percentile Losses	15,033,337	12,790,499	11,117,838	9,577,026	8,451,125	7,206,541	64,176,365
(4)	95th Percentile Losses	16,299,307	13,862,963	12,039,237	10,366,711	9,141,105	7,780,665	69,489,989
(5)	99th Percentile Losses	22,075,827	18,814,411	16,102,777	13,843,672	12,094,654	10,184,703	93,116,044
(6)	Mean	11,877,805	10,104,960	8,771,715	7,567,830	6,678,981	5,715,726	50,717,017
	Claim Payments Arising from Future Claims (Report Years 2025 through 12/31/2031)							
		2026	2027	2028	2029	2030	2031 (1/2)	Totals
(7)	50th Percentile Losses	1,161,030	2,042,399	3,218,520	4,122,253	4,785,479	2,505,863	17,835,545
(8)	75th Percentile Losses	1,360,294	2,409,472	3,804,205	4,870,383	5,653,742	2,962,477	21,060,572
(9)	90th Percentile Losses	1,551,134	2,763,835	4,372,946	5,597,292	6,497,032	3,406,108	24,188,347
(10)	95th Percentile Losses	1,668,748	2,983,289	4,726,318	6,047,317	7,018,078	3,680,347	26,124,096
(11)	99th Percentile Losses	1,909,843	3,431,023	5,452,964	6,971,549	8,085,435	4,241,301	30,092,116
(12)	Mean	1,178,353	2,076,269	3,273,900	4,192,654	4,866,782	2,548,644	18,136,602
	Total Projected Claim Payments							
		2026	2027	2028	2029	2030	2031 (1/2)	Totals
(13)	50th Percentile Losses	12,841,519	11,981,722	11,849,820	11,570,216	11,360,863	8,137,968	67,742,108
(14)	75th Percentile Losses	14,695,854	13,757,082	13,664,647	13,370,490	13,156,231	9,373,303	78,017,607
(15)	90th Percentile Losses	16,584,471	15,554,334	15,490,784	15,174,318	14,948,156	10,612,650	88,364,713
(16)	95th Percentile Losses	17,968,055	16,846,251	16,765,555	16,414,028	16,159,183	11,461,011	95,614,084
(17)	99th Percentile Losses	23,985,671	22,245,434	21,555,741	20,815,221	20,180,089	14,426,004	123,208,160
(18)	Mean	13,056,158	12,181,228	12,045,615	11,760,484	11,545,764	8,264,369	68,853,619

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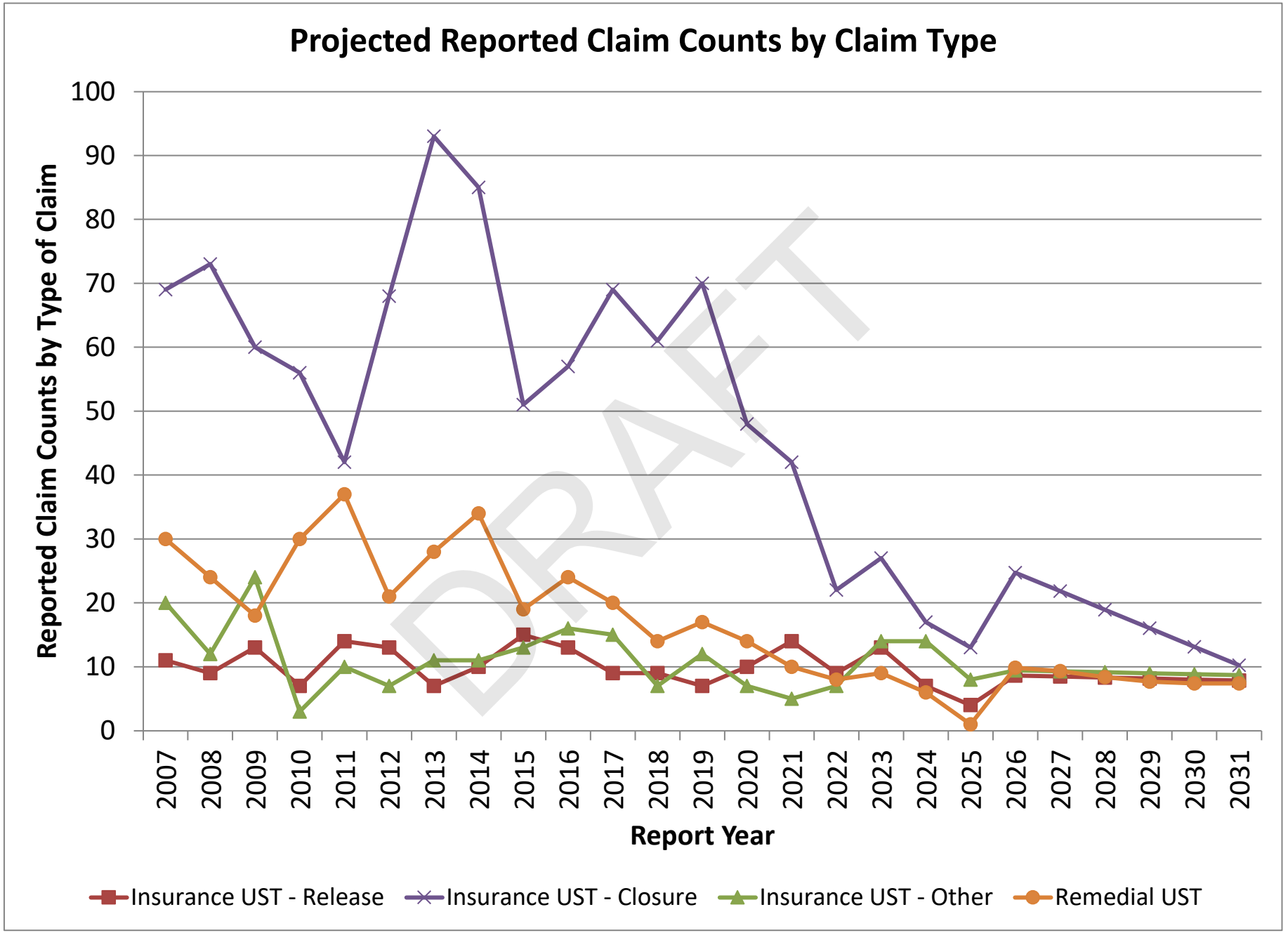
Projected Reported Claim Counts by Claim Type
Reported Claim Counts by Type of Claim
100
90
80
70
60
50
40
30
20
10
0
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
2029
2030
2031
Report Year
Insurance UST - Release
Insurance UST - Closure
Insurance UST - Other
Remedial UST
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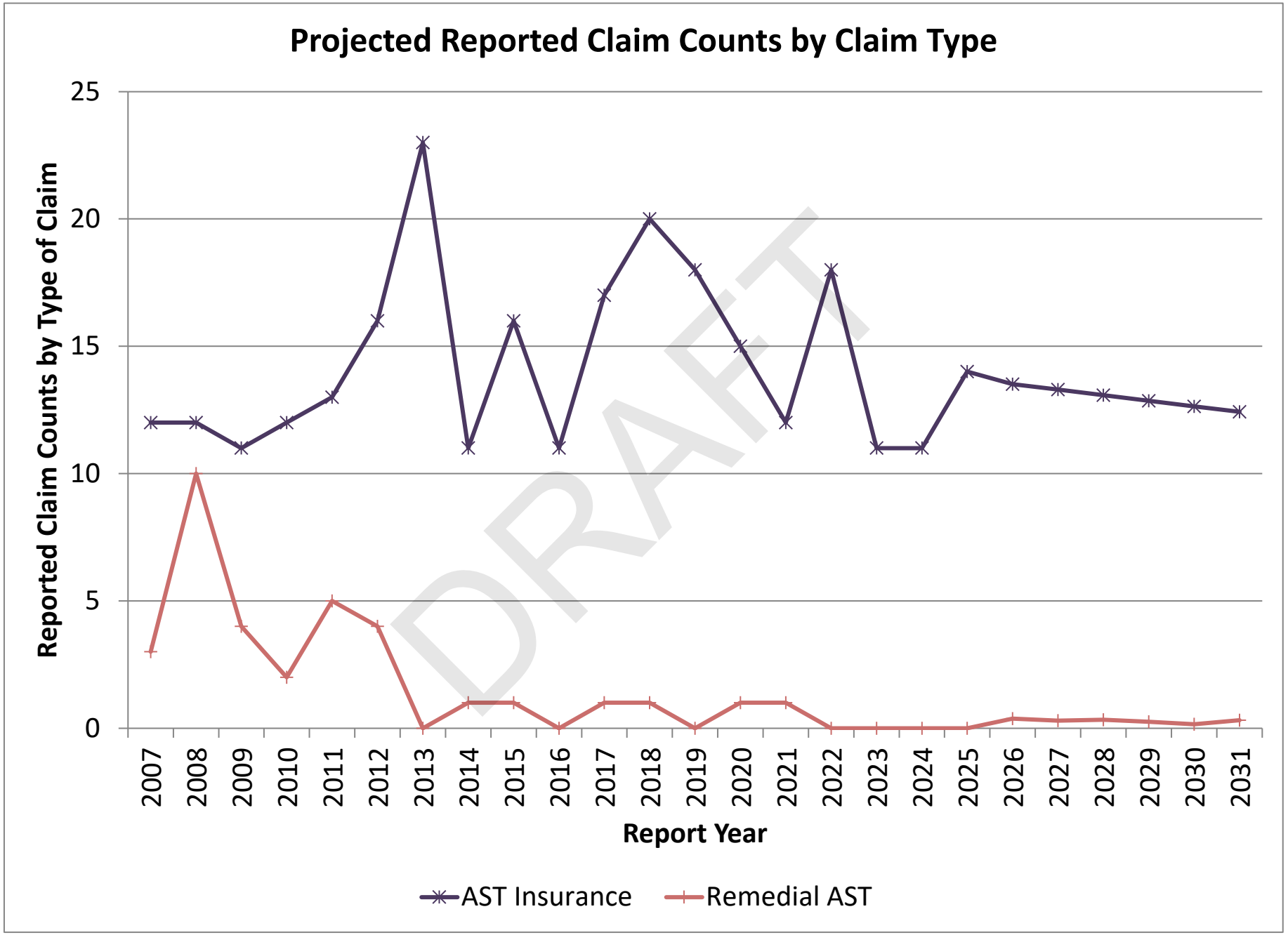
Projected Reported Claim Counts by Claim Type
Reported Claim Counts by Type of Claim
25
20
15
10
5
0
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
2029
2030
2031
Report Year
AST Insurance
Remedial AST
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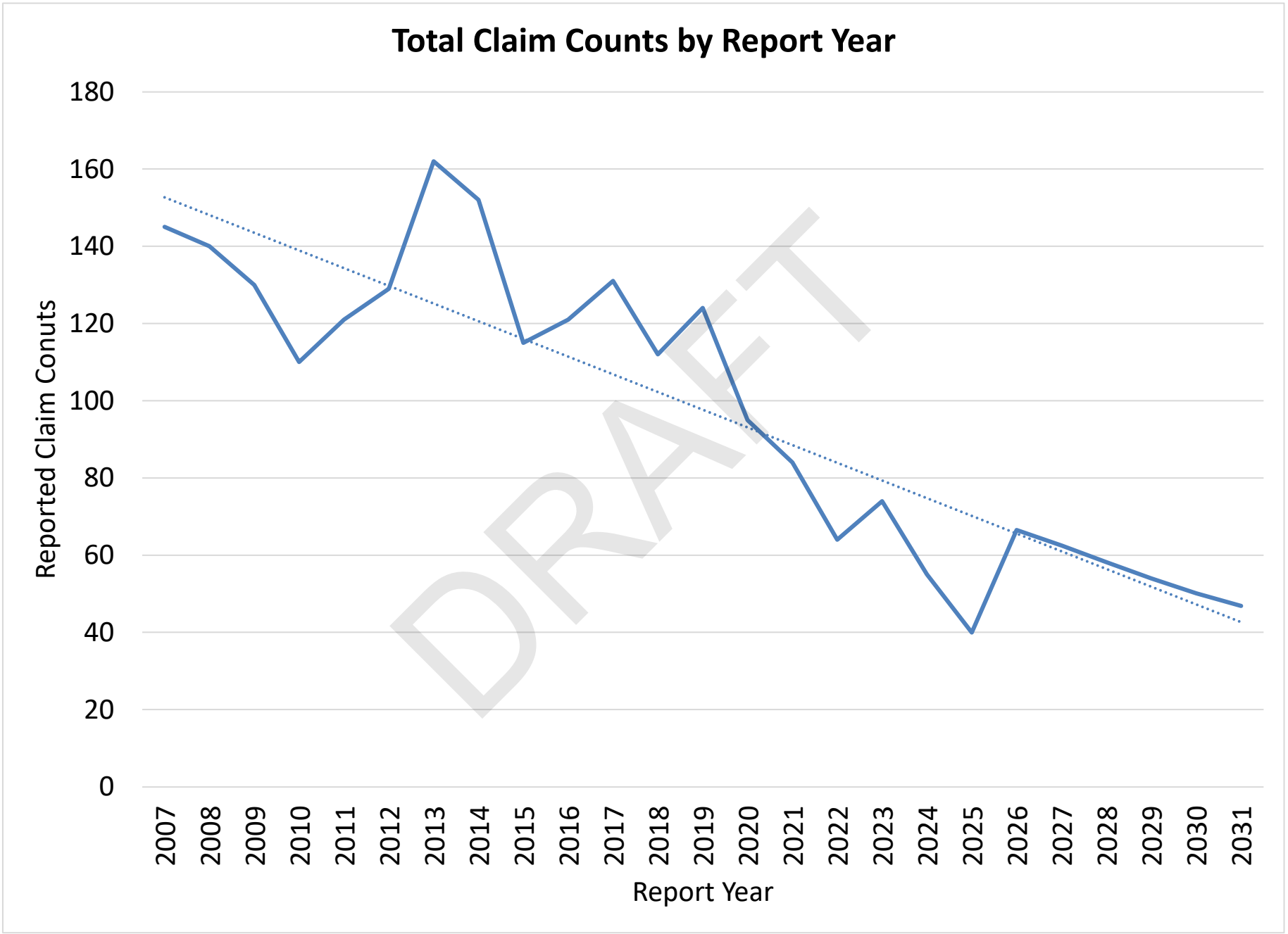
Total Claim Counts by Report Year
Reported Claim Conuts
180
160
140
120
100
80
60
40
20
0
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
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2031
Report Year
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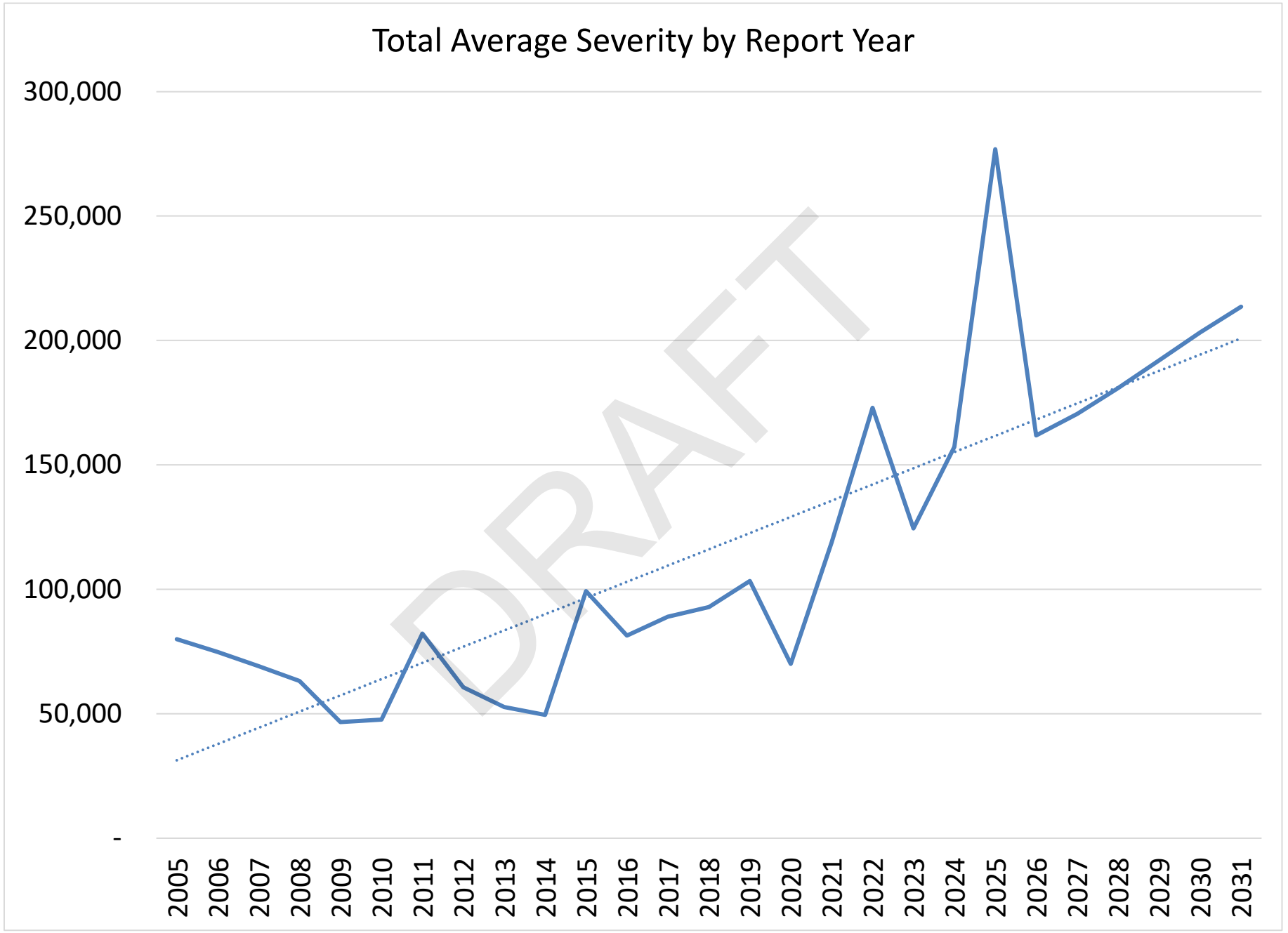
Total Average Severity by Report Year
300,000
250,000
200,000
150,000
100,000
50,000
-
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
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2029
2030
2031
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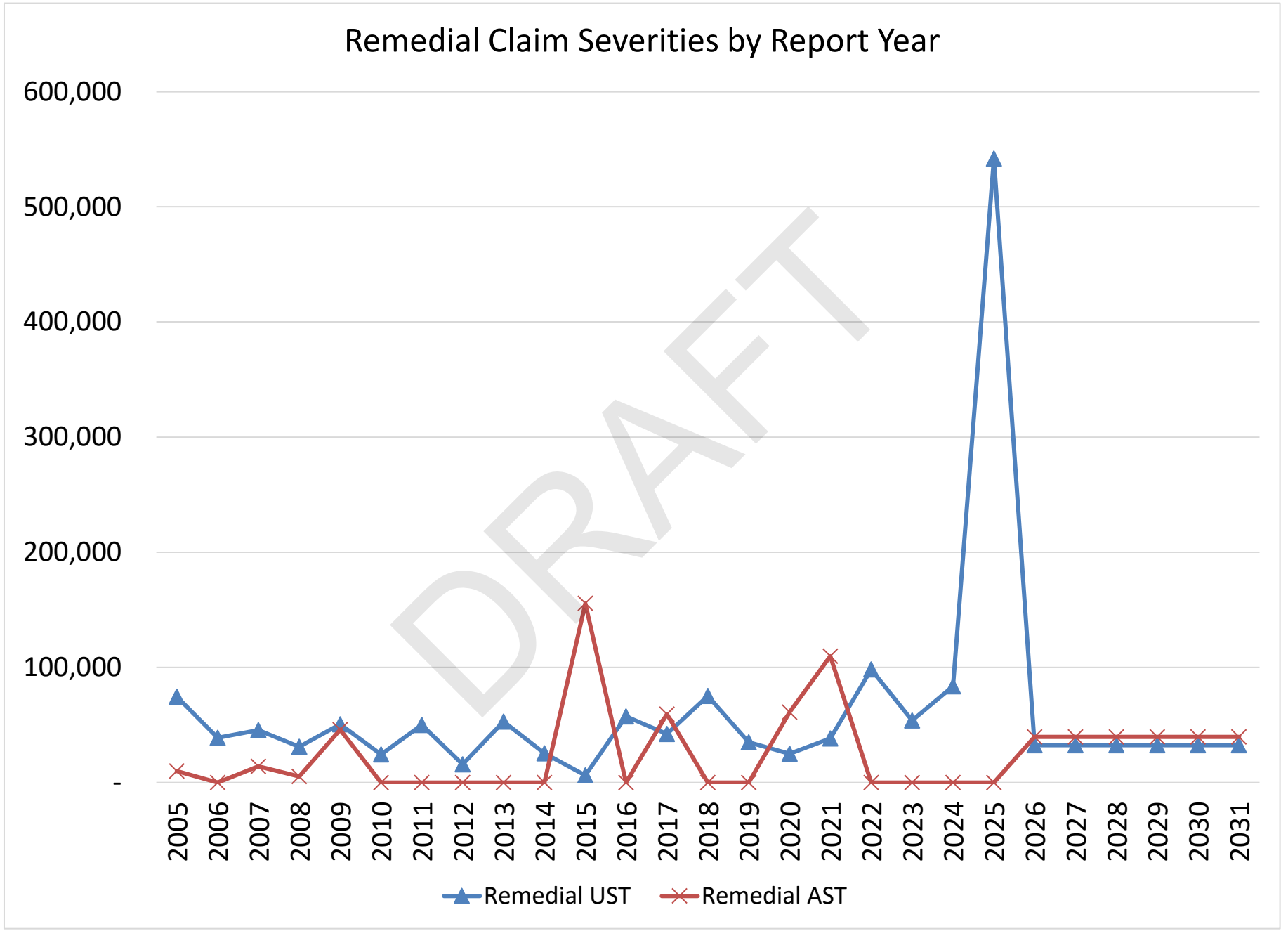
Remedial Claim Severities by Report Year
600,000
500,000
400,000
300,000
200,000
100,000
-
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
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2031
Remedial UST
Remedial AST
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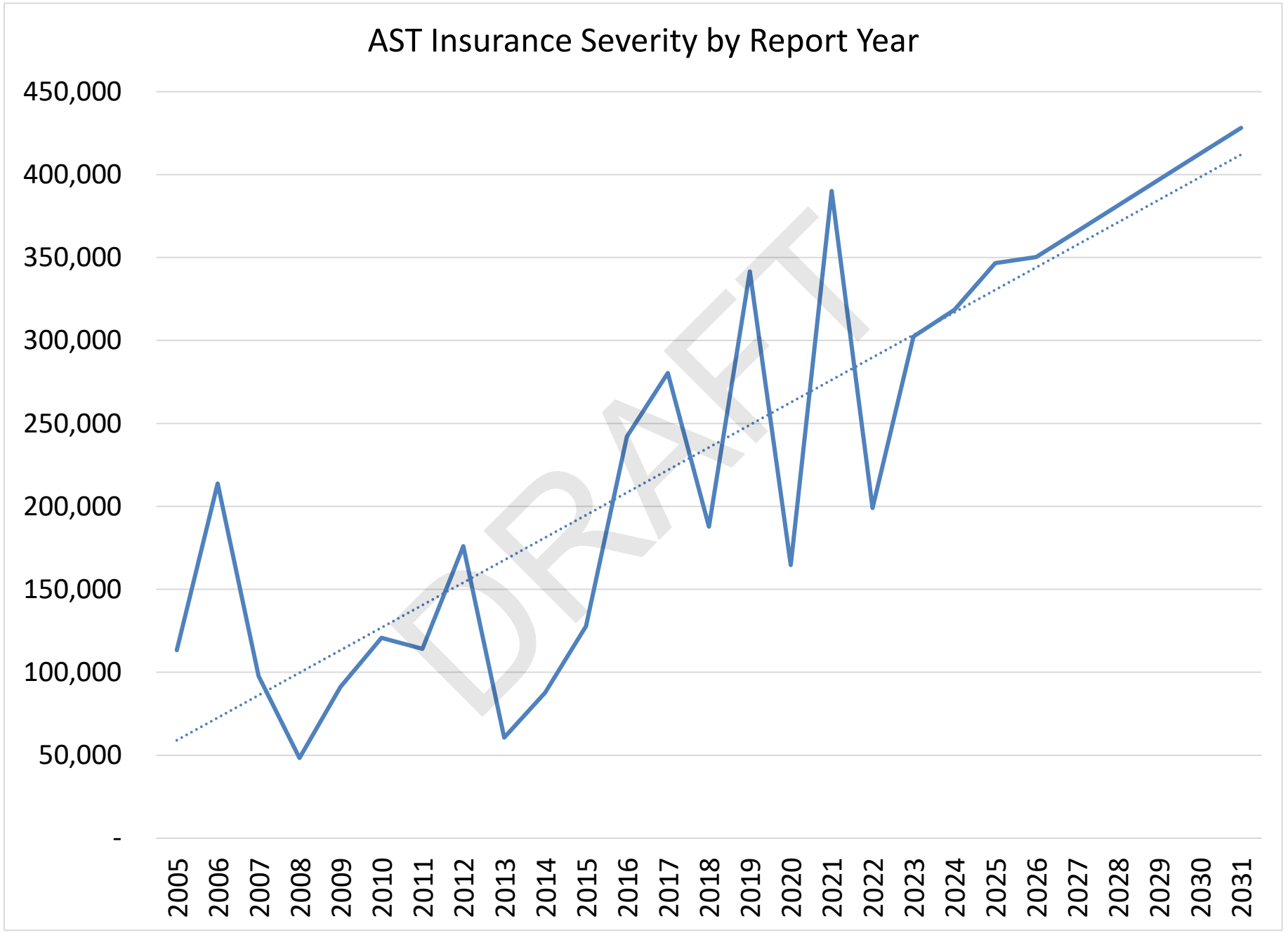
AST Insurance Severity by Report Year
450,000
400,000
350,000
300,000
250,000
200,000
150,000
100,000
50,000
-
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
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2027
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2030
2031
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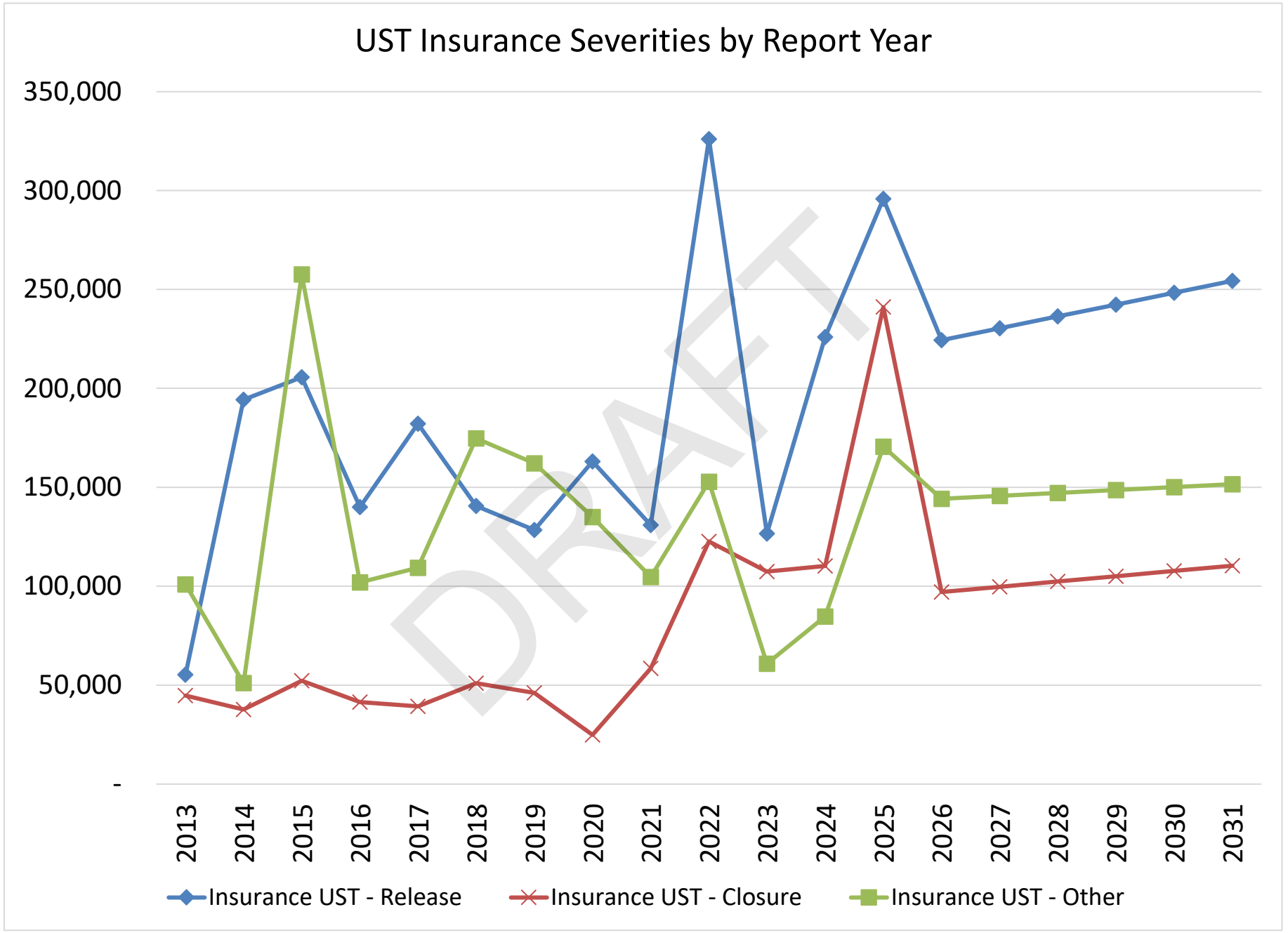
UST Insurance Severities by Report Year
350,000
300,000
250,000
200,000
150,000
100,000
50,000
-
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
2029
2030
2031
Insurance UST - Release
Insurance UST - Closure
Insurance UST - Other
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Ultimate Losses Projected Latest Year

	UST				AST	
RY	RELEASE	CLOSURE	OTHER	REMEDIAL	INSURANCE	REMEDIAL
2026	1,935,074	2,400,314	1,359,814	319,242	4,733,109	14,810
2027	1,950,242	2,177,107	1,351,997	302,479	4,863,815	11,725
2028	1,963,517	1,938,466	1,343,738	271,546	4,987,739	13,189
2029	1,974,899	1,684,389	1,335,039	248,841	5,104,881	9,901
2030	1,984,389	1,414,878	1,325,898	239,433	5,215,241	6,201
2031	995,993	564,966	658,159	119,641	2,659,409	6,200

Ultimate Losses Projected Prior Year

	UST				AST	
RY	RELEASE	CLOSURE	OTHER	REMEDIAL	INSURANCE	REMEDIAL
2025	2,499,622	2,424,175	1,037,984	469,103	3,774,570	19,164
2026	2,221,019	2,281,283	991,071	430,564	3,853,901	21,554
2027	2,289,925	2,131,298	942,278	403,325	3,929,745	19,457
2028	2,359,666	1,974,220	891,604	396,865	4,002,100	17,097
2029	2,430,241	1,810,048	839,050	377,518	4,070,966	19,230
2030	2,501,650	1,638,783	784,616	367,858	4,136,345	16,843
2031	2,573,894	1,460,426	728,301	373,125	4,198,235	14,156

Difference

	UST				AST	
RY	RELEASE	CLOSURE	OTHER	REMEDIAL	INSURANCE	REMEDIAL
2026	(285,945)	119,030	368,743	(111,322)	879,208	(6,744)
2027	(339,684)	45,809	409,719	(100,846)	934,070	(7,732)
2028	(396,149)	(35,754)	452,134	(125,319)	985,639	(3,909)
2029	(455,342)	(125,659)	495,988	(128,678)	1,033,914	(9,330)
2030	(517,261)	(223,906)	541,282	(128,425)	1,078,896	(10,642)
2031	(1,577,901)	(895,460)	(70,143)	(253,484)	(1,538,826)	(7,956)

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance UST Claims
Projection of Future Frequencies and Severities

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	UST POLS	REPORTED CLAIM COUNTS			ULTIMATE LOSS SEVERITY			ULTIMATE LOSSES		
RY	IN FORCE	RELEASE	CLOSURE	OTHER	RELEASE	CLOSURE	OTHER	RELEASE	CLOSURE	OTHER
1998		18	161	39	74,822	37,046	77,442	1,346,789	5,964,475	3,020,235
1999		8	225	20	17,822	42,897	136,137	142,573	9,651,795	2,722,748
2000		26	90	59	69,900	60,931	74,690	1,817,407	5,483,807	4,406,695
2001		23	65	36	47,137	34,656	29,311	1,084,144	2,252,659	1,055,182
2002		19	68	48	37,557	65,433	95,453	713,587	4,449,420	4,581,721
2003		19	73	45	104,256	51,091	79,596	1,980,868	3,729,632	3,581,828
2004		10	68	38	130,854	35,792	123,859	1,308,541	2,433,850	4,706,651
2005		10	53	18	168,093	52,359	119,366	1,680,933	2,775,028	2,148,585
2006		5	54	17	32,249	29,012	240,306	161,243	1,566,642	4,085,206
2007		11	69	20	225,875	58,800	45,329	2,484,630	4,057,224	906,577
2008	2,664	9	73	12	226,141	41,915	197,446	2,035,269	3,059,823	2,369,357
2009	2,662	13	60	24	68,223	34,759	41,962	886,897	2,085,518	1,007,078
2010	2,622	7	56	3	97,170	38,168	80,695	680,191	2,137,385	242,085
2011	2,623	14	42	10	159,889	39,227	272,685	2,238,449	1,647,517	2,726,846
2012	2,617	13	68	7	78,951	37,564	156,418	1,026,368	2,554,347	1,094,926
2013	2,603	7	93	11	55,293	44,747	100,915	387,049	4,161,506	1,110,068
2014	2,573	10	85	11	194,230	37,642	51,049	1,942,298	3,199,566	561,542
2015	2,530	15	51	13	205,610	52,204	257,582	3,084,143	2,662,411	3,348,565
2016	2,509	13	57	16	140,016	41,475	101,987	1,820,206	2,364,060	1,631,800
2017	2,489	9	69	15	182,079	39,272	109,312	1,638,711	2,709,781	1,639,673
2018	2,487	9	61	7	140,526	50,978	174,748	1,264,734	3,109,631	1,223,238
2019	2,413	7	70	12	128,357	46,131	162,155	898,499	3,229,163	1,945,858
2020	2,408	10	48	7	163,006	24,893	134,991	1,630,064	1,194,866	944,940
2021	2,405	14	42	5	130,956	58,425	104,662	1,833,382	2,453,833	523,308
2022	2,371	9	22	7	326,020	122,594	152,872	2,934,182	2,697,060	1,070,101
2023	2,347	13	27	14	126,611	107,424	60,836	1,645,942	2,900,461	851,710
2024	2,319	7	17	14	225,965	110,242	84,746	1,581,757	1,874,115	1,186,448
2025	2,337	4	13	8	295,806	241,110	170,518	1,183,224	3,134,430	1,364,142
2026	2,291	9	25	9	224,383	97,066	144,162	1,935,074	2,400,314	1,359,814
2027	2,269	8	22	9	230,366	99,728	145,639	1,950,242	2,177,107	1,351,997
2028	2,248	8	19	9	236,350	102,391	147,115	1,963,517	1,938,466	1,343,738
2029	2,227	8	16	9	242,333	105,054	148,592	1,974,899	1,684,389	1,335,039
2030	2,205	8	13	9	248,317	107,716	150,068	1,984,389	1,414,878	1,325,898
2031	2,184	4	5	4	254,300	110,379	151,545	995,993	564,966	658,159

Notes: Future RYs for Cols (2), (6), (7), and (8) are linearly interpolated against report year.
Future RYs for Cols (3), (4), and (5) are linearly interpolated against Col (2).
Col (9) = (3) x (6); Col (10) = (4) x (7); Col (11) = (5) x (8).

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance AST Claims
Projection of Future Frequencies and Severities

(1) RY	(2) AST POLS IN FORCE	(3) REPORTED CLAIMS	(4) ULTIMATE SEVERITY	(5) ULTIMATE LOSS
1998		1	478,042	478,042
1999		7	384,176	2,689,230
2000		13	91,984	1,195,793
2001		24	278,151	6,675,614
2002		18	116,615	2,099,064
2003		21	76,567	1,607,917
2004		21	163,085	3,424,778
2005		19	113,341	2,153,485
2006		11	213,804	2,351,840
2007		12	97,801	1,173,609
2008	517	12	48,447	581,362
2009	563	11	91,105	1,002,153
2010	578	12	120,804	1,449,652
2011	810	13	114,112	1,483,458
2012	975	16	176,067	2,817,070
2013	1,003	23	60,658	1,395,123
2014	1,030	11	87,762	965,382
2015	1,021	16	127,799	2,044,784
2016	1,010	11	242,058	2,662,633
2017	1,005	17	280,384	4,766,520
2018	999	20	187,746	3,754,922
2019	989	18	341,647	6,149,653
2020	978	15	164,579	2,468,679
2021	965	12	390,053	4,680,635
2022	942	18	198,962	3,581,321
2023	914	11	302,307	3,325,372
2024	892	11	318,421	3,502,633
2025	886	14	346,572	4,852,007
2026	879	14	350,302	4,733,109
2027	865	13	365,873	4,863,815
2028	850	13	381,444	4,987,739
2029	836	13	397,014	5,104,881
2030	822	13	412,585	5,215,241
2031	808	6	428,156	2,659,409

Notes: Future RYs for Col (2) are increased by a decreasing percentage to a maximum of 1,027 based on assumptions from PSTIF.
Future RYs for Col (3) are linearly interpolated against Col (2).
Col (5) = (3) x (4).

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Remedial Claims
Projection of Future Frequencies and Severities

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	POTENTIAL SITES		REPORTED CLAIM COUNTS		% REPORTED ON PREV YR		ULTIMATE LOSS SEVERITY		ULTIMATE LOSS	
RY	UST	AST	UST	AST	UST	AST	UST	AST	UST	AST
1998	15,479	2,402	319	12			59,479	55,219	18,973,941	662,628
1999	14,166	2,399	378	11	2.44%	0.46%	22,816	160,463	8,624,271	1,765,095
2000	13,952	2,399	558	50	3.94%	2.08%	29,100	121,737	16,237,801	6,086,837
2001	13,633	2,387	343	204	2.46%	8.50%	9,946	11,224	3,411,528	2,289,597
2002	13,255	2,376	126	18	0.92%	0.75%	25,372	13,305	3,196,851	239,493
2003	12,696	2,327	39	4	0.29%	0.17%	28,736	138,806	1,120,688	555,224
2004	12,354	2,123	62	13	0.49%	0.56%	39,395	163,634	2,442,481	2,127,247
2005	12,228	2,105	38	8	0.31%	0.38%	74,595	9,980	2,834,617	79,838
2006	12,189	2,101	21	12	0.17%	0.57%	38,808	-	814,977	-
2007	12,129	2,088	30	3	0.25%	0.14%	45,513	13,917	1,365,382	41,750
2008	12,021	2,055	24	10	0.20%	0.48%	30,924	5,179	742,165	51,787
2009	12,003	2,051	18	4	0.15%	0.19%	50,506	45,914	909,114	183,657
2010	11,973	2,049	30	2	0.25%	0.10%	24,363	-	730,904	-
2011	11,936	2,044	37	5	0.31%	0.24%	49,958	-	1,848,437	-
2012	11,915	2,040	21	4	0.18%	0.20%	15,756	-	330,875	-
2013	11,887	2,040	28	-	0.23%	0.00%	52,908	-	1,481,410	-
2014	11,853	2,039	34	1	0.29%	0.05%	25,423	-	864,369	-
2015	11,834	2,038	19	1	0.16%	0.05%	6,239	155,510	118,548	155,510
2016	11,810	2,038	24	-	0.20%	0.00%	57,345	-	1,376,272	-
2017	11,790	2,037	20	1	0.17%	0.05%	42,077	59,359	841,536	59,359
2018	11,776	2,036	14	1	0.12%	0.05%	75,107	-	1,051,495	-
2019	11,759	2,036	17	-	0.14%	0.00%	34,889	-	593,119	-
2020	11,745	2,035	14	1	0.12%	0.05%	25,009	61,158	350,129	61,158
2021	11,735	2,034	10	1	0.09%	0.05%	38,214	109,760	382,140	109,760
2022	11,727	2,034	8	-	0.07%	0.00%	98,185	-	785,479	-
2023	11,718	2,034	9	-	0.08%	0.00%	53,942	-	485,478	-
2024	11,712	2,034	6	-	0.05%	0.00%	83,449	-	500,695	-
2025	11,711	2,034	1	-	0.01%	0.00%	541,932	-	541,932	-
2026	11,701	2,034	10	0	0.08%	0.02%	32,454	39,533	319,242	14,810
2027	11,692	2,033	9	0	0.08%	0.01%	32,454	39,533	302,479	11,725
2028	11,683	2,033	8	0	0.07%	0.02%	32,454	39,533	271,546	13,189
2029	11,676	2,033	8	0	0.07%	0.01%	32,454	39,533	248,841	9,901
2030	11,668	2,033	7	0	0.06%	0.01%	32,454	39,533	239,433	6,201
2031	11,665	2,032	4	0	0.06%	0.01%	32,454	39,533	119,641	6,200

Notes: Future RYs for Cols (2) and (3) are [prior year sites] x (1 - [% reported from col (6) or (7)])
Future RYs for Cols (4) and (5) are the change in Cols (2) and (3), respectively.
Future RYs for Cols (6) and (7) are rolling average of prior 10 years.
Future RYs for Cols (8) and (9) are long-term averages from 1999-2022

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
All Claim Types
Cash Flow Summary

UNDISCOUNTED VALUE OF CURRENT RESERVES - PAYMENT STREAM

Category	Total	2026	2027	2028	2029	2030	2031	2032	2033	2034	After 2034
Insurance UST - Release	12,682,969	1,847,292	1,599,345	1,453,957	1,156,589	949,882	822,387	770,992	671,330	636,133	2,775,063
Insurance UST - Closure	17,275,960	2,764,208	2,402,280	1,875,962	1,585,995	1,290,799	995,818	855,713	755,257	688,302	4,061,625
Insurance UST - Other	11,898,325	2,071,169	1,463,586	1,202,326	1,095,728	963,294	779,607	641,467	554,958	501,793	2,624,398
Remedial UST	16,320,922	1,882,158	1,537,961	1,380,604	1,281,971	1,216,286	1,172,583	1,133,616	1,111,989	1,071,764	4,531,989
Insurance AST	27,030,320	3,086,559	2,878,139	2,633,622	2,227,993	2,040,131	1,727,175	1,581,805	1,455,231	1,302,723	8,096,942
Remedial AST	2,244,948	231,313	223,109	223,300	216,731	215,474	219,909	212,926	212,062	212,259	277,864
Total	87,453,443	11,882,699	10,104,420	8,769,771	7,565,007	6,675,865	5,717,479	5,196,520	4,760,828	4,412,974	22,367,881
Percent of Current Total Paid by Year - Undiscounted	100.0%	13.6%	11.6%	10.0%	8.7%	7.6%	6.5%	5.9%	5.4%	5.0%	25.6%

DISCOUNTED VALUE OF CURRENT RESERVES - PAYMENT STREAM

Category	Total	2026	2027	2028	2029	2030	2031	2032	2033	2034	After 2034
Insurance UST - Release	11,683,623	1,833,591	1,564,023	1,400,834	1,097,862	888,326	757,727	699,875	600,400	560,514	2,280,470
Insurance UST - Closure	15,863,543	2,743,707	2,349,225	1,807,419	1,505,465	1,207,150	917,522	776,782	675,459	606,482	3,274,331
Insurance UST - Other	10,948,257	2,055,807	1,431,262	1,158,396	1,040,091	900,869	718,311	582,298	496,324	442,144	2,122,756
Remedial UST	14,790,330	1,868,199	1,503,995	1,330,160	1,216,878	1,137,466	1,080,390	1,029,051	994,501	944,361	3,685,330
Insurance AST	24,328,107	3,063,667	2,814,574	2,537,397	2,114,865	1,907,923	1,591,377	1,435,898	1,301,478	1,147,864	6,413,063
Remedial AST	2,080,541	229,598	218,181	215,141	205,727	201,511	202,619	193,286	189,657	187,027	237,796
Total	79,694,400	11,794,569	9,881,260	8,449,347	7,180,888	6,243,245	5,267,946	4,717,190	4,257,818	3,888,391	18,013,745
Percent of Current Total Paid by Year - Discounted	100.0%	14.8%	12.4%	10.6%	9.0%	7.8%	6.6%	5.9%	5.3%	4.9%	22.6%

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
All Claim Types
ALAE Provision

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	PAID	INCURRED	PAID	ALAE PER $10K	CASE		ALAE	ULTIMATE
RY	LOSS	LOSS	ALAE	PAID LOSS	RESERVE	IBNR	UNPAID	ALAE
1994	4,497,996	4,778,222	7,784	17.30	280,226	-	1,609	9,392
1995	4,334,953	4,458,526	9,764	22.52	123,572	-	709	10,474
1996	72,676,341	78,507,300	141,118	19.42	5,830,959	-	33,472	174,590
1997	18,896,776	19,461,610	44,586	23.59	564,835	-	3,242	47,829
1998	28,353,862	30,446,110	88,811	31.32	2,092,249	-	12,010	100,821
1999	24,435,721	25,595,712	80,060	32.76	1,159,990	-	6,659	86,719
2000	32,044,291	35,228,341	94,982	29.64	3,184,050	-	18,278	113,260
2001	14,870,897	16,761,121	57,617	38.75	1,890,224	7,603	10,894	68,512
2002	14,506,621	15,265,133	50,027	34.49	758,512	15,002	4,440	54,467
2003	11,735,844	12,545,696	56,795	48.39	809,852	30,460	4,824	61,618
2004	14,661,582	16,317,995	139,364	95.05	1,656,413	125,551	10,229	149,593
2005	9,942,782	11,574,114	111,469	112.11	1,631,332	98,371	9,929	121,399
2006	8,097,030	8,816,526	66,987	82.73	719,496	163,382	5,068	72,055
2007	9,535,168	9,891,121	98,631	103.44	355,953	138,052	2,836	101,467
2008	8,188,354	8,601,044	40,829	49.86	412,690	238,719	3,739	44,568
2009	5,545,843	5,835,076	30,250	54.55	289,233	239,340	3,034	33,284
2010	4,115,927	5,091,632	33,122	80.47	975,706	148,585	6,454	39,576
2011	7,711,242	9,441,619	39,776	51.58	1,730,378	503,087	12,821	52,598
2012	7,058,880	7,272,901	33,932	48.07	214,021	550,685	4,390	38,321
2013	6,787,355	7,769,435	30,794	45.37	982,081	765,721	10,033	40,827
2014	5,306,638	6,821,197	30,359	57.21	1,514,559	711,959	12,781	43,141
2015	8,898,125	10,144,970	47,842	53.77	1,246,845	1,268,992	14,442	62,284
2016	6,437,662	8,651,260	27,672	42.98	2,213,597	1,203,711	19,617	47,289
2017	8,065,506	10,449,749	44,831	55.58	2,384,242	1,205,832	20,609	65,440
2018	6,614,933	8,718,204	32,098	48.52	2,103,272	1,685,816	21,751	53,849
2019	7,688,162	10,177,472	45,293	58.91	2,489,310	2,638,819	29,438	74,730
2020	3,065,270	4,771,930	20,840	67.99	1,706,660	1,877,906	20,577	41,417
2021	4,386,763	7,654,294	24,981	56.95	3,267,531	2,328,764	32,125	57,106
2022	4,799,181	7,277,316	29,457	61.38	2,478,135	3,790,825	35,987	65,444
2023	2,865,610	5,518,539	23,226	81.05	2,652,929	3,690,422	36,414	59,640
2024	1,709,975	4,136,492	17,531	102.52	2,426,517	4,509,156	39,814	57,345
2025	1,704,424	5,005,512	9,048	53.09	3,301,088	6,070,224	53,796	62,844
TOTAL ALL YEARS	369,539,712	422,986,171	1,609,875	43.56	53,446,459	34,006,984	502,023	2,111,899

Wtd. Average 2015-2023	56.08
Wtd. Average 2015-2025	57.40
Straight Average All Years	55.04
Weighted Average All Years	43.56
SELECTED RATIO	**57.40**

Notes:
Col (5) = (4) / (3) x 10,000
Col (8) = [(6) + (7)] x Selected Ratio / 10,000
Col (9) = (8) + (4)

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
All Claim Types
ULAE Provision

(1) FISCAL YEAR	(2) CONTRACTED FUND ADMIN FEES	(3) FY PAID LOSS	(4) AVERAGE FEES PER CY PAID
2006	2,895,762	12,847,713	0.225
2007	3,087,143	12,185,369	0.253
2008	3,124,118	15,806,387	0.198
2009	3,456,283	16,148,518	0.214
2010	3,289,570	14,134,856	0.233
2011	3,185,415	11,632,025	0.274
2012	3,188,828	12,461,529	0.256
2013	3,043,682	10,845,847	0.281
2014	3,116,377	10,116,592	0.308
2015	3,207,502	12,588,056	0.255
2016	3,255,111	13,762,021	0.237
2017	3,325,325	15,115,087	0.220
2018	3,176,324	13,127,399	0.242
2019	3,075,361	14,820,330	0.208
2020	2,835,776	12,260,319	0.231
2021	2,577,708	8,741,496	0.295
2022	2,828,920	8,981,440	0.315
2023	2,814,296	10,252,864	0.274
2024	2,758,742	10,256,319	0.269
2025	2,717,773	11,834,670	0.251
Total	60,960,018	247,918,837	0.246

(7) 3-Year Average	0.265
(8) 5-Year Average	0.281
(9) 10-Year ex. Hi/Lo	0.252
(10) Selected	0.281
(11) [Case O/S + IBNR] x 70%	61,217,410
(12) ULAE IBNR = (10) x (11)	17,187,966
(13) Discount	1,524,950
(14) Discounted ULAE IBNR = (12) - (13)	15,663,015

Note: Total row in Column (4) reflects a weighted average.
FY 2025 value in Column (4) is adjusted to reflect a full year of data.

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance UST - Release
Summary of Paid Development Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	PAID LDM	PAID	INCURRED	CASE	IBNR	UNPAID
RY	ULTIMATE	LOSS	LOSS	RESERVE	RESERVE	LOSS
1994	246,661	246,661	246,661	-	-	-
1995	241,953	241,953	241,953	-	-	-
1996	2,255,030	1,400,389	2,255,030	854,640	-	854,640
1997	1,995,927	1,995,927	1,995,927	-	-	-
1998	1,346,789	1,346,789	1,346,789	-	-	-
1999	142,573	142,573	142,573	-	-	-
2000	1,817,407	1,779,094	1,817,407	38,313	-	38,313
2001	1,084,144	1,067,005	1,084,144	17,138	-	17,138
2002	713,587	644,203	713,587	69,383	-	69,383
2003	1,980,868	1,980,868	1,980,868	-	-	-
2004	1,308,541	1,308,541	1,308,541	-	-	-
2005	1,680,933	1,009,263	1,680,933	671,670	-	671,670
2006	161,243	161,243	161,243	-	-	-
2007	2,490,497	2,399,071	2,481,747	82,676	8,750	91,426
2008	2,104,008	1,995,967	2,021,507	25,540	82,501	108,041
2009	879,624	794,324	879,624	85,300	-	85,300
2010	674,592	462,377	674,592	212,214	-	212,214
2011	2,306,671	2,047,949	2,181,164	133,216	125,507	258,723
2012	1,076,913	937,188	968,116	30,928	108,797	139,725
2013	323,372	271,046	301,974	30,928	21,398	52,326
2014	1,912,060	1,510,905	1,805,599	294,694	106,461	401,155
2015	3,359,972	2,569,731	2,797,827	228,096	562,145	790,241
2016	1,717,676	1,249,850	1,690,349	440,499	27,327	467,827
2017	1,773,597	1,246,295	1,328,971	82,676	444,627	527,302
2018	1,157,199	781,754	1,005,422	223,667	151,777	375,445
2019	588,156	367,186	575,886	208,700	12,270	220,970
2020	1,388,571	779,810	1,341,805	561,995	46,766	608,761
2021	1,732,917	828,427	1,514,515	686,089	218,401	904,490
2022	3,329,377	1,316,891	1,807,853	490,962	1,521,524	2,012,486
2023	1,431,901	411,637	1,073,125	661,488	358,776	1,020,264
2024	1,362,988	193,760	482,674	288,914	880,314	1,169,229
2025	175,602	-	175,602	175,602	-	175,602
TOTAL	44,761,349	33,488,680	40,084,008	6,595,328	4,677,341	11,272,669

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance UST - Release
Development of Losses to Ultimate

Development Period in Months

RY	12 - 24	24 - 36	36 - 48	48 - 60	60 - 72	72 - 84	84 - 96	96 - 108	108 - 120	120 - 132	132 - 144	144 - 156	156 - 168	168 - 180	180 - 192	192 - 204	204 - 216	216 - 228	228 - 240	240 - 252	252 - 264	264 - 276	276 - 288	288 - 300	300 - 312	312 - 324	324 - 336	336 - 348	348 - 360	360 - 372	372 - 384	384 - ULT
1994				1.000	1.000	1.000	1.000	1.229	1.242	1.000	1.152	1.218	1.191	1.000	1.191	1.041	1.000	1.124	1.149	1.000	1.091	1.131	1.120	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.005
1995					1.358	1.591	1.565	1.604	1.133	1.194	1.116	1.134	1.276	1.083	1.109	1.066	1.050	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.005
1996	2.098	1.106	1.151	1.889	1.193	1.082	1.122	1.025	1.000	1.272	1.000	1.366	1.049	1.032	1.091	1.082	1.016	1.000	1.044	1.013	1.008	1.060	1.030	1.005	1.027	1.043	1.045	1.039	1.006	1.000	1.000	1.005
1997	2.504	1.377	1.216	1.114	1.250	1.408	1.098	1.091	1.047	1.081	1.048	1.021	1.036	1.015	1.015	1.018	1.008	1.002	1.002	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.005
1998	2.695	1.438	1.290	1.798	1.112	1.037	1.063	1.235	1.015	1.063	1.019	1.007	1.015	1.003	1.024	1.076	1.009	1.044	1.013	1.000	1.017	1.011	1.005	1.000	1.000	1.002	1.004	1.000	1.000	1.000	1.000	1.005
1999		1.280	3.009	1.340	1.304	1.130	1.033	1.000	1.000	1.000	1.051	1.338	1.025	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.005
2000		3.172	1.271	1.381	1.569	1.028	1.029	1.000	1.037	1.008	1.014	1.107	1.052	1.000	1.028	1.040	1.000	1.006	1.005	1.008	1.007	1.000	1.000	1.008	1.004	1.001	1.001	1.000	1.000	1.000	1.000	1.005
2001	9.416	1.820	1.430	1.250	1.084	1.030	1.050	1.160	1.045	1.091	1.000	1.010	1.083	1.052	1.040	1.030	1.020	1.017	1.003	1.008	1.002	1.009	1.027	1.003	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.005
2002	14.784	1.513	1.247	1.168	1.278	1.063	1.032	1.155	1.050	1.057	1.006	1.070	1.047	1.000	1.003	1.012	1.015	1.002	1.012	1.000	1.015	1.000	1.000	1.003	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.005
2003	9.260	1.459	1.219	1.132	1.061	1.379	1.212	1.043	1.504	1.098	1.104	1.046	1.043	1.033	1.064	1.075	1.056	1.037	1.017	1.006	1.000	1.006	1.006	1.003	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.005
2004	1.643	1.382	1.103	1.442	1.231	1.095	1.286	1.072	1.121	1.050	1.255	1.147	1.097	1.229	1.068	1.024	1.022	1.016	1.019	1.031	1.002	1.003	1.006	1.003	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.005
2005	1.066	1.671	5.528	1.293	1.177	1.428	1.189	1.256	1.219	1.137	1.032	1.314	1.099	1.031	1.057	1.021	1.034	1.035	1.004	1.000	1.005	1.003	1.006	1.003	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.005
2006		1.000	1.000	6.470	1.171	1.049	1.000	1.000	1.369	1.067	1.211	1.120	1.145	1.000	1.000	1.000	1.000	1.000	1.000	1.005	1.005	1.003	1.006	1.003	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.005
2007	13.702	1.333	1.254	1.076	1.120	1.072	1.054	1.010	1.170	1.034	1.022	1.013	1.001	1.007	1.003	1.004	1.008	1.007	1.008	1.005	1.005	1.003	1.006	1.003	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.005
2008	1.316	1.096	1.028	1.066	1.055	1.037	1.093	1.155	1.059	1.027	1.037	1.009	1.003	1.014	1.015	1.024	1.014	1.015	1.008	1.005	1.005	1.003	1.006	1.003	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.005
2009	4.004	1.255	1.467	1.039	1.050	1.036	1.017	1.024	1.055	1.052	1.002	1.000	1.000	1.000	1.000	1.014	1.019	1.015	1.008	1.005	1.005	1.003	1.006	1.003	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.005
2010	17.254	1.587	1.461	1.027	1.217	1.072	1.205	1.049	1.050	1.141	1.016	1.266	1.173	1.040	1.000	1.017	1.019	1.015	1.008	1.005	1.005	1.003	1.006	1.003	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.005
2011	5.534	1.347	1.215	1.179	1.094	1.119	1.021	1.044	1.031	1.022	1.015	1.004	1.006	1.013	1.031	1.017	1.019	1.015	1.008	1.005	1.005	1.003	1.006	1.003	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.005
2012	3.464	2.126	1.414	1.190	1.404	1.089	1.087	1.085	1.067	1.011	1.035	1.027	1.029	1.020	1.031	1.017	1.019	1.015	1.008	1.005	1.005	1.003	1.006	1.003	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.005
2013	1.409	1.931	1.151	1.115	1.446	1.219	1.045	1.015	1.000	1.047	1.110	1.109	1.038	1.020	1.031	1.017	1.019	1.015	1.008	1.005	1.005	1.003	1.006	1.003	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.005
2014	19.137	1.226	1.156	1.068	1.098	1.037	1.024	1.049	1.025	1.055	1.049	1.061	1.038	1.020	1.031	1.017	1.019	1.015	1.008	1.005	1.005	1.003	1.006	1.003	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.005
2015	5.264	1.996	1.271	1.149	1.101	1.113	1.056	1.054	1.030	1.014	1.033	1.061	1.038	1.020	1.031	1.017	1.019	1.015	1.008	1.005	1.005	1.003	1.006	1.003	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.005
2016	28.197	1.598	1.317	1.397	1.096	1.233	1.068	1.039	1.041	1.051	1.033	1.061	1.038	1.020	1.031	1.017	1.019	1.015	1.008	1.005	1.005	1.003	1.006	1.003	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.005
2017	1.359	1.163	1.067	1.041	1.031	1.043	1.040	1.014	1.036	1.051	1.033	1.061	1.038	1.020	1.031	1.017	1.019	1.015	1.008	1.005	1.005	1.003	1.006	1.003	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.005
2018	9.001	2.419	1.204	1.233	1.221	1.056	1.065	1.040	1.036	1.051	1.033	1.061	1.038	1.020	1.031	1.017	1.019	1.015	1.008	1.005	1.005	1.003	1.006	1.003	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.005
2019	6.552	2.010	1.171	1.112	1.101	1.130	1.082	1.040	1.036	1.051	1.033	1.061	1.038	1.020	1.031	1.017	1.019	1.015	1.008	1.005	1.005	1.003	1.006	1.003	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.005
2020	9.425	2.737	1.450	1.415	1.116	1.112	1.082	1.040	1.036	1.051	1.033	1.061	1.038	1.020	1.031	1.017	1.019	1.015	1.008	1.005	1.005	1.003	1.006	1.003	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.005
2021		1.642	1.473	1.152	1.175	1.112	1.082	1.040	1.036	1.051	1.033	1.061	1.038	1.020	1.031	1.017	1.019	1.015	1.008	1.005	1.005	1.003	1.006	1.003	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.005
2022	1.620	2.202	1.664	1.209	1.175	1.112	1.082	1.040	1.036	1.051	1.033	1.061	1.038	1.020	1.031	1.017	1.019	1.015	1.008	1.005	1.005	1.003	1.006	1.003	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.005
2023	10.708	1.847	1.376	1.209	1.175	1.112	1.082	1.040	1.036	1.051	1.033	1.061	1.038	1.020	1.031	1.017	1.019	1.015	1.008	1.005	1.005	1.003	1.006	1.003	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.005
2024	1.587	2.022	1.376	1.209	1.175	1.112	1.082	1.040	1.036	1.051	1.033	1.061	1.038	1.020	1.031	1.017	1.019	1.015	1.008	1.005	1.005	1.003	1.006	1.003	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.005
2025	3.169	2.022	1.376	1.209	1.175	1.112	1.082	1.040	1.036	1.051	1.033	1.061	1.038	1.020	1.031	1.017	1.019	1.015	1.008	1.005	1.005	1.003	1.006	1.003	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.005

RY	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360	372	384	ULT
1994	-	-	-	43,694	43,694	43,694	43,694	43,694	53,694	66,694	66,694	76,832	93,580	111,486	111,486	132,821	138,273	138,273	155,391	178,532	178,532	194,724	220,213	246,661	246,661	246,661	246,661	246,661	246,661	246,661	246,661	246,661	247,894
1995	-	-	-	-	15,175	20,605	32,780	51,312	82,297	93,282	111,391	124,261	140,954	179,922	194,810	216,027	230,340	241,953	241,953	241,953	241,953	241,953	241,953	241,953	241,953	241,953	241,953	241,953	241,953	241,953	241,953	241,953	243,163
1996	60,606	127,123	140,605	161,781	305,670	364,732	394,527	442,597	453,495	453,495	576,781	576,781	787,820	826,524	853,309	930,849	1,007,552	1,023,213	1,023,213	1,068,112	1,082,062	1,090,678	1,155,906	1,190,251	1,196,571	1,228,820	1,281,996	1,339,491	1,392,387	1,400,389	1,400,389	1,400,389	1,407,391
1997	150,598	377,057	519,125	631,334	703,267	879,004	1,237,696	1,359,105	1,483,423	1,553,597	1,679,250	1,760,677	1,797,439	1,862,946	1,890,296	1,917,996	1,952,890	1,968,351	1,972,764	1,976,544	1,995,927	1,995,927	1,995,927	1,995,927	1,995,927	1,995,927	1,995,927	1,995,927	1,995,927	1,995,927	1,995,927	1,995,927	2,005,907
1998	71,919	193,815	278,696	359,433	646,106	718,507	745,388	792,136	978,580	992,873	1,055,025	1,075,457	1,082,693	1,099,371	1,103,031	1,129,278	1,215,534	1,226,074	1,280,060	1,296,308	1,296,308	1,318,514	1,332,502	1,338,666	1,338,666	1,338,666	1,340,765	1,346,789	1,346,789	1,346,789	1,346,789	1,346,789	1,353,523
1999	-	12,585	16,113	48,483	64,952	84,727	95,744	98,894	98,894	98,894	98,894	103,964	139,096	142,573	142,573	142,573	142,573	142,573	142,573	142,573	142,573	142,573	142,573	142,573	142,573	142,573	142,573	142,786	142,786	142,786	142,786	142,786	143,500
2000	-	140,585	445,902	566,818	782,614	1,228,212	1,262,017	1,298,340	1,298,340	1,346,953	1,357,619	1,376,791	1,524,125	1,603,731	1,603,891	1,649,008	1,715,267	1,715,267	1,724,971	1,733,353	1,746,733	1,758,542	1,758,542	1,758,542	1,772,486	1,779,094	1,780,169	1,782,835	1,782,835	1,782,835	1,782,835	1,782,835	1,791,749
2001	16,703	157,277	286,167	409,158	511,400	554,458	571,001	599,455	695,506	726,601	792,933	792,933	801,191	867,543	912,396	948,559	976,545	996,294	1,012,739	1,016,169	1,024,716	1,026,765	1,036,131	1,064,144	1,067,005	1,067,801	1,068,446	1,070,046	1,070,046	1,070,046	1,070,046	1,070,046	1,075,396
2002	9,216	136,257	206,137	257,078	300,195	383,621	407,778	420,844	485,920	509,980	539,053	542,052	580,088	607,282	607,282	609,321	616,509	625,847	627,301	634,837	634,837	644,203	644,203	644,203	645,922	646,404	646,794	647,763	647,763	647,763	647,763	647,763	651,001
2003	21,836	202,209	294,954	359,527	407,049	431,955	595,741	722,007	752,772	1,132,407	1,243,625	1,372,437	1,435,580	1,497,429	1,546,971	1,645,324	1,768,175	1,867,367	1,936,684	1,969,276	1,980,868	1,980,868	1,980,868	1,993,411	1,998,729	2,000,220	2,001,427	2,004,425	2,004,425	2,004,425	2,004,425	2,004,425	2,014,447
2004	71,257	117,103	161,795	178,485	257,392	316,743	346,872	446,145	478,479	536,422	563,361	707,282	811,449	890,246	1,094,026	1,168,514	1,196,043	1,222,862	1,242,288	1,266,265	1,305,456	1,308,541	1,311,897	1,320,204	1,323,726	1,324,713	1,325,513	1,327,498	1,327,498	1,327,498	1,327,498	1,327,498	1,334,135
2005	12,800	13,642	22,790	125,995	162,944	191,715	273,716	325,538	408,831	498,368	566,691	584,630	768,192	844,136	870,365	920,393	939,452	971,431	1,005,600	1,009,263	1,009,263	1,014,487	1,017,088	1,023,529	1,026,259	1,027,025	1,027,645	1,029,184	1,029,184	1,029,184	1,029,184	1,029,184	1,034,330
2006	-	8,947	8,947	8,947	57,884	67,789	71,084	71,084	71,084	97,281	103,765	125,694	140,820	161,243	161,243	161,243	161,243	161,243	161,243	161,243	162,012	162,850	163,268	164,302	164,740	164,863	164,962	165,210	165,210	165,210	165,210	165,210	166,036
2007	58,988	808,267	1,077,402	1,350,931	1,454,130	1,628,782	1,745,892	1,840,192	1,858,776	2,174,856	2,247,778	2,297,257	2,327,742	2,329,809	2,345,987	2,353,741	2,362,765	2,381,747	2,399,071	2,418,615	2,430,141	2,442,718	2,448,983	2,464,490	2,471,065	2,472,907	2,474,401	2,478,106	2,478,106	2,478,106	2,478,106	2,478,106	2,490,497
2008	750,154	987,266	1,081,739	1,111,591	1,185,280	1,249,946	1,296,178	1,417,026	1,636,341	1,733,534	1,780,630	1,845,959	1,861,871	1,867,753	1,893,642	1,922,224	1,968,385	1,995,967	2,026,770	2,043,280	2,053,018	2,063,643	2,068,936	2,082,037	2,087,591	2,089,148	2,090,409	2,093,540	2,093,540	2,093,540	2,093,540	2,093,540	2,104,008
2009	81,174	324,978	407,777	598,236	621,700	652,756	676,540	688,297	704,856	743,523	781,868	783,624	783,624	783,624	783,624	783,624	794,324	809,203	821,691	828,385	832,333	836,640	838,786	844,098	846,349	846,980	847,492	848,761	848,761	848,761	848,761	848,761	853,005
2010	3,627	62,582	99,320	145,127	148,993	181,398	194,452	234,328	245,727	258,129	294,609	299,192	378,913	444,452	462,377	462,377	470,309	479,118	486,512	490,476	492,813	495,364	496,634	499,779	501,112	501,486	501,789	502,540	502,540	502,540	502,540	502,540	505,053
2011	134,434	743,915	1,002,304	1,217,775	1,435,417	1,569,874	1,756,333	1,793,765	1,872,292	1,930,245	1,973,544	2,002,952	2,010,201	2,021,632	2,047,949	2,111,764	2,147,989	2,188,224	2,221,994	2,240,095	2,250,771	2,262,419	2,268,221	2,282,585	2,288,674	2,290,380	2,291,763	2,295,195	2,295,195	2,295,195	2,295,195	2,295,195	2,306,671
2012	35,519	123,028	261,546	369,814	440,068	617,743	673,028	731,313	793,679	847,115	856,110	886,202	910,479	937,188	956,124	985,917	1,002,830	1,021,614	1,037,380	1,045,831	1,050,815	1,056,253	1,058,962	1,065,668	1,068,511	1,069,307	1,069,953	1,071,555	1,071,555	1,071,555	1,071,555	1,071,555	1,076,913
2013	32,189	45,369	87,594	100,842	112,450	162,643	198,229	207,067	210,187	210,187	220,060	244,337	271,046	281,416	287,102	296,048	301,127	306,767	311,501	314,039	315,535	317,168	317,982	319,995	320,849	321,088	321,282	321,763	321,763	321,763	321,763	321,763	323,372
2014	37,615	719,825	882,491	1,019,963	1,088,861	1,195,738	1,239,479	1,269,589	1,332,249	1,365,417	1,440,421	1,510,905	1,602,662	1,663,978	1,697,598	1,750,496	1,780,524	1,813,876	1,841,868	1,856,873	1,865,722	1,875,378	1,880,188	1,892,094	1,897,141	1,898,556	1,899,702	1,902,547	1,902,547	1,902,547	1,902,547	1,902,547	1,912,060
2015	117,585	618,928	1,235,365	1,569,832	1,803,486	1,985,126	2,210,171	2,333,718	2,459,229	2,533,333	2,569,731	2,655,042	2,816,282	2,924,030	2,983,108	3,076,064	3,128,831	3,187,437	3,236,628	3,262,995	3,278,545	3,295,512	3,303,964	3,324,886	3,333,756	3,336,242	3,338,256	3,343,256	3,343,256	3,343,256	3,343,256	3,343,256	3,359,972
2016	9,664	272,486	435,421	573,268	800,813	877,440	1,081,888	1,155,656	1,200,561	1,249,850	1,313,692	1,357,304	1,439,733	1,494,815	1,525,017	1,572,538	1,599,513	1,629,474	1,654,621	1,668,100	1,676,050	1,684,724	1,689,044	1,699,740	1,704,274	1,705,545	1,706,575	1,709,131	1,709,131	1,709,131	1,709,131	1,709,131	1,717,676
2017	626,145	851,011	989,479	1,055,893	1,098,659	1,133,161	1,182,226	1,228,971	1,246,295	1,290,540	1,356,460	1,401,493	1,486,605	1,543,481	1,574,666	1,623,734	1,651,587	1,682,523	1,708,489	1,722,407	1,730,616	1,739,572	1,744,033	1,755,077	1,759,759	1,761,071	1,762,135	1,764,774	1,764,774	1,764,774	1,764,774	1,764,774	1,773,597
2018	17,593	158,351	383,046	461,344	569,047	695,089	734,336	781,754	813,156	842,024	885,034	914,416	969,948	1,007,057	1,027,404	1,059,419	1,077,592	1,097,777	1,114,718	1,123,799	1,129,155	1,134,999	1,137,910	1,145,115	1,148,170	1,149,026	1,149,720	1,151,442	1,151,442	1,151,442	1,151,442	1,151,442	1,157,199
2019	17,223	112,834	226,791	265,564	295,247	324,921	367,186	397,333	413,294	427,966	449,826	464,760	492,985	511,846	522,187	538,459	547,696	557,954	566,565	571,181	573,903	576,873	578,352	582,015	583,567	584,002	584,355	585,230	585,230	585,230	585,230	585,230	588,156
2020	13,204	124,444	340,637	493,861	698,864	779,810	866,885	938,059	975,739	1,010,379	1,061,989	1,097,245	1,163,881	1,208,409	1,232,825	1,271,240	1,293,047	1,317,267	1,337,596	1,348,493	1,354,919	1,361,931	1,365,424	1,374,071	1,377,736	1,378,764	1,379,596	1,381,662	1,381,662	1,381,662	1,381,662	1,381,662	1,388,571
2021	-	297,198	488,004	719,056	828,427	973,192	1,081,861	1,170,685	1,217,709	1,260,939	1,325,348	1,369,347	1,452,507	1,508,078	1,538,548	1,586,490	1,613,705	1,643,931	1,669,301	1,682,900	1,690,921	1,699,672	1,704,031	1,714,821	1,719,396	1,720,678	1,721,717	1,724,295	1,724,295	1,724,295	1,724,295	1,724,295	1,732,917
2022	221,888	359,549	791,618	1,316,891	1,591,620	1,869,751	2,078,532	2,249,186	2,339,531	2,422,588	2,546,332	2,630,866	2,790,638	2,897,405	2,955,945	3,048,055	3,100,341	3,158,414	3,207,156	3,233,283	3,248,692	3,265,505	3,273,880	3,294,611	3,303,400	3,305,863	3,307,860	3,312,813	3,312,813	3,312,813	3,312,813	3,312,813	3,329,377
2023	20,816	222,906	411,637	566,370	684,525	804,144	893,937	967,331	1,006,187	1,041,908	1,095,128	1,131,485	1,200,200	1,246,118	1,271,295	1,310,909	1,333,397	1,358,373	1,379,336	1,390,572	1,397,200	1,404,430	1,408,032	1,416,949	1,420,728	1,421,788	1,422,646	1,424,777	1,424,777	1,424,777	1,424,777	1,424,777	1,431,901
2024	122,128	193,760	391,826	539,112	651,581	765,443	850,915	920,777	957,763	991,765	1,042,424	1,077,030	1,142,438	1,186,147	1,210,112	1,247,820	1,269,225	1,292,999	1,312,953	1,323,649	1,329,957	1,336,840	1,340,269	1,348,756	1,352,354	1,353,362	1,354,179	1,356,207	1,356,207	1,356,207	1,356,207	1,356,207	1,362,988
2025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DRAFT

Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance UST - Release
Selection of Loss Development Factors

Development Period in Months

BY	12 - 24	24 - 36	36 - 48	48 - 60	60 - 72	72 - 84	84 - 96	96 - 108	108 - 120	120 - 132	132 - 144	144 - 156	156 - 168	168 - 180	180 - 192	192 - 204	204 - 216	216 - 228	228 - 240	240 - 252	252 - 264	264 - 276	276 - 288	288 - 300	300 - 312	312 - 324	324 - 336	336 - 348	348 - 360	360 - 372	372 - 384	
1994				1.000	1.000	1.000	1.000	1.229	1.242	1.000	1.152	1.218	1.191	1.000	1.191	1.041	1.000	1.124	1.149	1.000	1.091	1.131	1.120	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1995					1.358	1.591	1.565	1.604	1.133	1.194	1.116	1.134	1.276	1.083	1.109	1.066	1.050	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
1996	2.098	1.106	1.151	1.889	1.193	1.082	1.122	1.025	1.000	1.272	1.000	1.366	1.049	1.032	1.091	1.082	1.016	1.000	1.044	1.013	1.008	1.060	1.030	1.005	1.027	1.043	1.045	1.039	1.006			
1997	2.504	1.377	1.216	1.114	1.250	1.408	1.098	1.091	1.047	1.081	1.048	1.021	1.036	1.015	1.015	1.018	1.008	1.002	1.002	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
1998	2.695	1.438	1.290	1.798	1.112	1.037	1.063	1.235	1.015	1.063	1.019	1.007	1.015	1.003	1.024	1.076	1.009	1.044	1.013	1.000	1.017	1.011	1.005	1.000	1.000	1.002	1.004					
1999		1.280	3.009	1.340	1.304	1.130	1.033	1.000	1.000	1.000	1.051	1.338	1.025	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000						
2000		3.172	1.271	1.381	1.569	1.028	1.029	1.000	1.037	1.008	1.014	1.107	1.052	1.000	1.028	1.040	1.000	1.006	1.005	1.008	1.007	1.000	1.000	1.008	1.004							
2001	9.416	1.820	1.430	1.250	1.084	1.030	1.050	1.160	1.045	1.091	1.000	1.010	1.083	1.052	1.040	1.030	1.020	1.017	1.003	1.008	1.002	1.009	1.027	1.003								
2002	14.784	1.513	1.247	1.168	1.278	1.063	1.032	1.155	1.050	1.057	1.006	1.070	1.047	1.000	1.003	1.012	1.015	1.002	1.012	1.000	1.015	1.000	1.000									
2003	9.260	1.459	1.219	1.132	1.061	1.379	1.212	1.043	1.504	1.098	1.104	1.046	1.043	1.033	1.064	1.075	1.056	1.037	1.017	1.006	1.000	1.000										
2004	1.643	1.382	1.103	1.442	1.231	1.095	1.286	1.072	1.121	1.050	1.255	1.147	1.097	1.229	1.068	1.024	1.022	1.016	1.019	1.031	1.002											
2005	1.066	1.671	5.528	1.293	1.177	1.428	1.189	1.256	1.219	1.137	1.032	1.314	1.099	1.031	1.057	1.021	1.034	1.035	1.004	1.000												
2006		1.000	1.000	6.470	1.171	1.049	1.000	1.000	1.369	1.067	1.211	1.120	1.145	1.000	1.000	1.000	1.000	1.000	1.000													
2007	13.702	1.333	1.254	1.076	1.120	1.072	1.054	1.010	1.170	1.034	1.022	1.013	1.001	1.007	1.003	1.004	1.008	1.007														
2008	1.316	1.096	1.028	1.066	1.055	1.037	1.093	1.155	1.059	1.027	1.037	1.009	1.003	1.014	1.015	1.024	1.014															
2009	4.004	1.255	1.467	1.039	1.050	1.036	1.017	1.024	1.055	1.052	1.002	1.000	1.000	1.000	1.000	1.014																
2010	17.254	1.587	1.461	1.027	1.217	1.072	1.205	1.049	1.050	1.141	1.016	1.266	1.173	1.040	1.000																	
2011	5.534	1.347	1.215	1.179	1.094	1.119	1.021	1.044	1.031	1.022	1.015	1.004	1.006	1.013																		
2012	3.464	2.126	1.414	1.190	1.404	1.089	1.087	1.085	1.067	1.011	1.035	1.027	1.029																			
2013	1.409	1.931	1.151	1.115	1.446	1.219	1.045	1.015	1.000	1.047	1.110	1.109																				
2014	19.137	1.226	1.156	1.068	1.098	1.037	1.024	1.049	1.025	1.055	1.049																					
2015	5.264	1.996	1.271	1.149	1.101	1.113	1.056	1.054	1.030	1.014																						
2016	28.197	1.598	1.317	1.397	1.096	1.233	1.068	1.039	1.041																							
2017	1.359	1.163	1.067	1.041	1.031	1.043	1.040	1.014																								
2018	9.001	2.419	1.204	1.233	1.221	1.056	1.065																									
2019	6.552	2.010	1.171	1.112	1.101	1.130																										
2020	9.425	2.737	1.450	1.415	1.116																											
2021		1.642	1.473	1.152																												
2022	1.620	2.202	1.664																													
2023	10.708	1.847																														
2024	1.587																															
VOL WTD 3	2.128	1.923	1.561	1.233	1.151	1.061	1.056	1.040	1.031	1.030	1.050	1.019	1.031	1.014	1.009	1.013	1.010	1.015	1.011	1.012	1.003	1.003	1.008	1.006	1.002	1.001	1.014	1.015	1.004	1.000	1.000	
VOL WTD 5	3.169	2.022	1.460	1.165	1.100	1.112	1.050	1.041	1.035	1.025	1.033	1.033	1.018	1.012	1.006	1.014	1.016	1.021	1.014	1.010	1.004	1.002	1.007	1.003	1.006	1.011	1.012	1.014	1.004	1.000	1.000	
VOL WTD ALL	2.967	1.513	1.272	1.185	1.145	1.107	1.067	1.068	1.076	1.051	1.040	1.061	1.038	1.027	1.031	1.033	1.018	1.017	1.013	1.008	1.006	1.011	1.011	1.003	1.006	1.011	1.012	1.014	1.004	1.000	1.000	
ARITH 3	4.638	1.897	1.529	1.226	1.146	1.077	1.057	1.036	1.032	1.039	1.065	1.047	1.069	1.018	1.005	1.014	1.007	1.014	1.008	1.012	1.006	1.003	1.009	1.004	1.001	1.001	1.016	1.013	1.002	1.000	1.000	
ARITH 5	5.835	2.088	1.392	1.191	1.113	1.115	1.050	1.034	1.033	1.030	1.045	1.081	1.042	1.015	1.004	1.012	1.016	1.019	1.010	1.009	1.005	1.002	1.006	1.002	1.006	1.009	1.010	1.010	1.002	1.000	1.000	
ARITH ALL	7.320	1.669	1.490	1.427	1.183	1.138	1.098	1.100	1.100	1.069	1.062	1.116	1.072	1.031	1.042	1.033	1.017	1.021	1.021	1.006	1.013	1.021	1.020	1.002	1.004	1.007	1.010	1.010	1.002	1.000	1.000	
5 YR HI LO	5.523	2.019	1.376	1.166	1.104	1.100	1.053	1.034	1.032	1.028	1.033	1.047	1.013	1.011	1.001	1.013	1.015	1.019	1.011	1.005	1.004	1.000	1.002	1.001	1.001	1.001	1.001	1.000	1.000	NA	NA	
7 YR HI LO	6.649	2.024	1.323	1.209	1.102	1.112	1.055	1.040	1.036	1.038	1.030	1.032	1.037	1.013	1.015	1.017	1.019	1.015	1.008	1.004	1.005	1.002	1.006	1.002	1.001	1.000	1.001	1.000	1.000	NA	NA	
ALL YR HI LO	6.684	1.637	1.348	1.243	1.175	1.124	1.082	1.082	1.086	1.062	1.055	1.109	1.064	1.020	1.034	1.032	1.015	1.014	1.011	1.004	1.006	1.010	1.009	1.001	1.001	1.000	1.001	1.000	1.000	NA	NA	TAIL
SELECTED	3.169	2.022	1.376	1.209	1.175	1.112	1.082	1.040	1.036	1.051	1.033	1.061	1.038	1.020	1.031	1.017	1.019	1.015	1.008	1.005	1.005	1.003	1.006	1.003	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.005

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance UST - Release
Paid Losses

Development in Months

BY	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360	372	384
1994	-	-	-	43,694	43,694	43,694	43,694	43,694	53,694	66,694	66,694	76,832	93,580	111,486	111,486	132,821	138,273	138,273	155,391	178,532	178,532	194,724	220,213	246,661	246,661	246,661	246,661	246,661	246,661	246,661	246,661	246,661
1995	-	-	-	-	15,175	20,605	32,780	51,312	82,297	93,282	111,391	124,261	140,954	179,922	194,810	216,027	230,340	241,953	241,953	241,953	241,953	241,953	241,953	241,953	241,953	241,953	241,953	241,953	241,953	241,953	241,953	
1996	60,606	127,123	140,605	161,781	305,670	364,732	394,527	442,597	453,495	453,495	576,781	576,781	787,820	826,524	853,309	930,849	1,007,552	1,023,213	1,023,213	1,068,112	1,082,062	1,090,678	1,155,906	1,190,251	1,196,571	1,228,820	1,281,996	1,339,491	1,392,387	1,400,389		
1997	150,598	377,057	519,125	631,334	703,267	879,004	1,237,696	1,359,105	1,483,423	1,553,597	1,679,250	1,760,677	1,797,439	1,862,946	1,890,296	1,917,996	1,952,890	1,968,351	1,972,764	1,976,544	1,995,927	1,995,927	1,995,927	1,995,927	1,995,927	1,995,927	1,995,927	1,995,927	1,995,927			
1998	71,919	193,815	278,696	359,433	646,106	718,507	745,388	792,136	978,580	992,873	1,055,025	1,075,457	1,082,693	1,099,371	1,103,031	1,129,278	1,215,534	1,226,074	1,280,060	1,296,308	1,296,308	1,318,514	1,332,502	1,338,666	1,338,666	1,338,666	1,340,765	1,346,789				
1999	-	12,585	16,113	48,483	64,952	84,727	95,744	98,894	98,894	98,894	98,894	103,964	139,096	142,573	142,573	142,573	142,573	142,573	142,573	142,573	142,573	142,573	142,573	142,573	142,573	142,573	142,573					
2000	-	140,585	445,902	566,818	782,614	1,228,212	1,262,017	1,298,340	1,298,340	1,346,953	1,357,619	1,376,791	1,524,125	1,603,731	1,603,891	1,649,008	1,715,267	1,715,267	1,724,971	1,733,353	1,746,733	1,758,542	1,758,542	1,758,542	1,772,486	1,779,094						
2001	16,703	157,277	286,167	409,158	511,400	554,458	571,001	599,455	695,506	726,601	792,933	792,933	801,191	867,543	912,396	948,559	976,545	996,294	1,012,739	1,016,169	1,024,716	1,026,765	1,036,131	1,064,144	1,067,005							
2002	9,216	136,257	206,137	257,078	300,195	383,621	407,778	420,844	485,920	509,980	539,053	542,052	580,088	607,282	607,282	609,321	616,509	625,847	627,301	634,837	634,837	644,203	644,203	644,203								
2003	21,836	202,209	294,954	359,527	407,049	431,955	595,741	722,007	752,772	1,132,407	1,243,625	1,372,437	1,435,580	1,497,429	1,546,971	1,645,324	1,768,175	1,867,367	1,936,684	1,969,276	1,980,868	1,980,868	1,980,868									
2004	71,257	117,103	161,795	178,485	257,392	316,743	346,872	446,145	478,479	536,422	563,361	707,282	811,449	890,246	1,094,026	1,168,514	1,196,043	1,222,862	1,242,288	1,266,265	1,305,456	1,308,541										
2005	12,800	13,642	22,790	125,995	162,944	191,715	273,716	325,538	408,831	498,368	566,691	584,630	768,192	844,136	870,365	920,393	939,452	971,431	1,005,600	1,009,263	1,009,263											
2006	-	8,947	8,947	8,947	57,884	67,789	71,084	71,084	71,084	97,281	103,765	125,694	140,820	161,243	161,243	161,243	161,243	161,243	161,243	161,243												
2007	58,988	808,267	1,077,402	1,350,931	1,454,130	1,628,782	1,745,892	1,840,192	1,858,776	2,174,856	2,247,778	2,297,257	2,327,742	2,329,809	2,345,987	2,353,741	2,362,765	2,381,747	2,399,071													
2008	750,154	987,266	1,081,739	1,111,591	1,185,280	1,249,946	1,296,178	1,417,026	1,636,341	1,733,534	1,780,630	1,845,959	1,861,871	1,867,753	1,893,642	1,922,224	1,968,385	1,995,967														
2009	81,174	324,978	407,777	598,236	621,700	652,756	676,540	688,297	704,856	743,523	781,868	783,624	783,624	783,624	783,624	783,624	794,324															
2010	3,627	62,582	99,320	145,127	148,993	181,398	194,452	234,328	245,727	258,129	294,609	299,192	378,913	444,452	462,377	462,377																
2011	134,434	743,915	1,002,304	1,217,775	1,435,417	1,569,874	1,756,333	1,793,765	1,872,292	1,930,245	1,973,544	2,002,952	2,010,201	2,021,632	2,047,949																	
2012	35,519	123,028	261,546	369,814	440,068	617,743	673,028	731,313	793,679	847,115	856,110	886,202	910,479	937,188																		
2013	32,189	45,369	87,594	100,842	112,450	162,643	198,229	207,067	210,187	210,187	220,060	244,337	271,046																			
2014	37,615	719,825	882,491	1,019,963	1,088,861	1,195,738	1,239,479	1,269,589	1,332,249	1,365,417	1,440,421	1,510,905																				
2015	117,585	618,928	1,235,365	1,569,832	1,803,486	1,985,126	2,210,171	2,333,718	2,459,229	2,533,333	2,569,731																					
2016	9,664	272,486	435,421	573,268	800,813	877,440	1,081,888	1,155,656	1,200,561	1,249,850																						
2017	626,145	851,011	989,479	1,055,893	1,098,659	1,133,161	1,182,226	1,228,971	1,246,295																							
2018	17,593	158,351	383,046	461,344	569,047	695,089	734,336	781,754																								
2019	17,223	112,834	226,791	265,564	295,247	324,921	367,186																									
2020	13,204	124,444	340,637	493,861	698,864	779,810																										
2021	-	297,198	488,004	719,056	828,427																											
2022	221,888	359,549	791,618	1,316,891																												
2023	20,816	222,906	411,637																													
2024	122,128	193,760																														
2025	-																															

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance UST - Release
Summary of Incurred Development Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	INC LDM	PAID	INCURRED	CASE	IBNR	UNPAID
RY	ULTIMATE	LOSS	LOSS	RESERVE	RESERVE	LOSS
1994	246,661	246,661	246,661	-	-	-
1995	241,953	241,953	241,953	-	-	-
1996	2,255,030	1,400,389	2,255,030	854,640	-	854,640
1997	1,995,927	1,995,927	1,995,927	-	-	-
1998	1,346,789	1,346,789	1,346,789	-	-	-
1999	142,573	142,573	142,573	-	-	-
2000	1,817,407	1,779,094	1,817,407	38,313	-	38,313
2001	1,084,144	1,067,005	1,084,144	17,138	-	17,138
2002	713,587	644,203	713,587	69,383	-	69,383
2003	1,980,868	1,980,868	1,980,868	-	-	-
2004	1,308,541	1,308,541	1,308,541	-	-	-
2005	1,680,933	1,009,263	1,680,933	671,670	-	671,670
2006	161,243	161,243	161,243	-	-	-
2007	2,484,630	2,399,071	2,481,747	82,676	2,883	85,559
2008	2,035,269	1,995,967	2,021,507	25,540	13,762	39,303
2009	886,897	794,324	879,624	85,300	7,273	92,572
2010	680,191	462,377	674,592	212,214	5,599	217,814
2011	2,238,449	2,047,949	2,181,164	133,216	57,284	190,500
2012	1,026,368	937,188	968,116	30,928	58,252	89,180
2013	320,310	271,046	301,974	30,928	18,336	49,264
2014	1,977,224	1,510,905	1,805,599	294,694	171,625	466,319
2015	3,102,248	2,569,731	2,797,827	228,096	304,421	532,517
2016	1,922,736	1,249,850	1,690,349	440,499	232,386	672,886
2017	1,536,993	1,246,295	1,328,971	82,676	208,022	290,698
2018	1,180,209	781,754	1,005,422	223,667	174,788	398,455
2019	698,350	367,186	575,886	208,700	122,464	331,164
2020	1,727,942	779,810	1,341,805	561,995	386,138	948,133
2021	2,023,032	828,427	1,514,515	686,089	508,517	1,194,606
2022	2,538,986	1,316,891	1,807,853	490,962	731,133	1,222,094
2023	1,653,462	411,637	1,073,125	661,488	580,337	1,241,825
2024	862,019	193,760	482,674	288,914	379,345	668,259
2025	610,008	-	175,602	175,602	434,406	610,008
TOTAL	44,480,979	33,488,680	40,084,008	6,595,328	4,396,971	10,992,299

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance UST - Release
Development of Losses to Ultimate

Development Period in Months

BY	12 - 24	24 - 36	36 - 48	48 - 60	60 - 72	72 - 84	84 - 96	96 - 108	108 - 120	120 - 132	132 - 144	144 - 156	156 - 168	168 - 180	180 - 192	192 - 204	204 - 216	216 - 228	228 - 240	240 - 252	252 - 264	264 - 276	276 - 288	288 - 300	300 - 312	312 - 324	324 - 336	336 - 348	348 - 360	360 - 372	372 - 384	384 - ULT
1994	1.240	1.000	1.210	1.000	1.000	1.000	1.000	1.000	1.249	1.000	1.033	1.269	1.000	1.157	1.115	1.000	1.000	1.378	1.010	1.000	1.040	1.091	0.986	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1995	1.000	1.000	1.813	1.217	0.548	1.278	1.777	0.919	0.822	1.000	1.000	1.143	1.107	1.000	1.000	1.000	0.923	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1996	1.474	1.153	0.784	3.459	1.255	0.930	0.978	1.000	0.819	1.012	1.000	1.041	1.000	1.017	1.385	0.988	1.000	1.000	1.000	1.000	1.110	1.041	1.310	1.000	1.000	1.052	1.000	1.036	1.000	1.000	1.000
1997	1.213	1.080	1.386	1.059	1.155	1.093	1.198	0.957	0.995	0.995	1.000	1.032	1.000	1.000	1.000	1.006	1.000	1.000	1.000	0.935	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1998	1.576	1.426	1.285	1.532	1.012	1.102	0.971	1.005	1.018	1.004	0.968	1.033	0.947	1.005	1.021	1.014	1.000	0.988	1.000	1.030	1.000	0.978	1.000	1.000	1.001	1.000	0.996	1.000	1.000	1.000	1.000
1999	0.594	1.000	1.738	1.000	0.952	0.795	0.854	1.000	1.000	1.202	1.256	1.008	0.948	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2000	1.189	1.625	1.185	0.983	0.923	1.013	0.886	1.000	1.022	1.002	0.982	1.121	0.992	1.241	0.993	1.031	1.000	1.009	1.002	0.819	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2001	0.559	0.945	1.079	0.779	1.080	0.964	1.027	1.153	1.000	0.959	1.018	1.000	1.077	1.000	1.019	0.990	1.000	1.000	1.000	1.000	1.000	1.026	0.977	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2002	1.176	1.166	0.926	1.000	0.907	0.955	1.108	1.007	0.802	1.027	1.043	1.000	0.987	1.000	1.027	1.000	1.000	1.000	1.000	1.000	0.992	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2003	0.950	0.919	1.209	0.949	1.229	1.139	1.028	1.018	1.184	1.050	1.000	1.018	1.033	0.993	1.061	0.930	1.005	0.996	0.996	0.969	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2004	0.824	0.891	0.981	1.381	1.024	1.650	1.000	1.033	1.449	1.000	0.960	1.000	1.013	1.114	1.000	1.017	0.951	0.980	1.015	1.007	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2005	0.907	1.000	0.996	1.014	0.958	2.418	1.079	1.031	1.029	1.004	0.998	1.215	1.016	1.422	1.031	0.985	1.004	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2006	0.750	1.000	1.349	1.586	1.000	0.942	1.000	1.410	1.000	1.000	1.000	1.000	0.790	1.000	1.000	1.000	0.958	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2007	2.668	1.000	0.995	0.975	1.248	1.011	1.060	1.025	1.000	1.027	1.000	0.964	1.000	1.000	1.000	1.000	1.006	1.029	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2008	1.023	0.933	1.022	1.075	1.010	0.987	1.031	1.128	1.054	1.008	1.007	0.984	1.000	1.000	0.993	1.000	1.000	1.006	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2009	0.617	0.966	1.049	1.000	0.980	1.478	0.965	1.000	0.994	1.004	0.788	0.897	1.000	1.000	1.000	1.000	1.001	1.006	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2010	0.722	1.118	0.966	1.165	1.131	0.914	1.000	1.000	1.171	1.041	1.101	1.594	0.997	1.000	1.000	1.000	1.001	1.006	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2011	1.634	1.105	1.092	0.992	0.995	1.011	1.030	0.998	1.000	1.064	1.000	1.000	1.000	0.995	1.018	1.000	1.001	1.006	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2012	1.001	1.386	1.428	1.273	1.096	0.860	1.036	1.000	1.000	1.019	0.955	1.049	1.000	1.033	1.018	1.000	1.001	1.006	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2013	0.652	0.774	1.000	1.456	1.099	1.108	1.000	1.000	1.000	1.000	1.177	1.000	1.001	1.033	1.018	1.000	1.001	1.006	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2014	1.087	1.038	1.086	1.054	1.027	0.940	1.070	1.023	1.000	1.086	1.000	1.032	1.001	1.033	1.018	1.000	1.001	1.006	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2015	1.869	1.252	1.024	1.185	0.966	1.049	1.039	0.995	0.982	1.002	1.013	1.032	1.001	1.033	1.018	1.000	1.001	1.006	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2016	1.555	1.006	1.138	1.012	1.103	1.140	1.202	1.000	1.000	1.026	1.013	1.032	1.001	1.033	1.018	1.000	1.001	1.006	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2017	1.144	1.037	0.917	0.984	1.021	1.000	0.974	0.965	1.017	1.026	1.013	1.032	1.001	1.033	1.018	1.000	1.001	1.006	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2018	2.028	1.405	1.210	0.916	1.000	0.988	1.019	1.015	1.017	1.026	1.013	1.032	1.001	1.033	1.018	1.000	1.001	1.006	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2019	1.314	0.959	1.090	1.000	1.000	1.109	1.033	1.015	1.017	1.026	1.013	1.032	1.001	1.033	1.018	1.000	1.001	1.006	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2020	1.599	1.575	1.023	1.103	1.017	1.062	1.033	1.015	1.017	1.026	1.013	1.032	1.001	1.033	1.018	1.000	1.001	1.006	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2021	2.464	0.915	1.107	1.027	1.037	1.062	1.033	1.015	1.017	1.026	1.013	1.032	1.001	1.033	1.018	1.000	1.001	1.006	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2022	1.772	1.058	1.127	1.051	1.037	1.062	1.033	1.015	1.017	1.026	1.013	1.032	1.001	1.033	1.018	1.000	1.001	1.006	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2023	3.160	1.337	1.097	1.051	1.037	1.062	1.033	1.015	1.017	1.026	1.013	1.032	1.001	1.033	1.018	1.000	1.001	1.006	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2024	0.931	1.159	1.097	1.051	1.037	1.062	1.033	1.015	1.017	1.026	1.013	1.032	1.001	1.033	1.018	1.000	1.001	1.006	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2025	1.945	1.159	1.097	1.051	1.037	1.062	1.033	1.015	1.017	1.026	1.013	1.032	1.001	1.033	1.018	1.000	1.001	1.006	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

BY	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360	372	384	ULT
1994	50,001	62,000	62,000	75,000	75,000	75,000	75,000	75,000	75,000	93,694	93,694	96,832	122,832	122,832	142,070	158,405	158,405	158,405	218,273	220,532	220,532	229,333	250,213	246,661	246,661	246,661	246,661	246,661	246,661	246,661	246,661	246,661	246,661
1995	100,005	100,005	100,005	181,297	220,697	120,868	154,430	274,384	252,195	207,200	207,200	207,200	236,757	262,200	262,200	262,200	262,200	241,953	241,953	241,953	241,953	241,953	241,953	241,953	241,953	241,953	241,953	241,953	241,953	241,953	241,953	241,953	241,953
1996	216,462	319,010	367,737	288,272	997,058	1,251,389	1,163,182	1,137,140	1,137,140	931,235	942,582	942,582	980,842	980,842	997,795	1,382,410	1,366,007	1,366,007	1,366,007	1,366,007	1,366,007	1,516,413	1,579,163	2,069,209	2,069,209	2,069,209	2,176,370	2,176,370	2,255,030	2,255,030	2,255,030	2,255,030	2,255,030
1997	746,677	906,062	978,833	1,356,420	1,436,651	1,659,199	1,813,028	2,172,721	2,079,080	2,067,828	2,057,038	2,057,038	2,121,861	2,122,127	2,122,127	2,122,127	2,135,701	2,135,701	2,135,701	2,135,701	1,995,927	1,995,927	1,995,927	1,995,927	1,995,927	1,995,927	1,995,927	1,995,927	1,995,927	1,995,927	1,995,927	1,995,927	1,995,927	1,995,927
1998	280,352	441,921	629,991	809,760	1,240,170	1,255,103	1,382,637	1,342,716	1,349,223	1,373,262	1,378,815	1,334,952	1,378,952	1,305,491	1,311,491	1,339,090	1,358,000	1,358,000	1,341,060	1,341,060	1,381,308	1,381,308	1,351,348	1,351,348	1,351,348	1,352,666	1,352,666	1,346,789	1,346,789	1,346,789	1,346,789	1,346,789	1,346,789	1,346,789
1999	148,000	87,973	87,973	152,864	152,864	145,514	115,744	98,894	98,894	98,894	118,894	149,287	150,410	142,573	142,573	142,573	142,573	142,573	142,573	142,573	142,573	142,573	142,573	142,573	142,573	142,573	142,573	142,573	142,573	142,573	142,573	142,573	142,573
2000	830,009	986,785	1,603,954	1,900,891	1,868,003	1,724,741	1,747,051	1,548,700	1,548,700	1,582,140	1,585,805	1,557,714	1,746,592	1,731,797	2,148,891	2,133,481	2,199,740	2,199,740	2,219,267	2,223,018	1,820,018	1,817,407	1,817,407	1,817,407	1,817,407	1,817,407	1,817,407	1,817,407	1,817,407	1,817,407	1,817,407	1,817,407	1,817,407	1,817,407
2001	1,862,012	1,040,851	983,642	1,061,656	827,034	892,953	860,467	883,417	1,018,928	1,018,928	977,435	995,386	995,386	1,071,788	1,071,788	1,092,066	1,081,236	1,081,236	1,081,236	1,081,236	1,081,236	1,081,236	1,109,531	1,084,144	1,084,144	1,084,144	1,084,144	1,084,144	1,084,144	1,084,144	1,084,144	1,084,144	1,084,144
2002	674,164	792,896	924,518	855,817	855,481	775,594	741,003	821,003	826,548	662,748	680,698	709,949	709,949	700,590	700,590	719,666	719,666	719,666	719,666	719,666	719,666	713,587	713,587	713,587	713,587	713,587	713,587	713,587	713,587	713,587	713,587	713,587	713,587
2003	1,091,012	1,036,470	952,537	1,151,270	1,092,375	1,342,039	1,528,804	1,571,990	1,599,735	1,894,459	1,989,626	1,989,626	2,025,726	2,092,214	2,078,460	2,205,077	2,051,262	2,061,011	2,052,007	2,044,371	1,980,868	1,980,868	1,980,868	1,980,868	1,980,868	1,980,868	1,980,868	1,980,868	1,980,868	1,980,868	1,980,868	1,980,868	1,980,868	1,980,868
2004	496,850	409,451	364,653	357,620	494,041	505,771	834,631	834,631	861,768	1,248,642	1,248,642	1,199,204	1,199,204	1,215,087	1,353,628	1,353,628	1,376,628	1,308,781	1,283,109	1,301,747	1,310,240	1,308,541	1,308,541	1,308,541	1,308,541	1,308,541	1,308,541	1,308,541	1,308,541	1,308,541	1,308,541	1,308,541	1,308,541	1,308,541
2005	386,006	350,003	350,003	348,601	353,601	338,873	819,445	884,264	911,289	937,852	941,848	940,095	1,141,835	1,160,547	1,650,304	1,701,055	1,675,074	1,682,156	1,680,933	1,680,933	1,680,933	1,680,933	1,680,933	1,680,933	1,680,933	1,680,933	1,680,933	1,680,933	1,680,933	1,680,933	1,680,933	1,680,933	1,680,933	1,680,933
2006	100,001	75,001	75,001	101,150	160,447	160,447	151,084	151,084	213,084	213,084	213,084	213,084	213,084	213,084	168,243	168,243	168,243	168,243	161,243	161,243	161,243	161,243	161,243	161,243	161,243	161,243	161,243	161,243	161,243	161,243	161,243	161,243	161,243
2007	682,440	1,820,729	1,821,179	1,812,130	1,767,555	2,205,757	2,230,289	2,364,750	2,424,277	2,424,277	2,488,778	2,488,778	2,398,612	2,398,612	2,398,612	2,398,612	2,398,612	2,412,265	2,481,747	2,484,630	2,484,630	2,484,630	2,484,630	2,484,630	2,484,630	2,484,630	2,484,630	2,484,630	2,484,630	2,484,630	2,484,630	2,484,630	2,484,630	2,484,630
2008	1,588,551	1,624,832	1,516,553	1,550,168	1,666,353	1,682,424	1,660,446	1,711,851	1,930,604	2,035,727	2,052,177	2,067,463	2,034,991	2,034,991	2,034,991	2,021,507	2,021,507	2,021,507	2,032,907	2,035,269	2,035,269	2,035,269	2,035,269	2,035,269	2,035,269	2,035,269	2,035,269	2,035,269	2,035,269	2,035,269	2,035,269	2,035,269	2,035,269	2,035,269
2009	1,426,176	879,758	849,967	891,837	891,837	874,344	1,292,547	1,247,747	1,247,747	1,240,247	1,244,606	980,624	879,624	879,624	879,624	879,624	879,624	879,624	880,900	885,868	886,897	886,897	886,897	886,897	886,897	886,897	886,897	886,897	886,897	886,897	886,897	886,897	886,897
2010	337,003	243,262	272,086	262,819	306,255	346,255	316,478	316,478	316,478	370,478	385,727	424,609	676,953	674,592	674,592	674,592	674,613	675,592	679,402	680,191	680,191	680,191	680,191	680,191	680,191	680,191	680,191	680,191	680,191	680,191	680,191	680,191	680,191
2011	1,018,742	1,664,572	1,839,853	2,009,107	1,993,817	1,983,357	2,004,595	2,064,707	2,060,317	2,060,317	2,191,528	2,191,528	2,191,528	2,191,528	2,181,164	2,220,022	2,220,093	2,223,312	2,235,851	2,238,449	2,238,449	2,238,449	2,238,449	2,238,449	2,238,449	2,238,449	2,238,449	2,238,449	2,238,449	2,238,449	2,238,449	2,238,449	2,238,449	2,238,449
2012	385,065	385,438	534,218	762,801	970,701	1,063,470	914,659	948,028	948,028	948,208	966,601	922,671	968,116	968,116	1,000,102	1,017,919	1,017,952	1,019,428	1,025,177	1,026,368	1,026,368	1,026,368	1,026,368	1,026,368	1,026,368	1,026,368	1,026,368	1,026,368	1,026,368	1,026,368	1,026,368	1,026,368	1,026,368	1,026,368
2013	287,002	187,000	144,674	144,674	210,713	231,563	256,528	256,528	256,528	256,528	256,528	301,974	301,974	302,131	312,113	317,673	317,683	318,144	319,938	320,310	320,310	320,310	320,310	320,310	320,310	320,310	320,310	320,310	320,310	320,310	320,310	320,310	320,310
2014	1,217,768	1,324,230	1,374,411	1,493,061	1,573,979	1,616,609	1,519,369	1,626,355	1,662,972	1,662,972	1,805,599	1,805,599	1,864,040	1,865,006	1,926,625	1,960,948	1,961,011	1,963,854	1,974,930	1,977,224	1,977,224	1,977,224	1,977,224	1,977,224	1,977,224	1,977,224	1,977,224	1,977,224	1,977,224	1,977,224	1,977,224	1,977,224	1,977,224	1,977,224
2015	956,615	1,788,319	2,238,470	2,292,173	2,716,546	2,625,210	2,752,754	2,859,888	2,845,588	2,793,537	2,797,827	2,832,969	2,924,662	2,926,179	3,022,858	3,076,710	3,076,809	3,081,271	3,098,648	3,102,248	3,102,248	3,102,248	3,102,248	3,102,248	3,102,248	3,102,248	3,102,248	3,102,248	3,102,248	3,102,248	3,102,248	3,102,248	3,102,248	3,102,248
2016	621,267	965,820	971,174	1,104,759	1,118,562	1,233,642	1,406,288	1,690,349	1,690,349	1,690,349	1,734,059	1,755,840	1,812,670	1,813,610	1,873,531	1,906,907	1,906,969	1,909,734	1,920,504	1,922,736	1,922,736	1,922,736	1,922,736	1,922,736	1,922,736	1,922,736	1,922,736	1,922,736	1,922,736	1,922,736	1,922,736	1,922,736	1,922,736	1,922,736
2017	1,293,564	1,479,562	1,534,500	1,407,449	1,384,975	1,414,084	1,414,157	1,377,685	1,328,971	1,351,228	1,386,169	1,403,580	1,449,009	1,449,760	1,497,660	1,524,340	1,524,390	1,526,600	1,535,209	1,536,993	1,536,993	1,536,993	1,536,993	1,536,993	1,536,993	1,536,993	1,536,993	1,536,993	1,536,993	1,536,993	1,536,993	1,536,993	1,536,993	1,536,993
2018	316,005	641,000	900,447	1,089,911	998,234	998,049	986,206	1,005,422	1,020,476	1,037,567	1,064,397	1,077,766	1,112,649	1,113,226	1,150,007	1,170,494	1,170,531	1,172,229	1,178,840	1,180,209	1,180,209	1,180,209	1,180,209	1,180,209	1,180,209	1,180,209	1,180,209	1,180,209	1,180,209	1,180,209	1,180,209	1,180,209	1,180,209	1,180,209
2019	378,200	496,923	476,353	519,267	519,267	519,267	575,886	594,925	603,833	613,946	629,822	637,732	658,373	658,715	680,479	692,601	692,623	693,628	697,540	698,350	698,350	698,350	698,350	698,350	698,350	698,350	698,350	698,350	698,350	698,350	698,350	698,350	698,350
2020	463,634	741,554	1,167,959	1,195,388	1,318,795	1,341,805	1,424,928	1,472,036	1,494,076	1,519,099	1,558,381	1,577,955	1,629,027	1,629,872	1,683,722	1,713,718	1,713,773	1,716,258	1,725,937	1,727,942	1,727,942	1,727,942	1,727,942	1,727,942	1,727,942	1,727,942	1,727,942	1,727,942	1,727,942	1,727,942	1,727,942	1,727,942	1,727,942	1,727,942
2021	590,411	1,454,650	1,331,159	1,474,025	1,514,515	1,570,952	1,668,270	1,723,423	1,749,228	1,778,524	1,824,514	1,847,431	1,907,225	1,908,214	1,971,261	2,006,378	2,006,443	2,009,353	2,020,685	2,023,032	2,023,032	2,023,032	2,023,032	2,023,032	2,023,032	2,023,032	2,023,032	2,023,032	2,023,032	2,023,032	2,023,032	2,023,032	2,023,032	2,023,032
2022	855,883	1,516,699	1,604,044	1,807,853	1,900,777	1,971,607	2,093,746	2,162,965	2,195,350	2,232,118	2,289,838	2,318,599	2,393,643	2,394,885	2,474,011	2,518,085	2,518,166	2,521,817	2,536,039	2,538,986	2,538,986	2,538,986	2,538,986	2,538,986	2,538,986	2,538,986	2,538,986	2,538,986	2,538,986	2,538,986	2,538,986	2,538,986	2,538,986	2,538,986
2023	753,906	802,401	1,073,125	1,177,327	1,237,842	1,283,968	1,363,508	1,408,586	1,429,676	1,453,621	1,491,209	1,509,940	1,558,811	1,559,619	1,611,148	1,639,850	1,639,903	1,642,281	1,651,543	1,653,462	1,653,462	1,653,462	1,653,462	1,653,462	1,653,462	1,653,462	1,653,462	1,653,462	1,653,462	1,653,462	1,653,462	1,653,462	1,653,462	1,653,462
2024	518,531	482,674	559,465	613,790	645,338	669,386	710,854	734,354	745,350	757,833	777,429	787,194	812,673	813,094	839,959	854,922	854,950	856,190	861,018	862,019	862,019	862,019	862,019	862,019	862,019	862,019	862,019	862,019	862,019	862,019	862,019	862,019	862,019
2025	175,602	341,564	395,905	434,348	456,674	473,691	503,036	519,666	527,447	536,281	550,148	557,058	575,088	575,386	594,397	604,986	605,005	605,883	609,300	610,008	610,008	610,008	610,008	610,008	610,008	610,008	610,008	610,008	610,008	610,008	610,008	610,008	610,008

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance UST - Release
Selection of Loss Development Factors

Development Period in Months

AY	12 - 24	24 - 36	36 - 48	48 - 60	60 - 72	72 - 84	84 - 96	96 - 108	108 - 120	120 - 132	132 - 144	144 - 156	156 - 168	168 - 180	180 - 192	192 - 204	204 - 216	216 - 228	228 - 240	240 - 252	252 - 264	264 - 276	276 - 288	288 - 300	300 - 312	312 - 324	324 - 336	336 - 348	348 - 360	360 - 372	372 - 384	
1994	1.240	1.000	1.210	1.000	1.000	1.000	1.000	1.000	1.249	1.000	1.033	1.269	1.000	1.157	1.115	1.000	1.000	1.378	1.010	1.000	1.040	1.091	0.986	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1995	1.000	1.000	1.813	1.217	0.548	1.278	1.777	0.919	0.822	1.000	1.000	1.143	1.107	1.000	1.000	1.000	0.923	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
1996	1.474	1.153	0.784	3.459	1.255	0.930	0.978	1.000	0.819	1.012	1.000	1.041	1.000	1.017	1.385	0.988	1.000	1.000	1.000	1.000	1.110	1.041	1.310	1.000	1.000	1.052	1.000	1.036	1.000			
1997	1.213	1.080	1.386	1.059	1.155	1.093	1.198	0.957	0.995	0.995	1.000	1.032	1.000	1.000	1.000	1.006	1.000	1.000	1.000	0.935	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
1998	1.576	1.426	1.285	1.532	1.012	1.102	0.971	1.005	1.018	1.004	0.968	1.033	0.947	1.005	1.021	1.014	1.000	0.988	1.000	1.030	1.000	0.978	1.000	1.000	1.001	1.000	0.996					
1999	0.594	1.000	1.738	1.000	0.952	0.795	0.854	1.000	1.000	1.202	1.256	1.008	0.948	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000						
2000	1.189	1.625	1.185	0.983	0.923	1.013	0.886	1.000	1.022	1.002	0.982	1.121	0.992	1.241	0.993	1.031	1.000	1.009	1.002	0.819	0.999	1.000	1.000	1.000	1.000							
2001	0.559	0.945	1.079	0.779	1.080	0.964	1.027	1.153	1.000	0.959	1.018	1.000	1.077	1.000	1.019	0.990	1.000	1.000	1.000	1.000	1.000	1.026	0.977	1.000								
2002	1.176	1.166	0.926	1.000	0.907	0.955	1.108	1.007	0.802	1.027	1.043	1.000	0.987	1.000	1.027	1.000	1.000	1.000	1.000	1.000	0.992	1.000	1.000									
2003	0.950	0.919	1.209	0.949	1.229	1.139	1.028	1.018	1.184	1.050	1.000	1.018	1.033	0.993	1.061	0.930	1.005	0.996	0.996	0.969	1.000	1.000										
2004	0.824	0.891	0.981	1.381	1.024	1.650	1.000	1.033	1.449	1.000	0.960	1.000	1.013	1.114	1.000	1.017	0.951	0.980	1.015	1.007	0.999											
2005	0.907	1.000	0.996	1.014	0.958	2.418	1.079	1.031	1.029	1.004	0.998	1.215	1.016	1.422	1.031	0.985	1.004	0.999	1.000	1.000												
2006	0.750	1.000	1.349	1.586	1.000	0.942	1.000	1.410	1.000	1.000	1.000	1.000	0.790	1.000	1.000	1.000	0.958	1.000	1.000													
2007	2.668	1.000	0.995	0.975	1.248	1.011	1.060	1.025	1.000	1.027	1.000	0.964	1.000	1.000	1.000	1.000	1.006	1.029														
2008	1.023	0.933	1.022	1.075	1.010	0.987	1.031	1.128	1.054	1.008	1.007	0.984	1.000	1.000	0.993	1.000	1.000															
2009	0.617	0.966	1.049	1.000	0.980	1.478	0.965	1.000	0.994	1.004	0.788	0.897	1.000	1.000	1.000	1.000																
2010	0.722	1.118	0.966	1.165	1.131	0.914	1.000	1.000	1.171	1.041	1.101	1.594	0.997	1.000	1.000																	
2011	1.634	1.105	1.092	0.992	0.995	1.011	1.030	0.998	1.000	1.064	1.000	1.000	1.000	0.995																		
2012	1.001	1.386	1.428	1.273	1.096	0.860	1.036	1.000	1.000	1.019	0.955	1.049	1.000																			
2013	0.652	0.774	1.000	1.456	1.099	1.108	1.000	1.000	1.000	1.000	1.177	1.000																				
2014	1.087	1.038	1.086	1.054	1.027	0.940	1.070	1.023	1.000	1.086	1.000																					
2015	1.869	1.252	1.024	1.185	0.966	1.049	1.039	0.995	0.982	1.002																						
2016	1.555	1.006	1.138	1.012	1.103	1.140	1.202	1.000	1.000																							
2017	1.144	1.037	0.917	0.984	1.021	1.000	0.974	0.965																								
2018	2.028	1.405	1.210	0.916	1.000	0.988	1.019																									
2019	1.314	0.959	1.090	1.000	1.000	1.109																										
2020	1.599	1.575	1.023	1.103	1.017																											
2021	2.464	0.915	1.107	1.027																												
2022	1.772	1.058	1.127																													
2023	3.160	1.337																														
2024	0.931																															
VOL WTD 3	1.721	1.062	1.091	1.051	1.008	1.015	1.070	0.989	0.992	1.031	1.001	1.013	0.999	0.997	0.996	1.000	1.001	1.016	1.006	0.989	0.998	1.007	0.993	1.000	1.000	1.000	0.999	1.018	1.000	1.000	1.000	
VOL WTD 5	1.863	1.128	1.111	1.009	1.031	1.051	1.060	0.997	0.993	1.038	1.007	1.041	1.000	0.999	0.998	0.996	0.993	1.004	1.002	0.992	0.998	1.005	0.995	1.000	1.000	1.018	0.999	1.017	1.000	1.000	1.000	
VOL WTD ALL	1.245	1.102	1.092	1.078	1.043	1.062	1.040	1.015	1.017	1.019	0.989	1.032	1.002	1.050	1.031	0.996	0.997	1.006	1.001	0.962	1.012	1.007	1.050	1.000	1.000	1.018	0.999	1.017	1.000	1.000	1.000	
ARITH 3	1.954	1.103	1.086	1.044	1.006	1.032	1.065	0.987	0.994	1.029	1.044	1.016	0.999	0.998	0.998	1.000	0.988	1.009	1.005	0.992	0.997	1.009	0.992	1.000	1.000	1.000	0.999	1.012	1.000	1.000	1.000	
ARITH 5	1.985	1.169	1.112	1.006	1.028	1.057	1.061	0.996	0.996	1.034	1.047	1.108	0.999	0.999	0.999	0.997	0.984	1.001	1.002	0.995	0.998	1.005	0.995	1.000	1.000	1.010	0.999	1.009	1.000	1.000	1.000	
ARITH ALL	1.313	1.102	1.145	1.185	1.027	1.110	1.053	1.028	1.026	1.023	1.014	1.068	0.995	1.052	1.038	0.998	0.990	1.027	1.002	0.980	1.013	1.014	1.030	1.000	1.000	1.009	0.999	1.009	1.000	1.000	1.000	
5 YR HI LO	1.945	1.118	1.108	1.004	1.013	1.053	1.043	0.998	1.000	1.028	1.034	1.016	1.000	1.000	1.000	1.000	0.988	0.998	1.000	1.000	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	NA	NA	
7 YR HI LO	1.836	1.159	1.097	1.025	1.013	1.051	1.033	0.999	1.000	1.026	1.013	0.999	0.999	1.000	1.000	0.997	0.993	0.999	1.000	0.994	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	NA	NA	
ALL YR HI LO	1.275	1.095	1.134	1.113	1.037	1.069	1.031	1.015	1.016	1.017	1.013	1.049	1.001	1.033	1.018	1.000	0.994	1.002	1.001	0.991	1.004	1.008	0.998	1.000	1.000	1.000	1.000	1.000	1.000	NA	NA	Tail
SELECTED	1.945	1.159	1.097	1.051	1.037	1.062	1.033	1.015	1.017	1.026	1.013	1.032	1.001	1.033	1.018	1.000	1.001	1.006	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance UST - Release
Incurred Losses

Development in Months

BY	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360	372	384
1994	50,001	62,000	62,000	75,000	75,000	75,000	75,000	75,000	75,000	93,694	93,694	96,832	122,832	122,832	142,070	158,405	158,405	158,405	218,273	220,532	220,532	229,333	250,213	246,661	246,661	246,661	246,661	246,661	246,661	246,661	246,661	246,661
1995	100,005	100,005	100,005	181,297	220,697	120,868	154,430	274,384	252,195	207,200	207,200	207,200	236,757	262,200	262,200	262,200	262,200	241,953	241,953	241,953	241,953	241,953	241,953	241,953	241,953	241,953	241,953	241,953	241,953	241,953	241,953	
1996	216,462	319,010	367,737	288,272	997,058	1,251,389	1,163,182	1,137,140	1,137,140	931,235	942,582	942,582	980,842	980,842	997,795	1,382,410	1,366,007	1,366,007	1,366,007	1,366,007	1,366,007	1,516,413	1,579,163	2,069,209	2,069,209	2,069,209	2,176,370	2,176,370	2,255,030	2,255,030		
1997	746,677	906,062	978,833	1,356,420	1,436,651	1,659,199	1,813,028	2,172,721	2,079,080	2,067,828	2,057,038	2,057,038	2,121,861	2,122,127	2,122,127	2,122,127	2,135,701	2,135,701	2,135,701	2,135,701	1,995,927	1,995,927	1,995,927	1,995,927	1,995,927	1,995,927	1,995,927	1,995,927	1,995,927			
1998	280,352	441,921	629,991	809,760	1,240,170	1,255,103	1,382,637	1,342,716	1,349,223	1,373,262	1,378,815	1,334,952	1,378,952	1,305,491	1,311,491	1,339,090	1,358,000	1,358,000	1,341,060	1,341,060	1,381,308	1,381,308	1,351,348	1,351,348	1,351,348	1,352,666	1,352,666	1,346,789				
1999	148,000	87,973	87,973	152,864	152,864	145,514	115,744	98,894	98,894	98,894	118,894	149,287	150,410	142,573	142,573	142,573	142,573	142,573	142,573	142,573	142,573	142,573	142,573	142,573	142,573	142,573	142,573					
2000	830,009	986,785	1,603,954	1,900,891	1,868,003	1,724,741	1,747,051	1,548,700	1,548,700	1,582,140	1,585,805	1,557,714	1,746,592	1,731,797	2,148,891	2,133,481	2,199,740	2,199,740	2,219,267	2,223,018	1,820,018	1,817,407	1,817,407	1,817,407	1,817,407	1,817,407						
2001	1,862,012	1,040,851	983,642	1,061,656	827,034	892,953	860,467	883,417	1,018,928	1,018,928	977,435	995,386	995,386	1,071,788	1,071,788	1,092,066	1,081,236	1,081,236	1,081,236	1,081,236	1,081,236	1,081,236	1,109,531	1,084,144	1,084,144							
2002	674,164	792,896	924,518	855,817	855,481	775,594	741,003	821,003	826,548	662,748	680,698	709,949	709,949	700,590	700,590	719,666	719,666	719,666	719,666	719,666	719,666	713,587	713,587	713,587								
2003	1,091,012	1,036,470	952,537	1,151,270	1,092,375	1,342,039	1,528,804	1,571,990	1,599,735	1,894,459	1,989,626	1,989,626	2,025,726	2,092,214	2,078,460	2,205,077	2,051,262	2,061,011	2,052,007	2,044,371	1,980,868	1,980,868	1,980,868									
2004	496,850	409,451	364,653	357,620	494,041	505,771	834,631	834,631	861,768	1,248,642	1,248,642	1,199,204	1,199,204	1,215,087	1,353,628	1,353,628	1,376,628	1,308,781	1,283,109	1,301,747	1,310,240	1,308,541										
2005	386,006	350,003	350,003	348,601	353,601	338,873	819,445	884,264	911,289	937,852	941,848	940,095	1,141,835	1,160,547	1,650,304	1,701,055	1,675,074	1,682,156	1,680,933	1,680,933	1,680,933											
2006	100,001	75,001	75,001	101,150	160,447	160,447	151,084	151,084	213,084	213,084	213,084	213,084	213,084	168,243	168,243	168,243	168,243	161,243	161,243	161,243												
2007	682,440	1,820,729	1,821,179	1,812,130	1,767,555	2,205,757	2,230,289	2,364,750	2,424,277	2,424,277	2,488,778	2,488,778	2,398,612	2,398,612	2,398,612	2,398,612	2,398,612	2,412,265	2,481,747													
2008	1,588,551	1,624,832	1,516,553	1,550,168	1,666,353	1,682,424	1,660,446	1,711,851	1,930,604	2,035,727	2,052,177	2,067,463	2,034,991	2,034,991	2,034,991	2,021,507	2,021,507	2,021,507														
2009	1,426,176	879,758	849,967	891,837	891,837	874,344	1,292,547	1,247,747	1,247,747	1,240,247	1,244,606	980,624	879,624	879,624	879,624	879,624	879,624															
2010	337,003	243,262	272,086	262,819	306,255	346,255	316,478	316,478	316,478	370,478	385,727	424,609	676,953	674,592	674,592	674,592																
2011	1,018,742	1,664,572	1,839,853	2,009,107	1,993,817	1,983,357	2,004,595	2,064,707	2,060,317	2,060,317	2,191,528	2,191,528	2,191,528	2,191,528	2,181,164																	
2012	385,065	385,438	534,218	762,801	970,701	1,063,470	914,659	948,028	948,028	948,208	966,601	922,671	968,116	968,116																		
2013	287,002	187,000	144,674	144,674	210,713	231,563	256,528	256,528	256,528	256,528	256,528	301,974	301,974																			
2014	1,217,768	1,324,230	1,374,411	1,493,061	1,573,979	1,616,609	1,519,369	1,626,355	1,662,972	1,662,972	1,805,599	1,805,599																				
2015	956,615	1,788,319	2,238,470	2,292,173	2,716,546	2,625,210	2,752,754	2,859,888	2,845,588	2,793,537	2,797,827																					
2016	621,267	965,820	971,174	1,104,759	1,118,562	1,233,642	1,406,288	1,690,349	1,690,349	1,690,349																						
2017	1,293,564	1,479,562	1,534,500	1,407,449	1,384,975	1,414,084	1,414,157	1,377,685	1,328,971																							
2018	316,005	641,000	900,447	1,089,911	998,234	998,049	986,206	1,005,422																								
2019	378,200	496,923	476,353	519,267	519,267	519,267	575,886																									
2020	463,634	741,554	1,167,959	1,195,388	1,318,795	1,341,805																										
2021	590,411	1,454,650	1,331,159	1,474,025	1,514,515																											
2022	855,883	1,516,699	1,604,044	1,807,853																												
2023	253,906	802,401	1,073,125																													
2024	518,531	482,674																														
2025	175,602																															

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance UST - Release
Determination of Pure Premium

(1) RY	(2) PAID LDM ULTIMATE	(3) INC LDM ULTIMATE	(4) SELECTED ULTIMATE	(5) POLICIES IN FORCE	(6) PURE PREMIUM
1994					
1995					
1996					
1997					
1998					
1999					
2000					
2001					
2002					
2003					
2004					
2005					
2006					
2007					
2008					
2009	879,624	886,897	883,260	2,662	332
2010	674,592	680,191	677,391	2,622	258
2011	2,306,671	2,238,449	2,272,560	2,623	866
2012	1,076,913	1,026,368	1,051,641	2,617	402
2013	323,372	320,310	321,841	2,603	124
2014	1,912,060	1,977,224	1,944,642	2,573	756
2015	3,359,972	3,102,248	3,231,110	2,530	1,277
2016	1,717,676	1,922,736	1,820,206	2,509	725
2017	1,773,597	1,536,993	1,655,295	2,489	665
2018	1,157,199	1,180,209	1,168,704	2,487	470
2019	588,156	698,350	643,253	2,413	267
2020	1,388,571	1,727,942	1,558,256	2,408	647
2021	1,732,917	2,023,032	1,877,975	2,405	781
2022	3,329,377	2,538,986	2,934,182	2,371	1,238
2023	1,431,901	1,653,462	1,542,681	2,347	657
2024	1,362,988	862,019	1,112,504	2,319	480
2025	175,602	610,008	610,008	2,337	261
TOTAL	25,191,189	24,985,424	25,305,510	42,315	598

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance UST - Release
Paid Bornhuetter-Ferguson Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
RY	POLICIES IN FORCE	PROJECTED PURE PREM	TRENDED PURE PREM	DETRENDED PURE PREM	EXPECTED LOSSES	PERCENT UNPAID	EXPECTED UNPAID	PAID LOSSES	INDICATED ULTIMATE	INCURRED LOSSES	IBNR RESERVE	CASE RESERVE	ULTIMATE PURE PREM
1994													
1995													
1996													
1997													
1998													
1999													
2000													
2001													
2002													
2003													
2004													
2005													
2006													
2007													
2008													
2009	2,662	332	433	544	1,448,220	6.9%	99,627	794,324	893,951	879,624	14,327	85,300	336
2010	2,622	258	331	553	1,450,316	8.4%	122,547	462,377	584,925	674,592	(89,667)	212,214	223
2011	2,623	866	1,093	562	1,475,136	11.2%	165,455	2,047,949	2,213,404	2,181,164	32,239	133,216	844
2012	2,617	402	499	572	1,496,377	13.0%	194,148	937,188	1,131,337	968,116	163,221	30,928	432
2013	2,603	124	151	581	1,513,265	16.2%	244,867	271,046	515,913	301,974	213,939	30,928	198
2014	2,573	756	907	591	1,520,843	21.0%	319,076	1,510,905	1,829,982	1,805,599	24,383	294,694	711
2015	2,530	1,277	1,508	601	1,520,438	23.5%	357,596	2,569,731	2,927,327	2,797,827	129,500	228,096	1,157
2016	2,509	725	842	611	1,533,036	27.2%	417,538	1,249,850	1,667,388	1,690,349	(22,961)	440,499	665
2017	2,489	665	759	621	1,546,252	29.7%	459,711	1,246,295	1,706,006	1,328,971	377,035	82,676	685
2018	2,487	470	528	632	1,570,850	32.4%	509,651	781,754	1,291,405	1,005,422	285,983	223,667	519
2019	2,413	267	294	642	1,549,601	37.6%	582,184	367,186	949,370	575,886	373,484	208,700	393
2020	2,408	647	703	653	1,572,253	43.8%	689,289	779,810	1,469,099	1,341,805	127,294	561,995	610
2021	2,405	781	834	664	1,596,558	52.2%	833,318	828,427	1,661,745	1,514,515	147,229	686,089	691
2022	2,371	1,238	1,301	675	1,600,313	60.4%	967,330	1,316,891	2,284,221	1,807,853	476,368	490,962	963
2023	2,347	657	679	686	1,610,608	71.3%	1,147,598	411,637	1,559,234	1,073,125	486,109	661,488	664
2024	2,319	480	488	698	1,618,010	85.8%	1,387,997	193,760	1,581,757	482,674	1,099,083	288,914	682
2025	2,337	261	261	709	1,657,841	95.5%	1,583,463	-	1,583,463	175,602	1,407,861	175,602	678
TOTAL	42,315				26,279,916		10,081,395	15,769,132	25,850,527	20,605,099	5,245,428	4,835,968	611

Pure Premium Selection	
3-Year Average x Latest	823
5-Year Average x Latest	801
All Year Average x Latest	709
Selected Pure Premium	709

Trend = 1.017

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance UST - Release
Incurred Bornhuetter-Ferguson Method

(1) RY	(2) POLICIES IN FORCE	(3) PROJECTED PURE PREM	(4) TRENDED PURE PREM	(5) DETRENDED PURE PREM	(6) EXPECTED LOSSES	(7) PERCENT IBNR	(8) EXPECTED IBNR	(9) INCURRED LOSSES	(10) INDICATED ULTIMATE	(11) PAID LOSSES	(12) UNPAID LOSS	(13) CASE RESERVE	(14) ULTIMATE PURE PREM
1994													
1995													
1996													
1997													
1998													
1999													
2000													
2001													
2002													
2003													
2004													
2005													
2006													
2007													
2008													
2009	2,662	332	433	544	1,448,220	0.8%	11,876	879,624	891,500	794,324	97,175	85,300	335
2010	2,622	258	331	553	1,450,316	0.8%	11,939	674,592	686,531	462,377	224,153	212,214	262
2011	2,623	866	1,093	562	1,475,136	2.6%	37,750	2,181,164	2,218,915	2,047,949	170,966	133,216	846
2012	2,617	402	499	572	1,496,377	5.7%	84,928	968,116	1,053,044	937,188	115,855	30,928	402
2013	2,603	124	151	581	1,513,265	5.7%	86,626	301,974	388,600	271,046	117,554	30,928	149
2014	2,573	756	907	591	1,520,843	8.7%	132,011	1,805,599	1,937,610	1,510,905	426,705	294,694	753
2015	2,530	1,277	1,508	601	1,520,438	9.8%	149,199	2,797,827	2,947,027	2,569,731	377,295	228,096	1,165
2016	2,509	725	842	611	1,533,036	12.1%	185,286	1,690,349	1,875,635	1,249,850	625,786	440,499	748
2017	2,489	665	759	621	1,546,252	13.5%	209,275	1,328,971	1,538,246	1,246,295	291,951	82,676	618
2018	2,487	470	528	632	1,570,850	14.8%	232,641	1,005,422	1,238,063	781,754	456,309	223,667	498
2019	2,413	267	294	642	1,549,601	17.5%	271,740	575,886	847,627	367,186	480,440	208,700	351
2020	2,408	647	703	653	1,572,253	22.3%	351,346	1,341,805	1,693,151	779,810	913,341	561,995	703
2021	2,405	781	834	664	1,596,558	25.1%	401,317	1,514,515	1,915,832	828,427	1,087,405	686,089	797
2022	2,371	1,238	1,301	675	1,600,313	28.8%	460,830	1,807,853	2,268,683	1,316,891	951,792	490,962	957
2023	2,347	657	679	686	1,610,608	35.1%	565,296	1,073,125	1,638,421	411,637	1,226,784	661,488	698
2024	2,319	480	488	698	1,618,010	44.0%	712,030	482,674	1,194,704	193,760	1,000,945	288,914	515
2025	2,337	261	261	709	1,657,841	71.2%	1,180,601	175,602	1,356,203	-	1,356,203	175,602	580
TOTAL	42,315				26,279,916		5,084,692	20,605,099	25,689,791	15,769,132	9,920,660	4,835,968	607

Pure Premium Selection	
3-Year Average x Latest	823
5-Year Average x Latest	801
All Year Average x Latest	709
Selected Pure Premium	709

Trend = 1.017

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance UST - Closure
Summary of Paid Development Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	PAID LDM	PAID	INCURRED	CASE	IBNR	UNPAID
RY	ULTIMATE	LOSS	LOSS	RESERVE	RESERVE	LOSS
1994	1,128,314	848,088	1,128,314	280,226	-	280,226
1995	830,629	830,629	830,629	-	-	-
1996	3,877,028	3,877,028	3,877,028	-	-	-
1997	4,643,906	4,549,960	4,643,906	93,945	-	93,945
1998	5,964,475	5,269,003	5,964,475	695,472	-	695,472
1999	9,651,795	9,448,098	9,651,795	203,698	-	203,698
2000	5,579,749	5,442,164	5,483,807	41,643	95,942	137,585
2001	2,277,020	2,217,747	2,252,659	34,913	24,361	59,274
2002	4,449,420	4,257,908	4,449,420	191,511	-	191,511
2003	3,707,756	3,536,302	3,707,756	171,454	-	171,454
2004	2,419,322	2,294,455	2,419,322	124,867	-	124,867
2005	2,828,604	2,699,442	2,754,676	55,234	73,929	129,163
2006	1,554,313	1,390,513	1,554,313	163,800	-	163,800
2007	4,088,350	3,802,372	4,012,126	209,753	76,224	285,978
2008	3,001,472	2,687,058	3,001,472	314,414	-	314,414
2009	2,218,730	1,989,601	2,027,535	37,933	191,195	229,129
2010	2,073,191	1,826,075	2,073,191	247,117	-	247,117
2011	1,780,922	1,539,584	1,575,584	36,000	205,338	241,338
2012	2,794,058	2,372,394	2,417,514	45,121	376,544	421,664
2013	4,019,909	3,322,331	3,849,626	527,295	170,283	697,578
2014	3,178,330	2,578,827	3,031,218	452,391	147,112	599,503
2015	2,566,553	2,028,326	2,468,325	439,999	98,229	538,227
2016	2,346,469	1,782,848	2,058,489	275,640	287,980	563,620
2017	2,697,578	1,976,124	2,372,691	396,567	324,887	721,454
2018	3,291,127	2,307,469	2,616,008	308,538	675,120	983,658
2019	3,373,246	2,257,806	2,764,559	506,753	608,687	1,115,440
2020	978,552	609,790	805,254	195,465	173,298	368,762
2021	2,086,763	1,100,207	2,086,763	986,556	-	986,556
2022	3,101,540	1,513,440	1,871,084	357,644	1,230,456	1,588,100
2023	3,396,472	1,360,538	2,088,057	727,519	1,308,415	2,035,934
2024	1,495,773	391,932	917,728	525,797	578,045	1,103,842
2025	3,640,066	635,861	1,185,329	549,467	2,454,737	3,004,204
TOTAL	101,041,430	82,743,919	91,940,651	9,196,731	9,100,780	18,297,511

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance UST - Closure
Development of Losses to Ultimate

Development Period in Months

RY	12 - 24	24 - 36	36 - 48	48 - 60	60 - 72	72 - 84	84 - 96	96 - 108	108 - 120	120 - 132	132 - 144	144 - 156	156 - 168	168 - 180	180 - 192	192 - 204	204 - 216	216 - 228	228 - 240	240 - 252	252 - 264	264 - 276	276 - 288	288 - 300	300 - 312	312 - 324	324 - 336	336 - 348	348 - 360	360 - 372	372 - 384	384 - ULT
1994	1.590	1.284	2.725	1.390	1.000	1.129	1.360	1.656	1.129	1.207	1.047	1.079	1.019	1.004	1.102	1.083	1.001	1.059	1.031	1.000	1.046	1.003	1.000	1.009	1.000	1.047	1.000	1.016	1.000	1.091	1.000	1.016
1995	1.931	1.289	1.132	1.533	1.023	1.266	1.393	1.005	1.040	1.013	1.043	1.008	1.000	1.010	1.000	1.000	1.028	1.000	1.000	1.036	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.016
1996	1.951	1.854	1.381	1.832	1.102	1.078	1.026	1.059	1.034	1.034	1.022	1.015	1.052	1.015	1.018	1.008	1.011	1.004	1.023	1.022	1.009	1.008	1.007	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.016
1997	5.819	1.948	1.614	1.305	1.186	1.276	1.075	1.043	1.055	1.059	1.023	1.040	1.051	1.045	1.016	1.014	1.016	1.051	1.021	1.014	1.007	1.007	1.007	1.000	1.007	1.006	1.006	1.004	1.000	1.000	1.000	1.016
1998	5.396	1.373	1.182	1.137	1.047	1.093	1.057	1.077	1.068	1.091	1.022	1.062	1.028	1.009	1.026	1.015	1.047	1.054	1.027	1.025	1.014	1.015	1.002	1.010	1.002	1.004	1.000	1.003	1.000	1.000	1.000	1.016
1999	3.145	1.413	1.151	1.230	1.119	1.083	1.082	1.054	1.045	1.051	1.035	1.034	1.044	1.017	1.015	1.021	1.022	1.010	1.010	1.005	1.008	1.003	1.004	1.001	1.000	1.003	1.002	1.003	1.000	1.000	1.000	1.016
2000	2.794	1.171	1.209	1.059	1.096	1.051	1.035	1.083	1.030	1.048	1.022	1.069	1.019	1.023	1.018	1.027	1.028	1.013	1.007	1.012	1.001	1.000	1.000	1.000	1.000	1.004	1.002	1.003	1.000	1.000	1.000	1.016
2001	1.379	1.610	1.131	1.121	1.052	1.061	1.021	1.044	1.031	1.037	1.057	1.024	1.013	1.024	1.018	1.023	1.030	1.022	1.006	1.000	1.000	1.000	1.001	1.013	1.001	1.004	1.002	1.003	1.000	1.000	1.000	1.016
2002	2.952	1.311	1.160	1.055	1.048	1.343	1.023	1.026	1.012	1.018	1.028	1.020	1.012	1.019	1.032	1.000	1.004	1.002	1.002	1.000	1.001	1.002	1.000	1.003	1.001	1.004	1.002	1.003	1.000	1.000	1.000	1.016
2003	2.242	1.245	1.134	1.118	1.091	1.096	1.060	1.025	1.029	1.042	1.015	1.027	1.006	1.016	1.044	1.039	1.017	1.023	1.011	1.017	1.017	1.023	1.003	1.003	1.001	1.004	1.002	1.003	1.000	1.000	1.000	1.016
2004	6.475	1.290	1.079	1.064	1.094	1.117	1.039	1.023	1.013	1.082	1.016	1.028	1.024	1.007	1.008	1.013	1.004	1.000	1.047	1.005	1.007	1.006	1.003	1.003	1.001	1.004	1.002	1.003	1.000	1.000	1.000	1.016
2005	2.800	1.295	1.163	1.080	1.079	1.006	1.039	1.058	1.049	1.027	1.016	1.110	1.038	1.035	1.034	1.013	1.044	1.012	1.014	1.006	1.008	1.006	1.003	1.003	1.001	1.004	1.002	1.003	1.000	1.000	1.000	1.016
2006	3.574	1.540	1.136	1.366	1.032	1.073	1.086	1.027	1.001	1.027	1.000	1.003	1.037	1.040	1.017	1.000	1.008	1.006	1.005	1.011	1.008	1.006	1.003	1.003	1.001	1.004	1.002	1.003	1.000	1.000	1.000	1.016
2007	4.897	1.574	1.091	1.110	1.096	1.059	1.011	1.071	1.089	1.037	1.041	1.041	1.022	1.009	1.009	1.010	1.008	1.000	1.015	1.011	1.008	1.006	1.003	1.003	1.001	1.004	1.002	1.003	1.000	1.000	1.000	1.016
2008	3.181	1.294	1.214	1.216	1.094	1.068	1.037	1.047	1.057	1.049	1.012	1.030	1.010	1.016	1.014	1.014	1.000	1.017	1.015	1.011	1.008	1.006	1.003	1.003	1.001	1.004	1.002	1.003	1.000	1.000	1.000	1.016
2009	4.550	1.176	1.057	1.032	1.024	1.028	1.025	1.018	1.008	1.059	1.002	1.009	1.000	1.000	1.000	1.023	1.019	1.017	1.015	1.011	1.008	1.006	1.003	1.003	1.001	1.004	1.002	1.003	1.000	1.000	1.000	1.016
2010	9.898	1.200	1.190	1.142	1.092	1.042	1.038	1.055	1.049	1.051	1.032	1.009	1.080	1.017	1.022	1.017	1.019	1.017	1.015	1.011	1.008	1.006	1.003	1.003	1.001	1.004	1.002	1.003	1.000	1.000	1.000	1.016
2011	2.092	1.360	1.105	1.049	1.034	1.106	1.077	1.034	1.022	1.002	1.005	1.005	1.000	1.000	1.020	1.017	1.019	1.017	1.015	1.011	1.008	1.006	1.003	1.003	1.001	1.004	1.002	1.003	1.000	1.000	1.000	1.016
2012	2.259	1.678	1.189	1.204	1.119	1.072	1.056	1.017	1.030	1.022	1.022	1.012	1.011	1.018	1.020	1.017	1.019	1.017	1.015	1.011	1.008	1.006	1.003	1.003	1.001	1.004	1.002	1.003	1.000	1.000	1.000	1.016
2013	2.154	1.421	1.329	1.240	1.184	1.078	1.052	1.045	1.023	1.019	1.034	1.034	1.027	1.018	1.020	1.017	1.019	1.017	1.015	1.011	1.008	1.006	1.003	1.003	1.001	1.004	1.002	1.003	1.000	1.000	1.000	1.016
2014	7.132	1.486	1.179	1.112	1.200	1.049	1.007	1.033	1.030	1.018	1.059	1.019	1.027	1.018	1.020	1.017	1.019	1.017	1.015	1.011	1.008	1.006	1.003	1.003	1.001	1.004	1.002	1.003	1.000	1.000	1.000	1.016
2015	10.893	2.283	1.132	1.105	1.104	1.028	1.011	1.000	1.026	1.020	1.027	1.019	1.027	1.018	1.020	1.017	1.019	1.017	1.015	1.011	1.008	1.006	1.003	1.003	1.001	1.004	1.002	1.003	1.000	1.000	1.000	1.016
2016	3.832	1.726	1.334	1.117	1.061	1.101	1.016	1.015	1.010	1.040	1.027	1.019	1.027	1.018	1.020	1.017	1.019	1.017	1.015	1.011	1.008	1.006	1.003	1.003	1.001	1.004	1.002	1.003	1.000	1.000	1.000	1.016
2017	3.572	1.541	1.247	1.138	1.075	1.052	1.031	1.007	1.037	1.040	1.027	1.019	1.027	1.018	1.020	1.017	1.019	1.017	1.015	1.011	1.008	1.006	1.003	1.003	1.001	1.004	1.002	1.003	1.000	1.000	1.000	1.016
2018	4.370	1.506	1.246	1.088	1.079	1.078	1.050	1.045	1.037	1.040	1.027	1.019	1.027	1.018	1.020	1.017	1.019	1.017	1.015	1.011	1.008	1.006	1.003	1.003	1.001	1.004	1.002	1.003	1.000	1.000	1.000	1.016
2019	7.572	1.468	1.191	1.192	1.178	1.093	1.047	1.045	1.037	1.040	1.027	1.019	1.027	1.018	1.020	1.017	1.019	1.017	1.015	1.011	1.008	1.006	1.003	1.003	1.001	1.004	1.002	1.003	1.000	1.000	1.000	1.016
2020	3.890	1.683	1.218	1.116	1.121	1.074	1.047	1.045	1.037	1.040	1.027	1.019	1.027	1.018	1.020	1.017	1.019	1.017	1.015	1.011	1.008	1.006	1.003	1.003	1.001	1.004	1.002	1.003	1.000	1.000	1.000	1.016
2021	1.802	2.322	1.529	1.327	1.112	1.074	1.047	1.045	1.037	1.040	1.027	1.019	1.027	1.018	1.020	1.017	1.019	1.017	1.015	1.011	1.008	1.006	1.003	1.003	1.001	1.004	1.002	1.003	1.000	1.000	1.000	1.016
2022	4.759	1.298	1.119	1.149	1.112	1.074	1.047	1.045	1.037	1.040	1.027	1.019	1.027	1.018	1.020	1.017	1.019	1.017	1.015	1.011	1.008	1.006	1.003	1.003	1.001	1.004	1.002	1.003	1.000	1.000	1.000	1.016
2023	4.546	1.612	1.218	1.149	1.112	1.074	1.047	1.045	1.037	1.040	1.027	1.019	1.027	1.018	1.020	1.017	1.019	1.017	1.015	1.011	1.008	1.006	1.003	1.003	1.001	1.004	1.002	1.003	1.000	1.000	1.000	1.016
2024		1.529	1.218	1.149	1.112	1.074	1.047	1.045	1.037	1.040	1.027	1.019	1.027	1.018	1.020	1.017	1.019	1.017	1.015	1.011	1.008	1.006	1.003	1.003	1.001	1.004	1.002	1.003	1.000	1.000	1.000	1.016
2025	1.500	1.529	1.218	1.149	1.112	1.074	1.047	1.045	1.037	1.040	1.027	1.019	1.027	1.018	1.020	1.017	1.019	1.017	1.015	1.011	1.008	1.006	1.003	1.003	1.001	1.004	1.002	1.003	1.000	1.000	1.000	1.016

RY	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360	372	384	ULT
1994	17,096	27,184	34,895	95,084	132,148	132,148	149,193	202,874	336,027	379,362	457,817	479,155	517,191	527,042	529,376	583,342	631,688	632,598	669,990	690,824	690,824	722,650	724,556	724,556	731,314	731,314	765,504	765,504	777,703	777,703	848,088	848,088	861,656
1995	89,034	171,911	221,544	250,710	384,248	393,149	497,892	693,726	697,392	725,043	734,723	766,019	772,311	772,311	779,668	779,668	779,668	801,569	801,569	801,569	830,629	830,629	830,629	830,629	830,629	830,629	830,629	830,629	830,629	830,629	830,629	830,629	843,918
1996	248,435	484,694	898,742	1,241,483	2,274,586	2,506,109	2,700,383	2,769,493	2,933,288	3,033,001	3,134,874	3,203,100	3,252,258	3,422,969	3,474,090	3,537,955	3,565,408	3,605,861	3,620,092	3,703,617	3,785,792	3,818,767	3,847,779	3,874,358	3,877,028	3,877,028	3,877,028	3,877,028	3,877,028	3,877,028	3,877,028	3,877,028	3,939,054
1997	72,267	420,516	818,971	1,322,050	1,725,175	2,046,286	2,611,320	2,806,731	2,927,033	3,087,166	3,270,647	3,346,153	3,480,934	3,657,844	3,823,868	3,884,517	3,938,233	4,000,871	4,203,519	4,290,460	4,351,204	4,383,540	4,415,705	4,446,446	4,446,446	4,476,358	4,504,990	4,531,150	4,549,960	4,549,960	4,549,960	4,549,960	4,622,752
1998	244,191	1,317,603	1,808,685	2,137,859	2,431,813	2,545,169	2,781,548	2,941,195	3,167,671	3,383,414	3,689,967	3,771,262	4,003,931	4,114,580	4,152,017	4,258,947	4,324,127	4,527,913	4,773,615	4,900,838	5,023,106	5,095,402	5,174,038	5,186,048	5,238,246	5,250,621	5,269,003	5,269,003	5,285,335	5,285,335	5,285,335	5,285,335	5,369,892
1999	786,810	2,474,382	3,496,322	4,023,648	4,948,985	5,540,026	6,001,712	6,496,501	6,850,066	7,158,107	7,522,683	7,784,778	8,050,943	8,403,872	8,550,000	8,674,731	8,858,161	9,049,576	9,137,364	9,232,961	9,275,507	9,349,792	9,373,987	9,412,640	9,423,681	9,423,681	9,448,098	9,464,308	9,493,643	9,493,643	9,493,643	9,493,643	9,645,526
2000	738,273	2,062,618	2,415,497	2,919,665	3,092,893	3,389,522	3,561,543	3,685,610	3,990,320	4,108,957	4,305,211	4,399,521	4,703,612	4,793,636	4,902,861	4,988,988	5,122,239	5,263,743	5,331,739	5,370,653	5,436,106	5,442,164	5,442,164	5,442,164	5,442,164	5,442,164	5,442,164	5,465,540	5,474,917	5,491,887	5,491,887	5,491,887	5,491,887	5,579,749
2001	493,157	680,163	1,095,144	1,238,075	1,388,175	1,460,247	1,549,347	1,581,683	1,652,001	1,702,772	1,766,170	1,865,996	1,911,094	1,936,133	1,983,119	2,018,978	2,065,730	2,128,279	2,174,973	2,188,879	2,188,879	2,188,879	2,188,879	2,188,879	2,190,054	2,217,747	2,220,874	2,230,413	2,234,240	2,241,165	2,241,165	2,241,165	2,241,165	2,277,020
2002	523,306	1,545,046	2,024,839	2,349,790	2,479,316	2,598,612	3,489,397	3,570,739	3,663,170	3,707,244	3,775,271	3,880,256	3,958,320	4,004,981	4,079,843	4,208,501	4,208,501	4,225,838	4,233,790	4,243,920	4,243,920	4,249,787	4,257,908	4,257,908	4,271,218	4,277,240	4,295,613	4,302,983	4,316,320	4,316,320	4,316,320	4,316,320	4,385,374
2003	558,641	1,252,492	1,559,919	1,768,858	1,977,267	2,157,660	2,363,773	2,505,098	2,568,104	2,643,427	2,753,678	2,796,043	2,871,359	2,887,346	2,934,085	3,063,698	3,182,240	3,235,238	3,308,507	3,345,219	3,400,641	3,457,659	3,536,302	3,546,949	3,558,036	3,563,053	3,578,358	3,584,497	3,595,608	3,595,608	3,595,608	3,595,608	3,653,132
2004	143,829	931,294	1,201,475	1,296,399	1,379,054	1,509,347	1,686,522	1,752,111	1,791,788	1,815,522	1,963,819	1,994,768	2,050,897	2,099,609	2,113,648	2,130,676	2,158,476	2,166,165	2,166,165	2,268,537	2,279,382	2,294,455	2,309,118	2,316,070	2,323,310	2,326,586	2,336,580	2,340,589	2,347,843	2,347,843	2,347,843	2,347,843	2,385,405
2005	337,211	944,193	1,222,262	1,421,775	1,535,499	1,656,178	1,665,460	1,730,844	1,831,040	1,920,466	1,971,656	2,004,142	2,224,850	2,249,907	2,389,815	2,471,917	2,503,065	2,614,037	2,646,006	2,682,736	2,699,442	2,720,757	2,738,144	2,746,388	2,754,972	2,758,857	2,770,707	2,775,461	2,784,064	2,784,064	2,784,064	2,784,064	2,828,604
2006	114,292	408,515	629,120	714,825	976,707	1,008,090	1,081,296	1,174,274	1,206,522	1,207,387	1,239,850	1,239,850	1,243,210	1,289,388	1,340,833	1,364,261	1,364,261	1,375,401	1,383,313	1,390,513	1,405,945	1,417,047	1,426,103	1,430,396	1,434,867	1,436,891	1,443,063	1,445,538	1,450,019	1,450,019	1,450,019	1,450,019	1,473,217
2007	249,922	1,223,865	1,926,859	2,102,500	2,334,792	2,559,689	2,711,518	2,740,693	2,935,041	3,195,238	3,312,186	3,449,564	3,591,451	3,670,807	3,702,436	3,734,150	3,771,178	3,802,372	3,802,372	3,858,837	3,901,663	3,932,471	3,957,602	3,969,517	3,981,925	3,987,540	4,004,668	4,011,539	4,023,973	4,023,973	4,023,973	4,023,973	4,088,350
2008	285,783	909,119	1,176,822	1,428,082	1,736,851	1,899,675	2,029,161	2,105,246	2,203,792	2,328,660	2,441,800	2,471,712	2,544,896	2,570,798	2,612,744	2,649,605	2,687,058	2,687,058	2,733,715	2,774,311	2,805,101	2,827,250	2,845,318	2,853,884	2,862,805	2,866,842	2,879,156	2,884,096	2,893,035	2,893,035	2,893,035	2,893,035	2,939,319
2009	281,383	1,280,215	1,505,006	1,590,623	1,641,266	1,680,809	1,727,791	1,771,068	1,803,131	1,818,009	1,925,581	1,929,070	1,945,535	1,945,535	1,945,535	1,945,535	1,989,601	2,028,312	2,063,531	2,094,174	2,117,416	2,134,135	2,147,773	2,154,240	2,160,974	2,164,021	2,173,316	2,177,045	2,183,793	2,183,793	2,183,793	2,183,793	2,218,730
2010	70,430	697,094	836,490	995,262	1,136,718	1,241,412	1,293,850	1,342,840	1,416,703	1,486,360	1,561,464	1,611,644	1,625,448	1,756,221	1,786,879	1,826,075	1,857,087	1,893,219	1,926,093	1,954,695	1,976,389	1,991,994	2,004,724	2,010,760	2,017,045	2,019,889	2,028,566	2,032,046	2,038,344	2,038,344	2,038,344	2,038,344	2,070,955
2011	354,238	741,233	1,008,015	1,114,183	1,168,623	1,208,286	1,336,441	1,439,764	1,488,452	1,521,528	1,524,576	1,532,420	1,539,584	1,539,584	1,539,584	1,570,337	1,597,006	1,628,078	1,656,347	1,680,944	1,699,599	1,713,020	1,723,967	1,729,157	1,734,562	1,737,008	1,744,469	1,747,462	1,752,879	1,752,879	1,752,879	1,752,879	1,780,922
2012	308,280	696,402	1,168,776	1,389,447	1,672,985	1,872,897	2,007,539	2,119,951	2,155,353	2,220,037	2,268,503	2,318,652	2,346,795	2,372,394	2,415,427	2,463,675	2,505,515	2,554,264	2,598,616	2,637,205	2,666,473	2,687,528	2,704,702	2,712,846	2,721,325	2,725,163	2,736,868	2,741,564	2,750,062	2,750,062	2,750,062	2,750,062	2,794,058
2013	420,803	906,448	1,288,052	1,711,865	2,123,471	2,514,517	2,709,963	2,851,670	2,979,573	3,047,996	3,107,325	3,212,616	3,322,331	3,413,246	3,475,159	3,544,575	3,604,772	3,674,909	3,738,719	3,794,238	3,836,348	3,866,640	3,891,350	3,903,066	3,915,266	3,920,787	3,937,628	3,944,384	3,956,610	3,956,610	3,956,610	3,956,610	4,019,909
2014	127,794	911,475	1,354,211	1,596,521	1,774,763	2,129,113	2,232,987	2,247,675	2,321,900	2,392,534	2,435,894	2,578,827	2,626,792	2,698,673	2,747,625	2,802,508	2,850,103	2,905,556	2,956,008	2,999,904	3,033,197	3,057,148	3,076,685	3,085,948	3,095,594	3,099,959	3,113,274	3,118,616	3,128,282	3,128,282	3,128,282	3,128,282	3,178,330
2015	54,289	591,352	1,349,945	1,527,986	1,687,938	1,864,127	1,916,105	1,938,080	1,938,080	1,988,326	2,028,326	2,082,445	2,121,177	2,179,223	2,218,752	2,263,071	2,301,505	2,346,284	2,387,024	2,422,471	2,449,357	2,468,697	2,484,473	2,491,953	2,499,743	2,503,267	2,514,020	2,518,333	2,526,139	2,526,139	2,526,139	2,526,139	2,566,553
2016	148,859	570,416	984,252	1,312,538	1,465,936	1,555,593	1,711,971	1,739,743	1,765,433	1,782,848	1,854,395	1,903,873	1,939,284	1,992,352	2,028,492	2,069,010	2,104,148	2,145,088	2,182,335	2,214,742	2,239,322	2,257,004	2,271,427	2,278,266	2,285,387	2,288,610	2,298,440	2,302,384	2,309,520	2,309,520	2,309,520	2,309,520	2,346,469
2017	215,178	768,576	1,184,057	1,476,912	1,681,453	1,808,008	1,901,855	1,961,557	1,976,124	2,049,621	2,131,873	2,188,755	2,229,465	2,290,474	2,332,021	2,378,603	2,418,998	2,466,064	2,508,884	2,546,140	2,574,398	2,594,726	2,611,307	2,619,169	2,627,356	2,631,061	2,642,363	2,646,896	2,655,100	2,655,100	2,655,100	2,655,100	2,697,578
2018	211,847	925,703	1,393,959	1,736,597	1,889,816	2,038,612	2,197,242	2,307,469	2,410,932	2,500,600	2,600,951	2,670,348	2,720,015	2,794,448	2,845,137	2,901,968	2,951,252	3,008,673	3,060,915	3,106,369	3,140,844	3,165,645	3,185,875	3,195,467	3,205,455	3,209,975	3,223,763	3,229,294	3,239,303	3,239,303	3,239,303	3,239,303	3,291,127
2019	111,087	841,196	1,235,233	1,470,814	1,753,565	2,066,521	2,257,806	2,365,044	2,471,088	2,562,994	2,665,848	2,736,977	2,787,884	2,864,174	2,916,128	2,974,377	3,024,890	3,083,744	3,137,290	3,183,878	3,219,213	3,244,632	3,265,367	3,275,199	3,285,436	3,290,069	3,304,201	3,309,870	3,320,129	3,320,129	3,320,129	3,320,129	3,373,246
2020	61,138	237,826	400,210	487,443	543,858	609,790	654,972	686,081	716,843	743,504	773,341	793,975	808,743	830,874	845,945	862,843	877,497	894,570	910,103	923,618	933,868	941,242	947,257	950,109	953,079	954,423	958,522	960,167	963,143	963,143	963,143	963,143	978,552
2021	129,624	233,590	542,419	829,368	1,100,207	1,223,007	1,313,625	1,376,018	1,437,716	1,491,188	1,551,030	1,592,414	1,622,033	1,666,419	1,696,647	1,730,537	1,759,926	1,794,168	1,825,322	1,852,428	1,872,986	1,887,776	1,899,840	1,905,560	1,911,516	1,914,211	1,922,434	1,925,732	1,931,701	1,931,701	1,931,701	1,931,701	1,962,605
2022	219,104	1,042,659	1,352,858	1,513,440	1,738,676	1,932,740	2,075,946	2,174,546	2,272,049	2,356,552	2,451,121	2,516,521	2,563,327	2,633,472	2,681,241	2,734,798	2,781,243	2,835,357	2,884,589	2,927,425	2,959,914	2,983,286	3,002,351	3,011,390	3,020,803	3,025,063	3,038,056	3,043,269	3,052,702	3,052,702	3,052,702	3,052,702	3,101,540
2023	185,707	844,230	1,360,538	1,657,357	1,904,011	2,116,529	2,273,352	2,381,328	2,488,103	2,580,641	2,684,204	2,755,822	2,807,079	2,883,895	2,936,206	2,994,856	3,045,717	3,104,977	3,158,891	3,209,800	3,241,379	3,266,973	3,287,850	3,297,749	3,308,057	3,312,722	3,326,951	3,332,660	3,342,989	3,342,989	3,342,989	3,342,989	3,396,472
2024	-	391,932	599,168	729,884	838,508	932,099	1,001,162	1,048,714	1,095,736	1,136,489	1,182,097	1,213,637	1,236,210	1,270,039	1,293,077	1,318,905	1,341,304	1,367,401	1,391,145	1,411,803	1,427,472	1,438,743	1,447,937	1,452,297	1,456,836	1,458,891	1,465,157	1,467,671	1,472,220	1,472,220	1,472,220	1,472,220	1,495,773
2025	635,861	953,792	1,458,116	1,776,222	2,040,566	2,268,325	2,436,396	2,552,116	2,666,548	2,765,724	2,876,714	2,953,469	3,008,402	3,090,726	3,146,790	3,209,646	3,264,155	3,327,664	3,385,445	3,435,719	3,473,849	3,501,279	3,523,654	3,534,263	3,545,310	3,550,309	3,565,559	3,571,677	3,582,747	3,582,747	3,582,747	3,582,747	3,640,066

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance UST - Closure
Selection of Loss Development Factors

Development Period in Months

BY	12 - 24	24 - 36	36 - 48	48 - 60	60 - 72	72 - 84	84 - 96	96 - 108	108 - 120	120 - 132	132 - 144	144 - 156	156 - 168	168 - 180	180 - 192	192 - 204	204 - 216	216 - 228	228 - 240	240 - 252	252 - 264	264 - 276	276 - 288	288 - 300	300 - 312	312 - 324	324 - 336	336 - 348	348 - 360	360 - 372	372 - 384	
1994	1.590	1.284	2.725	1.390	1.000	1.129	1.360	1.656	1.129	1.207	1.047	1.079	1.019	1.004	1.102	1.083	1.001	1.059	1.031	1.000	1.046	1.003	1.000	1.009	1.000	1.047	1.000	1.016	1.000	1.091	1.000	
1995	1.931	1.289	1.132	1.533	1.023	1.266	1.393	1.005	1.040	1.013	1.043	1.008	1.000	1.010	1.000	1.000	1.028	1.000	1.000	1.036	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
1996	1.951	1.854	1.381	1.832	1.102	1.078	1.026	1.059	1.034	1.034	1.022	1.015	1.052	1.015	1.018	1.008	1.011	1.004	1.023	1.022	1.009	1.008	1.007	1.001	1.000	1.000	1.000	1.000	1.000			
1997	5.819	1.948	1.614	1.305	1.186	1.276	1.075	1.043	1.055	1.059	1.023	1.040	1.051	1.045	1.016	1.014	1.016	1.051	1.021	1.014	1.007	1.007	1.007	1.000	1.007	1.006	1.006	1.004				
1998	5.396	1.373	1.182	1.137	1.047	1.093	1.057	1.077	1.068	1.091	1.022	1.062	1.028	1.009	1.026	1.015	1.047	1.054	1.027	1.025	1.014	1.015	1.002	1.010	1.002	1.004	1.000					
1999	3.145	1.413	1.151	1.230	1.119	1.083	1.082	1.054	1.045	1.051	1.035	1.034	1.044	1.017	1.015	1.021	1.022	1.010	1.010	1.005	1.008	1.003	1.004	1.001	1.000	1.003						
2000	2.794	1.171	1.209	1.059	1.096	1.051	1.035	1.083	1.030	1.048	1.022	1.069	1.019	1.023	1.018	1.027	1.028	1.013	1.007	1.012	1.001	1.000	1.000	1.000	1.000							
2001	1.379	1.610	1.131	1.121	1.052	1.061	1.021	1.044	1.031	1.037	1.057	1.024	1.013	1.024	1.018	1.023	1.030	1.022	1.006	1.000	1.000	1.000	1.001	1.013								
2002	2.952	1.311	1.160	1.055	1.048	1.343	1.023	1.026	1.012	1.018	1.028	1.020	1.012	1.019	1.032	1.000	1.004	1.002	1.002	1.000	1.001	1.002	1.000									
2003	2.242	1.245	1.134	1.118	1.091	1.096	1.060	1.025	1.029	1.042	1.015	1.027	1.006	1.016	1.044	1.039	1.017	1.023	1.011	1.017	1.017	1.023										
2004	6.475	1.290	1.079	1.064	1.094	1.117	1.039	1.023	1.013	1.082	1.016	1.028	1.024	1.007	1.008	1.013	1.004	1.000	1.047	1.005	1.007											
2005	2.800	1.295	1.163	1.080	1.079	1.006	1.039	1.058	1.049	1.027	1.016	1.110	1.038	1.035	1.034	1.013	1.044	1.012	1.014	1.006												
2006	3.574	1.540	1.136	1.366	1.032	1.073	1.086	1.027	1.001	1.027	1.000	1.003	1.037	1.040	1.017	1.000	1.008	1.006	1.005													
2007	4.897	1.574	1.091	1.110	1.096	1.059	1.011	1.071	1.089	1.037	1.041	1.041	1.022	1.009	1.009	1.010	1.008	1.000														
2008	3.181	1.294	1.214	1.216	1.094	1.068	1.037	1.047	1.057	1.049	1.012	1.030	1.010	1.016	1.014	1.014	1.000															
2009	4.550	1.176	1.057	1.032	1.024	1.028	1.025	1.018	1.008	1.059	1.002	1.009	1.000	1.000	1.000	1.023																
2010	9.898	1.200	1.190	1.142	1.092	1.042	1.038	1.055	1.049	1.051	1.032	1.009	1.080	1.017	1.022																	
2011	2.092	1.360	1.105	1.049	1.034	1.106	1.077	1.034	1.022	1.002	1.005	1.005	1.000	1.000																		
2012	2.259	1.678	1.189	1.204	1.119	1.072	1.056	1.017	1.030	1.022	1.022	1.012	1.011																			
2013	2.154	1.421	1.329	1.240	1.184	1.078	1.052	1.045	1.023	1.019	1.034	1.034																				
2014	7.132	1.486	1.179	1.112	1.200	1.049	1.007	1.033	1.030	1.018	1.059																					
2015	10.893	2.283	1.132	1.105	1.104	1.028	1.011	1.000	1.026	1.020																						
2016	3.832	1.726	1.334	1.117	1.061	1.101	1.016	1.015	1.010																							
2017	3.572	1.541	1.247	1.138	1.075	1.052	1.031	1.007																								
2018	4.370	1.506	1.246	1.088	1.079	1.078	1.050																									
2019	7.572	1.468	1.191	1.192	1.178	1.093																										
2020	3.890	1.683	1.218	1.116	1.121																											
2021	1.802	2.322	1.529	1.327																												
2022	4.759	1.298	1.119																													
2023	4.546	1.612																														
2024																																
VOL WTD 3	5.629	1.535	1.233	1.219	1.126	1.075	1.034	1.007	1.023	1.019	1.038	1.021	1.028	1.006	1.012	1.014	1.005	1.005	1.024	1.010	1.008	1.009	1.000	1.002	1.001	1.004	1.002	1.002	1.000	1.044	1.000	
VOL WTD 5	4.618	1.529	1.226	1.161	1.101	1.070	1.024	1.023	1.024	1.017	1.033	1.017	1.018	1.009	1.012	1.012	1.013	1.009	1.014	1.006	1.005	1.004	1.002	1.003	1.001	1.003	1.002	1.003	1.000	1.044	1.000	
VOL WTD ALL	3.351	1.434	1.192	1.166	1.098	1.093	1.047	1.045	1.037	1.042	1.027	1.035	1.027	1.018	1.020	1.017	1.019	1.017	1.015	1.011	1.008	1.006	1.003	1.003	1.001	1.004	1.002	1.003	1.000	1.044	1.000	
ARITH 3	4.652	1.744	1.289	1.212	1.126	1.074	1.033	1.007	1.022	1.019	1.038	1.017	1.030	1.006	1.012	1.016	1.005	1.006	1.022	1.009	1.008	1.008	1.000	1.005	1.001	1.004	1.002	1.001	1.000	1.045	1.000	
ARITH 5	3.749	1.676	1.260	1.172	1.103	1.070	1.023	1.020	1.024	1.016	1.030	1.014	1.020	1.008	1.012	1.012	1.013	1.008	1.016	1.006	1.005	1.005	1.001	1.005	1.002	1.002	1.001	1.005	1.000	1.045	1.000	
ARITH ALL	4.115	1.508	1.261	1.196	1.090	1.097	1.068	1.063	1.038	1.046	1.026	1.033	1.025	1.017	1.023	1.019	1.018	1.018	1.016	1.012	1.010	1.006	1.002	1.004	1.001	1.010	1.001	1.005	1.000	1.045	1.000	
5 YR HI LO	4.218	1.588	1.218	1.149	1.092	1.074	1.020	1.018	1.026	1.019	1.029	1.010	1.007	1.008	1.013	1.012	1.007	1.006	1.010	1.004	1.003	1.001	1.001	1.004	1.001	1.002	1.000	1.002	1.000	NA	NA	
7 YR HI LO	4.391	1.562	1.247	1.134	1.112	1.070	1.032	1.021	1.026	1.026	1.021	1.019	1.016	1.015	1.014	1.014	1.008	1.008	1.009	1.006	1.006	1.005	1.003	1.002	1.000	1.003	1.000	1.002	1.000	NA	NA	
ALL YR HI LO	3.971	1.491	1.214	1.178	1.089	1.091	1.057	1.039	1.036	1.040	1.026	1.030	1.023	1.016	1.019	1.016	1.017	1.016	1.014	1.011	1.007	1.005	1.002	1.004	1.000	1.003	1.000	1.002	1.000	NA	NA	Tail
SELECTED	1.500	1.529	1.218	1.149	1.112	1.074	1.047	1.045	1.037	1.040	1.027	1.019	1.027	1.018	1.020	1.017	1.019	1.017	1.015	1.011	1.008	1.006	1.003	1.003	1.001	1.004	1.002	1.003	1.000	1.000	1.000	1.016

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance UST - Closure
Paid Losses

Development in Months

BY	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360	372	384
1994	17,096	27,184	34,895	95,084	132,148	132,148	149,193	202,874	336,027	379,362	457,817	479,155	517,191	527,042	529,376	583,342	631,688	632,598	669,990	690,824	690,824	722,650	724,556	724,556	731,314	731,314	765,504	765,504	777,703	777,703	848,088	848,088
1995	89,034	171,911	221,544	250,710	384,248	393,149	497,892	693,726	697,392	725,043	734,723	766,019	772,311	772,311	779,668	779,668	779,668	801,569	801,569	801,569	830,629	830,629	830,629	830,629	830,629	830,629	830,629	830,629	830,629	830,629	830,629	
1996	248,435	484,694	898,742	1,241,483	2,274,586	2,506,109	2,700,383	2,769,493	2,933,288	3,033,001	3,134,874	3,203,100	3,252,258	3,422,969	3,474,090	3,537,955	3,565,408	3,605,861	3,620,092	3,703,617	3,785,792	3,818,767	3,847,779	3,874,358	3,877,028	3,877,028	3,877,028	3,877,028	3,877,028	3,877,028	3,877,028	
1997	72,267	420,516	818,971	1,322,050	1,725,175	2,046,286	2,611,320	2,806,731	2,927,033	3,087,166	3,270,647	3,346,153	3,480,934	3,657,844	3,823,868	3,884,517	3,938,233	4,000,871	4,203,519	4,290,460	4,351,204	4,383,540	4,415,705	4,446,446	4,446,446	4,476,358	4,504,990	4,531,150	4,549,960				
1998	244,191	1,317,603	1,808,685	2,137,859	2,431,813	2,545,169	2,781,548	2,941,195	3,167,671	3,383,414	3,689,967	3,771,262	4,003,931	4,114,580	4,152,017	4,258,947	4,324,127	4,527,913	4,773,615	4,900,838	5,023,106	5,095,402	5,174,038	5,186,048	5,238,246	5,250,621	5,269,003	5,269,003				
1999	786,810	2,474,382	3,496,322	4,023,648	4,948,985	5,540,026	6,001,712	6,496,501	6,850,066	7,158,107	7,522,683	7,784,778	8,050,943	8,403,872	8,550,000	8,674,731	8,858,161	9,049,576	9,137,364	9,232,961	9,275,507	9,349,792	9,373,987	9,412,640	9,423,681	9,423,681	9,448,098					
2000	738,273	2,062,618	2,415,497	2,919,665	3,092,893	3,389,522	3,561,543	3,685,610	3,990,320	4,108,957	4,305,211	4,399,521	4,703,612	4,793,636	4,902,861	4,988,988	5,122,239	5,263,743	5,331,739	5,370,653	5,436,106	5,442,164	5,442,164	5,442,164	5,442,164	5,442,164						
2001	493,157	680,163	1,095,144	1,238,075	1,388,175	1,460,247	1,549,347	1,581,683	1,652,001	1,702,772	1,766,170	1,865,996	1,911,094	1,936,133	1,983,119	2,018,978	2,065,730	2,128,279	2,174,973	2,188,879	2,188,879	2,188,879	2,188,879	2,190,054	2,217,747							
2002	523,306	1,545,046	2,024,839	2,349,790	2,479,316	2,598,612	3,489,397	3,570,739	3,663,170	3,707,244	3,775,271	3,880,256	3,958,320	4,004,981	4,079,843	4,208,501	4,208,501	4,225,838	4,233,790	4,243,920	4,243,920	4,249,787	4,257,908	4,257,908								
2003	558,641	1,252,492	1,559,919	1,768,858	1,977,267	2,157,660	2,363,773	2,505,098	2,568,104	2,643,427	2,753,678	2,796,043	2,871,359	2,887,346	2,934,085	3,063,698	3,182,240	3,235,238	3,308,507	3,345,219	3,400,641	3,457,659	3,536,302									
2004	143,829	931,294	1,201,475	1,296,399	1,379,054	1,509,347	1,686,522	1,752,111	1,791,788	1,815,522	1,963,819	1,994,768	2,050,897	2,099,609	2,113,648	2,130,676	2,158,476	2,166,165	2,166,165	2,268,537	2,279,382	2,294,455										
2005	337,211	944,193	1,222,262	1,421,775	1,535,499	1,656,178	1,665,460	1,730,844	1,831,040	1,920,466	1,971,656	2,004,142	2,224,850	2,309,907	2,389,815	2,471,917	2,503,065	2,614,037	2,646,006	2,682,736	2,699,442											
2006	114,292	408,515	629,120	714,825	976,707	1,008,090	1,081,296	1,174,274	1,206,522	1,207,387	1,239,850	1,239,850	1,243,210	1,289,388	1,340,833	1,364,261	1,364,261	1,375,401	1,383,313	1,390,513												
2007	249,922	1,223,865	1,926,859	2,102,500	2,334,792	2,559,689	2,711,518	2,740,693	2,935,041	3,195,238	3,312,186	3,449,564	3,591,451	3,670,807	3,702,436	3,734,150	3,771,178	3,802,372	3,802,372													
2008	285,783	909,119	1,176,822	1,428,082	1,736,851	1,899,675	2,029,161	2,105,246	2,203,792	2,328,660	2,441,800	2,471,712	2,544,896	2,570,798	2,612,744	2,649,605	2,687,058	2,687,058														
2009	281,383	1,280,215	1,505,006	1,590,623	1,641,266	1,680,809	1,727,791	1,771,068	1,803,131	1,818,009	1,925,581	1,929,070	1,945,535	1,945,535	1,945,535	1,945,535	1,989,601															
2010	70,430	697,094	836,490	995,262	1,136,718	1,241,412	1,293,850	1,342,840	1,416,703	1,486,360	1,561,464	1,611,644	1,625,448	1,756,221	1,786,879	1,826,075																
2011	354,238	741,233	1,008,015	1,114,183	1,168,623	1,208,286	1,336,441	1,439,764	1,488,452	1,521,528	1,524,576	1,532,420	1,539,584	1,539,584	1,539,584																	
2012	308,280	696,402	1,168,776	1,389,447	1,672,985	1,872,897	2,007,539	2,119,951	2,155,353	2,220,037	2,268,503	2,318,652	2,346,795	2,372,394																		
2013	420,803	906,448	1,288,052	1,711,865	2,123,471	2,514,517	2,709,963	2,851,670	2,979,573	3,047,996	3,107,325	3,212,616	3,322,331																			
2014	127,794	911,475	1,354,211	1,596,521	1,774,763	2,129,113	2,232,987	2,247,675	2,321,900	2,392,534	2,435,894	2,578,827																				
2015	54,289	591,352	1,349,945	1,527,986	1,687,938	1,864,127	1,916,105	1,938,080	1,938,080	1,988,326	2,028,326																					
2016	148,859	570,416	984,252	1,312,538	1,465,936	1,555,593	1,711,971	1,739,743	1,765,433	1,782,848																						
2017	215,178	768,576	1,184,057	1,476,912	1,681,453	1,808,008	1,901,855	1,961,557	1,976,124																							
2018	211,847	925,703	1,393,959	1,736,597	1,889,816	2,038,612	2,197,242	2,307,469																								
2019	111,087	841,196	1,235,233	1,470,814	1,753,565	2,066,521	2,257,806																									
2020	61,138	237,826	400,210	487,443	543,858	609,790																										
2021	129,624	233,590	542,419	829,368	1,100,207																											
2022	219,104	1,042,659	1,352,858	1,513,440																												
2023	185,707	844,230	1,360,538																													
2024	-	391,932																														
2025	635,861																															

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance UST - Closure
Summary of Incurred Development Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	INC LDM	PAID	INCURRED	CASE	IBNR	UNPAID
RY	ULTIMATE	LOSS	LOSS	RESERVE	RESERVE	LOSS
1994	1,128,314	848,088	1,128,314	280,226	-	280,226
1995	830,629	830,629	830,629	-	-	-
1996	3,877,028	3,877,028	3,877,028	-	-	-
1997	4,643,906	4,549,960	4,643,906	93,945	-	93,945
1998	5,964,475	5,269,003	5,964,475	695,472	-	695,472
1999	9,651,795	9,448,098	9,651,795	203,698	-	203,698
2000	5,483,807	5,442,164	5,483,807	41,643	-	41,643
2001	2,252,659	2,217,747	2,252,659	34,913	-	34,913
2002	4,449,420	4,257,908	4,449,420	191,511	-	191,511
2003	3,729,632	3,536,302	3,707,756	171,454	21,876	193,330
2004	2,433,850	2,294,455	2,419,322	124,867	14,527	139,394
2005	2,775,028	2,699,442	2,754,676	55,234	20,352	75,586
2006	1,566,642	1,390,513	1,554,313	163,800	12,329	176,129
2007	4,057,224	3,802,372	4,012,126	209,753	45,099	254,852
2008	3,059,823	2,687,058	3,001,472	314,414	58,351	372,765
2009	2,085,518	1,989,601	2,027,535	37,933	57,983	95,917
2010	2,137,385	1,826,075	2,073,191	247,117	64,194	311,310
2011	1,647,517	1,539,584	1,575,584	36,000	71,933	107,933
2012	2,554,347	2,372,394	2,417,514	45,121	136,833	181,953
2013	4,161,506	3,322,331	3,849,626	527,295	311,880	839,175
2014	3,329,545	2,578,827	3,031,218	452,391	298,327	750,718
2015	2,751,785	2,028,326	2,468,325	439,999	283,460	723,459
2016	2,327,115	1,782,848	2,058,489	275,640	268,626	544,267
2017	2,739,169	1,976,124	2,372,691	396,567	366,478	763,045
2018	3,059,462	2,307,469	2,616,008	308,538	443,455	751,993
2019	3,279,543	2,257,806	2,764,559	506,753	514,984	1,021,737
2020	978,591	609,790	805,254	195,465	173,337	368,801
2021	2,576,999	1,100,207	2,086,763	986,556	490,236	1,476,792
2022	2,438,997	1,513,440	1,871,084	357,644	567,913	925,557
2023	3,010,154	1,360,538	2,088,057	727,519	922,097	1,649,616
2024	1,564,640	391,932	917,728	525,797	646,912	1,172,709
2025	3,428,612	635,861	1,185,329	549,467	2,243,283	2,792,751
TOTAL	99,975,114	82,743,919	91,940,651	9,196,731	8,034,464	17,231,195

DRAFT

Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance UST - Closure
Development of Losses to Ultimate

Development Period in Months

RY	12 - 24	24 - 36	36 - 48	48 - 60	60 - 72	72 - 84	84 - 96	96 - 108	108 - 120	120 - 132	132 - 144	144 - 156	156 - 168	168 - 180	180 - 192	192 - 204	204 - 216	216 - 228	228 - 240	240 - 252	252 - 264	264 - 276	276 - 288	288 - 300	300 - 312	312 - 324	324 - 336	336 - 348	348 - 360	360 - 372	372 - 384	384 - ULT
1994	1.748	1.035	1.099	1.064	1.087	1.000	1.188	1.063	1.046	1.136	1.039	0.962	0.938	1.054	1.022	1.352	0.998	1.000	1.000	1.000	0.994	1.000	1.000	1.000	1.000	1.288	1.000	1.000	1.000	1.000	1.000	1.000
1995	1.568	0.944	0.990	1.403	1.380	1.130	1.006	1.003	1.165	0.989	0.963	1.000	1.033	0.953	1.000	1.000	1.025	1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1996	1.115	1.062	1.088	1.277	0.983	1.123	0.973	1.014	0.948	1.021	1.057	0.930	1.031	1.011	1.001	1.010	0.996	1.014	1.035	1.000	1.000	0.999	1.003	0.995	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1997	1.376	1.029	1.122	1.191	0.932	1.009	1.006	0.951	1.008	0.949	1.007	1.030	1.036	1.012	1.022	1.005	1.040	1.023	1.004	0.982	1.007	1.002	1.017	1.000	0.985	1.000	1.005	1.000	1.000	1.000	1.000	1.000
1998	0.968	1.227	0.936	1.000	1.053	1.001	0.983	1.009	1.012	1.045	1.014	1.016	1.012	1.008	0.997	0.993	1.066	1.050	1.011	1.007	0.999	1.001	1.115	0.998	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1999	1.380	1.175	1.037	1.067	1.059	1.019	1.058	0.998	1.115	1.039	1.005	1.043	0.997	1.000	1.009	1.002	0.974	0.971	0.999	1.003	1.010	1.000	0.999	1.008	1.000	0.991	1.000	1.000	1.000	1.000	1.000	1.000
2000	1.307	1.026	1.352	1.020	0.960	1.014	0.989	0.994	1.014	1.019	1.004	1.023	1.021	1.000	1.039	1.011	1.018	1.002	0.995	0.990	0.996	1.000	1.000	0.983	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2001	0.774	1.045	1.094	0.950	1.013	1.048	0.988	1.032	1.007	1.037	1.006	1.014	0.990	1.000	1.031	1.000	1.011	0.996	0.990	1.000	1.000	1.000	1.002	1.011	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2002	1.086	1.231	1.061	0.999	1.008	1.176	0.980	1.001	1.007	1.022	1.019	0.998	0.985	1.015	1.013	0.987	1.000	1.000	1.002	1.005	1.000	1.000	1.007	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2003	0.866	1.069	1.034	1.077	0.986	0.979	0.990	0.992	1.055	0.996	1.003	1.003	1.011	1.035	1.060	1.024	0.994	1.034	1.000	1.172	0.993	0.896	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2004	0.726	1.002	0.957	1.153	0.996	0.915	1.012	1.022	1.037	1.008	1.020	1.029	1.000	0.997	0.997	0.984	1.034	1.000	1.035	1.000	1.000	1.000	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2005	0.999	1.065	0.965	0.916	1.003	0.977	1.047	1.044	0.963	0.984	1.044	1.127	0.982	1.023	1.010	0.999	1.004	1.000	1.002	0.994	1.001	1.000	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2006	0.697	0.925	1.016	1.121	0.979	0.945	0.958	1.009	0.962	0.985	1.000	1.105	1.020	1.126	0.988	1.000	1.000	1.000	0.873	1.001	1.001	1.000	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2007	1.129	0.948	0.943	0.962	1.063	1.019	1.010	1.028	1.090	1.012	1.005	1.033	1.014	1.000	1.022	1.000	0.998	1.000	1.003	1.001	1.001	1.000	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2008	0.720	0.880	1.052	1.089	1.010	1.024	0.994	1.105	1.066	1.000	0.983	0.996	1.012	1.011	1.010	1.000	1.000	1.008	1.003	1.001	1.001	1.000	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2009	0.825	0.842	0.957	1.023	0.974	1.022	0.998	1.008	1.073	1.018	1.000	0.965	1.020	1.000	1.000	1.000	1.009	1.008	1.003	1.001	1.001	1.000	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2010	0.696	0.928	0.970	1.076	1.062	1.073	1.007	0.983	0.992	0.985	1.091	1.000	1.071	1.000	0.996	1.002	1.009	1.008	1.003	1.001	1.001	1.000	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2011	0.832	1.000	1.031	0.966	1.093	1.020	1.004	0.991	0.999	0.998	1.000	0.994	1.000	1.000	1.014	1.002	1.009	1.008	1.003	1.001	1.001	1.000	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2012	0.858	0.963	1.329	1.028	0.996	1.035	0.984	0.844	0.992	1.000	1.009	1.004	1.000	1.010	1.014	1.002	1.009	1.008	1.003	1.001	1.001	1.000	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2013	0.764	1.126	1.009	0.996	1.083	1.028	1.024	1.029	1.003	1.059	1.057	0.996	1.023	1.010	1.014	1.002	1.009	1.008	1.003	1.001	1.001	1.000	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2014	0.746	1.098	0.950	1.204	0.985	0.982	1.044	1.028	1.003	1.003	1.002	1.016	1.023	1.010	1.014	1.002	1.009	1.008	1.003	1.001	1.001	1.000	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2015	2.616	1.627	1.100	1.101	0.994	0.987	1.163	1.004	1.000	0.993	1.015	1.016	1.023	1.010	1.014	1.002	1.009	1.008	1.003	1.001	1.001	1.000	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2016	2.752	1.370	1.064	0.912	0.987	1.098	0.991	0.999	1.000	1.014	1.015	1.016	1.023	1.010	1.014	1.002	1.009	1.008	1.003	1.001	1.001	1.000	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2017	2.579	1.003	1.096	1.040	1.033	1.019	0.978	0.993	1.021	1.014	1.015	1.016	1.023	1.010	1.014	1.002	1.009	1.008	1.003	1.001	1.001	1.000	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2018	1.754	1.190	1.050	1.029	1.005	1.039	1.007	1.013	1.021	1.014	1.015	1.016	1.023	1.010	1.014	1.002	1.009	1.008	1.003	1.001	1.001	1.000	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2019	3.047	1.145	1.173	1.001	0.962	1.049	1.014	1.013	1.021	1.014	1.015	1.016	1.023	1.010	1.014	1.002	1.009	1.008	1.003	1.001	1.001	1.000	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2020	0.901	0.926	0.998	0.998	1.031	1.024	1.014	1.013	1.021	1.014	1.015	1.016	1.023	1.010	1.014	1.002	1.009	1.008	1.003	1.001	1.001	1.000	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2021	1.219	1.545	1.331	1.096	1.016	1.024	1.014	1.013	1.021	1.014	1.015	1.016	1.023	1.010	1.014	1.002	1.009	1.008	1.003	1.001	1.001	1.000	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2022	1.749	1.297	0.968	1.056	1.016	1.024	1.014	1.013	1.021	1.014	1.015	1.016	1.023	1.010	1.014	1.002	1.009	1.008	1.003	1.001	1.001	1.000	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2023	2.121	1.106	1.106	1.056	1.016	1.024	1.014	1.013	1.021	1.014	1.015	1.016	1.023	1.010	1.014	1.002	1.009	1.008	1.003	1.001	1.001	1.000	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2024	6.285	1.183	1.106	1.056	1.016	1.024	1.014	1.013	1.021	1.014	1.015	1.016	1.023	1.010	1.014	1.002	1.009	1.008	1.003	1.001	1.001	1.000	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2025	1.697	1.183	1.106	1.056	1.016	1.024	1.014	1.013	1.021	1.014	1.015	1.016	1.023	1.010	1.014	1.002	1.009	1.008	1.003	1.001	1.001	1.000	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

RY	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360	372	384	ULT
1994	187,103	327,100	338,664	372,338	396,280	430,925	430,925	512,003	544,249	569,328	646,825	671,833	646,361	606,161	639,180	653,025	882,676	881,282	881,282	881,282	881,282	875,960	875,960	875,960	875,960	1,128,314	1,128,314	1,128,314	1,128,314	1,128,314	1,128,314	1,128,314	1,128,314
1995	229,050	359,228	339,169	335,712	470,908	649,998	734,664	739,266	741,392	863,373	854,043	822,060	822,060	849,516	809,668	809,668	809,668	829,668	829,668	829,668	830,629	830,629	830,629	830,629	830,629	830,629	830,629	830,629	830,629	830,629	830,629	830,629	830,629
1996	2,074,608	2,312,993	2,456,425	2,673,073	3,413,485	3,354,566	3,767,622	3,665,813	3,718,947	3,524,021	3,596,366	3,799,750	3,534,045	3,643,349	3,685,176	3,687,940	3,723,882	3,707,363	3,757,936	3,887,596	3,887,596	3,887,613	3,883,098	3,896,281	3,877,028	3,877,028	3,877,028	3,877,028	3,877,028	3,877,028	3,877,028	3,877,028	3,877,028
1997	2,396,340	3,296,691	3,392,934	3,805,286	4,531,604	4,223,037	4,260,238	4,287,861	4,079,282	4,113,314	3,902,281	3,929,176	4,047,234	4,192,485	4,241,564	4,333,493	4,357,186	4,532,100	4,636,226	4,652,717	4,571,271	4,602,339	4,610,824	4,690,855	4,690,855	4,620,899	4,620,899	4,643,906	4,643,906	4,643,906	4,643,906	4,643,906	4,643,906	4,643,906
1998	3,675,965	3,559,113	4,365,735	4,088,438	4,086,851	4,304,774	4,307,747	4,235,040	4,274,042	4,324,783	4,519,773	4,581,805	4,653,835	4,710,482	4,749,789	4,737,115	4,702,682	5,014,309	5,265,050	5,323,794	5,363,065	5,355,706	5,358,491	5,975,720	5,964,475	5,964,476	5,964,475	5,964,475	5,964,475	5,964,475	5,964,475	5,964,475	5,964,475	5,964,475
1999	4,037,062	5,571,871	6,545,350	6,787,456	7,241,227	7,671,357	7,817,662	8,271,935	8,254,562	9,206,158	9,560,694	9,605,104	10,021,467	9,989,020	9,992,011	10,080,720	10,105,116	9,843,136	9,558,326	9,546,992	9,578,572	9,674,953	9,674,953	9,666,343	9,740,883	9,740,883	9,651,795	9,651,795	9,651,795	9,651,795	9,651,795	9,651,795	9,651,795	9,651,795
2000	2,762,343	3,611,594	3,705,600	5,111,259	5,112,429	4,908,784	4,977,899	4,921,943	4,894,275	4,961,257	5,054,309	5,076,112	5,193,017	5,303,446	5,303,354	5,511,724	5,574,262	5,673,733	5,687,601	5,658,501	5,602,232	5,578,254	5,578,254	5,578,254	5,578,254	5,483,807	5,483,807	5,483,807	5,483,807	5,483,807	5,483,807	5,483,807	5,483,807	5,483,807
2001	2,251,558	1,743,446	1,822,201	1,993,523	1,894,340	1,918,963	2,011,132	1,987,488	2,052,066	2,067,276	2,144,617	2,157,214	2,187,052	2,164,958	2,164,958	2,231,893	2,231,893	2,255,449	2,246,989	2,223,792	2,223,792	2,223,792	2,223,792	2,227,492	2,252,659	2,252,659	2,252,659	2,252,659	2,252,659	2,252,659	2,252,659	2,252,659	2,252,659
2002	2,542,017	2,760,461	3,397,838	3,606,278	3,602,481	3,629,619	4,269,535	4,184,966	4,189,633	4,220,328	4,314,840	4,395,247	4,388,354	4,323,344	4,389,340	4,444,852	4,388,828	4,388,828	4,388,828	4,395,828	4,418,120	4,418,120	4,418,120	4,449,420	4,449,420	4,449,420	4,449,420	4,449,420	4,449,420	4,449,420	4,449,420	4,449,420	4,449,420
2003	2,947,566	2,552,226	2,729,345	2,821,402	3,038,665	2,996,630	2,935,032	2,905,668	2,883,632	3,043,090	3,031,155	3,041,419	3,049,245	3,081,544	3,188,294	3,379,908	3,460,316	3,438,965	3,555,208	3,555,208	4,166,373	4,136,003	3,707,756	3,729,632	3,729,632	3,729,632	3,729,632	3,729,632	3,729,632	3,729,632	3,729,632	3,729,632	3,729,632
2004	2,784,076	2,021,523	2,025,941	1,938,585	2,234,615	2,224,836	2,035,592	2,059,706	2,105,619	2,182,954	2,200,007	2,244,932	2,310,707	2,310,706	2,304,759	2,298,878	2,262,131	2,338,322	2,338,322	2,419,322	2,419,322	2,419,322	2,419,574	2,433,850	2,433,850	2,433,850	2,433,850	2,433,850	2,433,850	2,433,850	2,433,850	2,433,850	2,433,850
2005	2,418,554	2,416,450	2,572,849	2,483,026	2,274,631	2,281,970	2,229,537	2,333,344	2,437,114	2,347,584	2,309,022	2,411,172	2,717,437	2,667,437	2,729,436	2,755,939	2,754,019	2,765,098	2,765,098	2,770,415	2,754,676	2,758,464	2,758,751	2,775,028	2,775,028	2,775,028	2,775,028	2,775,028	2,775,028	2,775,028	2,775,028	2,775,028	2,775,028
2006	2,279,915	1,590,227	1,471,489	1,494,938	1,675,834	1,640,664	1,549,814	1,484,507	1,497,613	1,440,812	1,418,755	1,418,755	1,568,383	1,600,382	1,802,384	1,780,461	1,780,461	1,780,461	1,780,461	1,554,313	1,555,152	1,557,291	1,557,453	1,566,642	1,566,642	1,566,642	1,566,642	1,566,642	1,566,642	1,566,642	1,566,642	1,566,642	1,566,642
2007	3,104,642	3,506,428	3,324,034	3,133,446	3,015,593	3,206,641	3,266,444	3,297,905	3,388,641	3,693,115	3,736,832	3,754,548	3,878,579	3,932,825	3,932,825	4,020,125	4,020,125	4,012,126	4,012,126	4,025,296	4,027,468	4,033,007	4,033,427	4,057,224	4,057,224	4,057,224	4,057,224	4,057,224	4,057,224	4,057,224	4,057,224	4,057,224	4,057,224
2008	3,378,033	2,432,035	2,139,716	2,250,962	2,450,839	2,475,575	2,534,647	2,518,897	2,784,301	2,969,033	2,968,102	2,916,589	2,905,922	2,941,629	2,972,885	3,001,472	3,001,472	3,001,472	3,025,811	3,035,744	3,037,382	3,041,559	3,041,876	3,059,823	3,059,823	3,059,823	3,059,823	3,059,823	3,059,823	3,059,823	3,059,823	3,059,823	3,059,823
2009	2,770,198	2,286,030	1,923,883	1,840,582	1,883,630	1,833,921	1,873,872	1,869,496	1,884,955	2,023,386	2,059,214	2,059,214	1,987,951	2,027,535	2,027,535	2,027,535	2,027,535	2,045,747	2,062,336	2,069,106	2,070,222	2,073,070	2,073,285	2,085,518	2,085,518	2,085,518	2,085,518	2,085,518	2,085,518	2,085,518	2,085,518	2,085,518	2,085,518
2010	2,399,535	1,670,654	1,551,137	1,504,347	1,618,767	1,718,575	1,843,937	1,857,606	1,825,960	1,811,019	1,783,637	1,945,713	1,945,107	2,082,322	2,082,322	2,073,191	2,077,959	2,096,625	2,113,626	2,120,565	2,121,709	2,124,627	2,124,848	2,137,385	2,137,385	2,137,385	2,137,385	2,137,385	2,137,385	2,137,385	2,137,385	2,137,385	2,137,385
2011	1,730,234	1,440,222	1,440,536	1,484,741	1,433,817	1,567,380	1,598,788	1,605,837	1,590,668	1,588,365	1,584,634	1,584,634	1,575,584	1,575,584	1,575,584	1,598,036	1,601,711	1,616,098	1,629,204	1,634,552	1,635,434	1,637,683	1,637,853	1,647,517	1,647,517	1,647,517	1,647,517	1,647,517	1,647,517	1,647,517	1,647,517	1,647,517	1,647,517
2012	2,490,976	2,137,662	2,058,476	2,735,440	2,811,353	2,799,426	2,897,254	2,851,986	2,405,715	2,386,551	2,386,388	2,408,911	2,417,514	2,417,514	2,442,821	2,477,631	2,483,329	2,505,636	2,525,954	2,534,246	2,535,613	2,539,101	2,539,365	2,554,347	2,554,347	2,554,347	2,554,347	2,554,347	2,554,347	2,554,347	2,554,347	2,554,347	2,554,347
2013	3,392,371	2,592,125	2,918,959	2,945,843	2,934,795	3,178,441	3,266,982	3,343,869	3,441,847	3,452,011	3,656,207	3,866,080	3,849,626	3,938,580	3,979,809	4,036,521	4,045,805	4,082,146	4,115,249	4,128,758	4,130,985	4,136,667	4,137,097	4,161,506	4,161,506	4,161,506	4,161,506	4,161,506	4,161,506	4,161,506	4,161,506	4,161,506	4,161,506
2014	3,096,607	2,310,421	2,536,205	2,408,839	2,899,099	2,854,689	2,802,533	2,926,238	3,008,322	3,016,488	3,025,756	3,031,218	3,080,015	3,151,186	3,184,172	3,229,546	3,236,974	3,266,050	3,292,535	3,303,343	3,305,125	3,309,671	3,310,015	3,329,545	3,329,545	3,329,545	3,329,545	3,329,545	3,329,545	3,329,545	3,329,545	3,329,545	3,329,545
2015	421,275	1,102,257	1,793,275	1,972,587	2,171,046	2,157,798	2,129,592	2,477,479	2,486,479	2,486,479	2,468,325	2,505,225	2,545,555	2,604,375	2,631,638	2,669,138	2,675,277	2,699,308	2,721,197	2,730,130	2,731,603	2,735,360	2,735,644	2,751,785	2,751,785	2,751,785	2,751,785	2,751,785	2,751,785	2,751,785	2,751,785	2,751,785	2,751,785
2016	524,435	1,443,017	1,977,045	2,103,420	1,917,742	1,892,215	2,077,388	2,059,543	2,058,489	2,058,489	2,087,400	2,118,606	2,152,712	2,202,455	2,225,510	2,257,223	2,262,415	2,282,737	2,301,248	2,308,802	2,310,048	2,313,225	2,313,465	2,327,115	2,327,115	2,327,115	2,327,115	2,327,115	2,327,115	2,327,115	2,327,115	2,327,115	2,327,115
2017	786,588	2,028,990	2,036,039	2,230,762	2,320,748	2,396,824	2,441,873	2,388,569	2,372,691	2,422,978	2,457,009	2,493,740	2,533,885	2,592,435	2,619,573	2,656,902	2,663,012	2,686,933	2,708,721	2,717,613	2,719,080	2,722,819	2,723,102	2,739,169	2,739,169	2,739,169	2,739,169	2,739,169	2,739,169	2,739,169	2,739,169	2,739,169	2,739,169
2018	1,101,481	1,931,507	2,298,304	2,413,915	2,484,981	2,498,400	2,596,652	2,616,008	2,650,132	2,706,299	2,744,309	2,785,335	2,830,174	2,895,571	2,925,882	2,967,575	2,974,401	3,001,118	3,025,455	3,035,386	3,037,024	3,041,201	3,041,517	3,059,462	3,059,462	3,059,462	3,059,462	3,059,462	3,059,462	3,059,462	3,059,462	3,059,462	3,059,462
2019	668,550	2,037,158	2,332,992	2,737,603	2,740,228	2,634,859	2,764,559	2,804,189	2,840,768	2,900,975	2,941,719	2,985,696	3,033,761	3,103,863	3,136,354	3,181,046	3,188,363	3,217,002	3,243,089	3,253,735	3,255,490	3,259,968	3,260,307	3,279,543	3,279,543	3,279,543	3,279,543	3,279,543	3,279,543	3,279,543	3,279,543	3,279,543	3,279,543
2020	938,865	846,081	783,580	782,178	780,753	805,254	824,924	836,749	847,664	865,629	877,787	890,909	905,251	926,169	935,864	949,200	951,383	959,929	967,713	970,890	971,414	972,750	972,851	978,591	978,591	978,591	978,591	978,591	978,591	978,591	978,591	978,591
2021	759,215	925,850	1,430,238	1,903,987	2,086,763	2,120,538	2,172,335	2,203,475	2,232,218	2,279,528	2,311,544	2,346,100	2,383,868	2,438,953	2,464,484	2,499,602	2,505,351	2,527,856	2,548,354	2,556,720	2,558,099	2,561,617	2,561,884	2,576,999	2,576,999	2,576,999	2,576,999	2,576,999	2,576,999	2,576,999	2,576,999	2,576,999	2,576,999
2022	852,512	1,491,285	1,933,700	1,871,084	1,975,014	2,006,981	2,056,004	2,085,476	2,112,680	2,157,456	2,187,758	2,220,463	2,256,209	2,308,344	2,332,508	2,365,745	2,371,186	2,392,486	2,411,887	2,419,804	2,421,110	2,424,439	2,424,692	2,438,997	2,438,997	2,438,997	2,438,997	2,438,997	2,438,997	2,438,997	2,438,997	2,438,997	2,438,997
2023	890,066	1,887,858	2,088,057	2,309,248	2,437,516	2,476,969	2,537,472	2,573,846	2,607,420	2,662,682	2,700,079	2,740,444	2,784,561	2,848,904	2,878,726	2,919,748	2,926,463	2,952,750	2,976,694	2,986,466	2,988,077	2,992,187	2,992,498	3,010,154	3,010,154	3,010,154	3,010,154	3,010,154	3,010,154	3,010,154	3,010,154	3,010,154	3,010,154
2024	146,010	917,728	1,085,346	1,200,318	1,266,990	1,287,497	1,318,946	1,337,853	1,355,304	1,384,029	1,403,467	1,424,448	1,447,380	1,480,825	1,496,326	1,517,648	1,521,139	1,534,802	1,547,248	1,552,327	1,553,165	1,555,301	1,555,463	1,564,640	1,564,640	1,564,640	1,564,640	1,564,640	1,564,640	1,564,640	1,564,640	1,564,640	1,564,640
2025	1,185,329	2,011,028	2,378,330	2,630,270	2,776,369	2,821,306	2,890,220	2,931,651	2,969,892	3,032,836	3,075,432	3,121,408	3,171,658	3,244,946	3,278,914	3,325,638	3,333,287	3,363,228	3,390,501	3,401,631	3,403,466	3,408,147	3,408,501	3,428,612	3,428,612	3,428,612	3,428,612	3,428,612	3,428,612	3,428,612	3,428,612	3,428,612	3,428,612

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance UST - Closure
Selection of Loss Development Factors

	Development Period in Months																																
BY	12 - 24	24 - 36	36 - 48	48 - 60	60 - 72	72 - 84	84 - 96	96 - 108	108 - 120	120 - 132	132 - 144	144 - 156	156 - 168	168 - 180	180 - 192	192 - 204	204 - 216	216 - 228	228 - 240	240 - 252	252 - 264	264 - 276	276 - 288	288 - 300	300 - 312	312 - 324	324 - 336	336 - 348	348 - 360	360 - 372	372 - 384		
1994	1.748	1.035	1.099	1.064	1.087	1.000	1.188	1.063	1.046	1.136	1.039	0.962	0.938	1.054	1.022	1.352	0.998	1.000	1.000	1.000	0.994	1.000	1.000	1.000	1.288	1.000	1.000	1.000	1.000	1.000	1.000		
1995	1.568	0.944	0.990	1.403	1.380	1.130	1.006	1.003	1.165	0.989	0.963	1.000	1.033	0.953	1.000	1.000	1.025	1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
1996	1.115	1.062	1.088	1.277	0.983	1.123	0.973	1.014	0.948	1.021	1.057	0.930	1.031	1.011	1.001	1.010	0.996	1.014	1.035	1.000	1.000	0.999	1.003	0.995	1.000	1.000	1.000	1.000	1.000				
1997	1.376	1.029	1.122	1.191	0.932	1.009	1.006	0.951	1.008	0.949	1.007	1.030	1.036	1.012	1.022	1.005	1.040	1.023	1.004	0.982	1.007	1.002	1.017	1.000	0.985	1.000	1.005	1.000					
1998	0.968	1.227	0.936	1.000	1.053	1.001	0.983	1.009	1.012	1.045	1.014	1.016	1.012	1.008	0.997	0.993	1.066	1.050	1.011	1.007	0.999	1.001	1.115	0.998	1.000	1.000	1.000						
1999	1.380	1.175	1.037	1.067	1.059	1.019	1.058	0.998	1.115	1.039	1.005	1.043	0.997	1.000	1.009	1.002	0.974	0.971	0.999	1.003	1.010	1.000	0.999	1.008	1.000	0.991							
2000	1.307	1.026	1.352	1.020	0.960	1.014	0.989	0.994	1.014	1.019	1.004	1.023	1.021	1.000	1.039	1.011	1.018	1.002	0.995	0.990	0.996	1.000	1.000	0.983	1.000								
2001	0.774	1.045	1.094	0.950	1.013	1.048	0.988	1.032	1.007	1.037	1.006	1.014	0.990	1.000	1.031	1.000	1.011	0.996	0.990	1.000	1.000	1.000	1.002	1.011									
2002	1.086	1.231	1.061	0.999	1.008	1.176	0.980	1.001	1.007	1.022	1.019	0.998	0.985	1.015	1.013	0.987	1.000	1.000	1.002	1.005	1.000	1.000	1.007										
2003	0.866	1.069	1.034	1.077	0.986	0.979	0.990	0.992	1.055	0.996	1.003	1.003	1.011	1.035	1.060	1.024	0.994	1.034	1.000	1.172	0.993	0.896											
2004	0.726	1.002	0.957	1.153	0.996	0.915	1.012	1.022	1.037	1.008	1.020	1.029	1.000	0.997	0.997	0.984	1.034	1.000	1.035	1.000	1.000												
2005	0.999	1.065	0.965	0.916	1.003	0.977	1.047	1.044	0.963	0.984	1.044	1.127	0.982	1.023	1.010	0.999	1.004	1.000	1.002	0.994													
2006	0.697	0.925	1.016	1.121	0.979	0.945	0.958	1.009	0.962	0.985	1.000	1.105	1.020	1.126	0.988	1.000	1.000	1.000	0.873														
2007	1.129	0.948	0.943	0.962	1.063	1.019	1.010	1.028	1.090	1.012	1.005	1.033	1.014	1.000	1.022	1.000	0.998	1.000															
2008	0.720	0.880	1.052	1.089	1.010	1.024	0.994	1.105	1.066	1.000	0.983	0.996	1.012	1.011	1.010	1.000	1.000																
2009	0.825	0.842	0.957	1.023	0.974	1.022	0.998	1.008	1.073	1.018	1.000	0.965	1.020	1.000	1.000	1.000																	
2010	0.696	0.928	0.970	1.076	1.062	1.073	1.007	0.983	0.992	0.985	1.091	1.000	1.071	1.000	0.996																		
2011	0.832	1.000	1.031	0.966	1.093	1.020	1.004	0.991	0.999	0.998	1.000	0.994	1.000	1.000																			
2012	0.858	0.963	1.329	1.028	0.996	1.035	0.984	0.844	0.992	1.000	1.009	1.004	1.000																				
2013	0.764	1.126	1.009	0.996	1.083	1.028	1.024	1.029	1.003	1.059	1.057	0.996																					
2014	0.746	1.098	0.950	1.204	0.985	0.982	1.044	1.028	1.003	1.003	1.002																						
2015	2.616	1.627	1.100	1.101	0.994	0.987	1.163	1.004	1.000	0.993																							
2016	2.752	1.370	1.064	0.912	0.987	1.098	0.991	0.999	1.000																								
2017	2.579	1.003	1.096	1.040	1.033	1.019	0.978	0.993																									
2018	1.754	1.190	1.050	1.029	1.005	1.039	1.007																										
2019	3.047	1.145	1.173	1.001	0.962	1.049																											
2020	0.901	0.926	0.998	0.998	1.031																												
2021	1.219	1.545	1.331	1.096																													
2022	1.749	1.297	0.968																														
2023	2.121	1.106																															
2024	6.285																																
VOL WTD 3	2.275	1.266	1.099	1.034	0.989	1.036	0.993	0.999	1.001	1.022	1.026	0.998	1.023	1.000	1.003	1.000	0.999	1.000	0.980	1.068	0.997	0.960	1.003	1.000	1.000	0.996	1.002	1.000	1.000	1.000	1.000		
VOL WTD 5	1.692	1.192	1.106	1.034	0.998	1.037	1.035	1.013	1.000	1.015	1.032	0.993	1.020	1.002	1.007	1.000	1.006	1.008	0.991	1.040	0.997	0.984	1.024	1.000	0.998	0.996	1.001	1.000	1.000	1.000	1.000		
VOL WTD ALL	1.084	1.086	1.060	1.052	1.011	1.028	1.011	1.002	1.027	1.014	1.015	1.016	1.010	1.010	1.014	1.006	1.008	1.005	1.000	1.012	1.001	0.990	1.020	0.999	1.006	0.997	1.001	1.000	1.000	1.000	1.000		
ARITH 3	3.385	1.316	1.099	1.032	0.999	1.036	0.992	0.999	1.001	1.018	1.023	0.998	1.024	1.000	1.002	1.000	0.999	1.000	0.970	1.055	0.998	0.965	1.003	1.001	1.000	0.997	1.002	1.000	1.000	1.000	1.000		
ARITH 5	2.455	1.204	1.104	1.033	1.004	1.038	1.037	1.011	1.000	1.011	1.032	0.992	1.021	1.002	1.003	1.000	1.007	1.007	0.982	1.034	0.998	0.979	1.025	1.000	0.997	0.998	1.001	1.000	1.000	1.000	1.000		
ARITH ALL	1.491	1.094	1.061	1.063	1.027	1.028	1.015	1.006	1.024	1.013	1.016	1.013	1.009	1.014	1.013	1.023	1.010	1.006	0.996	1.013	1.000	0.990	1.016	0.999	1.039	0.998	1.001	1.000	1.000	1.000	1.000		
5 YR HI LO	1.697	1.183	1.074	1.024	1.008	1.036	1.014	1.010	1.001	1.000	1.023	0.997	1.011	1.000	1.002	1.000	1.001	1.000	1.001	1.002	0.999	1.000	1.003	1.002	1.000	1.000	1.000	1.000	1.000	NA	NA		
7 YR HI LO	1.978	1.148	1.076	1.033	1.000	1.024	1.010	1.003	0.999	1.002	1.014	0.998	1.013	1.007	1.002	1.000	1.000	1.000	0.998	1.001	0.999	1.000	1.006	1.000	1.000	1.000	1.000	1.000	1.000	NA	NA		
ALL YR HI LO	1.353	1.084	1.055	1.056	1.016	1.027	1.010	1.009	1.021	1.011	1.014	1.012	1.010	1.010	1.011	1.002	1.009	1.006	1.003	1.000	0.999	1.000	1.004	1.000	1.000	1.000	1.000	1.000	1.000	NA	NA	Tail	
SELECTED	1.697	1.183	1.106	1.056	1.016	1.024	1.014	1.013	1.021	1.014	1.015	1.016	1.023	1.010	1.014	1.002	1.009	1.008	1.003	1.001	1.001	1.000	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance UST - Closure
Incurred Losses

	Development in Months																																
BY	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360	372	384
1994	187,103	327,100	338,664	372,338	396,280	430,925	430,925	512,003	544,249	569,328	646,825	671,833	646,361	606,161	639,180	653,025	882,676	881,282	881,282	881,282	881,282	875,960	875,960	875,960	875,960	1,128,314	1,128,314	1,128,314	1,128,314	1,128,314	1,128,314	1,128,314	1,128,314
1995	229,050	359,228	339,169	335,712	470,908	649,998	734,664	739,266	741,392	863,373	854,043	822,060	822,060	849,516	809,668	809,668	809,668	829,668	829,668	829,668	830,629	830,629	830,629	830,629	830,629	830,629	830,629	830,629	830,629	830,629	830,629		
1996	2,074,608	2,312,993	2,456,425	2,673,073	3,413,485	3,354,566	3,767,622	3,665,813	3,718,947	3,524,021	3,596,366	3,799,750	3,534,045	3,643,349	3,685,176	3,687,940	3,723,882	3,707,363	3,757,936	3,887,596	3,887,596	3,887,613	3,883,098	3,896,281	3,877,028	3,877,028	3,877,028	3,877,028	3,877,028	3,877,028	3,877,028		
1997	2,396,340	3,296,691	3,392,934	3,805,286	4,531,604	4,223,037	4,260,238	4,287,861	4,079,282	4,113,314	3,902,281	3,929,176	4,047,234	4,192,485	4,241,564	4,333,493	4,357,186	4,532,100	4,636,226	4,652,717	4,571,271	4,602,339	4,610,824	4,690,855	4,690,855	4,620,899	4,620,899	4,643,906	4,643,906				
1998	3,675,965	3,559,113	4,365,735	4,088,438	4,086,851	4,304,774	4,307,747	4,235,040	4,274,042	4,324,783	4,519,773	4,581,805	4,653,835	4,710,482	4,749,789	4,737,115	4,702,682	5,014,309	5,265,050	5,323,794	5,363,065	5,355,706	5,358,491	5,975,720	5,964,475	5,964,476	5,964,475	5,964,475					
1999	4,037,062	5,571,871	6,545,350	6,787,456	7,241,227	7,671,357	7,817,662	8,271,935	8,254,562	9,206,158	9,560,694	9,605,104	10,021,467	9,989,020	9,992,011	10,080,720	10,105,116	9,843,136	9,558,326	9,546,992	9,578,572	9,674,953	9,674,953	9,666,343	9,740,883	9,740,883	9,651,795						
2000	2,762,343	3,611,594	3,705,600	5,011,259	5,112,429	4,908,784	4,977,899	4,921,943	4,894,275	4,961,257	5,054,309	5,076,112	5,193,017	5,303,446	5,303,354	5,511,724	5,574,262	5,673,733	5,687,601	5,658,501	5,602,232	5,578,254	5,578,254	5,578,254	5,483,807	5,483,807							
2001	2,251,558	1,743,446	1,822,201	1,993,523	1,894,340	1,918,963	2,011,132	1,987,488	2,052,066	2,067,276	2,144,617	2,157,214	2,187,052	2,164,958	2,164,958	2,231,893	2,231,893	2,255,449	2,246,989	2,223,792	2,223,792	2,223,792	2,223,792	2,227,492	2,252,659								
2002	2,542,017	2,760,461	3,397,838	3,606,278	3,602,481	3,629,619	4,269,535	4,184,966	4,189,633	4,220,328	4,314,840	4,395,247	4,388,354	4,323,344	4,389,340	4,444,852	4,388,828	4,388,828	4,388,828	4,395,828	4,418,120	4,418,120	4,418,120	4,449,420									
2003	2,947,566	2,552,226	2,729,345	2,821,402	3,038,665	2,996,630	2,935,032	2,905,668	2,883,632	3,043,090	3,031,155	3,041,419	3,049,245	3,081,544	3,188,294	3,379,908	3,460,316	3,438,965	3,555,208	3,555,208	4,166,373	4,136,003	3,707,756										
2004	2,784,076	2,021,523	2,025,941	1,938,585	2,234,615	2,224,836	2,035,592	2,059,706	2,105,619	2,182,954	2,200,007	2,244,932	2,310,707	2,310,706	2,304,759	2,298,878	2,262,131	2,338,322	2,338,322	2,419,322	2,419,322	2,419,322											
2005	2,418,554	2,416,450	2,572,849	2,483,026	2,274,631	2,281,970	2,229,537	2,333,344	2,437,114	2,347,584	2,309,022	2,411,172	2,717,437	2,667,437	2,729,436	2,755,939	2,754,019	2,765,098	2,765,098	2,770,415	2,754,676												
2006	2,279,915	1,590,227	1,471,489	1,494,938	1,675,834	1,640,664	1,549,814	1,484,507	1,497,613	1,440,812	1,418,755	1,418,755	1,568,383	1,600,382	1,802,384	1,780,461	1,780,461	1,780,461	1,780,461	1,554,313													
2007	3,104,642	3,506,428	3,324,034	3,133,446	3,015,593	3,206,641	3,266,444	3,297,905	3,388,641	3,693,115	3,736,832	3,754,548	3,878,579	3,932,825	3,932,825	4,020,125	4,020,125	4,012,126	4,012,126														
2008	3,378,033	2,432,035	2,139,716	2,250,962	2,450,839	2,475,575	2,534,647	2,518,897	2,784,301	2,969,033	2,968,102	2,916,589	2,905,922	2,941,629	2,972,885	3,001,472	3,001,472	3,001,472															
2009	2,770,198	2,286,030	1,923,883	1,840,582	1,883,630	1,833,921	1,873,872	1,869,496	1,884,955	2,023,386	2,059,214	2,059,214	1,987,951	2,027,535	2,027,535	2,027,535	2,027,535																
2010	2,399,535	1,670,654	1,551,137	1,504,347	1,618,767	1,718,575	1,843,937	1,857,606	1,825,960	1,811,019	1,783,637	1,945,713	1,945,107	2,082,322	2,082,322	2,073,191																	
2011	1,730,234	1,440,222	1,440,536	1,484,741	1,433,817	1,567,380	1,598,788	1,605,837	1,590,668	1,588,365	1,584,634	1,584,634	1,575,584	1,575,584	1,575,584																		
2012	2,490,976	2,137,662	2,058,476	2,735,440	2,811,353	2,799,426	2,897,254	2,851,986	2,405,715	2,386,551	2,386,388	2,408,911	2,417,514	2,417,514																			
2013	3,392,371	2,592,125	2,918,959	2,945,843	2,934,795	3,178,441	3,266,982	3,343,869	3,441,847	3,452,011	3,656,207	3,866,080	3,849,626																				
2014	3,096,607	2,310,421	2,536,205	2,408,839	2,899,099	2,854,689	2,802,533	2,926,238	3,008,322	3,016,488	3,025,756	3,031,218																				
2015	421,275	1,102,257	1,793,275	1,972,587	2,171,046	2,157,798	2,129,592	2,477,479	2,486,479	2,486,479	2,468,325																					
2016	524,435	1,443,017	1,977,045	2,103,420	1,917,742	1,892,215	2,077,388	2,059,543	2,058,489	2,058,489																						
2017	786,588	2,028,990	2,036,039	2,230,762	2,320,748	2,396,824	2,441,873	2,388,569	2,372,691																							
2018	1,101,481	1,931,507	2,298,304	2,413,915	2,484,981	2,498,400	2,596,652	2,616,008																								
2019	668,550	2,037,158	2,332,992	2,737,603	2,740,228	2,634,859	2,764,559																									
2020	938,865	846,081	783,580	782,178	780,753	805,254																										
2021	759,215	925,850	1,430,238	1,903,987	2,086,763																											
2022	852,512	1,491,285	1,933,700	1,871,084																												
2023	890,066	1,887,858	2,088,057																													
2024	146,010	917,728																														
2025	1,185,329																															

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance UST - Closure
Determination of Pure Premium

(1) RY	(2) PAID LDM ULTIMATE	(3) INC LDM ULTIMATE	(4) SELECTED ULTIMATE	(5) POLICIES IN FORCE	(6) PURE PREMIUM
1994					
1995					
1996					
1997					
1998					
1999					
2000					
2001					
2002					
2003					
2004					
2005					
2006					
2007					
2008					
2009	2,218,730	2,085,518	2,152,124	2,662	808
2010	2,073,191	2,137,385	2,105,288	2,622	803
2011	1,780,922	1,647,517	1,714,219	2,623	654
2012	2,794,058	2,554,347	2,674,203	2,617	1,022
2013	4,019,909	4,161,506	4,090,708	2,603	1,572
2014	3,178,330	3,329,545	3,253,937	2,573	1,265
2015	2,566,553	2,751,785	2,659,169	2,530	1,051
2016	2,346,469	2,327,115	2,336,792	2,509	931
2017	2,697,578	2,739,169	2,718,373	2,489	1,092
2018	3,291,127	3,059,462	3,175,295	2,487	1,277
2019	3,373,246	3,279,543	3,326,395	2,413	1,379
2020	978,552	978,591	978,571	2,408	406
2021	2,086,763	2,576,999	2,331,881	2,405	970
2022	3,101,540	2,438,997	2,770,269	2,371	1,168
2023	3,396,472	3,010,154	3,203,313	2,347	1,365
2024	1,495,773	1,564,640	1,530,207	2,319	660
2025	3,640,066	3,428,612	3,534,339	2,337	1,512
TOTAL	45,039,278	44,070,884	44,555,081	42,315	1,053

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance UST - Closure
Paid Bornhuetter-Ferguson Method

(1) RY	(2) POLICIES IN FORCE	(3) PROJECTED PURE PREM	(4) TRENDED PURE PREM	(5) DETRENDED PURE PREM	(6) EXPECTED LOSSES	(7) PERCENT UNPAID	(8) EXPECTED UNPAID	(9) PAID LOSSES	(10) INDICATED ULTIMATE	(11) INCURRED LOSSES	(12) IBNR RESERVE	(13) CASE RESERVE	(14) ULTIMATE PURE PREM
1994													
1995													
1996													
1997													
1998													
1999													
2000													
2001													
2002													
2003													
2004													
2005													
2006													
2007													
2008													
2009	2,662	808	808	1,055	2,808,294	10.3%	290,013	1,989,601	2,279,614	2,027,535	252,080	37,933	856
2010	2,622	803	803	1,055	2,766,095	11.8%	327,077	1,826,075	2,153,152	2,073,191	79,960	247,117	821
2011	2,623	654	654	1,055	2,767,150	13.6%	374,985	1,539,584	1,914,569	1,575,584	338,985	36,000	730
2012	2,617	1,022	1,022	1,055	2,760,821	15.1%	416,648	2,372,394	2,789,042	2,417,514	371,528	45,121	1,066
2013	2,603	1,572	1,572	1,055	2,746,051	17.4%	476,524	3,322,331	3,798,856	3,849,626	(50,771)	527,295	1,459
2014	2,573	1,265	1,265	1,055	2,714,403	18.9%	511,996	2,578,827	3,090,823	3,031,218	59,605	452,391	1,201
2015	2,530	1,051	1,051	1,055	2,669,039	21.0%	559,720	2,028,326	2,588,045	2,468,325	119,721	439,999	1,023
2016	2,509	931	931	1,055	2,646,885	24.0%	635,780	1,782,848	2,418,629	2,058,489	360,140	275,640	964
2017	2,489	1,092	1,092	1,055	2,625,786	26.7%	702,253	1,976,124	2,678,377	2,372,691	305,686	396,567	1,076
2018	2,487	1,277	1,277	1,055	2,623,676	29.9%	784,169	2,307,469	3,091,638	2,616,008	475,631	308,538	1,243
2019	2,413	1,379	1,379	1,055	2,545,610	33.1%	841,763	2,257,806	3,099,569	2,764,559	335,010	506,753	1,285
2020	2,408	406	406	1,055	2,540,335	37.7%	957,312	609,790	1,567,102	805,254	761,848	195,465	651
2021	2,405	970	970	1,055	2,537,170	43.9%	1,114,871	1,100,207	2,215,078	2,086,763	128,315	986,556	921
2022	2,371	1,168	1,168	1,055	2,501,301	51.2%	1,280,756	1,513,440	2,794,196	1,871,084	923,112	357,644	1,178
2023	2,347	1,365	1,365	1,055	2,475,982	59.9%	1,484,168	1,360,538	2,844,707	2,088,057	756,649	727,519	1,212
2024	2,319	660	660	1,055	2,446,444	73.8%	1,805,412	391,932	2,197,343	917,728	1,279,615	525,797	948
2025	2,337	1,512	1,512	1,055	2,465,433	82.5%	2,034,761	635,861	2,670,622	1,185,329	1,485,294	549,467	1,143
TOTAL	42,315				44,640,476		14,598,210	29,593,152	44,191,362	36,208,954	7,982,408	6,615,802	1,044

Pure Premium Selection		Trend =	1.000
3-Year Average	1,179		
5-Year Average	1,135		
All Year Average	1,055		
Selected Pure Premium	1,055		

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance UST - Closure
Incurred Bornhuetter-Ferguson Method

(1) RY	(2) POLICIES IN FORCE	(3) PROJECTED PURE PREM	(4) TRENDED PURE PREM	(5) DETRENDED PURE PREM	(6) EXPECTED LOSSES	(7) PERCENT IBNR	(8) EXPECTED IBNR	(9) INCURRED LOSSES	(10) INDICATED ULTIMATE	(11) PAID LOSSES	(12) UNPAID LOSS	(13) CASE RESERVE	(14) ULTIMATE PURE PREM
1994													
1995													
1996													
1997													
1998													
1999													
2000													
2001													
2002													
2003													
2004													
2005													
2006													
2007													
2008													
2009	2,662	808	808	1,055	2,808,294	2.8%	78,078	2,027,535	2,105,613	1,989,601	116,012	37,933	791
2010	2,622	803	803	1,055	2,766,095	3.0%	83,076	2,073,191	2,156,267	1,826,075	330,193	247,117	822
2011	2,623	654	654	1,055	2,767,150	4.4%	120,818	1,575,584	1,696,401	1,539,584	156,818	36,000	647
2012	2,617	1,022	1,022	1,055	2,760,821	5.4%	147,893	2,417,514	2,565,408	2,372,394	193,014	45,121	980
2013	2,603	1,572	1,572	1,055	2,746,051	7.5%	205,800	3,849,626	4,055,426	3,322,331	733,095	527,295	1,558
2014	2,573	1,265	1,265	1,055	2,714,403	9.0%	243,210	3,031,218	3,274,428	2,578,827	695,601	452,391	1,273
2015	2,530	1,051	1,051	1,055	2,669,039	10.3%	274,936	2,468,325	2,743,261	2,028,326	714,935	439,999	1,084
2016	2,509	931	931	1,055	2,646,885	11.5%	305,539	2,058,489	2,364,027	1,782,848	581,179	275,640	942
2017	2,489	1,092	1,092	1,055	2,625,786	13.4%	351,308	2,372,691	2,723,999	1,976,124	747,875	396,567	1,094
2018	2,487	1,277	1,277	1,055	2,623,676	14.5%	380,290	2,616,008	2,996,297	2,307,469	688,828	308,538	1,205
2019	2,413	1,379	1,379	1,055	2,545,610	15.7%	399,735	2,764,559	3,164,294	2,257,806	906,488	506,753	1,311
2020	2,408	406	406	1,055	2,540,335	17.7%	449,967	805,254	1,255,221	609,790	645,431	195,465	521
2021	2,405	970	970	1,055	2,537,170	19.0%	482,659	2,086,763	2,569,422	1,100,207	1,469,215	986,556	1,068
2022	2,371	1,168	1,168	1,055	2,501,301	23.3%	582,421	1,871,084	2,453,505	1,513,440	940,064	357,644	1,035
2023	2,347	1,365	1,365	1,055	2,475,982	30.6%	758,465	2,088,057	2,846,522	1,360,538	1,485,984	727,519	1,213
2024	2,319	660	660	1,055	2,446,444	41.3%	1,011,500	917,728	1,929,228	391,932	1,537,297	525,797	832
2025	2,337	1,512	1,512	1,055	2,465,433	65.4%	1,613,091	1,185,329	2,798,420	635,861	2,162,559	549,467	1,197
TOTAL	42,315				44,640,476		7,488,786	36,208,954	43,697,740	29,593,152	14,104,588	6,615,802	1,033

Pure Premium Selection		Trend =	1.000
3-Year Average	1,179		
5-Year Average	1,135		
All Year Average	1,055		
Selected Pure Premium	1,055		

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance UST - Other
Summary of Paid Development Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	PAID LDM	PAID	INCURRED	CASE	IBNR	UNPAID
RY	ULTIMATE	LOSS	LOSS	RESERVE	RESERVE	LOSS
1994	3,403,247	3,403,247	3,403,247	-	-	-
1995	3,165,091	3,041,518	3,165,091	123,572	-	123,572
1996	2,547,508	2,269,676	2,547,508	277,832	-	277,832
1997	3,678,448	3,678,448	3,678,448	-	-	-
1998	3,020,235	2,628,924	3,020,235	391,311	-	391,311
1999	2,722,748	2,722,748	2,722,748	-	-	-
2000	4,406,695	4,247,876	4,406,695	158,819	-	158,819
2001	1,071,352	1,031,527	1,055,182	23,655	16,170	39,825
2002	4,573,844	4,332,343	4,573,844	241,501	-	241,501
2003	3,575,741	3,122,179	3,575,741	453,562	-	453,562
2004	4,745,410	4,478,491	4,669,533	191,042	75,878	266,920
2005	2,147,591	1,989,976	2,116,803	126,827	30,788	157,615
2006	4,334,556	3,937,251	3,955,672	18,421	378,883	397,305
2007	945,931	845,022	864,373	19,351	81,557	100,908
2008	2,473,753	2,166,592	2,239,328	72,736	234,425	307,161
2009	943,108	943,108	943,108	-	-	-
2010	223,439	223,439	223,439	-	-	-
2011	2,494,564	1,700,374	2,494,564	794,190	-	794,190
2012	1,167,108	920,105	1,001,501	81,396	165,607	247,003
2013	1,189,551	912,130	998,657	86,527	190,895	277,422
2014	409,264	304,917	354,917	50,000	54,346	104,346
2015	3,867,217	2,715,575	2,929,629	214,053	937,588	1,151,641
2016	1,631,800	1,080,239	1,241,258	161,019	390,542	551,561
2017	1,854,464	1,142,980	1,203,383	60,403	651,081	711,484
2018	1,212,842	700,060	941,091	241,031	271,751	512,782
2019	2,329,514	1,257,606	1,425,164	167,558	904,349	1,071,907
2020	825,953	393,204	586,122	192,919	239,830	432,749
2021	351,037	133,043	158,434	25,391	192,603	217,994
2022	1,270,138	403,883	462,388	58,505	807,750	866,255
2023	492,799	131,787	336,602	204,815	156,197	361,012
2024	610,353	94,811	610,353	515,542	-	515,542
2025	665,703	-	665,703	665,703	-	665,703
TOTAL	68,351,001	56,953,079	62,570,760	5,617,681	5,780,241	11,397,922

DRAFT

Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance UST - Other
Development of Losses to Ultimate

Development Period in Months

RY	12 - 24	24 - 36	36 - 48	48 - 60	60 - 72	72 - 84	84 - 96	96 - 108	108 - 120	120 - 132	132 - 144	144 - 156	156 - 168	168 - 180	180 - 192	192 - 204	204 - 216	216 - 228	228 - 240	240 - 252	252 - 264	264 - 276	276 - 288	288 - 300	300 - 312	312 - 324	324 - 336	336 - 348	348 - 360	360 - 372	372 - 384	384 - ULT
1994		1.566	2.122	1.438	1.840	1.224	1.340	1.256	1.374	1.033	1.027	1.066	1.045	1.062	1.057	1.055	1.027	1.035	1.030	1.016	1.043	1.010	1.020	1.018	1.006	1.004	1.004	1.009	1.135	1.013	1.010	1.025
1995	3.760	1.734	1.593	1.161	1.131	1.269	1.382	1.086	1.093	1.276	1.062	1.051	1.033	1.037	1.032	1.021	1.022	1.024	1.014	1.015	1.001	1.012	1.007	1.007	1.000	1.003	1.000	1.000	1.000	1.051	1.000	1.025
1996	-	2.391	4.177	1.897	1.678	1.269	1.332	1.060	1.130	1.071	1.029	1.053	1.054	1.140	1.002	1.054	1.034	1.094	1.043	1.081	1.007	1.000	1.017	1.000	1.004	1.009	1.007	1.015	1.000	1.000	1.000	1.025
1997	520.511	1.681	1.601	1.318	1.251	1.227	1.559	1.139	1.061	1.178	1.027	1.023	1.046	1.081	1.029	1.026	1.015	1.005	1.008	1.010	1.009	1.012	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.025
1998	18.330	1.363	1.853	1.780	1.198	1.171	1.075	1.059	1.104	1.156	1.118	1.118	1.199	1.046	1.167	1.015	1.092	1.081	1.015	1.038	1.023	1.006	1.002	1.001	1.000	1.003	1.011	1.005	1.000	1.000	1.000	1.025
1999	3.453	1.116	1.035	1.044	1.071	1.044	1.043	1.153	1.042	1.074	1.049	1.032	1.027	1.020	1.019	1.012	1.004	1.002	1.006	1.012	1.007	1.007	1.000	1.000	1.000	1.004	1.004	1.005	1.000	1.000	1.000	1.025
2000	8.917	1.206	1.216	1.172	1.090	1.079	1.091	1.076	1.157	1.053	1.017	1.032	1.036	1.009	1.034	1.025	1.024	1.028	1.012	1.097	1.016	1.015	1.010	1.005	1.013	1.003	1.004	1.005	1.000	1.000	1.000	1.025
2001	1.729	1.108	1.687	1.112	1.158	1.220	1.100	1.171	1.005	1.045	1.023	1.028	1.025	1.010	1.033	1.097	1.051	1.044	1.036	1.015	1.008	1.000	1.005	1.000	1.002	1.003	1.004	1.005	1.000	1.000	1.000	1.025
2002	3.256	2.453	2.032	1.367	1.642	1.240	1.180	1.126	1.054	1.044	1.077	1.079	1.065	1.072	1.035	1.077	1.032	1.026	1.020	1.005	1.013	1.000	1.015	1.004	1.002	1.003	1.004	1.005	1.000	1.000	1.000	1.025
2003	3.629	2.485	1.410	1.189	1.228	1.199	1.072	1.100	1.068	1.027	1.049	1.080	1.108	1.059	1.037	1.014	1.019	1.014	1.020	1.003	1.021	1.012	1.009	1.004	1.002	1.003	1.004	1.005	1.000	1.000	1.000	1.025
2004	6.103	1.809	1.261	1.316	1.260	1.135	1.132	1.107	1.123	1.052	1.041	1.049	1.023	1.044	1.027	1.011	1.015	1.001	1.004	1.006	1.022	1.007	1.009	1.004	1.002	1.003	1.004	1.005	1.000	1.000	1.000	1.025
2005	5.222	2.259	1.250	1.104	1.109	1.018	1.046	1.033	1.054	1.103	1.033	1.092	1.032	1.053	1.025	1.019	1.016	1.027	1.000	1.002	1.019	1.007	1.009	1.004	1.002	1.003	1.004	1.005	1.000	1.000	1.000	1.025
2006	100.428	1.629	1.471	1.443	1.147	1.195	1.128	1.059	1.101	1.326	1.291	1.157	1.195	1.157	1.000	1.002	1.008	1.010	1.009	1.020	1.019	1.007	1.009	1.004	1.002	1.003	1.004	1.005	1.000	1.000	1.000	1.025
2007	45.101	1.733	1.075	1.017	1.041	1.044	1.029	1.102	1.029	1.011	1.015	1.033	1.000	1.000	1.006	1.012	1.000	1.023	1.017	1.020	1.019	1.007	1.009	1.004	1.002	1.003	1.004	1.005	1.000	1.000	1.000	1.025
2008		1.535	1.328	1.727	1.493	1.274	1.276	1.178	1.118	1.138	1.053	1.049	1.077	1.009	1.010	1.012	1.028	1.020	1.017	1.020	1.019	1.007	1.009	1.004	1.002	1.003	1.004	1.005	1.000	1.000	1.000	1.025
2009	2.291	1.458	1.263	1.107	1.204	1.079	1.036	1.033	1.004	1.008	1.020	1.000	1.000	1.000	1.000	1.000	1.024	1.020	1.017	1.020	1.019	1.007	1.009	1.004	1.002	1.003	1.004	1.005	1.000	1.000	1.000	1.025
2010	-	2.208	2.273	1.135	1.042	1.130	1.052	1.017	1.040	1.000	1.000	1.000	1.000	1.000	1.000	1.025	1.024	1.020	1.017	1.020	1.019	1.007	1.009	1.004	1.002	1.003	1.004	1.005	1.000	1.000	1.000	1.025
2011	2.002	2.024	1.869	1.704	1.133	1.260	1.127	1.089	1.266	1.256	1.161	1.023	1.027	1.111	1.023	1.025	1.024	1.020	1.017	1.020	1.019	1.007	1.009	1.004	1.002	1.003	1.004	1.005	1.000	1.000	1.000	1.025
2012	6.056	1.931	1.627	1.289	1.221	1.139	1.025	1.143	1.020	1.041	1.101	1.062	1.037	1.035	1.023	1.025	1.024	1.020	1.017	1.020	1.019	1.007	1.009	1.004	1.002	1.003	1.004	1.005	1.000	1.000	1.000	1.025
2013		2.029	1.850	2.184	1.178	1.014	1.069	1.032	1.008	1.000	1.003	1.009	1.028	1.035	1.023	1.025	1.024	1.020	1.017	1.020	1.019	1.007	1.009	1.004	1.002	1.003	1.004	1.005	1.000	1.000	1.000	1.025
2014		3.013	1.147	1.138	1.313	1.128	1.116	1.046	1.013	1.000	1.000	1.029	1.028	1.035	1.023	1.025	1.024	1.020	1.017	1.020	1.019	1.007	1.009	1.004	1.002	1.003	1.004	1.005	1.000	1.000	1.000	1.025
2015	5.351	1.634	1.133	1.434	1.350	1.025	1.008	1.038	1.000	1.021	1.061	1.029	1.028	1.035	1.023	1.025	1.024	1.020	1.017	1.020	1.019	1.007	1.009	1.004	1.002	1.003	1.004	1.005	1.000	1.000	1.000	1.025
2016	4.953	1.891	1.395	1.131	1.324	1.102	1.052	1.134	1.066	1.061	1.061	1.029	1.028	1.035	1.023	1.025	1.024	1.020	1.017	1.020	1.019	1.007	1.009	1.004	1.002	1.003	1.004	1.005	1.000	1.000	1.000	1.025
2017		2.180	1.523	1.277	1.064	1.139	1.084	1.031	1.074	1.061	1.061	1.029	1.028	1.035	1.023	1.025	1.024	1.020	1.017	1.020	1.019	1.007	1.009	1.004	1.002	1.003	1.004	1.005	1.000	1.000	1.000	1.025
2018	6.785	1.824	1.256	1.116	1.161	1.228	1.175	1.068	1.074	1.061	1.061	1.029	1.028	1.035	1.023	1.025	1.024	1.020	1.017	1.020	1.019	1.007	1.009	1.004	1.002	1.003	1.004	1.005	1.000	1.000	1.000	1.025
2019	1.510	1.163	1.068	1.077	1.332	1.091	1.069	1.068	1.074	1.061	1.061	1.029	1.028	1.035	1.023	1.025	1.024	1.020	1.017	1.020	1.019	1.007	1.009	1.004	1.002	1.003	1.004	1.005	1.000	1.000	1.000	1.025
2020		5.505	1.220	1.413	1.150	1.134	1.069	1.068	1.074	1.061	1.061	1.029	1.028	1.035	1.023	1.025	1.024	1.020	1.017	1.020	1.019	1.007	1.009	1.004	1.002	1.003	1.004	1.005	1.000	1.000	1.000	1.025
2021		1.211	1.385	1.306	1.256	1.134	1.069	1.068	1.074	1.061	1.061	1.029	1.028	1.035	1.023	1.025	1.024	1.020	1.017	1.020	1.019	1.007	1.009	1.004	1.002	1.003	1.004	1.005	1.000	1.000	1.000	1.025
2022	6.853	1.182	1.092	1.192	1.256	1.134	1.069	1.068	1.074	1.061	1.061	1.029	1.028	1.035	1.023	1.025	1.024	1.020	1.017	1.020	1.019	1.007	1.009	1.004	1.002	1.003	1.004	1.005	1.000	1.000	1.000	1.025
2023	1.717	1.761	1.189	1.192	1.256	1.134	1.069	1.068	1.074	1.061	1.061	1.029	1.028	1.035	1.023	1.025	1.024	1.020	1.017	1.020	1.019	1.007	1.009	1.004	1.002	1.003	1.004	1.005	1.000	1.000	1.000	1.025
2024	4.035	1.632	1.189	1.192	1.256	1.134	1.069	1.068	1.074	1.061	1.061	1.029	1.028	1.035	1.023	1.025	1.024	1.020	1.017	1.020	1.019	1.007	1.009	1.004	1.002	1.003	1.004	1.005	1.000	1.000	1.000	1.025
2025	4.068	1.632	1.189	1.192	1.256	1.134	1.069	1.068	1.074	1.061	1.061	1.029	1.028	1.035	1.023	1.025	1.024	1.020	1.017	1.020	1.019	1.007	1.009	1.004	1.002	1.003	1.004	1.005	1.000	1.000	1.000	1.025

RY	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360	372	384	ULT
1994	-	67,556	105,762	224,445	322,720	593,891	727,102	973,960	1,223,383	1,680,534	1,736,151	1,783,144	1,901,121	1,985,974	2,108,783	2,229,646	2,353,177	2,416,592	2,500,825	2,575,464	2,617,719	2,729,017	2,757,576	2,813,689	2,862,976	2,879,778	2,892,263	2,904,608	2,930,701	3,325,762	3,369,805	3,403,247	3,486,949
1995	57,146	214,861	372,610	593,564	689,047	779,151	988,375	1,365,685	1,483,319	1,621,206	2,068,109	2,195,718	2,307,489	2,384,650	2,474,037	2,554,120	2,607,829	2,663,932	2,728,277	2,767,464	2,808,933	2,811,884	2,845,490	2,864,027	2,884,276	2,884,276	2,893,591	2,893,591	2,893,591	2,893,591	3,041,518	3,041,518	3,116,323
1996	-	17,700	42,316	176,760	335,328	562,825	713,987	950,907	1,008,006	1,138,950	1,219,963	1,255,045	1,321,564	1,392,644	1,587,262	1,590,384	1,676,801	1,734,357	1,897,262	1,979,584	2,139,915	2,154,274	2,154,274	2,191,849	2,191,849	2,200,780	2,220,428	2,236,594	2,269,676	2,269,676	2,269,676	2,269,676	2,325,498
1997	439	228,598	384,266	615,310	810,739	1,014,623	1,245,366	1,941,775	2,211,344	2,345,205	2,763,348	2,836,923	2,901,679	3,033,730	3,280,943	3,376,266	3,462,906	3,516,084	3,532,892	3,559,664	3,594,408	3,626,458	3,669,572	3,678,448	3,678,448	3,678,448	3,678,448	3,678,448	3,678,448	3,678,448	3,678,448	3,678,448	3,768,918
1998	6,465	118,511	161,556	299,311	532,819	638,505	747,760	804,023	851,858	940,596	1,087,299	1,215,530	1,359,258	1,629,754	1,704,629	1,989,855	2,018,841	2,204,678	2,382,158	2,418,884	2,510,541	2,568,757	2,584,769	2,590,454	2,593,088	2,593,088	2,601,109	2,628,924	2,642,205	2,642,205	2,642,205	2,642,205	2,707,189
1999	357,471	1,234,237	1,376,895	1,425,317	1,488,590	1,594,064	1,663,943	1,736,098	2,001,842	2,085,194	2,238,708	2,349,101	2,424,075	2,490,058	2,539,119	2,586,804	2,618,422	2,627,746	2,634,286	2,650,903	2,683,553	2,702,953	2,722,748	2,722,748	2,722,748	2,722,748	2,722,748	2,733,482	2,747,292	2,747,292	2,747,292	2,747,292	2,814,861
2000	114,187	1,018,212	1,227,935	1,493,269	1,750,358	1,908,405	2,059,006	2,247,037	2,418,072	2,797,305	2,945,750	2,995,139	3,091,814	3,203,887	3,233,491	3,344,627	3,426,721	3,508,911	3,605,836	3,649,865	4,003,655	4,067,021	4,126,675	4,169,938	4,192,604	4,247,876	4,259,035	4,275,827	4,297,429	4,297,429	4,297,429	4,297,429	4,403,122
2001	104,196	180,134	199,654	336,731	374,550	433,710	529,272	581,958	681,517	684,727	715,780	732,297	752,978	771,454	779,324	805,227	883,218	928,198	968,904	1,003,341	1,018,271	1,026,602	1,026,602	1,026,602	1,031,527	1,031,527	1,033,578	1,036,294	1,040,379	1,045,635	1,045,635	1,045,635	1,071,352
2002	39,750	129,433	317,549	645,166	881,959	1,448,299	1,795,420	2,119,144	2,385,722	2,515,613	2,626,157	2,827,608	3,051,616	3,249,469	3,483,473	3,604,479	3,881,563	4,004,641	4,106,762	4,189,494	4,210,452	4,266,556	4,266,556	4,332,343	4,350,965	4,359,618	4,371,070	4,388,304	4,410,473	4,410,473	4,410,473	4,410,473	4,518,947
2003	70,930	257,387	639,714	902,054	1,072,965	1,317,164	1,579,451	1,692,868	1,861,811	1,989,247	2,043,300	2,143,512	2,315,479	2,565,592	2,717,089	2,817,658	2,856,078	2,910,296	2,950,945	3,011,404	3,021,286	3,083,893	3,122,179	3,150,920	3,164,464	3,170,757	3,179,086	3,191,620	3,207,744	3,207,744	3,207,744	3,207,744	3,286,638
2004	90,918	554,838	1,003,934	1,265,633	1,665,587	2,099,306	2,382,002	2,697,142	2,987,009	3,355,323	3,528,803	3,673,274	3,851,449	3,939,069	4,112,757	4,223,202	4,271,607	4,334,593	4,338,651	4,357,924	4,382,324	4,478,491	4,507,957	4,549,454	4,569,010	4,578,096	4,590,122	4,608,219	4,631,500	4,631,500	4,631,500	4,631,500	4,745,410
2005	64,509	336,850	760,805	951,148	1,049,818	1,164,238	1,184,748	1,238,896	1,279,491	1,348,838	1,487,208	1,535,671	1,677,117	1,731,576	1,823,327	1,868,233	1,903,410	1,933,923	1,986,936	1,986,936	1,989,976	2,026,793	2,040,129	2,058,909	2,067,759	2,071,871	2,077,313	2,085,504	2,096,040	2,096,040	2,096,040	2,096,040	2,147,591
2006	2,233	224,299	365,337	537,313	775,151	888,935	1,062,080	1,197,945	1,268,221	1,395,888	1,851,282	2,389,601	2,764,255	3,304,645	3,823,843	3,824,736	3,833,223	3,862,716	3,902,928	3,937,251	4,016,435	4,090,746	4,117,661	4,155,565	4,173,428	4,181,727	4,192,712	4,209,243	4,230,508	4,230,508	4,230,508	4,230,508	4,334,556
2007	7,065	318,642	552,262	593,816	603,938	628,469	656,318	675,212	744,229	765,632	774,413	785,680	811,327	811,327	811,327	816,275	826,373	826,373	845,022	859,227	876,507	892,724	898,598	906,870	910,768	912,579	914,976	918,584	923,224	923,224	923,224	923,224	945,931
2008	-	134,080	205,854	273,370	472,091	704,738	898,168	1,146,107	1,350,478	1,510,195	1,717,896	1,809,564	1,898,415	2,044,361	2,062,340	2,082,101	2,107,328	2,166,592	2,209,862	2,247,009	2,292,200	2,334,609	2,349,970	2,371,602	2,381,796	2,386,533	2,392,802	2,402,236	2,414,372	2,414,372	2,414,372	2,414,372	2,473,753
2009	140,848	322,681	470,506	594,291	657,716	792,191	854,383	884,880	913,849	917,398	924,493	943,108	943,108	943,108	943,108	943,108	943,108	943,108	965,321	984,600	1,001,151	1,021,286	1,040,181	1,047,025	1,056,663	1,061,205	1,063,315	1,066,109	1,070,312	1,075,719	1,075,719	1,075,719	1,102,176
2010	-	29,916	66,069	150,177	170,474	177,574	200,650	211,147	214,795	223,439	223,439	223,439	223,439	223,439	223,439	223,439	223,439	229,109	234,505	239,188	243,209	248,100	252,691	254,353	256,695	257,798	258,311	258,989	260,010	261,324	261,324	261,324	267,751
2011	34,886	69,855	141,373	264,278	450,244	510,173	642,965	724,726	789,478	999,155	1,254,601	1,456,728	1,489,924	1,529,896	1,700,374	1,739,623	1,783,769	1,825,781	1,862,245	1,893,548	1,931,631	1,967,369	1,980,313	1,998,543	2,007,133	2,011,125	2,016,408	2,024,358	2,034,585	2,034,585	2,034,585	2,034,585	2,084,625
2012	17,882	108,288	209,139	340,184	438,523	535,264	609,736	624,675	714,076	728,666	758,294	834,910	886,902	920,105	951,980	973,954	998,669	1,022,191	1,042,606	1,060,131	1,081,452	1,101,461	1,108,708	1,118,914	1,123,724	1,125,958	1,128,916	1,133,367	1,139,093	1,139,093	1,139,093	1,139,093	1,167,108
2013	-	82,788	168,015	310,824	678,846	799,890	810,824	866,715	894,386	901,545	901,545	904,045	912,130	937,798	970,286	992,683	1,017,873	1,041,847	1,062,654	1,080,517	1,102,248	1,122,641	1,130,028	1,140,430	1,145,332	1,147,610	1,150,624	1,155,161	1,160,997	1,160,997	1,160,997	1,160,997	1,189,551
2014	-	44,273	133,385	153,017	174,091	228,658	257,829	287,806	301,110	304,917	304,917	304,917	313,817	322,648	333,826	341,531	350,198	358,446	365,605	371,750	379,227	386,243	388,785	392,363	394,050	394,834	395,871	397,432	399,439	399,439	399,439	399,439	409,264
2015	129,482	692,863	1,132,035	1,282,058	1,839,001	2,482,178	2,544,354	2,564,169	2,660,786	2,660,786	2,715,575	2,881,229	2,965,322	3,048,771	3,154,388	3,227,199	3,309,094	3,387,032	3,454,676	3,512,748	3,583,395	3,649,694	3,673,707	3,707,525	3,723,461	3,730,866	3,740,666	3,755,414	3,774,387	3,774,387	3,774,387	3,774,387	3,867,217
2016	39,426	195,261	369,308	515,059	582,529	770,994	849,586	893,887	1,013,503	1,080,239	1,145,856	1,215,755	1,251,239	1,286,451	1,331,016	1,361,740	1,396,296	1,429,182	1,457,726	1,482,229	1,512,039	1,540,014	1,550,147	1,564,417	1,571,141	1,574,266	1,578,401	1,584,624	1,592,630	1,592,630	1,592,630	1,592,630	1,631,800
2017	-	199,097	434,059	660,895	843,710	897,982	1,022,452	1,108,402	1,142,980	1,227,641	1,302,212	1,381,648	1,421,974	1,461,991	1,512,638	1,547,553	1,586,825	1,624,199	1,656,636	1,684,484	1,718,361	1,750,154	1,761,669	1,777,886	1,785,528	1,789,079	1,793,778	1,800,851	1,809,948	1,809,948	1,809,948	1,809,948	1,854,464
2018	24,083	163,397	298,091	374,370	417,839	485,126	595,974	700,060	747,523	802,892	851,663	903,615	929,989	956,160	989,284	1,012,119	1,037,803	1,062,246	1,083,461	1,101,673	1,123,830	1,144,622	1,152,153	1,162,759	1,167,757	1,170,080	1,173,153	1,177,779	1,183,729	1,183,729	1,183,729	1,183,729	1,212,842
2019	428,443	647,159	752,622	804,016	865,583	1,153,052	1,257,606	1,344,609	1,435,772	1,542,121	1,635,794	1,735,579	1,786,235	1,836,502	1,900,123	1,943,983	1,993,315	2,040,263	2,081,010	2,115,991	2,158,547	2,198,483	2,212,948	2,233,319	2,242,919	2,247,379	2,253,283	2,262,167	2,273,595	2,273,595	2,273,595	2,273,595	2,329,514
2020	-	36,025	198,330	241,893	341,805	393,204	445,897	476,745	509,067	546,774	579,987	615,367	633,328	651,150	673,708	689,259	706,750	723,396	737,843	750,246	765,334	779,494	784,623	791,846	795,250	796,831	798,924	802,074	806,126	806,126	806,126	806,126	825,953
2021	-	60,751	73,580	101,906	133,043	167,115	189,510	202,621	216,358	232,384	246,499	261,536	269,170	276,744	286,332	292,941	300,375	307,449	313,589	318,861	325,274	331,292	333,471	336,541	337,988	338,660	339,549	340,888	342,610	342,610	342,610	342,610	351,037
2022	45,657	312,901	369,984	403,883	481,382	604,663	685,694	733,131	782,837	840,822	891,896	946,303	973,922	1,001,330	1,036,018	1,059,932	1,086,830	1,112,427	1,134,644	1,153,717	1,176,920	1,198,695	1,206,582	1,217,689	1,222,923	1,225,355	1,228,574	1,233,418	1,239,649	1,239,649	1,239,649	1,239,649	1,270,138
2023	43,599	74,851	131,787	156,702	186,771	234,602	266,042	284,447	303,732	326,229	346,046	367,155	377,871	388,505	401,964	411,242	421,678	431,609	440,229	447,629	456,632	465,080	468,140	472,450	474,481	475,424	476,673	478,552	480,970	480,970	480,970	480,970	492,799
2024	23,495	94,811	154,708	183,957	219,255	275,406	312,313	333,919	356,558	382,969	406,232	431,012	443,592	456,076	471,875	482,767	495,018	506,677	516,796	525,483	536,052	545,970	549,562	554,621	557,005	558,112	559,578	561,785	564,623	564,623	564,623	564,623	578,510
2025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DRAFT

Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance UST - Other
Selection of Loss Development Factors

	Development Period in Months																															
BY	12 - 24	24 - 36	36 - 48	48 - 60	60 - 72	72 - 84	84 - 96	96 - 108	108 - 120	120 - 132	132 - 144	144 - 156	156 - 168	168 - 180	180 - 192	192 - 204	204 - 216	216 - 228	228 - 240	240 - 252	252 - 264	264 - 276	276 - 288	288 - 300	300 - 312	312 - 324	324 - 336	336 - 348	348 - 360	360 - 372	372 - 384	
1994		1.566	2.122	1.438	1.840	1.224	1.340	1.256	1.374	1.033	1.027	1.066	1.045	1.062	1.057	1.055	1.027	1.035	1.030	1.016	1.043	1.010	1.020	1.018	1.006	1.004	1.004	1.009	1.135	1.013	1.010	
1995	3.760	1.734	1.593	1.161	1.131	1.269	1.382	1.086	1.093	1.276	1.062	1.051	1.033	1.037	1.032	1.021	1.022	1.024	1.014	1.015	1.001	1.012	1.007	1.007	1.000	1.003	1.000	1.000	1.000	1.051		
1996		2.391	4.177	1.897	1.678	1.269	1.332	1.060	1.130	1.071	1.029	1.053	1.054	1.140	1.002	1.054	1.034	1.094	1.043	1.081	1.007	1.000	1.017	1.000	1.004	1.009	1.007	1.015	1.000			
1997	520.511	1.681	1.601	1.318	1.251	1.227	1.559	1.139	1.061	1.178	1.027	1.023	1.046	1.081	1.029	1.026	1.015	1.005	1.008	1.010	1.009	1.012	1.002	1.000	1.000	1.000	1.000	1.000				
1998	18.330	1.363	1.853	1.780	1.198	1.171	1.075	1.059	1.104	1.156	1.118	1.118	1.199	1.046	1.167	1.015	1.092	1.081	1.015	1.038	1.023	1.006	1.002	1.001	1.000	1.003	1.011					
1999	3.453	1.116	1.035	1.044	1.071	1.044	1.043	1.153	1.042	1.074	1.049	1.032	1.027	1.020	1.019	1.012	1.004	1.002	1.006	1.012	1.007	1.007	1.000	1.000	1.000	1.000						
2000	8.917	1.206	1.216	1.172	1.090	1.079	1.091	1.076	1.157	1.053	1.017	1.032	1.036	1.009	1.034	1.025	1.024	1.028	1.012	1.097	1.016	1.015	1.010	1.005	1.013							
2001	1.729	1.108	1.687	1.112	1.158	1.220	1.100	1.171	1.005	1.045	1.023	1.028	1.025	1.010	1.033	1.097	1.051	1.044	1.036	1.015	1.008	1.000	1.005	1.000								
2002	3.256	2.453	2.032	1.367	1.642	1.240	1.180	1.126	1.054	1.044	1.077	1.079	1.065	1.072	1.035	1.077	1.032	1.026	1.020	1.005	1.013	1.000	1.015									
2003	3.629	2.485	1.410	1.189	1.228	1.199	1.072	1.100	1.068	1.027	1.049	1.080	1.108	1.059	1.037	1.014	1.019	1.014	1.020	1.003	1.021	1.012										
2004	6.103	1.809	1.261	1.316	1.260	1.135	1.132	1.107	1.123	1.052	1.041	1.049	1.023	1.044	1.027	1.011	1.015	1.001	1.004	1.006	1.022											
2005	5.222	2.259	1.250	1.104	1.109	1.018	1.046	1.033	1.054	1.103	1.033	1.092	1.032	1.053	1.025	1.019	1.016	1.027	1.000	1.002												
2006	100.428	1.629	1.471	1.443	1.147	1.195	1.128	1.059	1.101	1.326	1.291	1.157	1.195	1.157	1.000	1.002	1.008	1.010	1.009													
2007	45.101	1.733	1.075	1.017	1.041	1.044	1.029	1.102	1.029	1.011	1.015	1.033	1.000	1.000	1.006	1.012	1.000	1.023														
2008		1.535	1.328	1.727	1.493	1.274	1.276	1.178	1.118	1.138	1.053	1.049	1.077	1.009	1.010	1.012	1.028															
2009	2.291	1.458	1.263	1.107	1.204	1.079	1.036	1.033	1.004	1.008	1.020	1.000	1.000	1.000	1.000	1.000																
2010		2.208	2.273	1.135	1.042	1.130	1.052	1.017	1.040	1.000	1.000	1.000	1.000	1.000	1.000																	
2011	2.002	2.024	1.869	1.704	1.133	1.260	1.127	1.089	1.266	1.256	1.161	1.023	1.027	1.111																		
2012	6.056	1.931	1.627	1.289	1.221	1.139	1.025	1.143	1.020	1.041	1.101	1.062	1.037																			
2013		2.029	1.850	2.184	1.178	1.014	1.069	1.032	1.008	1.000	1.003	1.009																				
2014		3.013	1.147	1.138	1.313	1.128	1.116	1.046	1.013	1.000	1.000																					
2015	5.351	1.634	1.133	1.434	1.350	1.025	1.008	1.038	1.000	1.021																						
2016	4.953	1.891	1.395	1.131	1.324	1.102	1.052	1.134	1.066																							
2017		2.180	1.523	1.277	1.064	1.139	1.084	1.031																								
2018	6.785	1.824	1.256	1.116	1.161	1.228	1.175																									
2019	1.510	1.163	1.068	1.077	1.332	1.091																										
2020		5.505	1.220	1.413	1.150																											
2021		1.211	1.385	1.306																												
2022	6.853	1.182	1.092																													
2023	1.717	1.761																														
2024	4.035																															
VOL WTD 3	4.280	1.283	1.165	1.168	1.250	1.134	1.095	1.055	1.018	1.014	1.040	1.029	1.028	1.063	1.006	1.009	1.013	1.017	1.005	1.004	1.019	1.005	1.012	1.003	1.006	1.001	1.005	1.004	1.049	1.031	1.010	
VOL WTD 5	5.138	1.349	1.138	1.192	1.213	1.083	1.054	1.051	1.017	1.061	1.082	1.021	1.040	1.034	1.003	1.008	1.014	1.011	1.011	1.005	1.017	1.008	1.008	1.002	1.004	1.003	1.004	1.005	1.049	1.031	1.010	
VOL WTD ALL	4.068	1.568	1.319	1.266	1.233	1.133	1.136	1.097	1.087	1.090	1.061	1.057	1.061	1.058	1.031	1.026	1.024	1.024	1.015	1.024	1.016	1.008	1.009	1.004	1.004	1.003	1.004	1.005	1.049	1.031	1.010	
ARITH 3	4.202	1.385	1.232	1.265	1.215	1.153	1.104	1.068	1.026	1.007	1.035	1.031	1.021	1.037	1.003	1.008	1.012	1.020	1.004	1.003	1.019	1.004	1.010	1.002	1.004	1.001	1.006	1.005	1.045	1.032	1.010	
ARITH 5	4.202	2.165	1.204	1.238	1.206	1.117	1.087	1.056	1.021	1.063	1.053	1.019	1.028	1.024	1.003	1.009	1.013	1.015	1.011	1.006	1.016	1.007	1.007	1.001	1.003	1.003	1.004	1.006	1.045	1.032	1.010	
ARITH ALL	34.636	1.903	1.559	1.336	1.252	1.152	1.141	1.095	1.084	1.087	1.057	1.052	1.054	1.051	1.030	1.028	1.026	1.029	1.017	1.025	1.015	1.007	1.009	1.004	1.003	1.003	1.004	1.006	1.045	1.032	1.010	
5 YR HI LO	4.035	1.385	1.189	1.233	1.212	1.110	1.084	1.039	1.014	1.020	1.035	1.011	1.021	1.003	1.002	1.009	1.013	1.016	1.011	1.005	1.017	1.007	1.006	1.000	1.001	1.002	1.004	1.004	1.000	NA	NA	
7 YR HI LO	4.179	1.632	1.269	1.248	1.256	1.097	1.069	1.068	1.029	1.014	1.035	1.023	1.028	1.035	1.008	1.010	1.017	1.020	1.013	1.008	1.016	1.008	1.007	1.001	1.002	1.003	1.004	1.004	1.000	NA	NA	
ALL YR HI LO	11.999	1.803	1.481	1.315	1.237	1.152	1.129	1.091	1.074	1.079	1.048	1.049	1.049	1.047	1.023	1.025	1.023	1.027	1.016	1.020	1.014	1.008	1.008	1.002	1.002	1.003	1.004	1.004	1.000	NA	NA	Tail
SELECTED	4.068	1.632	1.189	1.192	1.256	1.134	1.069	1.068	1.074	1.061	1.061	1.029	1.028	1.035	1.023	1.025	1.024	1.020	1.017	1.020	1.019	1.007	1.009	1.004	1.002	1.003	1.004	1.005	1.000	1.000	1.000	1.025

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance UST - Other
Paid Losses

Development in Months

BY	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360	372	384
1994	-	67,556	105,762	224,445	322,720	593,891	727,102	973,960	1,223,383	1,680,534	1,736,151	1,783,144	1,901,121	1,985,974	2,108,783	2,229,646	2,353,177	2,416,592	2,500,825	2,575,464	2,617,719	2,729,017	2,757,576	2,813,689	2,862,976	2,879,778	2,892,263	2,904,608	2,930,701	3,325,762	3,369,805	3,403,247
1995	57,146	214,861	372,610	593,564	689,047	779,151	988,375	1,365,685	1,483,319	1,621,206	2,068,109	2,195,718	2,307,489	2,384,650	2,474,037	2,554,120	2,607,829	2,663,932	2,728,277	2,767,464	2,808,933	2,811,884	2,845,490	2,864,027	2,884,276	2,884,276	2,893,591	2,893,591	2,893,591	2,893,591	3,041,518	
1996	-	17,700	42,316	176,760	335,328	562,825	713,987	950,907	1,008,006	1,138,950	1,219,963	1,255,045	1,321,564	1,392,644	1,587,262	1,590,384	1,676,801	1,734,357	1,897,262	1,979,584	2,139,915	2,154,274	2,154,274	2,191,849	2,191,849	2,200,780	2,220,428	2,236,594	2,269,676	2,269,676		
1997	439	228,598	384,266	615,310	810,739	1,014,623	1,245,366	1,941,775	2,211,344	2,345,205	2,763,348	2,836,923	2,901,679	3,033,730	3,280,943	3,376,266	3,462,906	3,516,084	3,532,892	3,559,664	3,594,408	3,626,458	3,669,572	3,678,448	3,678,448	3,678,448	3,678,448	3,678,448	3,678,448			
1998	6,465	118,511	161,556	299,311	532,819	638,505	747,760	804,023	851,858	940,596	1,087,299	1,215,530	1,359,258	1,629,754	1,704,629	1,989,855	2,018,841	2,204,678	2,382,158	2,418,884	2,510,541	2,568,757	2,584,769	2,590,454	2,593,088	2,593,088	2,601,109	2,628,924				
1999	357,471	1,234,237	1,376,895	1,425,317	1,488,590	1,594,064	1,663,943	1,736,098	2,001,842	2,085,194	2,238,708	2,349,101	2,424,075	2,490,058	2,539,119	2,586,804	2,618,422	2,627,746	2,634,286	2,650,903	2,683,553	2,702,953	2,722,748	2,722,748	2,722,748	2,722,748	2,722,748					
2000	114,187	1,018,212	1,227,935	1,493,269	1,750,358	1,908,405	2,059,006	2,247,037	2,418,072	2,797,305	2,945,750	2,995,139	3,091,814	3,203,887	3,233,491	3,344,627	3,426,721	3,508,911	3,605,836	3,649,865	4,003,655	4,067,021	4,126,675	4,169,938	4,192,604	4,247,876						
2001	104,196	180,134	199,654	336,731	374,550	433,710	529,272	581,958	681,517	684,727	715,780	732,297	752,978	771,454	779,324	805,227	883,218	928,198	968,904	1,003,341	1,018,271	1,026,602	1,026,602	1,031,527	1,031,527							
2002	39,750	129,433	317,549	645,166	881,959	1,448,299	1,795,420	2,119,144	2,385,722	2,515,613	2,626,157	2,827,608	3,051,616	3,249,469	3,483,473	3,604,479	3,881,563	4,004,641	4,106,762	4,189,494	4,210,452	4,266,556	4,266,556	4,332,343								
2003	70,930	257,387	639,714	902,054	1,072,965	1,317,164	1,579,451	1,692,868	1,861,811	1,989,247	2,043,300	2,143,512	2,315,479	2,565,592	2,717,089	2,817,658	2,856,078	2,910,296	2,950,945	3,011,404	3,021,286	3,083,893	3,122,179									
2004	90,918	554,838	1,003,934	1,265,633	1,665,587	2,099,306	2,382,002	2,697,142	2,987,009	3,355,323	3,528,803	3,673,274	3,851,449	3,939,069	4,112,757	4,223,202	4,271,607	4,334,593	4,338,651	4,357,924	4,382,324	4,478,491										
2005	64,509	336,850	760,805	951,148	1,049,818	1,164,238	1,184,748	1,238,896	1,279,491	1,348,838	1,487,208	1,535,671	1,677,117	1,731,576	1,823,327	1,868,233	1,903,410	1,933,923	1,986,936	1,986,936	1,989,976											
2006	2,233	224,299	365,337	537,313	775,151	888,935	1,062,080	1,197,945	1,268,221	1,395,888	1,851,282	2,389,601	2,764,255	3,304,645	3,823,843	3,824,736	3,833,223	3,862,716	3,902,928	3,937,251												
2007	7,065	318,642	552,262	593,816	603,938	628,469	656,318	675,212	744,229	765,632	774,413	785,680	811,327	811,327	811,327	816,275	826,373	826,373	845,022													
2008	-	134,080	205,854	273,370	472,091	704,738	898,168	1,146,107	1,350,478	1,510,195	1,717,896	1,809,564	1,898,415	2,044,361	2,062,340	2,082,101	2,107,328	2,166,592														
2009	140,848	322,681	470,506	594,291	657,716	792,191	854,383	884,880	913,849	917,398	924,493	943,108	943,108	943,108	943,108	943,108	943,108															
2010	-	29,916	66,069	150,177	170,474	177,574	200,650	211,147	214,795	223,439	223,439	223,439	223,439	223,439	223,439	223,439																
2011	34,886	69,855	141,373	264,278	450,244	510,173	642,965	724,726	789,478	999,155	1,254,601	1,456,728	1,489,924	1,529,896	1,700,374																	
2012	17,882	108,288	209,139	340,184	438,523	535,264	609,736	624,675	714,076	728,666	758,294	834,910	886,902	920,105																		
2013	-	82,788	168,015	310,824	678,846	799,890	810,824	866,715	894,386	901,545	901,545	904,045	912,130																			
2014	-	44,273	133,385	153,017	174,091	228,658	257,829	287,806	301,110	304,917	304,917	304,917																				
2015	129,482	692,863	1,132,035	1,282,058	1,839,001	2,482,178	2,544,354	2,564,169	2,660,786	2,660,786	2,715,575																					
2016	39,426	195,261	369,308	515,059	582,529	770,994	849,586	893,887	1,013,503	1,080,239																						
2017	-	199,097	434,059	660,895	843,710	897,982	1,022,452	1,108,402	1,142,980																							
2018	24,083	163,397	298,091	374,370	417,839	485,126	595,974	700,060																								
2019	428,443	647,159	752,622	804,016	865,583	1,153,052	1,257,606																									
2020	-	36,025	198,330	241,893	341,805	393,204																										
2021	-	60,751	73,580	101,906	133,043																											
2022	45,657	312,901	369,984	403,883																												
2023	43,599	74,851	131,787																													
2024	23,495	94,811																														
2025	-																															

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance UST - Other
Summary of Incurred Development Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	INC LDM	PAID	INCURRED	CASE	IBNR	UNPAID
RY	ULTIMATE	LOSS	LOSS	RESERVE	RESERVE	LOSS
1994	3,403,247	3,403,247	3,403,247	-	-	-
1995	3,165,091	3,041,518	3,165,091	123,572	-	123,572
1996	2,547,508	2,269,676	2,547,508	277,832	-	277,832
1997	3,678,448	3,678,448	3,678,448	-	-	-
1998	3,020,235	2,628,924	3,020,235	391,311	-	391,311
1999	2,722,748	2,722,748	2,722,748	-	-	-
2000	4,406,695	4,247,876	4,406,695	158,819	-	158,819
2001	1,055,182	1,031,527	1,055,182	23,655	-	23,655
2002	4,581,721	4,332,343	4,573,844	241,501	7,877	249,378
2003	3,581,828	3,122,179	3,575,741	453,562	6,087	459,649
2004	4,706,651	4,478,491	4,669,533	191,042	37,118	228,160
2005	2,148,585	1,989,976	2,116,803	126,827	31,782	158,609
2006	4,085,206	3,937,251	3,955,672	18,421	129,533	147,955
2007	906,577	845,022	864,373	19,351	42,204	61,555
2008	2,369,357	2,166,592	2,239,328	72,736	130,029	202,765
2009	1,007,078	943,108	943,108	-	63,970	63,970
2010	242,085	223,439	223,439	-	18,646	18,646
2011	2,726,846	1,700,374	2,494,564	794,190	232,282	1,026,472
2012	1,094,926	920,105	1,001,501	81,396	93,425	174,821
2013	1,110,068	912,130	998,657	86,527	111,411	197,938
2014	397,439	304,917	354,917	50,000	42,522	92,522
2015	3,347,359	2,715,575	2,929,629	214,053	417,730	631,783
2016	1,459,366	1,080,239	1,241,258	161,019	218,108	379,126
2017	1,439,411	1,142,980	1,203,383	60,403	236,029	296,431
2018	1,181,078	700,060	941,091	241,031	239,988	481,019
2019	1,898,223	1,257,606	1,425,164	167,558	473,059	640,617
2020	837,951	393,204	586,122	192,919	251,829	444,747
2021	244,699	133,043	158,434	25,391	86,265	111,656
2022	794,141	403,883	462,388	58,505	331,753	390,258
2023	626,851	131,787	336,602	204,815	290,248	495,064
2024	1,264,287	94,811	610,353	515,542	653,934	1,169,476
2025	2,376,340	-	665,703	665,703	1,710,637	2,376,340
TOTAL	68,427,225	56,953,079	62,570,760	5,617,681	5,856,466	11,474,147

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance UST - Other
Development of Losses to Ultimate

Development Period in Months

RY	12 - 24	24 - 36	36 - 48	48 - 60	60 - 72	72 - 84	84 - 96	96 - 108	108 - 120	120 - 132	132 - 144	144 - 156	156 - 168	168 - 180	180 - 192	192 - 204	204 - 216	216 - 228	228 - 240	240 - 252	252 - 264	264 - 276	276 - 288	288 - 300	300 - 312	312 - 324	324 - 336	336 - 348	348 - 360	360 - 372	372 - 384	384 - ULT
1994	15.451	1.018	1.063	1.379	1.386	1.238	0.981	1.166	1.020	0.997	0.977	0.872	1.009	1.044	0.972	1.047	0.992	1.021	1.045	1.023	1.052	1.008	0.962	1.000	1.000	1.001	1.138	1.004	1.013	0.971	1.001	1.000
1995	1.245	0.927	1.155	0.988	1.043	1.069	1.204	0.975	1.001	1.145	0.992	1.010	1.043	0.997	1.033	1.005	1.012	0.983	1.008	1.000	1.002	1.012	1.000	1.001	1.000	1.000	1.060	1.000	1.000	1.023	1.000	1.000
1996	0.783	1.411	1.368	1.380	1.056	1.117	1.105	1.027	1.010	0.884	0.936	1.043	1.017	1.103	1.016	1.097	0.999	1.028	1.181	1.000	1.000	1.000	1.000	1.015	1.000	1.000	1.070	1.000	1.000	1.000	1.000	1.000
1997	1.860	1.230	1.198	1.413	1.137	1.171	1.111	1.037	1.003	1.089	1.016	0.971	1.084	1.034	1.005	1.005	1.002	1.014	1.002	1.001	0.997	1.003	1.000	1.000	1.000	0.991	1.000	1.000	1.000	1.000	1.000	1.000
1998	1.032	0.989	1.073	1.294	1.108	1.049	1.241	1.024	1.091	0.997	1.032	0.982	1.077	1.312	1.061	1.018	1.079	1.017	1.023	1.000	1.002	1.010	1.000	1.000	1.000	1.005	1.000	1.000	1.000	1.000	1.000	1.000
1999	1.034	1.090	1.052	1.039	1.011	0.999	1.185	1.022	1.029	1.061	1.028	0.999	0.956	1.005	0.996	0.999	0.997	1.000	1.000	0.991	1.000	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2000	1.255	1.096	1.119	1.055	1.021	1.029	1.063	1.049	1.044	1.051	1.024	1.025	1.000	1.014	0.998	1.028	1.002	0.979	0.998	1.085	1.018	1.040	1.000	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2001	0.974	0.874	1.046	1.005	1.062	1.075	0.986	1.015	0.991	1.000	1.020	1.034	1.000	1.109	1.000	1.000	1.035	1.000	0.953	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2002	1.015	1.073	0.969	1.211	1.074	1.037	1.026	1.103	1.039	1.026	1.089	1.034	1.013	1.024	1.015	1.041	1.001	1.015	1.000	1.000	1.003	1.000	1.007	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2003	0.931	1.129	1.067	0.881	1.164	1.048	1.003	1.017	0.993	1.093	1.063	1.007	0.996	1.012	1.024	0.999	1.003	1.009	1.033	1.045	1.000	1.017	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2004	0.775	1.030	1.089	1.071	1.138	1.004	1.096	1.069	1.092	1.005	1.022	0.997	1.008	1.025	1.007	1.036	0.999	1.000	1.000	1.005	1.030	1.006	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2005	1.822	1.024	1.042	0.960	0.988	1.032	1.023	1.000	1.013	1.029	1.038	1.054	1.034	1.001	1.052	0.997	1.008	1.018	1.000	1.000	1.007	1.006	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2006	1.152	1.011	1.056	1.179	0.992	1.005	1.068	1.082	1.148	1.060	1.015	1.002	1.163	1.148	0.977	1.012	1.000	0.994	1.000	1.017	1.007	1.006	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2007	0.859	0.861	0.898	1.026	1.003	1.019	1.041	1.139	1.000	1.000	1.000	0.963	1.000	1.000	1.000	1.016	1.000	1.018	1.016	1.017	1.007	1.006	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2008	1.310	1.076	1.062	1.284	1.133	1.178	1.124	1.113	1.056	1.015	1.013	1.016	1.009	1.000	1.004	1.000	1.047	1.009	1.016	1.017	1.007	1.006	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2009	0.838	0.960	1.065	1.041	1.068	1.009	0.984	0.981	1.000	1.011	0.996	1.000	1.000	1.000	1.000	1.000	1.009	1.009	1.016	1.017	1.007	1.006	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2010	1.292	1.275	1.339	1.000	1.000	1.038	1.037	0.947	0.994	1.000	1.000	1.000	1.000	1.000	1.000	1.015	1.009	1.009	1.016	1.017	1.007	1.006	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2011	1.186	0.941	2.132	1.086	1.074	1.630	0.747	1.074	1.007	1.246	1.000	1.107	1.117	1.000	1.009	1.015	1.009	1.009	1.016	1.017	1.007	1.006	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2012	1.319	1.158	1.159	1.093	1.463	0.990	1.158	1.000	1.000	1.000	1.055	0.997	0.933	1.000	1.009	1.015	1.009	1.009	1.016	1.017	1.007	1.006	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2013	1.390	0.989	1.040	1.623	0.957	0.959	1.062	1.000	0.991	1.000	1.000	1.000	1.017	1.000	1.009	1.015	1.009	1.009	1.016	1.017	1.007	1.006	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2014	1.602	0.891	1.000	1.121	1.000	1.101	1.191	1.000	0.845	1.000	1.000	1.007	1.017	1.000	1.009	1.015	1.009	1.009	1.016	1.017	1.007	1.006	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2015	1.817	1.132	0.979	1.218	1.251	1.047	1.000	1.034	0.999	1.000	1.020	1.007	1.017	1.000	1.009	1.015	1.009	1.009	1.016	1.017	1.007	1.006	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2016	0.838	1.184	1.170	1.082	1.013	1.031	1.000	1.157	0.990	1.029	1.020	1.007	1.017	1.000	1.009	1.015	1.009	1.009	1.016	1.017	1.007	1.006	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2017	2.792	1.314	1.247	0.979	1.011	1.036	0.975	0.952	1.017	1.029	1.020	1.007	1.017	1.000	1.009	1.015	1.009	1.009	1.016	1.017	1.007	1.006	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2018	3.151	1.170	1.056	1.026	1.021	1.201	0.971	1.049	1.017	1.029	1.020	1.007	1.017	1.000	1.009	1.015	1.009	1.009	1.016	1.017	1.007	1.006	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2019	1.422	0.953	0.979	1.011	1.045	0.953	1.061	1.049	1.017	1.029	1.020	1.007	1.017	1.000	1.009	1.015	1.009	1.009	1.016	1.017	1.007	1.006	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2020	1.172	1.426	0.916	1.171	1.210	1.073	1.061	1.049	1.017	1.029	1.020	1.007	1.017	1.000	1.009	1.015	1.009	1.009	1.016	1.017	1.007	1.006	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2021	0.512	1.000	1.047	0.970	1.080	1.073	1.061	1.049	1.017	1.029	1.020	1.007	1.017	1.000	1.009	1.015	1.009	1.009	1.016	1.017	1.007	1.006	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2022	2.558	1.035	0.828	1.112	1.080	1.073	1.061	1.049	1.017	1.029	1.020	1.007	1.017	1.000	1.009	1.015	1.009	1.009	1.016	1.017	1.007	1.006	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2023	1.059	1.042	1.084	1.112	1.080	1.073	1.061	1.049	1.017	1.029	1.020	1.007	1.017	1.000	1.009	1.015	1.009	1.009	1.016	1.017	1.007	1.006	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2024	1.802	1.112	1.084	1.112	1.080	1.073	1.061	1.049	1.017	1.029	1.020	1.007	1.017	1.000	1.009	1.015	1.009	1.009	1.016	1.017	1.007	1.006	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2025	1.723	1.112	1.084	1.112	1.080	1.073	1.061	1.049	1.017	1.029	1.020	1.007	1.017	1.000	1.009	1.015	1.009	1.009	1.016	1.017	1.007	1.006	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

RY	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360	372	384	ULT
1994	65,047	1,005,018	1,023,016	1,087,349	1,499,341	2,078,139	2,573,685	2,525,449	2,944,082	3,003,278	2,995,177	2,924,889	2,550,436	2,574,369	2,688,316	2,614,164	2,736,632	2,714,782	2,772,423	2,896,698	2,962,023	3,116,839	3,142,787	3,022,670	3,022,670	3,022,670	3,025,330	3,443,682	3,458,682	3,503,101	3,399,805	3,403,247	3,403,247
1995	1,345,826	1,675,949	1,553,606	1,794,446	1,772,905	1,849,070	1,976,684	2,379,084	2,318,512	2,321,479	2,657,629	2,635,614	2,661,105	2,775,105	2,766,065	2,856,864	2,870,975	2,906,668	2,855,886	2,879,342	2,878,011	2,883,696	2,917,052	2,917,052	2,919,348	2,919,348	2,919,348	3,093,591	3,093,591	3,093,591	3,165,091	3,165,091	3,165,091
1996	634,958	497,443	701,793	959,776	1,324,610	1,399,259	1,562,675	1,726,825	1,773,459	1,791,890	1,583,674	1,482,276	1,546,632	1,573,321	1,734,904	1,761,831	1,933,421	1,932,111	1,985,403	2,344,436	2,344,436	2,344,436	2,344,436	2,344,436	2,380,349	2,380,349	2,380,349	2,547,508	2,547,508	2,547,508	2,547,508	2,547,508	2,547,508
1997	502,583	935,032	1,150,245	1,378,150	1,947,336	2,214,227	2,591,866	2,880,119	2,986,984	2,997,120	3,265,114	3,318,830	3,221,107	3,492,440	3,610,025	3,626,882	3,643,635	3,651,096	3,700,587	3,708,217	3,713,372	3,703,945	3,713,968	3,713,448	3,713,448	3,713,448	3,713,448	3,678,448	3,678,448	3,678,448	3,678,448	3,678,448	3,678,448
1998	752,604	776,480	767,994	823,905	1,066,204	1,181,568	1,239,878	1,538,625	1,576,160	1,719,015	1,713,432	1,768,332	1,735,967	1,869,464	2,452,683	2,602,586	2,649,256	2,857,819	2,905,273	2,970,679	2,971,774	2,976,737	3,005,904	3,005,904	3,005,904	3,005,904	3,020,235	3,020,235	3,020,235	3,020,235	3,020,235	3,020,235	3,020,235
1999	1,712,508	1,770,639	1,930,013	2,030,050	2,108,225	2,131,472	2,129,530	2,523,004	2,577,625	2,653,444	2,814,130	2,892,443	2,889,189	2,760,814	2,773,420	2,761,910	2,758,547	2,750,103	2,750,103	2,750,103	2,724,553	2,724,553	2,722,748	2,722,748	2,722,748	2,722,748	2,722,748	2,722,748	2,722,748	2,722,748	2,722,748	2,722,748	2,722,748	2,722,748
2000	1,698,608	2,131,795	2,337,379	2,616,121	2,758,703	2,816,918	2,899,853	3,083,798	3,236,082	3,377,793	3,550,236	3,636,238	3,726,564	3,725,592	3,779,290	3,772,662	3,878,829	3,886,359	3,805,884	3,798,781	4,123,209	4,199,099	4,365,025	4,365,025	4,406,695	4,406,695	4,406,695	4,406,695	4,406,695	4,406,695	4,406,695	4,406,695	4,406,695	4,406,695
2001	903,017	879,435	768,432	803,398	807,374	857,373	921,857	909,006	922,903	914,707	914,707	932,652	964,133	964,133	1,069,609	1,069,609	1,069,609	1,107,092	1,107,092	1,055,182	1,055,182	1,055,182	1,055,182	1,055,182	1,055,182	1,055,182	1,055,182	1,055,182	1,055,182	1,055,182	1,055,182	1,055,182	1,055,182
2002	2,103,792	2,136,359	2,292,076	2,220,507	2,690,036	2,888,001	2,995,721	3,073,653	3,390,124	3,520,988	3,614,155	3,934,639	4,066,718	4,119,846	4,218,927	4,281,991	4,459,410	4,464,352	4,530,974	4,530,974	4,531,430	4,543,316	4,543,316	4,573,844	4,581,721	4,581,721	4,581,721	4,581,721	4,581,721	4,581,721	4,581,721	4,581,721	4,581,721
2003	2,188,347	2,037,947	2,300,433	2,453,916	2,162,594	2,516,185	2,638,216	2,645,657	2,689,486	2,669,997	2,918,788	3,102,947	3,124,594	3,111,514	3,149,028	3,223,096	3,218,366	3,228,365	3,256,297	3,362,272	3,514,265	3,514,265	3,575,741	3,575,670	3,581,828	3,581,828	3,581,828	3,581,828	3,581,828	3,581,828	3,581,828	3,581,828	3,581,828
2004	3,003,287	2,327,925	2,398,477	2,611,344	2,796,197	3,183,380	3,197,130	3,503,732	3,744,551	4,090,314	4,110,662	4,200,197	4,188,550	4,221,388	4,327,913	4,360,336	4,516,782	4,512,461	4,512,461	4,512,461	4,535,017	4,669,533	4,698,653	4,698,559	4,706,651	4,706,651	4,706,651	4,706,651	4,706,651	4,706,651	4,706,651	4,706,651	4,706,651
2005	855,094	1,558,332	1,595,861	1,662,314	1,596,329	1,577,303	1,627,822	1,664,850	1,665,200	1,687,550	1,736,223	1,801,967	1,899,621	1,963,983	1,965,504	2,067,863	2,061,727	2,078,924	2,116,804	2,116,804	2,116,803	2,131,640	2,144,934	2,144,891	2,148,585	2,148,585	2,148,585	2,148,585	2,148,585	2,148,585	2,148,585	2,148,585	2,148,585
2006	1,458,736	1,680,496	1,698,579	1,793,328	2,114,309	2,096,877	2,106,813	2,250,803	2,435,160	2,795,151	2,963,704	3,008,941	3,014,915	3,507,529	4,026,063	3,933,956	3,979,449	3,980,385	3,955,672	3,955,672	4,024,777	4,052,988	4,078,263	4,078,182	4,085,206	4,085,206	4,085,206	4,085,206	4,085,206	4,085,206	4,085,206	4,085,206	4,085,206
2007	1,049,030	901,475	776,584	697,298	715,705	717,904	731,520	761,453	867,453	867,453	867,453	867,453	835,778	835,778	835,778	835,778	849,275	849,275	864,373	877,832	893,167	899,428	905,037	905,019	906,577	906,577	906,577	906,577	906,577	906,577	906,577	906,577	906,577
2008	596,136	781,142	840,868	893,113	1,147,030	1,299,395	1,530,368	1,720,312	1,915,158	2,021,967	2,051,978	2,077,957	2,111,568	2,129,799	2,129,799	2,138,633	2,138,633	2,239,328	2,259,056	2,294,229	2,334,309	2,350,671	2,365,330	2,365,283	2,369,357	2,369,357	2,369,357	2,369,357	2,369,357	2,369,357	2,369,357	2,369,357	2,369,357
2009	1,008,223	844,876	811,301	864,241	899,372	960,149	968,896	953,538	935,849	935,849	946,493	943,108	943,108	943,108	943,108	943,108	943,108	951,810	960,196	975,146	992,181	999,136	1,005,367	1,005,346	1,007,078	1,007,078	1,007,078	1,007,078	1,007,078	1,007,078	1,007,078	1,007,078	1,007,078
2010	100,002	129,253	164,798	220,645	220,645	220,645	228,932	237,342	224,795	223,439	223,439	223,439	223,439	223,439	223,439	223,439	226,708	228,800	230,815	234,409	238,504	240,176	241,674	241,669	242,085	242,085	242,085	242,085	242,085	242,085	242,085	242,085	242,085
2011	443,503	526,138	494,996	1,055,259	1,146,204	1,230,702	2,005,572	1,497,560	1,608,103	1,619,827	2,017,512	2,017,508	2,233,004	2,494,564	2,494,564	2,516,815	2,553,637	2,577,198	2,599,903	2,640,383	2,686,510	2,705,341	2,722,212	2,722,157	2,726,846	2,726,846	2,726,846	2,726,846	2,726,846	2,726,846	2,726,846	2,726,846	2,726,846
2012	314,431	414,642	480,020	556,332	607,983	889,634	880,779	1,020,206	1,020,206	1,020,206	1,020,206	1,076,501	1,073,400	1,001,501	1,001,656	1,010,591	1,025,376	1,034,837	1,043,954	1,060,208	1,078,730	1,086,291	1,093,065	1,093,043	1,094,926	1,094,926	1,094,926	1,094,926	1,094,926	1,094,926	1,094,926	1,094,926	1,094,926
2013	445,007	618,612	611,639	636,393	1,032,995	989,033	948,554	1,007,339	1,007,339	998,657	998,657	998,657	998,657	998,657	1,015,351	1,015,509	1,024,567	1,039,557	1,049,148	1,058,391	1,074,870	1,093,648	1,101,314	1,108,182	1,108,159	1,110,068	1,110,068	1,110,068	1,110,068	1,110,068	1,110,068	1,110,068	1,110,068
2014	200,006	320,413	285,522	285,522	320,154	320,154	352,358	419,807	419,807	354,917	354,917	354,917	357,551	363,528	363,584	366,827	372,194	375,628	378,937	384,837	391,560	394,305	396,764	396,756	397,439	397,439	397,439	397,439	397,439	397,439	397,439	397,439	397,439
2015	883,506	1,605,384	1,817,239	1,779,882	2,167,846	2,711,516	2,838,141	2,838,141	2,933,310	2,929,629	2,929,629	2,989,226	3,011,402	3,061,745	3,062,219	3,089,534	3,134,735	3,163,658	3,191,529	3,241,221	3,297,844	3,320,960	3,341,670	3,341,603	3,347,359	3,347,359	3,347,359	3,347,359	3,347,359	3,347,359	3,347,359	3,347,359	3,347,359
2016	825,404	691,547	818,967	958,451	1,037,429	1,050,982	1,083,599	1,083,599	1,253,320	1,241,258	1,277,246	1,303,228	1,312,897	1,334,845	1,335,052	1,346,961	1,366,667	1,379,277	1,391,428	1,413,092	1,437,778	1,447,856	1,456,886	1,456,856	1,459,366	1,459,366	1,459,366	1,459,366	1,459,366	1,459,366	1,459,366	1,459,366	1,459,366
2017	276,255	771,193	1,013,157	1,263,398	1,236,321	1,250,328	1,295,631	1,263,750	1,203,383	1,224,286	1,259,781	1,285,409	1,294,945	1,316,593	1,316,797	1,328,543	1,347,980	1,360,417	1,372,402	1,393,770	1,418,119	1,428,059	1,436,965	1,436,936	1,439,411	1,439,411	1,439,411	1,439,411	1,439,411	1,439,411	1,439,411	1,439,411	1,439,411
2018	198,003	624,000	730,228	770,772	790,771	806,999	969,311	941,091	987,410	1,004,562	1,033,687	1,054,715	1,062,540	1,080,303	1,080,470	1,090,108	1,106,056	1,116,262	1,126,096	1,143,629	1,163,608	1,171,764	1,179,071	1,179,048	1,181,078	1,181,078	1,181,078	1,181,078	1,181,078	1,181,078	1,181,078	1,181,078	1,181,078
2019	1,067,059	1,517,150	1,445,774	1,415,866	1,430,865	1,494,977	1,425,164	1,512,516	1,586,961	1,614,527	1,661,337	1,695,133	1,707,709	1,736,257	1,736,526	1,752,016	1,777,648	1,794,050	1,809,856	1,838,035	1,870,144	1,883,253	1,894,998	1,894,960	1,898,223	1,898,223	1,898,223	1,898,223	1,898,223	1,898,223	1,898,223	1,898,223	1,898,223
2020	270,001	316,500	451,429	413,571	484,283	586,122	629,124	667,685	700,547	712,716	733,380	748,299	753,850	766,453	766,571	773,409	784,724	791,965	798,942	811,381	825,556	831,343	836,527	836,510	837,951	837,951	837,951	837,951	837,951	837,951	837,951	837,951	837,951
2021	304,601	155,916	155,916	163,257	158,434	171,160	183,717	194,978	204,574	208,128	214,162	218,519	220,140	223,820	223,855	225,851	229,156	231,270	233,307	236,940	241,079	242,769	244,283	244,278	244,699	244,699	244,699	244,699	244,699	244,699	244,699	244,699	244,699
2022	210,904	539,581	558,651	462,388	514,178	555,478	596,232	632,776	663,921	675,453	695,037	709,176	714,437	726,381	726,493	732,973	743,697	750,559	757,171	768,960	782,394	787,878	792,791	792,775	794,141	794,141	794,141	794,141	794,141	794,141	794,141	794,141	794,141
2023	305,102	323,000	336,602	364,983	405,864	438,464	470,632	499,479	524,062	533,166	548,624	559,784	563,937	573,365	573,453	578,569	587,033	592,450	597,669	606,975	617,578	621,907	625,786	625,773	626,851	626,851	626,851	626,851	626,851	626,851	626,851	626,851	626,851
2024	338,706	610,353	678,889	736,130	818,582	884,332	949,212	1,007,392	1,056,975	1,075,335	1,106,512	1,129,021	1,137,398	1,156,412	1,156,591	1,166,908	1,183,980	1,194,904	1,205,431	1,224,199	1,245,586	1,254,317	1,262,139	1,262,113	1,264,287	1,264,287	1,264,287	1,264,287	1,264,287	1,264,287	1,264,287	1,264,287	1,264,287
2025	665,703	1,147,213	1,276,032	1,383,622	1,538,597	1,662,181	1,784,129	1,893,483	1,986,678	2,021,187	2,079,788	2,122,096	2,137,840	2,173,579	2,173,915	2,193,307	2,225,395	2,245,928	2,265,715	2,300,992	2,341,189	2,357,600	2,372,302	2,372,255	2,376,340	2,376,340	2,376,340	2,376,340	2,376,340	2,376,340	2,376,340	2,376,340	2,376,340

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance UST - Other
Selection of Loss Development Factors

Development Period in Months

BY	12 - 24	24 - 36	36 - 48	48 - 60	60 - 72	72 - 84	84 - 96	96 - 108	108 - 120	120 - 132	132 - 144	144 - 156	156 - 168	168 - 180	180 - 192	192 - 204	204 - 216	216 - 228	228 - 240	240 - 252	252 - 264	264 - 276	276 - 288	288 - 300	300 - 312	312 - 324	324 - 336	336 - 348	348 - 360	360 - 372	372 - 384	
1994	15.451	1.018	1.063	1.379	1.386	1.238	0.981	1.166	1.020	0.997	0.977	0.872	1.009	1.044	0.972	1.047	0.992	1.021	1.045	1.023	1.052	1.008	0.962	1.000	1.000	1.001	1.138	1.004	1.013	0.971	1.001	
1995	1.245	0.927	1.155	0.988	1.043	1.069	1.204	0.975	1.001	1.145	0.992	1.010	1.043	0.997	1.033	1.005	1.012	0.983	1.008	1.000	1.002	1.012	1.000	1.001	1.000	1.000	1.060	1.000	1.000	1.023		
1996	0.783	1.411	1.368	1.380	1.056	1.117	1.105	1.027	1.010	0.884	0.936	1.043	1.017	1.103	1.016	1.097	0.999	1.028	1.181	1.000	1.000	1.000	1.000	1.015	1.000	1.000	1.070	1.000	1.000			
1997	1.860	1.230	1.198	1.413	1.137	1.171	1.111	1.037	1.003	1.089	1.016	0.971	1.084	1.034	1.005	1.005	1.002	1.014	1.002	1.001	0.997	1.003	1.000	1.000	1.000	1.000	0.991	1.000				
1998	1.032	0.989	1.073	1.294	1.108	1.049	1.241	1.024	1.091	0.997	1.032	0.982	1.077	1.312	1.061	1.018	1.079	1.017	1.023	1.000	1.002	1.010	1.000	1.000	1.000	1.005	1.000					
1999	1.034	1.090	1.052	1.039	1.011	0.999	1.185	1.022	1.029	1.061	1.028	0.999	0.956	1.005	0.996	0.999	0.997	1.000	1.000	0.991	1.000	0.999	1.000	1.000	1.000	1.000						
2000	1.255	1.096	1.119	1.055	1.021	1.029	1.063	1.049	1.044	1.051	1.024	1.025	1.000	1.014	0.998	1.028	1.002	0.979	0.998	1.085	1.018	1.040	1.000	1.010	1.000							
2001	0.974	0.874	1.046	1.005	1.062	1.075	0.986	1.015	0.991	1.000	1.020	1.034	1.000	1.109	1.000	1.000	1.035	1.000	0.953	1.000	1.000	1.000	1.000	1.000								
2002	1.015	1.073	0.969	1.211	1.074	1.037	1.026	1.103	1.039	1.026	1.089	1.034	1.013	1.024	1.015	1.041	1.001	1.015	1.000	1.000	1.003	1.000	1.007									
2003	0.931	1.129	1.067	0.881	1.164	1.048	1.003	1.017	0.993	1.093	1.063	1.007	0.996	1.012	1.024	0.999	1.003	1.009	1.033	1.045	1.000	1.017										
2004	0.775	1.030	1.089	1.071	1.138	1.004	1.096	1.069	1.092	1.005	1.022	0.997	1.008	1.025	1.007	1.036	0.999	1.000	1.000	1.005	1.030											
2005	1.822	1.024	1.042	0.960	0.988	1.032	1.023	1.000	1.013	1.029	1.038	1.054	1.034	1.001	1.052	0.997	1.008	1.018	1.000	1.000												
2006	1.152	1.011	1.056	1.179	0.992	1.005	1.068	1.082	1.148	1.060	1.015	1.002	1.163	1.148	0.977	1.012	1.000	0.994	1.000													
2007	0.859	0.861	0.898	1.026	1.003	1.019	1.041	1.139	1.000	1.000	1.000	0.963	1.000	1.000	1.000	1.016	1.000	1.018														
2008	1.310	1.076	1.062	1.284	1.133	1.178	1.124	1.113	1.056	1.015	1.013	1.016	1.009	1.000	1.004	1.000	1.047															
2009	0.838	0.960	1.065	1.041	1.068	1.009	0.984	0.981	1.000	1.011	0.996	1.000	1.000	1.000	1.000	1.000																
2010	1.292	1.275	1.339	1.000	1.000	1.038	1.037	0.947	0.994	1.000	1.000	1.000	1.000	1.000	1.000																	
2011	1.186	0.941	2.132	1.086	1.074	1.630	0.747	1.074	1.007	1.246	1.000	1.107	1.117	1.000																		
2012	1.319	1.158	1.159	1.093	1.463	0.990	1.158	1.000	1.000	1.000	1.055	0.997	0.933																			
2013	1.390	0.989	1.040	1.623	0.957	0.959	1.062	1.000	0.991	1.000	1.000	1.000																				
2014	1.602	0.891	1.000	1.121	1.000	1.101	1.191	1.000	0.845	1.000	1.000																					
2015	1.817	1.132	0.979	1.218	1.251	1.047	1.000	1.034	0.999	1.000																						
2016	0.838	1.184	1.170	1.082	1.013	1.031	1.000	1.157	0.990																							
2017	2.792	1.314	1.247	0.979	1.011	1.036	0.975	0.952																								
2018	3.151	1.170	1.056	1.026	1.021	1.201	0.971																									
2019	1.422	0.953	0.979	1.011	1.045	0.953																										
2020	1.172	1.426	0.916	1.171	1.210																											
2021	0.512	1.000	1.047	0.970																												
2022	2.558	1.035	0.828																													
2023	1.059	1.042																														
2024	1.802																															
VOL WTD 3	1.723	1.032	0.891	1.041	1.067	1.039	0.982	1.039	0.982	1.000	1.024	1.052	1.054	1.000	1.003	1.003	1.015	1.004	1.000	1.017	1.012	1.007	1.003	1.005	1.000	1.002	1.015	1.000	1.005	0.995	1.001	
VOL WTD 5	1.361	1.034	0.965	1.018	1.042	1.041	1.001	1.031	0.987	1.057	1.012	1.040	1.032	1.000	0.990	1.005	1.008	1.004	1.006	1.011	1.013	1.014	1.002	1.003	1.000	1.001	1.048	1.001	1.005	0.995	1.001	
VOL WTD ALL	1.194	1.060	1.084	1.112	1.091	1.073	1.051	1.049	1.029	1.039	1.020	1.004	1.030	1.044	1.009	1.020	1.009	1.005	1.016	1.015	1.011	1.010	0.997	1.003	1.000	1.001	1.048	1.001	1.005	0.995	1.001	
ARITH 3	1.806	1.026	0.930	1.051	1.092	1.064	0.982	1.047	0.945	1.000	1.018	1.035	1.017	1.000	1.001	1.005	1.016	1.010	1.000	1.017	1.011	1.006	1.002	1.003	1.000	1.002	1.020	1.000	1.004	0.997	1.001	
ARITH 5	1.421	1.091	0.965	1.031	1.060	1.054	1.028	1.028	0.965	1.049	1.011	1.021	1.012	1.000	0.996	1.005	1.011	1.008	1.007	1.010	1.010	1.011	1.001	1.002	1.000	1.001	1.052	1.001	1.004	0.997	1.001	
ARITH ALL	1.815	1.077	1.111	1.128	1.090	1.079	1.055	1.041	1.016	1.032	1.015	1.006	1.024	1.046	1.009	1.019	1.012	1.007	1.019	1.013	1.009	1.009	0.996	1.003	1.000	1.001	1.052	1.001	1.004	0.997	1.001	
5 YR HI LO	1.344	1.026	0.981	1.005	1.026	1.038	0.992	1.011	0.994	1.000	1.000	1.000	1.003	1.000	1.000	1.004	1.003	1.009	1.000	1.002	1.007	1.006	1.000	1.000	1.000	1.000	1.043	1.000	1.000	NA	NA	
7 YR HI LO	1.603	1.112	1.034	1.054	1.060	1.035	1.039	1.021	0.995	1.002	1.003	1.003	1.025	1.000	1.002	1.005	1.003	1.008	1.000	1.010	1.005	1.006	1.000	1.002	1.000	1.000	1.043	1.000	1.000	NA	NA	
ALL YR HI LO	1.389	1.072	1.083	1.119	1.080	1.062	1.061	1.040	1.017	1.029	1.015	1.007	1.021	1.032	1.008	1.015	1.008	1.007	1.010	1.007	1.006	1.006	1.000	1.002	1.000	1.000	1.043	1.000	1.000	NA	NA	
SELECTED	1.723	1.112	1.084	1.112	1.080	1.073	1.061	1.049	1.017	1.029	1.020	1.007	1.017	1.000	1.009	1.015	1.009	1.009	1.016	1.017	1.007	1.006	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	Tail
																																1.000

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance UST - Other
Incurred Losses

Development in Months

BY	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360	372	384
1994	65,047	1,005,018	1,023,016	1,087,349	1,499,341	2,078,139	2,573,685	2,525,449	2,944,082	3,003,278	2,995,177	2,924,889	2,550,436	2,574,369	2,688,316	2,614,164	2,736,632	2,714,782	2,772,423	2,896,698	2,962,023	3,116,839	3,142,787	3,022,670	3,022,670	3,022,670	3,025,330	3,443,682	3,458,682	3,503,101	3,399,805	3,403,247
1995	1,345,826	1,675,949	1,553,606	1,794,446	1,772,905	1,849,070	1,976,684	2,379,084	2,318,512	2,321,479	2,657,629	2,635,614	2,661,105	2,775,105	2,766,065	2,856,864	2,870,975	2,906,668	2,855,886	2,879,342	2,878,011	2,883,696	2,917,052	2,917,052	2,919,348	2,919,348	2,919,348	3,093,591	3,093,591	3,093,591	3,165,091	
1996	634,958	497,443	701,793	959,776	1,324,610	1,399,259	1,562,675	1,726,825	1,773,459	1,791,890	1,583,674	1,482,276	1,546,632	1,573,321	1,734,904	1,761,831	1,933,421	1,932,111	1,985,403	2,344,436	2,344,436	2,344,436	2,344,436	2,344,436	2,380,349	2,380,349	2,380,349	2,547,508	2,547,508	2,547,508		
1997	502,583	935,032	1,150,245	1,378,150	1,947,336	2,214,227	2,591,866	2,880,119	2,986,984	2,997,120	3,265,114	3,318,830	3,221,107	3,492,440	3,610,025	3,626,882	3,643,635	3,651,096	3,700,587	3,708,217	3,713,372	3,703,945	3,713,968	3,713,448	3,713,448	3,713,448	3,713,448	3,678,448	3,678,448			
1998	752,604	776,480	767,994	823,905	1,066,204	1,181,568	1,239,878	1,538,625	1,576,160	1,719,015	1,713,432	1,768,332	1,735,967	1,869,464	2,452,683	2,602,586	2,649,256	2,857,819	2,905,273	2,970,679	2,971,774	2,976,737	3,005,904	3,005,904	3,005,904	3,005,904	3,020,235	3,020,235				
1999	1,712,508	1,770,639	1,930,013	2,030,050	2,108,225	2,131,472	2,129,530	2,523,004	2,577,625	2,653,444	2,814,130	2,892,443	2,889,189	2,760,814	2,773,420	2,761,910	2,758,547	2,750,103	2,750,103	2,750,103	2,724,553	2,724,553	2,722,748	2,722,748	2,722,748	2,722,748	2,722,748					
2000	1,698,608	2,131,795	2,337,379	2,616,121	2,758,703	2,816,918	2,899,853	3,083,798	3,236,082	3,377,793	3,550,236	3,636,238	3,726,564	3,725,592	3,779,290	3,772,662	3,878,829	3,886,359	3,805,884	3,798,781	4,123,209	4,199,099	4,365,025	4,365,025	4,406,695	4,406,695						
2001	903,017	879,435	768,432	803,398	807,374	857,373	921,857	909,006	922,903	914,707	914,707	932,652	964,133	964,133	1,069,609	1,069,609	1,069,609	1,107,092	1,107,092	1,055,182	1,055,182	1,055,182	1,055,182	1,055,182	1,055,182	1,055,182						
2002	2,103,792	2,136,359	2,292,076	2,220,507	2,690,036	2,888,001	2,995,721	3,073,653	3,390,124	3,520,988	3,614,155	3,934,639	4,066,718	4,119,846	4,218,927	4,281,991	4,459,410	4,464,352	4,530,974	4,530,974	4,531,430	4,543,316	4,543,316	4,573,844								
2003	2,188,347	2,037,947	2,300,433	2,453,916	2,162,594	2,516,185	2,638,216	2,645,657	2,689,486	2,669,997	2,918,788	3,102,947	3,124,594	3,111,514	3,149,028	3,223,096	3,218,366	3,228,365	3,256,297	3,362,272	3,514,265	3,514,265	3,575,741									
2004	3,003,287	2,327,925	2,398,477	2,611,344	2,796,197	3,183,380	3,197,130	3,503,732	3,744,551	4,090,314	4,110,662	4,200,197	4,188,550	4,221,388	4,327,913	4,360,336	4,516,782	4,512,461	4,512,461	4,512,461	4,535,017	4,669,533										
2005	855,094	1,558,332	1,595,861	1,662,314	1,596,329	1,577,303	1,627,822	1,664,850	1,665,200	1,687,550	1,736,223	1,801,967	1,899,621	1,963,983	1,965,504	2,067,863	2,061,727	2,078,924	2,116,804	2,116,804	2,116,803										
2006	1,458,736	1,680,496	1,698,579	1,793,328	2,114,309	2,096,877	2,106,813	2,250,803	2,435,160	2,795,151	2,963,704	3,008,941	3,014,915	3,507,529	4,026,063	3,933,956	3,979,449	3,980,385	3,955,672	3,955,672												
2007	1,049,030	901,475	776,584	697,298	715,705	717,904	731,520	761,453	867,453	867,453	867,453	867,453	835,778	835,778	835,778	835,778	849,275	849,275	864,373												
2008	596,136	781,142	840,868	893,113	1,147,030	1,299,395	1,530,368	1,720,312	1,915,158	2,021,967	2,051,978	2,077,957	2,111,568	2,129,799	2,129,799	2,138,633	2,138,633	2,239,328													
2009	1,008,223	844,876	811,301	864,241	899,372	960,149	968,896	953,538	935,849	935,849	946,493	943,108	943,108	943,108	943,108	943,108	943,108														
2010	100,002	129,253	164,798	220,645	220,645	220,645	228,932	237,342	224,795	223,439	223,439	223,439	223,439	223,439	223,439	223,439															
2011	443,503	526,138	494,996	1,055,259	1,146,204	1,230,702	2,005,572	1,497,560	1,608,103	1,619,827	2,017,512	2,017,508	2,233,004	2,494,564	2,494,564																
2012	314,431	414,642	480,020	556,332	607,983	889,634	880,779	1,020,206	1,020,206	1,020,206	1,020,206	1,076,501	1,073,400	1,001,501																	
2013	445,007	618,612	611,639	636,393	1,032,995	989,033	948,554	1,007,339	1,007,339	998,657	998,657	998,657	998,657																		
2014	200,006	320,413	285,522	285,522	320,154	320,154	352,358	419,807	419,807	354,917	354,917	354,917																			
2015	883,506	1,605,384	1,817,239	1,779,882	2,167,846	2,711,516	2,838,141	2,838,141	2,933,310	2,929,629	2,929,629																				
2016	825,404	691,547	818,967	958,451	1,037,429	1,050,982	1,083,599	1,083,599	1,253,320	1,241,258																					
2017	276,255	771,193	1,013,157	1,263,398	1,236,321	1,250,328	1,295,631	1,263,750	1,203,383																						
2018	198,003	624,000	730,228	770,772	790,771	806,999	969,311	941,091																							
2019	1,067,059	1,517,150	1,445,774	1,415,866	1,430,865	1,494,977	1,425,164																								
2020	270,001	316,500	451,429	413,571	484,283	586,122																									
2021	304,601	155,916	155,916	163,257	158,434																										
2022	210,904	539,581	558,651	462,388																											
2023	305,102	323,000	336,602																												
2024	338,706	610,353																													
2025	665,703																														

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance UST - Other
Determination of Pure Premium

(1) RY	(2) PAID LDM ULTIMATE	(3) INC LDM ULTIMATE	(4) SELECTED ULTIMATE	(5) POLICIES IN FORCE	(6) PURE PREMIUM
1994					
1995					
1996					
1997					
1998					
1999					
2000					
2001					
2002					
2003					
2004					
2005					
2006					
2007					
2008					
2009	943,108	1,007,078	975,093	2,662	366
2010	223,439	242,085	232,762	2,622	89
2011	2,494,564	2,726,846	2,610,705	2,623	995
2012	1,167,108	1,094,926	1,131,017	2,617	432
2013	1,189,551	1,110,068	1,149,810	2,603	442
2014	409,264	397,439	403,351	2,573	157
2015	3,867,217	3,347,359	3,607,288	2,530	1,426
2016	1,631,800	1,459,366	1,545,583	2,509	616
2017	1,854,464	1,439,411	1,646,937	2,489	662
2018	1,212,842	1,181,078	1,181,078	2,487	475
2019	2,329,514	1,898,223	1,898,223	2,413	787
2020	825,953	837,951	837,951	2,408	348
2021	351,037	244,699	244,699	2,405	102
2022	1,270,138	794,141	794,141	2,371	335
2023	492,799	626,851	626,851	2,347	267
2024	610,353	1,264,287	1,264,287	2,319	545
2025	665,703	2,376,340	2,376,340	2,337	1,017
TOTAL	21,538,852	22,048,148	22,526,116	42,315	532

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance UST - Other
Paid Bornhuetter-Ferguson Method

(1) RY	(2) POLICIES IN FORCE	(3) PROJECTED PURE PREM	(4) TRENDED PURE PREM	(5) DETRENDED PURE PREM	(6) EXPECTED LOSSES	(7) PERCENT UNPAID	(8) EXPECTED UNPAID	(9) PAID LOSSES	(10) INDICATED ULTIMATE	(11) INCURRED LOSSES	(12) IBNR RESERVE	(13) CASE RESERVE	(14) ULTIMATE PURE PREM
1994													
1995													
1996													
1997													
1998													
1999													
2000													
2001													
2002													
2003													
2004													
2005													
2006													
2007													
2008													
2009	2,662	366	397	485	1,291,527	14.4%	186,395	943,108	1,129,504	943,108	186,395	-	424
2010	2,622	89	96	488	1,278,481	16.5%	211,586	223,439	435,025	223,439	211,586	-	166
2011	2,623	995	1,067	490	1,285,363	18.4%	236,926	1,700,374	1,937,300	2,494,564	(557,264)	794,190	739
2012	2,617	432	461	492	1,288,835	21.2%	272,765	920,105	1,192,870	1,001,501	191,369	81,396	456
2013	2,603	442	469	495	1,288,350	23.3%	300,463	912,130	1,212,593	998,657	213,936	86,527	466
2014	2,573	157	166	497	1,279,869	25.5%	326,316	304,917	631,234	354,917	276,316	50,000	245
2015	2,530	1,426	1,499	500	1,264,772	29.8%	376,644	2,715,575	3,092,219	2,929,629	162,591	214,053	1,222
2016	2,509	616	644	502	1,260,546	33.8%	426,074	1,080,239	1,506,313	1,241,258	265,055	161,019	600
2017	2,489	662	689	505	1,256,750	38.4%	482,165	1,142,980	1,625,145	1,203,383	421,762	60,403	653
2018	2,487	475	492	507	1,262,019	42.3%	533,574	700,060	1,233,634	941,091	292,543	241,031	496
2019	2,413	787	811	510	1,230,590	46.0%	566,246	1,257,606	1,823,853	1,425,164	398,688	167,558	756
2020	2,408	348	357	513	1,234,180	52.4%	646,636	393,204	1,039,839	586,122	453,717	192,919	432
2021	2,405	102	104	515	1,238,806	62.1%	769,299	133,043	902,342	158,434	743,908	25,391	375
2022	2,371	335	340	518	1,227,399	68.2%	837,106	403,883	1,240,989	462,388	778,602	58,505	523
2023	2,347	267	270	520	1,221,050	73.3%	894,510	131,787	1,026,297	336,602	689,695	204,815	437
2024	2,319	545	548	523	1,212,515	83.6%	1,013,797	94,811	1,108,609	610,353	498,256	515,542	478
2025	2,337	1,017	1,017	525	1,228,036	96.0%	1,178,564	-	1,178,564	665,703	512,861	665,703	504
TOTAL	42,315				21,349,088		9,259,066	13,057,261	22,316,328	16,576,313	5,740,015	3,519,051	527

Trend = 1.005

Pure Premium Selection	
3-Year Average x Latest	386
5-Year Average x Latest	324
All Year Average x Latest	525
Selected Pure Premium	525

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance UST - Other
Incurred Bornhuetter-Ferguson Method

(1) RY	(2) POLICIES IN FORCE	(3) PROJECTED PURE PREM	(4) TRENDED PURE PREM	(5) DETRENDED PURE PREM	(6) EXPECTED LOSSES	(7) PERCENT IBNR	(8) EXPECTED IBNR	(9) INCURRED LOSSES	(10) INDICATED ULTIMATE	(11) PAID LOSSES	(12) UNPAID LOSS	(13) CASE RESERVE	(14) ULTIMATE PURE PREM
1994													
1995													
1996													
1997													
1998													
1999													
2000													
2001													
2002													
2003													
2004													
2005													
2006													
2007													
2008													
2009	2,662	366	397	485	1,291,527	6.4%	82,038	943,108	1,025,146	943,108	82,038	-	385
2010	2,622	89	96	488	1,278,481	7.7%	98,473	223,439	321,911	223,439	98,473	-	123
2011	2,623	995	1,067	490	1,285,363	8.5%	109,492	2,494,564	2,604,055	1,700,374	903,681	794,190	993
2012	2,617	432	461	492	1,288,835	8.5%	109,970	1,001,501	1,111,471	920,105	191,366	81,396	425
2013	2,603	442	469	495	1,288,350	10.0%	129,305	998,657	1,127,961	912,130	215,832	86,527	433
2014	2,573	157	166	497	1,279,869	10.7%	136,933	354,917	491,850	304,917	186,933	50,000	191
2015	2,530	1,426	1,499	500	1,264,772	12.5%	157,836	2,929,629	3,087,464	2,715,575	371,889	214,053	1,220
2016	2,509	616	644	502	1,260,546	14.9%	188,393	1,241,258	1,429,651	1,080,239	349,412	161,019	570
2017	2,489	662	689	505	1,256,750	16.4%	206,076	1,203,383	1,409,459	1,142,980	266,479	60,403	566
2018	2,487	475	492	507	1,262,019	20.3%	256,434	941,091	1,197,525	700,060	497,465	241,031	482
2019	2,413	787	811	510	1,230,590	24.9%	306,677	1,425,164	1,731,841	1,257,606	474,235	167,558	718
2020	2,408	348	357	513	1,234,180	30.1%	370,907	586,122	957,029	393,204	563,826	192,919	397
2021	2,405	102	104	515	1,238,806	35.3%	436,722	158,434	595,156	133,043	462,114	25,391	247
2022	2,371	335	340	518	1,227,399	41.8%	512,747	462,388	975,135	403,883	571,252	58,505	411
2023	2,347	267	270	520	1,221,050	46.3%	565,378	336,602	901,981	131,787	770,193	204,815	384
2024	2,319	545	548	523	1,212,515	51.7%	627,156	610,353	1,237,509	94,811	1,142,698	515,542	534
2025	2,337	1,017	1,017	525	1,228,036	72.0%	884,017	665,703	1,549,720	-	1,549,720	665,703	663
TOTAL	42,315				21,349,088		5,178,554	16,576,313	21,754,866	13,057,261	8,697,605	3,519,051	514

Pure Premium Selection	
3-Year Average x Latest	386
5-Year Average x Latest	324
All Year Average x Latest	525
Selected Pure Premium	525

Trend = 1.005

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Remedial UST
Summary of Paid Development Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	PAID LDM	PAID	INCURRED	CASE	IBNR	UNPAID
RY	ULTIMATE	LOSS	LOSS	RESERVE	RESERVE	LOSS
1994	-	-	-	-	-	-
1995	114,027	114,027	114,027	-	-	-
1996	69,718,278	65,019,792	69,718,278	4,698,486	-	4,698,486
1997	9,280,255	8,672,440	9,143,330	470,889	136,925	607,814
1998	19,361,582	17,968,475	18,973,941	1,005,466	387,641	1,393,107
1999	8,658,081	7,977,996	8,624,271	646,276	33,810	680,086
2000	16,237,801	14,592,406	16,237,801	1,645,395	-	1,645,395
2001	3,403,926	2,466,616	3,403,926	937,310	-	937,310
2002	3,356,577	3,011,677	3,189,726	178,049	166,850	344,899
2003	1,246,618	1,109,154	1,118,190	9,036	128,428	137,464
2004	2,421,212	1,862,941	2,421,212	558,272	-	558,272
2005	2,800,137	2,391,427	2,788,380	396,953	11,757	408,710
2006	793,457	509,227	793,457	284,230	-	284,230
2007	1,555,214	1,273,344	1,317,516	44,172	237,698	281,870
2008	705,588	705,588	705,588	-	-	-
2009	909,114	712,041	838,041	126,000	71,074	197,074
2010	757,968	582,201	686,405	104,204	71,563	175,767
2011	1,722,861	1,171,861	1,722,861	551,000	-	551,000
2012	305,720	305,720	305,720	-	-	-
2013	1,693,311	1,185,684	1,356,966	171,282	336,345	507,627
2014	1,047,794	716,257	784,757	68,500	263,037	331,537
2015	161,451	107,157	107,158	1	54,293	54,294
2016	1,236,738	794,639	1,228,556	433,917	8,182	442,099
2017	1,019,739	625,438	660,660	35,222	359,079	394,301
2018	1,174,605	698,146	773,391	75,245	401,214	476,458
2019	577,246	318,684	498,650	179,966	78,595	258,561
2020	289,211	120,903	289,211	168,308	-	168,308
2021	271,811	125,124	165,132	40,007	106,680	146,687
2022	633,454	242,119	633,454	391,336	-	391,336
2023	485,478	143,612	249,601	105,989	235,877	341,866
2024	474,162	75,710	328,000	252,290	146,162	398,452
2025	310,787	10,943	279,800	268,857	30,987	299,843
TOTAL	152,724,201	135,611,348	149,458,006	13,846,658	3,266,195	17,112,853

DRAFT

Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Remedial UST
Development of Losses to Ultimate

Development Period in Months

BY	12 - 24	24 - 36	36 - 48	48 - 60	60 - 72	72 - 84	84 - 96	96 - 108	108 - 120	120 - 132	132 - 144	144 - 156	156 - 168	168 - 180	180 - 192	192 - 204	204 - 216	216 - 228	228 - 240	240 - 252	252 - 264	264 - 276	276 - 288	288 - 300	300 - 312	312 - 324	324 - 336	336 - 348	348 - 360	360 - 372	372 - 384	384 - ULT
1994																																1.062
1995								9.287	1.127	1.000	1.241	1.000	1.041	1.014	1.069	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.062
1996	20.724	3.266	2.407	2.036	1.409	1.264	1.161	1.143	1.103	1.082	1.072	1.051	1.076	1.061	1.043	1.032	1.031	1.021	1.035	1.021	1.023	1.023	1.020	1.011	1.008	1.006	1.008	1.007	1.008	1.000	1.000	1.062
1997	16.969	2.041	1.600	1.265	1.152	1.071	1.019	1.041	1.041	1.021	1.095	1.027	1.040	1.046	1.019	1.013	1.006	1.012	1.012	1.008	1.029	1.015	1.014	1.010	1.004	1.012	1.012	1.004	1.008	1.000	1.000	1.062
1998	12.647	2.010	1.342	1.146	1.074	1.053	1.029	1.071	1.035	1.080	1.051	1.056	1.031	1.025	1.017	1.018	1.019	1.010	1.012	1.018	1.031	1.016	1.004	1.006	1.001	1.003	1.006	1.007	1.008	1.000	1.000	1.062
1999	4.821	1.254	1.276	1.187	1.132	1.024	1.044	1.039	1.066	1.103	1.056	1.032	1.019	1.020	1.016	1.012	1.013	1.023	1.018	1.017	1.009	1.005	1.004	1.017	1.015	1.025	1.007	1.007	1.008	1.000	1.000	1.062
2000	2.319	1.409	1.202	1.169	1.115	1.077	1.140	1.034	1.054	1.044	1.028	1.027	1.031	1.030	1.030	1.027	1.025	1.030	1.036	1.028	1.023	1.017	1.015	1.013	1.018	1.007	1.007	1.007	1.008	1.000	1.000	1.062
2001		3.234	1.268	1.346	1.120	1.179	1.166	1.155	1.112	1.047	1.052	1.037	1.017	1.018	1.009	1.043	1.065	1.056	1.023	1.035	1.016	1.010	1.008	1.000	1.009	1.007	1.007	1.007	1.007	1.008	1.000	1.062
2002	10.139	2.111	1.125	1.147	1.072	1.092	1.039	1.043	1.094	1.033	1.046	1.078	1.043	1.070	1.090	1.065	1.041	1.023	1.011	1.002	1.006	1.002	1.012	1.011	1.009	1.007	1.007	1.007	1.008	1.000	1.000	1.062
2003	2.817	1.576	1.195	1.149	1.129	1.151	1.063	1.049	1.089	1.032	1.076	1.029	1.063	1.058	1.049	1.046	1.039	1.032	1.030	1.022	1.000	1.015	1.008	1.011	1.009	1.007	1.007	1.007	1.008	1.000	1.000	1.062
2004	4.773	1.326	1.368	1.217	1.136	1.111	1.059	1.037	1.046	1.032	1.043	1.015	1.037	1.036	1.053	1.030	1.011	1.007	1.053	1.032	1.029	1.018	1.008	1.011	1.009	1.007	1.007	1.007	1.008	1.000	1.000	1.062
2005	3.426	1.446	1.590	1.161	1.212	1.132	1.037	1.039	1.095	1.041	1.261	1.036	1.008	1.010	1.007	1.003	1.004	1.000	1.000	1.000	1.023	1.018	1.008	1.011	1.009	1.007	1.007	1.007	1.008	1.000	1.000	1.062
2006	4.337	3.865	1.419	1.348	1.051	1.042	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.218	1.000	1.120	1.000	1.086	1.143	1.020	1.023	1.018	1.008	1.011	1.009	1.007	1.007	1.007	1.008	1.000	1.000	1.062
2007	41.628	3.049	1.218	1.215	1.257	1.101	1.081	1.141	1.098	1.002	1.068	1.033	1.030	1.047	1.011	1.019	1.016	1.013	1.023	1.020	1.023	1.018	1.008	1.011	1.009	1.007	1.007	1.007	1.008	1.000	1.000	1.062
2008	4.194	1.048	1.204	1.247	1.256	1.030	1.086	1.045	1.015	1.032	1.084	1.033	1.014	1.010	1.000	1.000	1.000	1.020	1.023	1.020	1.023	1.018	1.008	1.011	1.009	1.007	1.007	1.007	1.008	1.000	1.000	1.062
2009	3.022	1.570	1.139	1.055	1.015	1.097	1.034	1.018	1.058	1.024	1.022	1.000	1.031	1.000	1.000	1.000	1.025	1.020	1.023	1.020	1.023	1.018	1.008	1.011	1.009	1.007	1.007	1.007	1.008	1.000	1.000	1.062
2010		1.835	1.081	1.363	1.047	1.069	1.179	1.088	1.045	1.028	1.074	1.000	1.005	1.027	1.006	1.020	1.025	1.020	1.023	1.020	1.023	1.018	1.008	1.011	1.009	1.007	1.007	1.007	1.008	1.000	1.000	1.062
2011	2.766	1.844	1.117	1.100	1.081	1.076	1.034	1.028	1.041	1.053	1.020	1.036	1.054	1.032	1.033	1.020	1.025	1.020	1.023	1.020	1.023	1.018	1.008	1.011	1.009	1.007	1.007	1.007	1.008	1.000	1.000	1.062
2012	13.380	1.407	1.134	1.101	1.063	1.086	1.061	1.033	1.028	1.000	1.000	1.000	1.000	1.034	1.033	1.020	1.025	1.020	1.023	1.020	1.023	1.018	1.008	1.011	1.009	1.007	1.007	1.007	1.008	1.000	1.000	1.062
2013	5.111	1.534	1.499	1.181	1.057	1.336	1.065	1.139	1.045	1.065	1.031	1.002	1.028	1.034	1.033	1.020	1.025	1.020	1.023	1.020	1.023	1.018	1.008	1.011	1.009	1.007	1.007	1.007	1.008	1.000	1.000	1.062
2014	13.888	1.678	1.154	1.132	1.060	1.043	1.052	1.029	1.077	1.010	1.003	1.024	1.028	1.034	1.033	1.020	1.025	1.020	1.023	1.020	1.023	1.018	1.008	1.011	1.009	1.007	1.007	1.007	1.008	1.000	1.000	1.062
2015		2.243	1.078	1.144	1.026	1.000	1.000	1.000	1.000	1.000	1.030	1.024	1.028	1.034	1.033	1.020	1.025	1.020	1.023	1.020	1.023	1.018	1.008	1.011	1.009	1.007	1.007	1.007	1.008	1.000	1.000	1.062
2016		1.274	1.172	1.204	1.173	1.122	1.108	1.059	1.041	1.033	1.030	1.024	1.028	1.034	1.033	1.020	1.025	1.020	1.023	1.020	1.023	1.018	1.008	1.011	1.009	1.007	1.007	1.007	1.008	1.000	1.000	1.062
2017	2.086	1.438	1.045	1.159	1.075	1.018	1.097	1.011	1.048	1.033	1.030	1.024	1.028	1.034	1.033	1.020	1.025	1.020	1.023	1.020	1.023	1.018	1.008	1.011	1.009	1.007	1.007	1.007	1.008	1.000	1.000	1.062
2018	3.476	1.240	1.157	1.186	1.166	1.223	1.124	1.032	1.048	1.033	1.030	1.024	1.028	1.034	1.033	1.020	1.025	1.020	1.023	1.020	1.023	1.018	1.008	1.011	1.009	1.007	1.007	1.007	1.008	1.000	1.000	1.062
2019		1.558	1.266	1.247	1.056	1.050	1.077	1.032	1.048	1.033	1.030	1.024	1.028	1.034	1.033	1.020	1.025	1.020	1.023	1.020	1.023	1.018	1.008	1.011	1.009	1.007	1.007	1.007	1.008	1.000	1.000	1.062
2020	4.771	1.258	1.912	1.072	1.138	1.091	1.077	1.032	1.048	1.033	1.030	1.024	1.028	1.034	1.033	1.020	1.025	1.020	1.023	1.020	1.023	1.018	1.008	1.011	1.009	1.007	1.007	1.007	1.008	1.000	1.000	1.062
2021		2.665	2.197	1.492	1.099	1.091	1.077	1.032	1.048	1.033	1.030	1.024	1.028	1.034	1.033	1.020	1.025	1.020	1.023	1.020	1.023	1.018	1.008	1.011	1.009	1.007	1.007	1.007	1.008	1.000	1.000	1.062
2022	3.621	2.699	1.264	1.188	1.099	1.091	1.077	1.032	1.048	1.033	1.030	1.024	1.028	1.034	1.033	1.020	1.025	1.020	1.023	1.020	1.023	1.018	1.008	1.011	1.009	1.007	1.007	1.007	1.008	1.000	1.000	1.062
2023		1.702	1.310	1.188	1.099	1.091	1.077	1.032	1.048	1.033	1.030	1.024	1.028	1.034	1.033	1.020	1.025	1.020	1.023	1.020	1.023	1.018	1.008	1.011	1.009	1.007	1.007	1.007	1.008	1.000	1.000	1.062
2024	6.119	1.853	1.310	1.188	1.099	1.091	1.077	1.032	1.048	1.033	1.030	1.024	1.028	1.034	1.033	1.020	1.025	1.020	1.023	1.020	1.023	1.018	1.008	1.011	1.009	1.007	1.007	1.007	1.008	1.000	1.000	1.062
2025	4.535	1.853	1.310	1.188	1.099	1.091	1.077	1.032	1.048	1.033	1.030	1.024	1.028	1.034	1.033	1.020	1.025	1.020	1.023	1.020	1.023	1.018	1.008	1.011	1.009	1.007	1.007	1.007	1.008	1.000	1.000	1.062

BY	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360	372	384	ULT
1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	-	-	-	-	-	-	-	7,781	72,262	81,424	81,424	101,034	101,034	105,196	106,705	114,027	114,027	114,027	114,027	114,027	114,027	114,027	114,027	114,027	114,027	114,027	114,027	114,027	114,027	114,027	114,027	114,027	121,096
1996	40,315	835,499	2,728,718	6,568,905	13,373,754	18,845,618	23,820,837	27,664,147	31,626,348	34,871,004	37,747,448	40,455,899	42,534,558	45,765,782	48,568,937	50,658,185	52,285,341	53,882,728	55,011,326	56,923,526	58,124,590	59,473,654	60,816,782	62,003,446	62,680,269	63,188,205	63,545,512	64,059,077	64,527,413	65,019,792	65,019,792	65,019,792	69,050,785
1997	61,400	1,041,894	2,126,620	3,402,864	4,304,438	4,959,870	5,311,545	5,412,008	5,631,204	5,859,361	5,980,682	6,550,759	6,730,658	7,001,728	7,322,383	7,463,064	7,561,344	7,606,213	7,693,757	7,786,570	7,847,588	8,076,143	8,200,584	8,314,134	8,400,063	8,432,328	8,529,481	8,634,234	8,672,440	8,738,499	8,738,499	8,738,499	9,280,255
1998	239,795	3,032,700	6,094,264	8,178,370	9,375,140	10,068,463	10,602,282	10,912,410	11,684,792	12,096,844	13,060,306	13,727,870	14,499,065	14,951,449	15,319,415	15,575,277	15,862,219	16,158,393	16,312,830	16,500,587	16,792,391	17,314,252	17,590,047	17,668,757	17,779,349	17,799,357	17,857,097	17,968,475	18,093,487	18,231,307	18,231,307	18,231,307	19,361,582
1999	436,835	2,105,831	2,641,761	3,370,046	3,998,601	4,527,780	4,638,276	4,843,173	5,032,565	5,366,728	5,917,688	6,249,511	6,450,553	6,574,295	6,705,452	6,809,966	6,893,063	6,982,923	7,144,639	7,276,048	7,401,552	7,470,931	7,507,360	7,539,703	7,668,887	7,780,416	7,977,996	8,035,114	8,091,017	8,152,647	8,152,647	8,152,647	8,658,081
2000	1,404,622	3,256,938	4,590,454	5,519,248	6,451,995	7,193,747	7,750,786	8,836,291	9,135,094	9,627,642	10,050,268	10,330,492	10,607,398	10,934,896	11,265,746	11,608,205	11,922,692	12,218,748	12,583,946	13,033,082	13,401,053	13,707,066	13,940,368	14,148,993	14,338,257	14,592,406	14,698,838	14,804,075	14,907,071	15,020,619	15,020,619	15,020,619	15,951,844
2001	-	147,472	476,981	604,628	813,801	911,192	1,074,243	1,252,777	1,447,406	1,609,378	1,685,756	1,773,480	1,839,082	1,870,679	1,904,981	1,922,955	2,005,524	2,135,112	2,253,770	2,305,160	2,384,844	2,422,364	2,447,144	2,466,616	2,466,616	2,488,394	2,506,544	2,524,489	2,542,053	2,561,416	2,561,416	2,561,416	2,720,214
2002	47,379	480,361	1,014,084	1,140,741	1,308,579	1,402,608	1,531,018	1,591,392	1,659,124	1,814,667	1,875,002	1,960,925	2,114,181	2,204,070	2,358,085	2,569,598	2,737,830	2,849,874	2,914,700	2,946,891	2,951,515	2,970,446	2,975,246	3,011,677	3,043,652	3,070,525	3,092,920	3,115,064	3,136,736	3,160,629	3,160,629	3,160,629	3,356,577
2003	71,422	201,172	317,027	378,728	435,080	491,064	565,402	600,804	630,373	686,253	708,407	762,255	784,155	833,873	881,870	925,066	967,687	1,005,806	1,037,603	1,068,824	1,092,445	1,092,445	1,109,154	1,118,524	1,130,399	1,140,380	1,148,697	1,156,921	1,164,970	1,173,844	1,173,844	1,173,844	1,246,618
2004	84,160	401,722	532,740	728,973	887,261	1,008,297	1,120,106	1,186,075	1,229,393	1,286,274	1,327,154	1,384,142	1,404,444	1,456,535	1,508,295	1,588,561	1,635,498	1,654,081	1,666,236	1,754,136	1,810,428	1,862,941	1,897,000	1,913,025	1,933,335	1,950,405	1,964,631	1,978,697	1,992,463	2,007,640	2,007,640	2,007,640	2,132,106
2005	115,085	394,303	570,217	906,812	1,053,062	1,275,950	1,444,651	1,497,871	1,556,506	1,704,631	1,773,966	2,236,223	2,315,908	2,334,050	2,357,368	2,374,726	2,382,660	2,391,422	2,391,427	2,391,427	2,391,427	2,446,636	2,491,367	2,512,413	2,539,087	2,561,505	2,580,188	2,598,661	2,616,741	2,636,673	2,636,673	2,636,673	2,800,137
2006	8,574	37,183	143,721	203,989	274,938	288,877	300,938	300,938	300,938	300,938	300,938	300,938	300,938	300,938	366,445	366,445	410,171	410,371	445,501	509,227	519,273	531,266	540,974	545,544	551,336	556,204	560,261	564,272	568,198	572,526	572,526	572,526	608,020
2007	2,861	119,076	363,029	442,068	537,077	674,872	743,159	803,483	916,913	1,006,421	1,008,109	1,076,420	1,112,466	1,146,136	1,200,201	1,213,637	1,237,230	1,257,047	1,273,344	1,302,517	1,328,214	1,358,877	1,383,721	1,395,410	1,410,225	1,422,676	1,433,053	1,443,313	1,453,354	1,464,424	1,464,424	1,464,424	1,555,214
2008	60,614	254,231	266,381	320,759	400,143	502,530	517,750	562,296	587,385	596,073	615,335	666,862	688,613	698,412	705,588	705,588	705,588	705,588	719,720	736,209	750,733	768,065	782,107	788,714	797,088	804,125	809,990	815,790	821,465	827,722	827,722	827,722	879,038
2009	93,362	282,127	442,836	504,349	532,197	540,101	592,613	612,576	625,399	659,857	675,804	690,692	690,692	712,041	712,041	712,041	712,041	729,730	744,945	761,398	776,419	794,344	808,867	815,700	824,360	831,638	837,704	843,702	849,571	856,043	856,043	856,043	909,114
2010	-	125,006	229,422	248,031	338,015	353,987	378,531	446,308	485,492	507,551	521,824	560,509	560,509	563,408	578,782	582,201	593,659	608,407	620,592	634,811	647,334	662,279	674,387	680,084	687,305	693,373	698,430	703,431	708,325	713,720	713,720	713,720	757,968
2011	120,046	332,076	612,202	684,075	752,341	813,135	874,773	904,905	930,473	968,523	1,019,798	1,040,105	1,077,136	1,135,081	1,171,861	1,210,139	1,233,955	1,264,610	1,289,937	1,319,491	1,345,522	1,376,586	1,401,753	1,413,595	1,428,602	1,441,216	1,451,728	1,462,121	1,472,294	1,483,508	1,483,508	1,483,508	1,575,481
2012	9,999	133,785	188,289	213,486	235,093	249,801	271,398	287,908	297,472	305,720	305,720	305,720	305,720	305,720	316,005	326,328	332,750	341,016	347,846	355,815	362,835	371,212	377,998	381,192	385,239	388,640	391,475	394,277	397,020	400,045	400,045	400,045	424,846
2013	43,387	221,753	340,269	510,062	602,181	636,244	850,328	905,949	1,032,105	1,078,285	1,148,079	1,183,499	1,185,684	1,218,510	1,259,505	1,300,645	1,326,243	1,359,190	1,386,412	1,418,175	1,446,154	1,479,541	1,506,590	1,519,318	1,535,448	1,549,005	1,560,303	1,571,474	1,582,407	1,594,460	1,594,460	1,594,460	1,693,311
2014	18,035	250,466	420,375	484,944	548,829	581,613	606,670	638,491	656,711	706,966	714,272	716,257	733,682	753,994	779,361	804,819	820,658	841,045	857,889	877,544	894,857	915,516	932,254	940,129	950,110	958,499	965,490	972,403	979,168	986,626	986,626	986,626	1,047,794
2015	-	37,773	84,716	91,292	104,472	107,157	107,157	107,157	107,157	107,157	107,157	110,366	113,051	116,180	120,089	124,012	126,452	129,594	132,189	135,218	137,885	141,069	143,648	144,861	146,399	147,692	148,769	149,834	150,877	152,026	152,026	152,026	161,451
2016	-	275,228	350,684	411,051	494,944	580,460	651,093	721,097	763,329	794,639	820,839	845,417	865,984	889,959	919,900	949,948	968,643	992,707	1,012,589	1,035,788	1,056,223	1,080,607	1,100,363	1,109,659	1,121,440	1,131,341	1,139,593	1,147,752	1,155,737	1,164,540	1,164,540	1,164,540	1,236,738
2017	141,856	-	295,863	425,489	444,673	515,254	554,058	564,063	618,660	625,438	655,211	676,814	697,079	714,038	733,806	758,494	783,269	798,684	818,526	834,919	854,048	870,897	891,003	907,293	914,957	924,671	932,835	939,639	946,366	952,951	960,209	960,209	1,019,739
2018	73,595	255,822	317,239	367,138	435,392	507,450	620,860	698,146	720,422	754,716	779,601	802,943	822,477	845,248	873,685	902,223	919,979	942,834	961,717	983,751	1,003,159	1,026,318	1,045,082	1,053,910	1,065,099	1,074,503	1,082,340	1,090,089	1,097,673	1,106,034	1,106,034	1,106,034	1,174,605
2019	-	116,852	182,025	230,417	287,383	303,436	318,684	343,096	354,043	370,896	383,126	394,597	404,197	415,387	429,362	443,387	452,113	463,345	472,624	483,453	492,990	504,372	513,593	517,932	523,430	528,052	531,903	535,711	539,439	543,548	543,548	543,548	577,246
2020	8,637	41,206	51,832	99,099	106,211	120,903	131,943	142,050	146,582	153,560	158,623	163,372	167,347	171,980	177,766	183,572	187,185	191,835	195,677	200,161	204,109	208,822	212,639	214,496	216,712	218,626	220,220	221,797	223,340	225,041	225,041	225,041	238,993
2021	-	14,326	38,178	83,880	125,124	137,505	150,061	161,556	166,710	174,646	180,405	185,806	190,327	195,596	202,177	208,781	212,889	218,178	222,548	227,647	232,138	237,497	241,839	243,882	246,471	248,647	250,461	252,254	254,009	255,944	255,944	255,944	271,811
2022	19,593	70,940	191,485	242,119	287,653	316,115	344,981	371,407	383,257	401,502	414,740	427,158	437,550	449,663	464,792	479,974	489,420	501,578	511,624	523,345	533,670	545,991	555,973	560,670	566,622	571,625	575,794	579,917	583,951	588,399	588,399	588,399	624,878
2023	-	84,385	143,612	188,106	223,482	245,595	268,021	288,552	297,759	311,933	322,218	331,866	339,940	349,351	361,104	372,899	380,238	389,684	397,489	406,596	414,617	424,189	431,945	435,594	440,218	444,105	447,344	450,547	453,681	457,137	457,137	457,137	485,478
2024	12,373	75,710	140,265	183,721	218,273	239,871	261,774	281,826	290,818	304,662	314,708	324,131	332,016	341,208	352,687	364,208	371,375	380,601	388,224	397,119	404,953	414,302	421,877	425,440	429,957	433,753	436,917	440,045	443,107	446,482	446,482	446,482	474,162
2025	10,943	49,624	91,936	120,419	143,066	157,222	171,578	184,721	190,615	199,689	206,273	212,449	217,618	223,643	231,167	238,718	243,416	249,463	254,459	260,289	265,424	271,552	276,516	278,852	281,813	284,301	286,374	288,425	290,431	292,644	292,644	292,644	310,787

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Remedial UST
Selection of Loss Development Factors

Development Period in Months

RY	12 - 24	24 - 36	36 - 48	48 - 60	60 - 72	72 - 84	84 - 96	96 - 108	108 - 120	120 - 132	132 - 144	144 - 156	156 - 168	168 - 180	180 - 192	192 - 204	204 - 216	216 - 228	228 - 240	240 - 252	252 - 264	264 - 276	276 - 288	288 - 300	300 - 312	312 - 324	324 - 336	336 - 348	348 - 360	360 - 372	372 - 384	
1994																																
1995								9.287	1.127	1.000	1.241	1.000	1.041	1.014	1.069	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
1996	20.724	3.266	2.407	2.036	1.409	1.264	1.161	1.143	1.103	1.082	1.072	1.051	1.076	1.061	1.043	1.032	1.031	1.021	1.035	1.021	1.023	1.023	1.020	1.011	1.008	1.006	1.008	1.007	1.008			
1997	16.969	2.041	1.600	1.265	1.152	1.071	1.019	1.041	1.041	1.021	1.095	1.027	1.040	1.046	1.019	1.013	1.006	1.012	1.012	1.008	1.029	1.015	1.014	1.010	1.004	1.012	1.012	1.004				
1998	12.647	2.010	1.342	1.146	1.074	1.053	1.029	1.071	1.035	1.080	1.051	1.056	1.031	1.025	1.017	1.018	1.019	1.010	1.012	1.018	1.031	1.016	1.004	1.006	1.001	1.003	1.006					
1999	4.821	1.254	1.276	1.187	1.132	1.024	1.044	1.039	1.066	1.103	1.056	1.032	1.019	1.020	1.016	1.012	1.013	1.023	1.018	1.017	1.009	1.005	1.004	1.017	1.015	1.025						
2000	2.319	1.409	1.202	1.169	1.115	1.077	1.140	1.034	1.054	1.044	1.028	1.027	1.031	1.030	1.030	1.027	1.025	1.030	1.036	1.028	1.023	1.017	1.015	1.013	1.018							
2001		3.234	1.268	1.346	1.120	1.179	1.166	1.155	1.112	1.047	1.052	1.037	1.017	1.018	1.009	1.043	1.065	1.056	1.023	1.035	1.016	1.010	1.008	1.000								
2002	10.139	2.111	1.125	1.147	1.072	1.092	1.039	1.043	1.094	1.033	1.046	1.078	1.043	1.070	1.090	1.065	1.041	1.023	1.011	1.002	1.006	1.002	1.012									
2003	2.817	1.576	1.195	1.149	1.129	1.151	1.063	1.049	1.089	1.032	1.076	1.029	1.063	1.058	1.049	1.046	1.039	1.032	1.030	1.022	1.000	1.015										
2004	4.773	1.326	1.368	1.217	1.136	1.111	1.059	1.037	1.046	1.032	1.043	1.015	1.037	1.036	1.053	1.030	1.011	1.007	1.053	1.032	1.029											
2005	3.426	1.446	1.590	1.161	1.212	1.132	1.037	1.039	1.095	1.041	1.261	1.036	1.008	1.010	1.007	1.003	1.004	1.000	1.000	1.000												
2006	4.337	3.865	1.419	1.348	1.051	1.042	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.218	1.000	1.120	1.000	1.086	1.143													
2007	41.628	3.049	1.218	1.215	1.257	1.101	1.081	1.141	1.098	1.002	1.068	1.033	1.030	1.047	1.011	1.019	1.016	1.013														
2008	4.194	1.048	1.204	1.247	1.256	1.030	1.086	1.045	1.015	1.032	1.084	1.033	1.014	1.010	1.000	1.000	1.000															
2009	3.022	1.570	1.139	1.055	1.015	1.097	1.034	1.018	1.058	1.024	1.022	1.000	1.031	1.000	1.000	1.000																
2010		1.835	1.081	1.363	1.047	1.069	1.179	1.088	1.045	1.028	1.074	1.000	1.005	1.027	1.006																	
2011	2.766	1.844	1.117	1.100	1.081	1.076	1.034	1.028	1.041	1.053	1.020	1.036	1.054	1.032																		
2012	13.380	1.407	1.134	1.101	1.063	1.086	1.061	1.033	1.028	1.000	1.000	1.000	1.000																			
2013	5.111	1.534	1.499	1.181	1.057	1.336	1.065	1.139	1.045	1.065	1.031	1.002																				
2014	13.888	1.678	1.154	1.132	1.060	1.043	1.052	1.029	1.077	1.010	1.003																					
2015		2.243	1.078	1.144	1.026	1.000	1.000	1.000	1.000	1.000																						
2016		1.274	1.172	1.204	1.173	1.122	1.108	1.059	1.041																							
2017	2.086	1.438	1.045	1.159	1.075	1.018	1.097	1.011																								
2018	3.476	1.240	1.157	1.186	1.166	1.223	1.124																									
2019		1.558	1.266	1.247	1.056	1.050																										
2020	4.771	1.258	1.912	1.072	1.138																											
2021		2.665	2.197	1.492																												
2022	3.621	2.699	1.264																													
2023		1.702																														
2024	6.119																															
VOL WTD 3	7.228	2.200	1.510	1.255	1.124	1.102	1.110	1.034	1.053	1.041	1.017	1.016	1.031	1.022	1.002	1.009	1.008	1.013	1.034	1.015	1.012	1.007	1.014	1.013	1.010	1.010	1.008	1.007	1.008	1.000	NA	
VOL WTD 5	7.058	1.853	1.310	1.199	1.123	1.102	1.092	1.065	1.048	1.041	1.026	1.010	1.028	1.027	1.005	1.014	1.007	1.014	1.025	1.016	1.019	1.011	1.008	1.010	1.008	1.007	1.008	1.007	1.008	1.000	NA	
VOL WTD ALL	4.535	1.744	1.413	1.336	1.194	1.137	1.100	1.089	1.074	1.066	1.064	1.043	1.051	1.045	1.033	1.027	1.025	1.020	1.028	1.020	1.023	1.018	1.015	1.011	1.008	1.007	1.008	1.007	1.008	1.000	NA	
ARITH 3	4.870	2.355	1.791	1.270	1.120	1.097	1.110	1.023	1.039	1.025	1.011	1.012	1.020	1.020	1.002	1.006	1.005	1.033	1.065	1.018	1.012	1.009	1.012	1.010	1.011	1.013	1.009	1.004	1.004	1.000	NA	
ARITH 5	4.837	1.976	1.559	1.231	1.122	1.083	1.076	1.047	1.038	1.026	1.026	1.007	1.021	1.023	1.003	1.029	1.006	1.028	1.047	1.018	1.015	1.010	1.009	1.009	1.009	1.009	1.007	1.004	1.004	1.000	NA	
ARITH ALL	8.501	1.914	1.349	1.233	1.123	1.102	1.073	1.414	1.059	1.035	1.066	1.026	1.030	1.042	1.026	1.029	1.019	1.024	1.031	1.017	1.017	1.011	1.010	1.008	1.008	1.009	1.007	1.004	1.004	1.000	NA	
5 YR HI LO	4.771	1.975	1.481	1.197	1.126	1.063	1.086	1.033	1.038	1.021	1.018	1.001	1.017	1.023	1.002	1.008	1.005	1.017	1.031	1.019	1.015	1.010	1.008	1.010	1.009	1.007	1.007	1.004	NA	NA	NA	
7 YR HI LO	4.196	1.724	1.354	1.188	1.099	1.091	1.077	1.032	1.040	1.023	1.030	1.014	1.016	1.025	1.005	1.020	1.014	1.026	1.030	1.020	1.017	1.012	1.011	1.008	1.007	1.007	1.007	1.004	NA	NA	NA	
ALL YR HI LO	7.166	1.872	1.319	1.207	1.115	1.096	1.071	1.059	1.059	1.033	1.059	1.024	1.029	1.034	1.024	1.024	1.017	1.020	1.023	1.016	1.017	1.011	1.010	1.008	1.007	1.007	1.007	1.004	NA	NA	NA	Tail
SELECTED	4.535	1.853	1.310	1.188	1.099	1.091	1.077	1.032	1.048	1.033	1.030	1.024	1.028	1.034	1.033	1.020	1.025	1.020	1.023	1.020	1.023	1.018	1.008	1.011	1.009	1.007	1.007	1.007	1.008	1.000	1.000	1.062

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Remedial UST
Paid Losses

Development in Months

RY	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360	372	384
1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	-	-	-	-	-	-	-	7,781	72,262	81,424	81,424	101,034	101,034	105,196	106,705	114,027	114,027	114,027	114,027	114,027	114,027	114,027	114,027	114,027	114,027	114,027	114,027	114,027	114,027	114,027	114,027	
1996	40,315	835,499	2,728,718	6,568,905	13,373,754	18,845,618	23,820,837	27,664,147	31,626,348	34,871,004	37,747,448	40,455,899	42,534,558	45,765,782	48,568,937	50,658,185	52,285,341	53,882,728	55,011,326	56,923,526	58,124,590	59,473,654	60,816,782	62,003,446	62,680,269	63,188,205	63,545,512	64,059,077	64,527,413	65,019,792		
1997	61,400	1,041,894	2,126,620	3,402,864	4,304,438	4,959,870	5,311,545	5,412,008	5,631,204	5,859,361	5,980,682	6,550,759	6,730,658	7,001,728	7,322,383	7,463,064	7,561,344	7,606,213	7,693,757	7,786,570	7,847,588	8,076,143	8,200,584	8,314,134	8,400,063	8,432,328	8,529,481	8,634,234	8,672,440			
1998	239,795	3,032,700	6,094,264	8,178,370	9,375,140	10,068,463	10,602,282	10,912,410	11,684,792	12,096,844	13,060,306	13,727,870	14,499,065	14,951,449	15,319,415	15,575,277	15,862,219	16,138,393	16,312,830	16,500,587	16,792,391	17,314,252	17,590,047	17,668,757	17,779,349	17,799,357	17,857,097	17,968,475				
1999	436,835	2,105,831	2,641,761	3,370,046	3,998,601	4,527,780	4,638,276	4,843,173	5,032,565	5,366,728	5,917,688	6,249,511	6,450,553	6,574,295	6,705,452	6,809,966	6,893,063	6,982,923	7,144,639	7,276,048	7,401,552	7,470,931	7,507,360	7,539,703	7,668,887	7,780,416	7,977,996					
2000	1,404,622	3,256,938	4,590,454	5,519,248	6,451,995	7,193,747	7,750,786	8,836,291	9,135,094	9,627,642	10,050,268	10,330,492	10,607,398	10,934,896	11,265,746	11,608,205	11,922,692	12,218,748	12,583,946	13,033,082	13,401,053	13,707,066	13,940,368	14,148,993	14,338,257	14,592,406						
2001	-	147,472	476,981	604,628	813,801	911,192	1,074,243	1,252,777	1,447,406	1,609,378	1,685,756	1,773,480	1,839,082	1,870,679	1,904,981	1,922,955	2,005,524	2,135,112	2,253,770	2,305,160	2,384,844	2,422,364	2,447,144	2,466,616	2,466,616							
2002	47,379	480,361	1,014,084	1,140,741	1,308,579	1,402,608	1,531,018	1,591,392	1,659,124	1,814,667	1,875,002	1,960,925	2,114,181	2,204,070	2,358,085	2,569,598	2,737,830	2,849,874	2,914,700	2,946,891	2,951,515	2,970,446	2,975,246	3,011,677								
2003	71,422	201,172	317,027	378,728	435,080	491,064	565,402	600,804	630,373	686,253	708,407	762,255	784,155	833,873	881,870	925,066	967,687	1,005,806	1,037,603	1,068,824	1,092,445	1,092,445	1,109,154									
2004	84,160	401,722	532,740	728,973	887,261	1,008,297	1,120,106	1,186,075	1,229,393	1,286,274	1,327,154	1,384,142	1,404,444	1,456,535	1,508,295	1,588,561	1,635,498	1,654,081	1,666,236	1,754,136	1,810,428	1,862,941										
2005	115,085	394,303	570,217	906,812	1,053,062	1,275,950	1,444,651	1,497,871	1,556,506	1,704,631	1,773,966	2,236,223	2,315,908	2,334,050	2,357,368	2,374,726	2,382,660	2,391,427	2,391,427	2,391,427	2,391,427											
2006	8,574	37,183	143,721	203,989	274,938	288,877	300,938	300,938	300,938	300,938	300,938	300,938	300,938	300,938	366,445	366,445	410,371	410,371	445,501	509,227												
2007	2,861	119,076	363,029	442,068	537,077	674,872	743,159	803,483	916,913	1,006,421	1,008,109	1,076,420	1,112,466	1,146,136	1,200,201	1,213,637	1,237,230	1,257,047	1,273,344													
2008	60,614	254,231	266,381	320,759	400,143	502,530	517,750	562,296	587,385	596,073	615,335	666,862	688,613	698,412	705,588	705,588	705,588	705,588														
2009	93,362	282,127	442,836	504,349	532,197	540,101	592,613	612,576	623,399	659,857	675,804	690,692	690,692	712,041	712,041	712,041	712,041															
2010	-	125,006	229,422	248,031	338,015	353,987	378,531	446,308	485,492	507,551	521,824	560,509	560,509	563,408	578,782	582,201																
2011	120,046	332,076	612,202	684,075	752,341	813,135	874,773	904,905	930,473	968,523	1,019,798	1,040,105	1,077,136	1,135,081	1,171,861																	
2012	9,999	133,785	188,289	213,486	235,093	249,801	271,398	287,908	297,472	305,720	305,720	305,720	305,720	305,720																		
2013	43,387	221,753	340,269	510,062	602,181	636,244	850,328	905,949	1,032,105	1,078,285	1,148,079	1,183,499	1,185,684																			
2014	18,035	250,466	420,375	484,944	548,829	581,613	606,670	638,491	656,711	706,966	714,272	716,257																				
2015	-	37,773	84,716	91,292	104,472	107,157	107,157	107,157	107,157	107,157	107,157																					
2016	-	275,228	350,684	411,051	494,944	580,460	651,093	721,097	763,329	794,639																						
2017	141,856	295,863	425,489	444,673	515,254	554,058	564,063	618,660	625,438																							
2018	73,595	255,822	317,239	367,138	435,392	507,450	620,860	698,146																								
2019	-	116,852	182,025	230,417	287,383	303,436	318,684																									
2020	8,637	41,206	51,832	99,099	106,211	120,903																										
2021	-	14,326	38,178	83,880	125,124																											
2022	19,593	70,940	191,485	242,119																												
2023	-	84,385	143,612																													
2024	12,373	75,710																														
2025	10,943																															

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Remedial UST
Summary of Incurred Development Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	INC LDM	PAID	INCURRED	CASE	IBNR	UNPAID
RY	ULTIMATE	LOSS	LOSS	RESERVE	RESERVE	LOSS
1994	-	-	-	-	-	-
1995	114,027	114,027	114,027	-	-	-
1996	69,718,278	65,019,792	69,718,278	4,698,486	-	4,698,486
1997	9,143,330	8,672,440	9,143,330	470,889	-	470,889
1998	18,973,941	17,968,475	18,973,941	1,005,466	-	1,005,466
1999	8,624,271	7,977,996	8,624,271	646,276	-	646,276
2000	16,237,801	14,592,406	16,237,801	1,645,395	-	1,645,395
2001	3,411,528	2,466,616	3,403,926	937,310	7,603	944,913
2002	3,196,851	3,011,677	3,189,726	178,049	7,124	185,174
2003	1,120,688	1,109,154	1,118,190	9,036	2,497	11,533
2004	2,442,481	1,862,941	2,421,212	558,272	21,269	579,540
2005	2,834,617	2,391,427	2,788,380	396,953	46,237	443,190
2006	814,977	509,227	793,457	284,230	21,520	305,750
2007	1,365,382	1,273,344	1,317,516	44,172	47,866	92,038
2008	742,165	705,588	705,588	-	36,577	36,577
2009	890,012	712,041	838,041	126,000	51,971	177,971
2010	730,904	582,201	686,405	104,204	44,499	148,703
2011	1,848,437	1,171,861	1,722,861	551,000	125,576	676,576
2012	330,875	305,720	305,720	-	25,155	25,155
2013	1,481,410	1,185,684	1,356,966	171,282	124,445	295,727
2014	864,369	716,257	784,757	68,500	79,612	148,112
2015	118,548	107,157	107,158	1	11,390	11,391
2016	1,376,272	794,639	1,228,556	433,917	147,716	581,634
2017	762,785	625,438	660,660	35,222	102,125	137,347
2018	928,385	698,146	773,391	75,245	154,994	230,239
2019	607,244	318,684	498,650	179,966	108,594	288,560
2020	356,075	120,903	289,211	168,308	66,864	235,172
2021	208,026	125,124	165,132	40,007	42,895	82,902
2022	830,965	242,119	633,454	391,336	197,511	588,847
2023	356,099	143,612	249,601	105,989	106,498	212,486
2024	500,695	75,710	328,000	252,290	172,695	424,985
2025	741,483	10,943	279,800	268,857	461,683	730,539
TOTAL	151,672,921	135,611,348	149,458,006	13,846,658	2,214,915	16,061,573

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Remedial UST
Development of Losses to Ultimate

Development Period in Months

AY	12 - 24	24 - 36	36 - 48	48 - 60	60 - 72	72 - 84	84 - 96	96 - 108	108 - 120	120 - 132	132 - 144	144 - 156	156 - 168	168 - 180	180 - 192	192 - 204	204 - 216	216 - 228	228 - 240	240 - 252	252 - 264	264 - 276	276 - 288	288 - 300	300 - 312	312 - 324	324 - 336	336 - 348	348 - 360	360 - 372	372 - 384	384 - ULT
1994																															1.000
1995	1.000	1.000	1.000	1.000	1.000	1.000	1.000	3.677	1.000	1.321	1.000	1.000	1.000	1.000	0.939	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1996	0.899	1.033	0.991	1.068	1.057	1.025	1.023	0.987	0.976	1.004	0.996	1.020	1.017	1.031	1.013	1.015	1.034	1.021	1.010	1.003	1.004	1.011	0.999	1.002	1.006	1.011	1.009	1.010	1.005	1.000	1.000	1.000
1997	1.401	1.118	1.163	1.128	1.028	1.003	0.954	0.965	1.030	1.098	0.987	1.020	1.012	1.040	1.012	1.002	1.015	1.000	1.012	0.992	1.010	1.012	0.988	1.004	1.008	1.031	1.004	1.002	1.000	1.000	1.000	1.000
1998	1.198	1.391	1.084	1.039	1.046	0.975	1.004	1.048	1.012	1.016	1.052	1.024	1.027	1.042	1.012	0.998	1.041	1.005	0.996	1.020	1.016	0.999	0.996	0.996	0.999	1.001	0.998	1.000	1.000	1.000	1.000	1.000
1999	1.390	1.027	0.939	1.053	0.966	0.914	0.986	1.021	1.015	1.032	1.011	1.045	1.002	0.997	0.991	1.000	1.023	0.977	1.010	0.995	1.025	1.007	1.033	0.986	1.010	1.023	1.000	1.000	1.000	1.000	1.000	1.000
2000	1.142	1.136	1.039	0.933	0.929	1.064	1.056	1.054	1.020	0.993	0.996	1.032	1.010	1.012	1.023	1.018	1.007	1.029	1.013	1.070	1.020	0.997	0.981	1.012	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2001	0.885	1.045	0.843	0.978	0.873	1.083	1.103	1.046	0.956	1.004	1.000	0.982	0.951	0.961	1.021	1.002	1.326	1.044	0.974	0.971	1.003	0.999	0.989	1.083	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2002	1.056	0.963	0.912	0.932	1.005	1.041	0.957	1.018	1.185	1.082	0.991	0.983	1.010	1.074	1.000	0.999	1.001	0.990	0.979	1.000	1.000	1.000	0.985	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2003	0.780	1.063	0.826	0.944	0.999	1.046	0.978	1.037	1.064	1.015	1.033	0.999	1.018	0.959	1.011	1.000	0.994	1.019	1.017	0.998	1.000	1.006	1.000	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2004	0.779	0.962	1.016	1.060	0.993	0.989	0.971	1.024	0.989	0.963	1.019	0.989	1.036	1.087	1.051	1.000	1.060	1.000	1.126	0.978	1.070	1.007	1.000	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2005	0.933	0.960	1.098	0.982	1.011	0.876	1.016	1.012	1.006	0.990	1.012	0.993	1.008	1.016	1.000	1.000	0.987	1.000	1.000	1.000	1.008	1.007	1.000	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2006	0.733	0.822	0.938	1.044	0.858	0.989	1.000	1.000	1.000	1.000	0.858	1.442	1.000	1.213	1.000	1.000	1.169	1.156	1.115	1.010	1.008	1.007	1.000	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2007	0.907	1.072	1.001	0.910	1.108	1.094	1.078	1.049	0.962	1.000	1.031	1.027	1.000	1.041	1.003	0.987	0.994	1.000	1.009	1.010	1.008	1.007	1.000	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2008	0.755	0.932	0.985	1.262	1.008	1.025	0.999	1.000	0.961	1.000	1.084	1.037	1.000	0.990	1.000	1.000	1.000	1.015	1.009	1.010	1.008	1.007	1.000	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2009	1.125	0.974	0.970	0.998	1.031	1.010	0.995	1.000	0.975	1.000	0.992	0.935	1.135	1.000	1.000	1.028	1.010	1.015	1.009	1.010	1.008	1.007	1.000	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2010	0.993	0.942	0.896	1.002	0.977	1.000	0.969	1.028	0.901	1.026	0.989	1.000	1.000	1.000	1.019	1.003	1.010	1.015	1.009	1.010	1.008	1.007	1.000	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2011	1.133	1.165	0.989	1.325	1.044	1.000	1.006	1.009	1.027	0.963	1.000	1.001	1.000	1.000	1.008	1.003	1.010	1.015	1.009	1.010	1.008	1.007	1.000	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2012	1.075	0.851	1.037	0.721	1.037	0.995	1.000	1.000	0.848	1.000	1.000	1.000	1.000	1.009	1.008	1.003	1.010	1.015	1.009	1.010	1.008	1.007	1.000	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2013	0.916	1.273	1.078	1.013	1.113	1.093	0.988	1.084	1.092	1.000	1.000	1.000	1.009	1.009	1.008	1.003	1.010	1.015	1.009	1.010	1.008	1.007	1.000	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2014	1.190	0.875	1.022	0.977	1.008	0.995	1.000	1.055	1.136	0.988	0.903	1.009	1.009	1.009	1.008	1.003	1.010	1.015	1.009	1.010	1.008	1.007	1.000	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2015	1.537	0.675	0.868	0.864	0.557	1.000	1.000	1.000	1.000	1.000	1.004	1.009	1.009	1.009	1.008	1.003	1.010	1.015	1.009	1.010	1.008	1.007	1.000	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2016	2.647	1.049	1.127	1.090	1.008	1.113	1.017	1.010	1.000	1.013	1.004	1.009	1.009	1.009	1.008	1.003	1.010	1.015	1.009	1.010	1.008	1.007	1.000	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2017	1.426	0.814	1.167	1.000	1.054	1.000	0.987	1.008	1.031	1.013	1.004	1.009	1.009	1.009	1.008	1.003	1.010	1.015	1.009	1.010	1.008	1.007	1.000	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2018	0.948	1.088	0.984	1.328	1.000	1.000	0.985	1.040	1.031	1.013	1.004	1.009	1.009	1.009	1.008	1.003	1.010	1.015	1.009	1.010	1.008	1.007	1.000	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2019	1.509	1.000	1.198	1.033	1.000	0.916	1.014	1.040	1.031	1.013	1.004	1.009	1.009	1.009	1.008	1.003	1.010	1.015	1.009	1.010	1.008	1.007	1.000	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2020	1.001	1.000	0.771	0.938	1.120	1.011	1.014	1.040	1.031	1.013	1.004	1.009	1.009	1.009	1.008	1.003	1.010	1.015	1.009	1.010	1.008	1.007	1.000	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2021	1.000	2.289	1.222	0.894	1.023	1.011	1.014	1.040	1.031	1.013	1.004	1.009	1.009	1.009	1.008	1.003	1.010	1.015	1.009	1.010	1.008	1.007	1.000	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2022	7.967	1.084	0.962	1.041	1.023	1.011	1.014	1.040	1.031	1.013	1.004	1.009	1.009	1.009	1.008	1.003	1.010	1.015	1.009	1.010	1.008	1.007	1.000	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2023	1.394	1.000	1.088	1.041	1.023	1.011	1.014	1.040	1.031	1.013	1.004	1.009	1.009	1.009	1.008	1.003	1.010	1.015	1.009	1.010	1.008	1.007	1.000	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2024	1.323	1.070	1.088	1.041	1.023	1.011	1.014	1.040	1.031	1.013	1.004	1.009	1.009	1.009	1.008	1.003	1.010	1.015	1.009	1.010	1.008	1.007	1.000	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2025	1.736	1.070	1.088	1.041	1.023	1.011	1.014	1.040	1.031	1.013	1.004	1.009	1.009	1.009	1.008	1.003	1.010	1.015	1.009	1.010	1.008	1.007	1.000	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000

AY	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360	372	384	ULT
1994																																	
1995	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	91,936	91,936	121,424	121,424	121,424	121,424	121,424	114,027	114,027	114,027	114,027	114,027	114,027	114,027	114,027	114,027	114,027	114,027	114,027	114,027	114,027	114,027	114,027	114,027
1996	53,231,135	47,836,730	49,407,530	48,978,093	52,313,132	55,298,399	56,691,009	57,974,713	57,222,079	55,851,498	56,090,044	55,878,170	56,973,590	57,914,909	59,727,749	60,520,991	61,438,932	63,542,669	64,900,172	65,555,188	65,727,535	65,987,452	66,724,399	66,685,817	66,826,230	67,247,616	68,008,001	68,645,744	69,348,060	69,718,278	69,718,278	69,718,278	69,718,278
1997	3,573,253	5,006,760	5,595,293	6,509,602	7,339,940	7,543,852	7,567,320	7,220,500	6,968,573	7,175,241	7,881,589	7,776,922	7,929,607	8,022,412	8,341,879	8,438,890	8,454,321	8,583,877	8,586,395	8,688,362	8,620,096	8,709,795	8,818,507	8,711,514	8,745,196	8,812,994	9,088,046	9,126,050	9,143,330	9,143,330	9,143,330	9,143,330	9,143,330
1998	7,364,437	8,821,577	12,269,029	13,304,188	13,819,877	14,450,902	14,092,048	14,149,777	14,829,092	15,013,956	15,259,044	16,052,593	16,444,809	16,896,144	17,597,797	17,814,255	17,785,694	18,506,398	18,597,581	18,518,569	18,881,580	19,179,628	19,155,673	19,087,562	19,015,031	18,995,556	19,013,395	18,973,941	18,973,941	18,973,941	18,973,941	18,973,941	18,973,941
1999	5,759,939	8,004,567	8,221,908	7,717,025	8,123,656	7,845,685	7,172,693	7,074,803	7,226,092	7,335,844	7,569,351	7,654,874	7,995,877	8,009,650	7,982,191	7,910,410	7,908,498	8,094,205	7,910,287	7,989,540	7,947,090	8,142,089	8,195,749	8,465,122	8,348,678	8,428,295	8,624,271	8,624,271	8,624,271	8,624,271	8,624,271	8,624,271	8,624,271
2000	9,324,730	10,648,160	12,097,019	12,566,308	11,722,952	10,889,342	11,584,303	12,227,733	12,884,763	13,143,239	13,056,075	13,003,942	13,414,878	13,545,655	13,710,843	14,028,530	14,281,976	14,387,340	14,807,965	14,999,507	16,054,212	16,378,942	16,324,532	16,010,411	16,200,640	16,237,801	16,237,801	16,237,801	16,237,801	16,237,801	16,237,801	16,237,801	16,237,801
2001	3,302,178	2,923,866	3,054,594	2,573,606	2,518,084	2,198,766	2,381,888	2,627,843	2,748,440	2,628,330	2,639,538	2,638,649	2,592,159	2,465,751	2,370,387	2,419,368	2,425,270	3,214,999	3,355,998	3,267,573	3,173,496	3,182,896	3,179,264	3,143,826	3,403,926	3,411,528	3,411,528	3,411,528	3,411,528	3,411,528	3,411,528	3,411,528	3,411,528
2002	2,797,972	2,955,239	2,845,096	2,594,519	2,418,970	2,430,893	2,530,221	2,421,288	2,465,465	2,921,043	3,160,884	3,133,768	3,081,785	3,114,120	3,344,801	3,344,801	3,340,765	3,344,498	3,309,504	3,239,727	3,239,727	3,239,727	3,239,727	3,189,726	3,189,726	3,196,851	3,196,851	3,196,851	3,196,851	3,196,851	3,196,851	3,196,851	3,196,851
2003	1,434,297	1,118,640	1,188,936	981,896	927,160	926,366	968,623	947,568	982,453	1,045,316	1,061,373	1,096,830	1,096,173	1,116,225	1,070,113	1,082,025	1,082,024	1,075,057	1,095,214	1,113,780	1,111,652	1,111,652	1,118,190	1,118,190	1,118,190	1,120,688	1,120,688	1,120,688	1,120,688	1,120,688	1,120,688	1,120,688	1,120,688
2004	2,160,155	1,682,506	1,619,281	1,645,353	1,743,733	1,732,311	1,713,785	1,664,385	1,704,088	1,685,636	1,623,046	1,654,141	1,636,601	1,695,355	1,843,239	1,937,796	1,937,796	2,053,302	2,053,302	2,311,950	2,261,949	2,421,212	2,437,038	2,437,038	2,437,038	2,442,481	2,442,481	2,442,481	2,442,481	2,442,481	2,442,481	2,442,481	2,442,481
2005	3,138,114	2,929,139	2,810,581	3,086,814	3,030,308	3,062,220	2,681,318	2,723,317	2,755,742	2,771,583	2,744,820	2,777,459	2,757,862	2,778,623	2,824,321	2,824,321	2,824,321	2,788,380	2,788,380	2,788,380	2,788,380	2,809,933	2,828,300	2,828,300	2,828,300	2,834,617	2,834,617	2,834,617	2,834,617	2,834,617	2,834,617	2,834,617	2,834,617
2006	700,016	513,381	422,074	395,901	413,398	354,751	350,940	350,940	350,940	350,940	350,940	300,940	433,939	433,939	526,438	526,438	526,438	615,521	711,501	793,457	801,683	807,880	813,160	813,160	813,160	814,977	814,977	814,977	814,977	814,977	814,977	814,977	814,977
2007	1,040,013	943,081	1,010,684	1,012,065	920,947	1,020,208	1,116,126	1,203,300	1,262,570	1,214,958	1,214,958	1,252,592	1,286,034	1,286,034	1,338,674	1,343,321	1,325,353	1,317,516	1,317,516	1,329,329	1,343,111	1,353,493	1,362,339	1,362,339	1,362,339	1,365,382	1,365,382	1,365,382	1,365,382	1,365,382	1,365,382	1,365,382	1,365,382
2008	731,009	551,962	514,640	506,914	639,744	644,925	660,908	660,233	660,233	634,174	634,174	687,450	712,613	712,613	705,588	705,588	705,588	705,588	716,147	722,568	730,060	735,703	740,511	740,511	740,511	742,165	742,165	742,165	742,165	742,165	742,165	742,165	742,165
2009	722,858	813,159	792,223	768,527	767,284	790,727	798,503	794,122	794,122	774,342	774,342	767,805	717,804	815,041	815,041	815,041	838,041	846,148	858,810	866,511	875,494	882,262	888,028	888,028	888,028	890,012	890,012	890,012	890,012	890,012	890,012	890,012	890,012
2010	901,512	895,353	843,467	755,637	756,775	739,686	739,686	716,609	736,806	664,148	681,183	673,407	673,407	673,406	673,406	686,405	688,224	694,882	705,281	711,604	718,982	724,540	729,275	729,275	729,275	730,904	730,904	730,904	730,904	730,904	730,904	730,904	730,904
2011	949,031	1,075,044	1,252,534	1,238,968	1,641,616	1,713,580	1,713,580	1,723,193	1,739,193	1,786,972	1,721,121	1,721,121	1,722,861	1,722,861	1,722,861	1,735,900	1,740,500	1,757,338	1,783,636	1,799,629	1,818,286	1,832,341	1,844,318	1,844,318	1,844,318	1,848,437	1,848,437	1,848,437	1,848,437	1,848,437	1,848,437	1,848,437	1,848,437
2012	510,805	549,280	467,534	484,868	349,610	362,382	360,480	360,480	360,480	305,720	305,720	305,720	305,720	305,720	308,397	310,731	311,554	314,568	319,276	322,138	325,478	327,994	330,138	330,138	330,138	330,875	330,875	330,875	330,875	330,875	330,875	330,875	330,875
2013	749,010	686,060	873,521	942,049	954,324	1,061,991	1,160,751	1,147,103	1,242,961	1,357,285	1,356,966	1,356,966	1,356,966	1,368,784	1,380,768	1,391,219	1,394,905	1,408,400	1,429,476	1,442,293	1,457,246	1,468,510	1,478,109	1,478,109	1,478,109	1,481,410	1,481,410	1,481,410	1,481,410	1,481,410	1,481,410	1,481,410	1,481,410
2014	704,012	837,531	732,853	748,791	731,229	737,336	733,721	733,721	773,923	879,488	869,123	784,757	791,758	798,654	805,647	811,744	813,895	821,769	834,067	841,545	850,270	856,842	862,443	862,443	862,443	864,369	864,369	864,369	864,369	864,369	864,369	864,369	864,369
2015	247,006	379,643	256,400	222,633	192,349	107,159	107,159	107,158	107,158	107,158	107,158	107,629	108,590	109,535	110,494	111,331	111,626	112,706	114,392	115,418	116,614	117,516	118,284	118,284	118,284	118,548	118,548	118,548	118,548	118,548	118,548	118,548	118,548
2016	313,008	828,611	868,811	978,809	1,066,742	1,075,089	1,196,458	1,216,866	1,228,556	1,228,556	1,244,041	1,249,512	1,260,660	1,271,640	1,282,773	1,292,482	1,295,907	1,308,444	1,328,024	1,339,931	1,353,823	1,364,288	1,373,205	1,373,205	1,373,205	1,376,272	1,376,272	1,376,272	1,376,272	1,376,272	1,376,272	1,376,272	1,376,272
2017	465,001	662,914	539,396	629,732	629,732	663,561	663,561	655,198	660,660	680,914	689,497	692,529	698,708	704,793	710,964	716,345	718,243	725,191	736,044	742,643	750,343	756,143	761,085	761,085	761,085	762,785	762,785	762,785	762,785	762,785	762,785	762,785	762,785
2018	582,223	551,894	600,621	590,864	784,953	784,953	784,953	773,391	804,089	828,741	839,187	842,877	850,397	857,804	865,314	871,863	874,173	882,630	895,839	903,871	913,242	920,301	926,316	926,316	926,316	928,385	928,385	928,385	928,385	928,385	928,385	928,385	928,385
2019	291,502	439,872	439,872	526,812	544,232	544,232	498,650	505,865	525,943	542,068	548,901	551,315	556,233	561,078	565,990	570,274	571,785	577,317	585,956	591,210	597,339	601,956	605,891	605,891	605,891	607,244	607,244	607,244	607,244	607,244	607,244	607,244	607,244
2020	357,003	357,216	357,215	275,274	258,212	289,211	292,398	296,628	308,402	317,857	321,863	323,279	326,163	328,004	331,884	334,396	335,282	338,526	343,592	346,672	350,267	352,974	355,281	355,281	355,281	356,075	356,075	356,075	356,075	356,075	356,075	356,075	356,075
2021	66,002	66,001	151,100	184,642	165,132	168,963	170,825	173,296	180,175	185,699	188,039	188,866	190,551	192,211	193,894	195,361	195,879	197,774	200,733	202,533	204,633	206,215	207,563	207,563	207,563	208,026	208,026	208,026	208,026	208,026	208,026	208,026	208,026
2022	76,203	607,100	658,237	633,454	659,622	674,926	682,363	692,235	719,712	741,777	751,127	754,430	761,161	767,790	774,512	780,374	782,442	790,012	801,834	809,023	817,411	823,729	829,113	829,113	829,113	830,965	830,965	830,965	830,965	830,965	830,965	830,965	830,965
2023	179,002	249,601	249,601	271,458	282,672	289,230	292,417	296,648	308,422	317,878	321,885	323,300	326,185	329,026	331,906	334,418	335,305	338,548	343,615	346,696	350,290	352,998	355,305	355,305	355,305	356,099	356,099	356,099	356,099	356,099	356,099	356,099	356,099
2024	248,002	328,000	350,954	381,686	397,453	406,674	411,156	417,104	433,660	446,955	452,589	454,579	458,635	462,629	466,680	470,212	471,458	476,019	483,142	487,474	492,528	496,335	499,579	499,579	499,579	500,695	500,695	500,695	500,695	500,695	500,695	500,695	500,695
2025	279,800	485,737	519,729	565,241	588,591	602,246	608,883	617,692	642,209	661,899	670,242	673,189	679,195	685,110	691,109	696,339	698,185	704,939	715,488	721,903	729,388	735,026	739,830	739,830	739,830	741,483	741,483	741,483	741,483	741,483	741,483	741,483	741,483

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Remedial UST
Selection of Loss Development Factors

Development Period in Months

RY	12 - 24	24 - 36	36 - 48	48 - 60	60 - 72	72 - 84	84 - 96	96 - 108	108 - 120	120 - 132	132 - 144	144 - 156	156 - 168	168 - 180	180 - 192	192 - 204	204 - 216	216 - 228	228 - 240	240 - 252	252 - 264	264 - 276	276 - 288	288 - 300	300 - 312	312 - 324	324 - 336	336 - 348	348 - 360	360 - 372	372 - 384	
1994																																
1995	1.000	1.000	1.000	1.000	1.000	1.000	1.000	3.677	1.000	1.321	1.000	1.000	1.000	1.000	0.939	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
1996	0.899	1.033	0.991	1.068	1.057	1.025	1.023	0.987	0.976	1.004	0.996	1.020	1.017	1.031	1.013	1.015	1.034	1.021	1.010	1.003	1.004	1.011	0.999	1.002	1.006	1.011	1.009	1.010	1.005			
1997	1.401	1.118	1.163	1.128	1.028	1.003	0.954	0.965	1.030	1.098	0.987	1.020	1.012	1.040	1.012	1.002	1.015	1.000	1.012	0.992	1.010	1.012	0.988	1.004	1.008	1.031	1.004	1.002				
1998	1.198	1.391	1.084	1.039	1.046	0.975	1.004	1.048	1.012	1.016	1.052	1.024	1.027	1.042	1.012	0.998	1.041	1.005	0.996	1.020	1.016	0.999	0.996	0.996	0.999	1.001	0.998					
1999	1.390	1.027	0.939	1.053	0.966	0.914	0.986	1.021	1.015	1.032	1.011	1.045	1.002	0.997	0.991	1.000	1.023	0.977	1.010	0.995	1.025	1.007	1.033	0.986	1.010	1.023						
2000	1.142	1.136	1.039	0.933	0.929	1.064	1.056	1.054	1.020	0.993	0.996	1.032	1.010	1.012	1.023	1.018	1.007	1.029	1.013	1.070	1.020	0.997	0.981	1.012	1.002							
2001	0.885	1.045	0.843	0.978	0.873	1.083	1.103	1.046	0.956	1.004	1.000	0.982	0.951	0.961	1.021	1.002	1.326	1.044	0.974	0.971	1.003	0.999	0.989	1.083								
2002	1.056	0.963	0.912	0.932	1.005	1.041	0.957	1.018	1.185	1.082	0.991	0.983	1.010	1.074	1.000	0.999	1.001	0.990	0.979	1.000	1.000	1.000	0.985									
2003	0.780	1.063	0.826	0.944	0.999	1.046	0.978	1.037	1.064	1.015	1.033	0.999	1.018	0.959	1.011	1.000	0.994	1.019	1.017	0.998	1.000	1.006										
2004	0.779	0.962	1.016	1.060	0.993	0.989	0.971	1.024	0.989	0.963	1.019	0.989	1.036	1.087	1.051	1.000	1.060	1.000	1.126	0.978	1.070											
2005	0.933	0.960	1.098	0.982	1.011	0.876	1.016	1.012	1.006	0.990	1.012	0.993	1.008	1.016	1.000	1.000	0.987	1.000	1.000	1.000												
2006	0.733	0.822	0.938	1.044	0.858	0.989	1.000	1.000	1.000	1.000	0.858	1.442	1.000	1.213	1.000	1.000	1.169	1.156	1.115													
2007	0.907	1.072	1.001	0.910	1.108	1.094	1.078	1.049	0.962	1.000	1.031	1.027	1.000	1.041	1.003	0.987	0.994	1.000														
2008	0.755	0.932	0.985	1.262	1.008	1.025	0.999	1.000	0.961	1.000	1.084	1.037	1.000	0.990	1.000	1.000	1.000															
2009	1.125	0.974	0.970	0.998	1.031	1.010	0.995	1.000	0.975	1.000	0.992	0.935	1.135	1.000	1.000	1.028																
2010	0.993	0.942	0.896	1.002	0.977	1.000	0.969	1.028	0.901	1.026	0.989	1.000	1.000	1.000	1.019																	
2011	1.133	1.165	0.989	1.325	1.044	1.000	1.006	1.009	1.027	0.963	1.000	1.001	1.000	1.000																		
2012	1.075	0.851	1.037	0.721	1.037	0.995	1.000	1.000	0.848	1.000	1.000	1.000	1.000																			
2013	0.916	1.273	1.078	1.013	1.113	1.093	0.988	1.084	1.092	1.000	1.000	1.000																				
2014	1.190	0.875	1.022	0.977	1.008	0.995	1.000	1.055	1.136	0.988	0.903																					
2015	1.537	0.675	0.868	0.864	0.557	1.000	1.000	1.000	1.000	1.000																						
2016	2.647	1.049	1.127	1.090	1.008	1.113	1.017	1.010	1.000																							
2017	1.426	0.814	1.167	1.000	1.054	1.000	0.987	1.008																								
2018	0.948	1.088	0.984	1.328	1.000	1.000	0.985																									
2019	1.509	1.000	1.198	1.033	1.000	0.916																										
2020	1.001	1.000	0.771	0.938	1.120																											
2021	1.000	2.289	1.222	0.894																												
2022	7.967	1.084	0.962																													
2023	1.394	1.000																														
2024	1.323																															
VOL WTD 3	2.354	1.148	0.937	0.981	1.020	0.977	1.000	1.009	1.050	0.995	0.967	1.001	1.000	1.000	1.006	1.002	1.032	1.020	1.061	0.992	1.024	1.000	0.982	1.012	1.002	1.013	1.007	1.009	1.005	1.000	NA	
VOL WTD 5	1.736	1.079	1.002	1.079	1.022	1.024	1.000	1.040	1.044	0.983	0.981	0.990	1.024	1.009	1.004	1.001	1.022	1.015	1.029	0.989	1.019	1.000	0.996	1.005	1.005	1.012	1.007	1.009	1.005	1.000	NA	
VOL WTD ALL	1.013	1.070	1.009	1.041	1.023	1.011	1.014	1.009	0.999	1.013	1.004	1.020	1.014	1.028	1.012	1.009	1.034	1.015	1.009	1.010	1.011	1.007	0.997	1.004	1.005	1.012	1.007	1.009	1.005	1.000	NA	
ARITH 3	3.561	1.458	0.985	0.955	1.040	0.972	0.997	1.006	1.045	0.996	0.968	1.000	1.000	1.000	1.006	1.005	1.054	1.052	1.080	0.992	1.023	1.002	0.985	1.027	1.004	1.018	1.004	1.004	1.003	1.000	NA	
ARITH 5	2.537	1.275	1.027	1.039	1.036	1.006	0.998	1.031	1.015	0.990	0.978	0.987	1.027	1.006	1.005	1.003	1.042	1.035	1.047	0.990	1.019	1.002	0.997	1.016	1.005	1.013	1.003	1.004	1.003	1.000	NA	
ARITH ALL	1.368	1.055	1.005	1.019	0.993	1.010	1.003	1.136	1.007	1.024	0.998	1.028	1.013	1.027	1.006	1.003	1.047	1.019	1.021	1.002	1.015	1.003	0.996	1.012	1.004	1.013	1.003	1.004	1.003	1.000	NA	
5 YR HI LO	1.239	1.028	1.048	0.990	1.021	1.000	0.996	1.024	1.031	0.996	0.996	1.000	1.000	1.000	1.001	1.000	1.018	1.006	1.044	0.992	1.008	1.002	0.990	1.004	1.005	1.012	1.002	1.002	NA	NA	NA	
7 YR HI LO	1.245	1.035	1.088	0.991	1.014	1.018	0.995	1.016	1.004	0.998	0.996	1.006	1.000	1.011	1.005	1.000	1.010	1.013	1.025	0.994	1.013	1.002	0.991	1.003	1.004	1.012	1.002	1.002	NA	NA	NA	
ALL YR HI LO	1.155	1.024	1.005	1.019	1.006	1.011	1.001	1.023	1.006	1.011	1.001	1.009	1.009	1.019	1.008	1.003	1.028	1.010	1.015	0.998	1.010	1.003	0.993	1.003	1.004	1.012	1.002	1.002	NA	NA	NA	Tail
SELECTED	1.736	1.070	1.088	1.041	1.023	1.011	1.014	1.040	1.031	1.013	1.004	1.009	1.009	1.009	1.008	1.003	1.010	1.015	1.009	1.010	1.008	1.007	1.000	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Remedial UST
Incurred Losses

Development in Months

RY	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360	372	384
1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	91,936	91,936	121,424	121,424	121,424	121,424	121,424	114,027	114,027	114,027	114,027	114,027	114,027	114,027	114,027	114,027	114,027	114,027	114,027	114,027	114,027	114,027	114,027	-
1996	53,231,135	47,836,730	49,407,530	48,978,093	52,313,132	55,298,399	56,691,009	57,974,713	57,222,079	55,851,498	56,090,044	55,878,170	56,973,590	57,914,909	59,727,749	60,520,991	61,438,932	63,542,669	64,900,172	65,555,188	65,727,535	65,987,452	66,724,399	66,685,817	66,826,230	67,247,616	68,008,001	68,645,744	69,348,060	69,718,278			
1997	3,573,253	5,006,760	5,595,293	6,509,602	7,339,940	7,543,852	7,567,320	7,220,500	6,968,573	7,175,241	7,881,589	7,776,922	7,929,607	8,022,412	8,341,879	8,438,890	8,454,321	8,583,877	8,586,395	8,688,362	8,620,096	8,709,795	8,818,507	8,711,514	8,745,196	8,812,994	9,088,046	9,126,050	9,143,330				
1998	7,364,437	8,821,577	12,269,029	13,304,188	13,819,877	14,450,902	14,092,048	14,149,777	14,829,092	15,013,956	15,259,044	16,052,593	16,444,809	16,896,144	17,597,797	17,814,255	17,785,694	18,506,398	18,597,581	18,518,569	18,881,580	19,179,628	19,155,673	19,087,562	19,015,031	18,995,556	19,013,395	18,973,941					
1999	5,759,939	8,004,567	8,221,908	7,717,025	8,123,656	7,845,685	7,172,693	7,074,803	7,226,092	7,335,844	7,569,351	7,654,874	7,995,877	8,009,650	7,982,191	7,910,410	7,908,498	8,094,205	7,910,287	7,989,540	7,947,090	8,142,089	8,195,749	8,465,122	8,348,678	8,428,295	8,624,271						
2000	9,324,730	10,648,160	12,097,019	12,566,308	11,722,952	10,889,342	11,584,303	12,227,733	12,884,763	13,143,239	13,056,075	13,003,942	13,414,878	13,545,655	13,710,843	14,028,530	14,281,976	14,387,340	14,807,965	14,999,507	16,054,212	16,378,942	16,324,532	16,010,411	16,200,640	16,237,801							
2001	3,302,178	2,923,866	3,054,594	2,573,606	2,518,084	2,198,766	2,381,888	2,627,843	2,748,440	2,628,330	2,639,538	2,638,649	2,592,159	2,465,751	2,370,387	2,419,368	2,425,270	3,214,999	3,355,998	3,267,573	3,173,496	3,182,896	3,179,264	3,143,826	3,403,926								
2002	2,797,972	2,955,239	2,845,096	2,594,519	2,418,970	2,430,893	2,530,221	2,421,288	2,465,465	2,921,043	3,160,884	3,133,768	3,081,785	3,114,120	3,344,801	3,344,801	3,340,765	3,344,498	3,309,504	3,239,727	3,239,727	3,239,727	3,239,727	3,189,726									
2003	1,434,297	1,118,640	1,188,936	981,896	927,160	926,366	968,623	947,568	982,453	1,045,316	1,061,373	1,096,830	1,096,173	1,116,225	1,070,113	1,082,025	1,082,024	1,075,057	1,095,214	1,113,780	1,111,652	1,111,652	1,118,190										
2004	2,160,155	1,682,506	1,619,281	1,645,353	1,743,733	1,732,311	1,713,785	1,664,385	1,704,088	1,685,636	1,623,046	1,654,141	1,636,601	1,695,355	1,843,239	1,937,796	1,937,796	2,053,302	2,053,302	2,311,950	2,261,949	2,421,212											
2005	3,138,114	2,929,139	2,810,581	3,086,814	3,030,308	3,062,220	2,681,318	2,723,317	2,755,742	2,771,583	2,744,820	2,777,459	2,757,862	2,778,623	2,824,321	2,824,321	2,824,321	2,788,380	2,788,380	2,788,380	2,788,380												
2006	700,016	513,381	422,074	395,901	413,398	354,751	350,940	350,940	350,940	350,940	350,940	300,940	433,939	433,939	526,438	526,438	526,438	615,521	711,501	793,457												
2007	1,040,013	943,081	1,010,684	1,012,065	920,947	1,020,208	1,116,126	1,203,300	1,262,570	1,214,958	1,214,958	1,252,592	1,286,034	1,286,034	1,338,674	1,343,321	1,325,353	1,317,516	1,317,516														
2008	731,009	551,962	514,640	506,914	639,744	644,925	660,908	660,233	660,233	634,174	634,174	687,450	712,613	712,613	705,588	705,588	705,588	705,588														
2009	722,858	813,159	792,223	768,527	767,284	790,727	798,503	794,122	794,122	774,342	774,342	767,805	717,804	815,041	815,041	815,041	838,041															
2010	901,512	895,353	843,467	755,637	756,775	739,686	739,686	716,609	736,806	664,148	681,183	673,407	673,407	673,406	673,406	686,405																
2011	949,031	1,075,044	1,252,534	1,238,968	1,641,616	1,713,580	1,713,580	1,723,193	1,739,193	1,786,972	1,721,121	1,721,121	1,722,861	1,722,861	1,722,861																	
2012	510,805	549,280	467,534	484,868	349,610	362,382	360,480	360,480	360,480	305,720	305,720	305,720	305,720	305,720																		
2013	749,010	686,060	873,521	942,049	954,324	1,061,991	1,160,751	1,147,103	1,242,963	1,357,285	1,356,966	1,356,966	1,356,966																			
2014	704,012	837,531	732,853	748,791	731,229	737,336	733,721	733,721	773,923	879,488	869,123	784,757																				
2015	247,006	379,643	256,400	222,633	192,349	107,159	107,159	107,158	107,158	107,158	107,158																					
2016	313,008	828,611	868,811	978,809	1,066,742	1,075,089	1,196,458	1,216,866	1,228,556	1,228,556																						
2017	465,001	662,914	539,396	629,732	629,732	663,561	663,561	655,198	660,660																							
2018	582,223	551,894	600,621	590,864	784,953	784,953	784,953	773,391																								
2019	291,502	439,872	439,872	526,812	544,232	544,232	498,650																									
2020	357,003	357,216	357,215	275,274	258,212	289,211																										
2021	66,002	66,001	151,100	184,642	165,132																											
2022	76,203	607,100	658,237	633,454																												
2023	179,002	249,601	249,601																													
2024	248,002	328,000																														
2025	279,800																															

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Remedial UST
Determination of Pure Premium

(1) RY	(2) PAID LDM ULTIMATE	(3) INC LDM ULTIMATE	(4) SELECTED ULTIMATE	(5) POTENTIAL SITES	(6) PURE PREMIUM
1994					
1995					
1996					
1997					
1998					
1999					
2000					
2001					
2002					
2003					
2004					
2005					
2006					
2007					
2008					
2009	909,114	890,012	899,563	12,003	75
2010	757,968	730,904	744,436	11,973	62
2011	1,722,861	1,848,437	1,785,649	11,936	150
2012	305,720	330,875	318,298	11,915	27
2013	1,693,311	1,481,410	1,587,361	11,887	134
2014	1,047,794	864,369	956,081	11,853	81
2015	161,451	118,548	140,000	11,834	12
2016	1,236,738	1,376,272	1,306,505	11,810	111
2017	1,019,739	762,785	891,262	11,790	76
2018	1,174,605	928,385	1,051,495	11,776	89
2019	577,246	607,244	592,245	11,759	50
2020	289,211	356,075	322,643	11,745	27
2021	271,811	208,026	239,919	11,735	20
2022	633,454	830,965	732,210	11,727	62
2023	485,478	356,099	420,788	11,718	36
2024	474,162	500,695	487,429	11,712	42
2025	310,787	741,483	526,135	11,711	45
TOTAL	13,071,448	12,932,584	13,002,016	200,884	65

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
UST Remedial Claims
Paid Bornhuetter-Ferguson Method

(1) RY	(2) POTENTIAL SITES	(3) PROJECTED PURE PREM	(4) TRENDED PURE PREM	(5) DETRENDED PURE PREM	(6) EXPECTED LOSSES	(7) PERCENT UNPAID	(8) EXPECTED UNPAID	(9) PAID LOSSES	(10) INDICATED ULTIMATE	(11) INCURRED LOSSES	(12) IBNR RESERVE	(13) CASE RESERVE	(14) ULTIMATE PURE PREM
1994													
1995													
1996													
1997													
1998													
1999													
2000													
2001													
2002													
2003													
2004													
2005													
2006													
2007													
2008													
2009	12,003	75	29	83	1,000,339	21.7%	216,849	712,041	928,890	838,041	90,849	126,000	77
2010	11,973	62	25	78	939,763	23.2%	217,924	582,201	800,125	686,405	113,720	104,204	67
2011	11,936	150	65	74	882,332	25.6%	226,043	1,171,861	1,397,904	1,722,861	(324,957)	551,000	117
2012	11,915	27	12	70	829,516	28.0%	232,595	305,720	538,315	305,720	232,595	-	45
2013	11,887	134	65	66	779,401	30.0%	233,652	1,185,684	1,419,335	1,356,966	62,370	171,282	119
2014	11,853	81	42	62	731,939	31.6%	231,596	716,257	947,853	784,757	163,096	68,500	80
2015	11,834	12	6	58	688,234	33.6%	231,444	107,157	338,601	107,158	231,443	1	29
2016	11,810	111	64	55	646,863	35.7%	231,235	794,639	1,025,874	1,228,556	(202,682)	433,917	87
2017	11,790	76	47	52	608,182	38.7%	235,165	625,438	860,603	660,660	199,943	35,222	73
2018	11,776	89	59	49	572,105	40.6%	232,065	698,146	930,211	773,391	156,820	75,245	79
2019	11,759	50	35	46	538,030	44.8%	240,996	318,684	559,680	498,650	61,029	179,966	48
2020	11,745	27	20	43	506,112	49.4%	250,078	120,903	370,981	289,211	81,770	168,308	32
2021	11,735	20	16	41	476,249	54.0%	257,015	125,124	382,140	165,132	217,008	40,007	33
2022	11,727	62	52	38	448,225	61.3%	274,553	242,119	516,672	633,454	(116,782)	391,336	44
2023	11,718	36	32	36	421,814	70.4%	297,034	143,612	440,647	249,601	191,046	105,989	38
2024	11,712	42	39	34	397,060	84.0%	333,661	75,710	409,371	328,000	81,371	252,290	35
2025	11,711	45	45	32	373,918	96.5%	360,752	10,943	371,695	279,800	91,895	268,857	32
TOTAL	200,884				10,840,081		4,302,657	7,936,238	12,238,895	10,908,362	1,330,533	2,972,123	61

Pure Premium Selection	
3-Year Average x Latest	41
5-Year Average x Latest	32
All Year Average x Latest	38
Selected Pure Premium	32

Trend = 0.942

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
UST Remedial Claims
Incurred Bornhuetter-Ferguson Method

(1) RY	(2) POTENTIAL SITES	(3) PROJECTED PURE PREM	(4) TRENDED PURE PREM	(5) DETRENDED PURE PREM	(6) EXPECTED LOSSES	(7) PERCENT IBNR	(8) EXPECTED IBNR	(9) INCURRED LOSSES	(10) INDICATED ULTIMATE	(11) PAID LOSSES	(12) UNPAID LOSS	(13) CASE RESERVE	(14) ULTIMATE PURE PREM
1994													
1995													
1996													
1997													
1998													
1999													
2000													
2001													
2002													
2003													
2004													
2005													
2006													
2007													
2008													
2009	12,003	75	29	83	1,000,339	5.8%	58,413	838,041	896,454	712,041	184,413	126,000	75
2010	11,973	62	25	78	939,763	6.1%	57,215	686,405	743,620	582,201	161,419	104,204	62
2011	11,936	150	65	74	882,332	6.8%	59,943	1,722,861	1,782,803	1,171,861	610,942	551,000	149
2012	11,915	27	12	70	829,516	7.6%	63,065	305,720	368,785	305,720	63,065	-	31
2013	11,887	134	65	66	779,401	8.4%	65,473	1,356,966	1,422,439	1,185,684	236,755	171,282	120
2014	11,853	81	42	62	731,939	9.2%	67,414	784,757	852,172	716,257	135,914	68,500	72
2015	11,834	12	6	58	688,234	9.6%	66,125	107,158	173,283	107,157	66,126	1	15
2016	11,810	111	64	55	646,863	10.7%	69,428	1,228,556	1,297,984	794,639	503,345	433,917	110
2017	11,790	76	47	52	608,182	13.4%	81,426	660,660	742,086	625,438	116,648	35,222	63
2018	11,776	89	59	49	572,105	16.7%	95,513	773,391	868,904	698,146	170,758	75,245	74
2019	11,759	50	35	46	538,030	17.9%	96,216	498,650	594,866	318,684	276,182	179,966	51
2020	11,745	27	20	43	506,112	18.8%	95,038	289,211	384,249	120,903	263,346	168,308	33
2021	11,735	20	16	41	476,249	20.6%	98,202	165,132	263,333	125,124	138,209	40,007	22
2022	11,727	62	52	38	448,225	23.8%	106,538	633,454	739,992	242,119	497,874	391,336	63
2023	11,718	36	32	36	421,814	29.9%	126,151	249,601	375,752	143,612	232,139	105,989	32
2024	11,712	42	39	34	397,060	34.5%	136,950	328,000	464,950	75,710	389,240	252,290	40
2025	11,711	45	45	32	373,918	62.3%	232,819	279,800	512,619	10,943	501,676	268,857	44
TOTAL	200,884				10,840,081		1,575,930	10,908,362	12,484,292	7,936,238	4,548,053	2,972,123	62

Pure Premium Selection	
3-Year Average x Latest	41
5-Year Average x Latest	32
All Year Average x Latest	38
Selected Pure Premium	32

Trend = 0.942

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance AST
Summary of Paid Development Method

(1) RY	(2) PAID LDM ULTIMATE	(3) PAID LOSS	(4) INCURRED LOSS	(5) CASE RESERVE	(6) IBNR RESERVE	(7) UNPAID LOSS
1994	-	-	-	-	-	-
1995	-	-	-	-	-	-
1996	-	-	-	-	-	-
1997	-	-	-	-	-	-
1998	478,042	478,042	478,042	-	-	-
1999	2,689,230	2,532,831	2,689,230	156,399	-	156,399
2000	1,195,793	1,195,793	1,195,793	-	-	-
2001	6,675,614	6,311,605	6,675,614	364,009	-	364,009
2002	2,126,290	2,020,996	2,099,064	78,068	27,226	105,294
2003	1,607,917	1,432,117	1,607,917	175,800	-	175,800
2004	3,424,778	2,780,056	3,424,778	644,722	-	644,722
2005	2,153,485	1,772,836	2,153,485	380,649	-	380,649
2006	2,351,840	2,098,796	2,351,840	253,044	-	253,044
2007	1,281,735	1,173,608	1,173,609	1	108,125	108,126
2008	581,362	581,362	581,362	-	-	-
2009	1,040,668	923,112	963,112	40,000	77,556	117,556
2010	1,434,006	1,021,835	1,434,006	412,171	-	412,171
2011	1,467,447	1,251,474	1,467,447	215,973	-	215,973
2012	2,997,721	2,523,473	2,580,049	56,577	417,672	474,249
2013	1,344,459	1,096,165	1,262,213	166,048	82,246	248,294
2014	844,706	195,732	844,706	648,974	-	648,974
2015	1,740,457	1,321,825	1,686,521	364,696	53,936	418,632
2016	2,432,608	1,530,087	2,432,608	902,522	-	902,522
2017	4,824,686	3,015,311	4,824,686	1,809,375	-	1,809,375
2018	3,455,412	2,127,503	3,382,293	1,254,790	73,119	1,327,909
2019	6,122,048	3,486,879	4,913,212	1,426,333	1,208,836	2,635,169
2020	2,060,993	1,100,406	1,688,380	587,974	372,613	960,587
2021	4,815,156	2,178,304	3,654,450	1,476,145	1,160,706	2,636,852
2022	3,430,498	1,322,847	2,502,537	1,179,690	927,961	2,107,651
2023	2,851,825	818,036	1,771,154	953,118	1,080,671	2,033,789
2024	4,905,836	953,763	1,797,737	843,974	3,108,099	3,952,073
2025	8,266,508	1,057,619	2,699,078	1,641,459	5,567,430	7,208,889
TOTAL	78,601,119	48,302,412	64,334,922	16,032,510	14,266,198	30,298,708

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance AST
Development of Losses to Ultimate

Development Period in Months

RY	12 - 24	24 - 36	36 - 48	48 - 60	60 - 72	72 - 84	84 - 96	96 - 108	108 - 120	120 - 132	132 - 144	144 - 156	156 - 168	168 - 180	180 - 192	192 - 204	204 - 216	216 - 228	228 - 240	240 - 252	252 - 264	264 - 276	276 - 288	288 - 300	300 - 312	312 - 324	324 - 336	336 - 348	348 - 360	360 - 372	372 - 384	384 - ULT
1994																															1.050
1995																														1.000	1.050
1996																													1.000	1.000	1.050
1997																												1.000	1.000	1.000	1.050
1998		1.000	1.000	1.000	1.000	1.000	1.000	1.000	4.669	2.231	2.058	1.148	1.066	1.091	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.050
1999	15.900	1.244	2.319	1.021	1.004	1.011	1.041	1.014	1.085	1.078	1.058	1.037	1.005	1.016	1.000	1.124	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.050
2000	1.761	1.262	1.034	1.014	1.018	1.108	1.028	1.038	1.083	1.014	1.013	1.025	1.001	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.050
2001	1.541	1.087	1.075	1.093	1.050	1.021	1.028	1.099	1.106	1.029	1.266	1.019	1.043	1.029	1.094	1.027	1.021	1.029	1.018	1.002	1.012	1.009	1.013	1.009	1.000	1.000	1.000	1.000	1.000	1.000	1.050
2002	10.706	2.111	1.228	1.161	1.078	1.049	1.133	1.134	1.168	1.037	1.019	1.010	1.052	1.053	1.024	1.009	1.061	1.009	1.027	1.025	1.003	1.042	1.014	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.050
2003	3.306	1.453	1.561	1.192	1.187	1.137	1.043	1.129	1.051	1.067	1.192	1.050	1.041	1.048	1.064	1.064	1.030	1.010	1.000	1.014	1.000	1.000	1.009	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.050
2004	3.116	1.474	1.254	1.298	1.343	1.122	1.032	1.102	1.122	1.044	1.055	1.050	1.020	1.011	1.008	1.012	1.024	1.006	1.000	1.000	1.000	1.003	1.009	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.050
2005	11.692	1.138	1.099	1.080	1.052	1.048	1.018	1.026	1.008	1.008	1.017	1.032	1.094	1.026	1.007	1.002	1.011	1.013	1.028	1.006	1.001	1.003	1.009	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.050
2006	4.502	1.556	1.611	1.283	1.183	1.035	1.111	1.026	1.092	1.151	1.063	1.076	1.033	1.035	1.040	1.013	1.009	1.024	1.027	1.009	1.001	1.003	1.009	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.050
2007	3.306	1.594	1.127	1.341	1.099	1.033	1.053	1.050	1.036	1.016	1.021	1.020	1.000	1.000	1.000	1.000	1.000	1.000	1.016	1.009	1.001	1.003	1.009	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.050
2008	2.474	1.276	1.351	1.168	1.027	1.067	1.100	1.125	1.050	1.023	1.021	1.008	1.015	1.004	1.000	1.000	1.000	1.015	1.016	1.009	1.001	1.003	1.009	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.050
2009	10.467	1.861	1.934	1.065	1.456	1.254	1.238	1.223	1.089	1.081	1.048	1.043	1.009	1.021	1.000	1.000	1.017	1.015	1.016	1.009	1.001	1.003	1.009	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.050
2010	4.034	1.182	1.691	1.078	1.324	1.134	1.340	1.062	1.386	1.075	1.132	1.132	1.013	1.033	1.095	1.013	1.017	1.015	1.016	1.009	1.001	1.003	1.009	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.050
2011	3.325	1.526	1.081	1.124	1.092	1.068	1.074	1.053	1.046	1.001	1.022	1.040	1.264	1.035	1.013	1.013	1.017	1.015	1.016	1.009	1.001	1.003	1.009	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.050
2012	1.608	1.402	1.175	1.175	1.088	1.109	1.113	1.079	1.045	1.024	1.018	1.011	1.030	1.027	1.013	1.013	1.017	1.015	1.016	1.009	1.001	1.003	1.009	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.050
2013	3.828	1.585	1.391	1.080	1.118	1.066	1.007	1.023	1.036	1.008	1.002	1.048	1.032	1.027	1.013	1.013	1.017	1.015	1.016	1.009	1.001	1.003	1.009	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.050
2014	1.000	6.122	3.205	1.209	1.485	1.019	1.292	1.019	1.151	1.154	1.000	1.042	1.032	1.027	1.013	1.013	1.017	1.015	1.016	1.009	1.001	1.003	1.009	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.050
2015	4.922	1.606	1.295	1.461	1.159	1.453	1.301	1.098	1.005	1.041	1.030	1.042	1.032	1.027	1.013	1.013	1.017	1.015	1.016	1.009	1.001	1.003	1.009	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.050
2016	3.887	1.284	1.170	1.170	1.171	1.054	1.070	1.073	1.084	1.047	1.030	1.042	1.032	1.027	1.013	1.013	1.017	1.015	1.016	1.009	1.001	1.003	1.009	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.050
2017	5.527	1.708	1.328	1.185	1.093	1.053	1.062	1.191	1.096	1.047	1.030	1.042	1.032	1.027	1.013	1.013	1.017	1.015	1.016	1.009	1.001	1.003	1.009	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.050
2018	3.795	1.505	1.208	1.292	1.295	1.078	1.112	1.074	1.096	1.047	1.030	1.042	1.032	1.027	1.013	1.013	1.017	1.015	1.016	1.009	1.001	1.003	1.009	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.050
2019	2.265	1.347	1.192	1.138	1.163	1.070	1.081	1.074	1.096	1.047	1.030	1.042	1.032	1.027	1.013	1.013	1.017	1.015	1.016	1.009	1.001	1.003	1.009	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.050
2020	3.694	1.560	1.207	1.173	1.277	1.067	1.081	1.074	1.096	1.047	1.030	1.042	1.032	1.027	1.013	1.013	1.017	1.015	1.016	1.009	1.001	1.003	1.009	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.050
2021	131.102	1.924	1.210	1.162	1.180	1.067	1.081	1.074	1.096	1.047	1.030	1.042	1.032	1.027	1.013	1.013	1.017	1.015	1.016	1.009	1.001	1.003	1.009	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.050
2022	4.778	1.563	1.379	1.173	1.180	1.067	1.081	1.074	1.096	1.047	1.030	1.042	1.032	1.027	1.013	1.013	1.017	1.015	1.016	1.009	1.001	1.003	1.009	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.050
2023	1.520	1.162	1.344	1.173	1.180	1.067	1.081	1.074	1.096	1.047	1.030	1.042	1.032	1.027	1.013	1.013	1.017	1.015	1.016	1.009	1.001	1.003	1.009	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.050
2024	2.457	1.475	1.344	1.173	1.180	1.067	1.081	1.074	1.096	1.047	1.030	1.042	1.032	1.027	1.013	1.013	1.017	1.015	1.016	1.009	1.001	1.003	1.009	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.050
2025	1.520	1.475	1.344	1.173	1.180	1.067	1.081	1.074	1.096	1.047	1.030	1.042	1.032	1.027	1.013	1.013	1.017	1.015	1.016	1.009	1.001	1.003	1.009	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.050

RY	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360	372	384	ULT
1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1996	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1997	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1998	-	16,713	16,713	16,713	16,713	16,713	16,713	16,713	16,713	78,028	174,102	358,349	411,237	438,258	478,042	478,042	478,042	478,042	478,042	478,042	478,042	478,042	478,042	478,042	478,042	478,042	478,042	478,042	478,042	478,042	478,042	478,042	501,944
1999	34,176	543,408	676,196	1,567,972	1,601,529	1,608,182	1,625,584	1,692,876	1,717,189	1,863,780	2,008,295	2,125,717	2,204,155	2,214,424	2,250,269	2,250,269	2,529,597	2,529,597	2,532,094	2,532,094	2,532,831	2,532,831	2,532,831	2,532,831	2,532,831	2,532,831	2,532,831	2,532,831	2,532,831	2,532,831	2,532,831	2,532,831	2,659,472
2000	370,129	651,957	822,756	850,390	862,198	877,375	971,906	999,462	1,037,135	1,123,070	1,139,298	1,154,165	1,182,661	1,184,428	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,255,583
2001	1,334,769	2,056,418	2,236,336	2,404,395	2,628,060	2,759,085	2,817,023	2,896,871	3,183,541	3,519,996	3,623,500	4,589,112	4,674,733	4,876,595	5,018,242	5,488,608	5,638,087	5,757,861	5,925,597	6,033,763	6,045,530	6,116,687	6,169,987	6,253,097	6,311,605	6,311,605	6,311,605	6,311,605	6,311,605	6,311,605	6,311,605	6,311,605	6,627,185
2002	25,391	271,845	573,933	704,799	818,350	881,841	924,693	1,047,264	1,187,136	1,386,044	1,436,815	1,464,223	1,479,159	1,556,347	1,638,304	1,677,022	1,692,921	1,796,372	1,812,290	1,861,975	1,909,066	1,913,996	1,994,064	2,020,996	2,025,038	2,025,038	2,025,038	2,025,038	2,025,038	2,025,038	2,025,038	2,025,038	2,126,290
2003	55,198	182,491	265,162	413,872	493,384	585,783	665,773	694,461	783,706	823,855	878,721	1,047,401	1,100,227	1,145,541	1,200,282	1,276,743	1,358,101	1,398,792	1,412,642	1,412,642	1,432,117	1,432,117	1,432,117	1,444,856	1,447,746	1,447,746	1,447,746	1,447,746	1,447,746	1,447,746	1,447,746	1,447,746	1,520,133
2004	154,438	481,188	709,451	889,323	1,154,237	1,550,136	1,738,876	1,795,147	1,978,584	2,219,493	2,316,258	2,443,349	2,565,442	2,616,804	2,645,562	2,666,495	2,698,686	2,762,524	2,780,056	2,780,056	2,780,056	2,780,056	2,788,131	2,812,933	2,818,558	2,818,558	2,818,558	2,818,558	2,818,558	2,818,558	2,818,558	2,818,558	2,959,486
2005	76,161	890,444	1,013,676	1,114,425	1,203,629	1,266,271	1,326,703	1,350,155	1,385,185	1,396,276	1,407,470	1,431,885	1,477,651	1,616,331	1,657,857	1,670,265	1,673,598	1,691,931	1,714,527	1,762,598	1,772,836	1,774,264	1,779,418	1,795,247	1,798,837	1,798,837	1,798,837	1,798,837	1,798,837	1,798,837	1,798,837	1,798,837	1,888,779
2006	60,491	272,313	423,641	682,375	875,535	1,035,779	1,072,081	1,190,682	1,221,925	1,334,084	1,534,980	1,631,669	1,755,125	1,812,291	1,876,290	1,951,782	1,977,382	1,995,945	2,044,448	2,098,796	2,118,456	2,120,162	2,126,320	2,145,235	2,149,525	2,149,525	2,149,525	2,149,525	2,149,525	2,149,525	2,149,525	2,149,525	2,257,001
2007	107,082	353,965	564,316	635,862	852,470	936,817	967,505	1,018,844	1,069,756	1,108,422	1,126,553	1,150,527	1,173,608	1,173,608	1,173,608	1,173,608	1,173,608	1,173,608	1,173,608	1,173,608	1,191,891	1,203,056	1,204,025	1,207,522	1,218,263	1,220,700	1,220,700	1,220,700	1,220,700	1,220,700	1,220,700	1,220,700	1,281,735
2008	76,453	189,175	241,331	325,929	380,673	391,046	417,098	458,918	516,229	541,900	554,141	565,941	570,718	579,066	581,362	581,362	581,362	581,362	589,865	599,054	604,665	605,152	606,910	612,309	613,533	613,533	613,533	613,533	613,533	613,533	613,533	613,533	644,210
2009	6,274	65,671	122,193	236,292	251,768	366,562	459,776	569,158	696,182	758,059	819,677	858,838	896,129	904,524	923,112	923,112	923,112	939,143	952,878	967,722	976,787	977,573	980,413	989,134	991,112	991,112	991,112	991,112	991,112	991,112	991,112	991,112	1,040,668
2010	25,118	101,329	119,772	202,531	218,274	289,061	327,938	439,479	466,760	646,920	695,674	787,662	891,779	903,292	933,528	1,021,835	1,034,876	1,052,848	1,068,246	1,084,887	1,095,049	1,095,931	1,099,115	1,108,892	1,111,109	1,111,109	1,111,109	1,111,109	1,111,109	1,111,109	1,111,109	1,111,109	1,166,665
2011	105,665	351,316	535,992	579,582	651,347	711,550	759,749	815,994	858,956	898,414	899,616	919,162	955,996	1,208,783	1,251,474	1,268,258	1,284,444	1,306,750	1,325,862	1,346,516	1,359,129	1,360,224	1,364,175	1,376,310	1,379,062	1,379,062	1,379,062	1,379,062	1,379,062	1,379,062	1,379,062	1,379,062	1,448,015
2012	492,662	792,235	1,110,684	1,305,178	1,533,202	1,668,186	1,849,816	2,059,499	2,222,469	2,323,261	2,380,133	2,422,544	2,449,027	2,523,473	2,590,836	2,625,583	2,659,091	2,705,271	2,744,835	2,787,594	2,813,706	2,815,973	2,824,152	2,849,274	2,854,972	2,854,972	2,854,972	2,854,972	2,854,972	2,854,972	2,854,972	2,854,972	2,997,721
2013	89,198	341,477	541,380	753,022	813,524	909,739	970,104	977,192	999,814	1,036,131	1,044,234	1,046,421	1,096,165	1,131,761	1,161,973	1,177,557	1,192,585	1,213,297	1,231,041	1,250,218	1,261,929	1,262,946	1,266,614	1,277,881	1,280,437	1,280,437	1,280,437	1,280,437	1,280,437	1,280,437	1,280,437	1,280,437	1,344,459
2014	3,119	3,119	19,091	61,186	74,003	109,866	111,997	144,666	147,359	169,547	195,732	195,732	204,018	210,643	216,266	219,167	221,964	225,818	229,121	232,690	234,870	235,059	235,742	237,839	238,315	238,315	238,315	238,315	238,315	238,315	238,315	238,315	250,230
2015	35,104	172,789	277,518	359,484	525,069	608,686	884,338	1,150,455	1,263,610	1,269,343	1,321,825	1,361,396	1,419,030	1,465,111	1,504,222	1,524,396	1,543,851	1,570,662	1,593,633	1,618,459	1,633,619	1,634,935	1,639,684	1,654,270	1,657,578	1,657,578	1,657,578	1,657,578	1,657,578	1,657,578	1,657,578	1,657,578	1,740,457
2016	145,829	566,906	727,719	851,131	995,600	1,165,875	1,228,997	1,314,960	1,411,117	1,530,087	1,602,209	1,650,173	1,720,033	1,775,889	1,823,295	1,847,749	1,871,330	1,903,829	1,931,672	1,961,764	1,980,140	1,981,735	1,987,491	2,005,171	2,009,181	2,009,181	2,009,181	2,009,181	2,009,181	2,009,181	2,009,181	2,009,181	2,109,640
2017	139,537	771,285	1,317,458	1,749,609	2,072,429	2,264,234	2,384,220	2,531,175	3,015,311	3,305,753	3,461,572	3,565,200	3,716,131	3,836,808	3,939,230	3,992,062	4,043,009	4,113,222	4,173,378	4,238,391	4,278,093	4,281,539	4,293,975	4,332,172	4,340,836	4,340,836	4,340,836	4,340,836	4,340,836	4,340,836	4,340,836	4,340,836	4,557,878
2018	153,788	583,697	878,341	1,060,851	1,370,309	1,774,133	1,912,756	2,127,503	2,285,963	2,506,152	2,624,282	2,702,844	2,817,268	2,908,755	2,986,404	3,026,456	3,065,080	3,118,310	3,163,916	3,213,203	3,243,302	3,245,914	3,255,342	3,284,300	3,290,868	3,290,868	3,290,868	3,290,868	3,290,868	3,290,868	3,290,868	3,290,868	3,455,412
2019	689,496	1,561,490	2,102,629	2,507,017	2,802,620	3,258,411	3,486,879	3,769,355	4,050,104	4,440,219	4,649,513	4,788,703	4,991,431	5,153,522	5,291,093	5,362,055	5,430,487	5,524,796	5,605,596	5,692,920	5,746,247	5,750,875	5,767,580	5,818,884	5,830,522	5,830,522	5,830,522	5,830,522	5,830,522	5,830,522	5,830,522	5,830,522	6,122,048
2020	105,627	390,166	608,554	734,769	861,719	1,100,406	1,173,861	1,268,957	1,363,471	1,494,804	1,565,262	1,612,121	1,680,369	1,734,937	1,781,251	1,805,141	1,828,178	1,859,927	1,887,129	1,916,526	1,934,479	1,936,037	1,941,661	1,958,932	1,962,850	1,962,850	1,962,850	1,962,850	1,962,850	1,962,850	1,962,850	1,962,850	2,060,993
2021	6,140	805,000	1,548,565	1,874,323	2,178,304	2,570,910	2,742,524	2,964,700	3,185,516	3,492,352	3,656,967	3,766,444	3,925,895	4,053,384	4,161,587	4,217,401	4,271,224	4,345,401	4,408,952	4,477,635	4,519,578	4,523,218	4,536,357	4,576,709	4,585,863	4,585,863	4,585,863	4,585,863	4,585,863	4,585,863	4,585,863	4,585,863	4,815,156
2022	128,434	613,647	959,231	1,322,847	1,551,906	1,831,613	1,953,877	2,112,164	2,269,481	2,488,083	2,605,361	2,683,356	2,796,955	2,887,783	2,964,871	3,004,635	3,042,981	3,095,827	3,141,104	3,190,036	3,219,918	3,222,511	3,231,871	3,260,620	3,267,141	3,267,141	3,267,141	3,267,141	3,267,141	3,267,141	3,267,141	3,267,141	3,430,498
2023	463,090	703,696	818,036	1,099,703	1,290,123	1,522,648	1,624,288	1,755,873	1,886,654	2,068,381	2,165,876	2,230,715	2,325,151	2,400,658	2,464,742	2,497,799	2,529,676	2,573,608	2,611,247	2,651,925	2,676,766	2,678,922	2,686,703	2,710,603	2,716,024	2,716,024	2,716,024	2,716,024	2,716,024	2,716,024	2,716,024	2,716,024	2,851,825
2024	388,229	953,763	1,407,221	1,891,758	2,219,327	2,619,326	2,794,172	3,020,531	3,245,506	3,558,121	3,725,836	3,837,374	3,999,828	4,129,718	4,239,959	4,296,824	4,351,661	4,427,234	4,491,983	4,561,959	4,604,692	4,608,401	4,621,786	4,662,899	4,672,225	4,672,225	4,672,225	4,672,225	4,672,225	4,672,225	4,672,225	4,672,225	4,905,836
2025	1,057,619	1,607,124	2,371,218	3,187,679	3,739,644	4,413,658	4,708,279	5,089,703	5,468,793	5,995,560	6,278,166	6,466,113	6,739,853	6,958,722	7,144,483	7,240,302	7,332,704	7,460,047	7,569,151	7,687,063	7,759,070	7,765,319	7,787,875	7,857,151	7,872,865	7,872,865	7,872,865	7,872,865	7,872,865	7,872,865	7,872,865	7,872,865	8,266,508

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance AST
Selection of Loss Development Factors

	Development Period in Months																															
BY	12 - 24	24 - 36	36 - 48	48 - 60	60 - 72	72 - 84	84 - 96	96 - 108	108 - 120	120 - 132	132 - 144	144 - 156	156 - 168	168 - 180	180 - 192	192 - 204	204 - 216	216 - 228	228 - 240	240 - 252	252 - 264	264 - 276	276 - 288	288 - 300	300 - 312	312 - 324	324 - 336	336 - 348	348 - 360	360 - 372	372 - 384	
1994																																
1995																																
1996																																
1997																																
1998		1.000	1.000	1.000	1.000	1.000	1.000	1.000	4.669	2.231	2.058	1.148	1.066	1.091	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
1999	15.900	1.244	2.319	1.021	1.004	1.011	1.041	1.014	1.085	1.078	1.058	1.037	1.005	1.016	1.000	1.124	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000						
2000	1.761	1.262	1.034	1.014	1.018	1.108	1.028	1.038	1.083	1.014	1.013	1.025	1.001	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000							
2001	1.541	1.087	1.075	1.093	1.050	1.021	1.028	1.099	1.106	1.029	1.266	1.019	1.043	1.029	1.094	1.027	1.021	1.029	1.018	1.002	1.012	1.009	1.013	1.009								
2002	10.706	2.111	1.228	1.161	1.078	1.049	1.133	1.134	1.168	1.037	1.019	1.010	1.052	1.053	1.024	1.009	1.061	1.009	1.027	1.025	1.003	1.042	1.014									
2003	3.306	1.453	1.561	1.192	1.187	1.137	1.043	1.129	1.051	1.067	1.192	1.050	1.041	1.048	1.064	1.064	1.030	1.010	1.000	1.014	1.000	1.000										
2004	3.116	1.474	1.254	1.298	1.343	1.122	1.032	1.102	1.122	1.044	1.055	1.050	1.020	1.011	1.008	1.012	1.024	1.006	1.000	1.000	1.000											
2005	11.692	1.138	1.099	1.080	1.052	1.048	1.018	1.026	1.008	1.008	1.017	1.032	1.094	1.026	1.007	1.002	1.011	1.013	1.028	1.006												
2006	4.502	1.556	1.611	1.283	1.183	1.035	1.111	1.026	1.092	1.151	1.063	1.076	1.033	1.035	1.040	1.013	1.009	1.024	1.027													
2007	3.306	1.594	1.127	1.341	1.099	1.033	1.053	1.050	1.036	1.016	1.021	1.020	1.000	1.000	1.000	1.000	1.000	1.000														
2008	2.474	1.276	1.351	1.168	1.027	1.067	1.100	1.125	1.050	1.023	1.021	1.008	1.015	1.004	1.000	1.000	1.000															
2009	10.467	1.861	1.934	1.065	1.456	1.254	1.238	1.223	1.089	1.081	1.048	1.043	1.009	1.021	1.000	1.000																
2010	4.034	1.182	1.691	1.078	1.324	1.134	1.340	1.062	1.386	1.075	1.132	1.132	1.013	1.033	1.095																	
2011	3.325	1.526	1.081	1.124	1.092	1.068	1.074	1.053	1.046	1.001	1.022	1.040	1.264	1.035																		
2012	1.608	1.402	1.175	1.175	1.088	1.109	1.113	1.079	1.045	1.024	1.018	1.011	1.030																			
2013	3.828	1.585	1.391	1.080	1.118	1.066	1.007	1.023	1.036	1.008	1.002	1.048																				
2014	1.000	6.122	3.205	1.209	1.485	1.019	1.292	1.019	1.151	1.154	1.000																					
2015	4.922	1.606	1.295	1.461	1.159	1.453	1.301	1.098	1.005	1.041																						
2016	3.887	1.284	1.170	1.170	1.171	1.054	1.070	1.073	1.084																							
2017	5.527	1.708	1.328	1.185	1.093	1.053	1.062	1.191																								
2018	3.795	1.505	1.208	1.292	1.295	1.078	1.112																									
2019	2.265	1.347	1.192	1.118	1.163	1.070																										
2020	3.694	1.560	1.207	1.173	1.277																											
2021	131.102	1.924	1.210	1.162																												
2022	4.778	1.563	1.379																													
2023	1.520	1.162																														
2024	2.457																															
VOL WTD 3	2.318	1.567	1.262	1.142	1.218	1.067	1.081	1.139	1.052	1.035	1.012	1.026	1.079	1.030	1.036	1.000	1.005	1.015	1.016	1.005	1.001	1.014	1.012	1.006	1.000	1.000	1.000	NA	NA	NA	NA	
VOL WTD 5	3.176	1.482	1.230	1.171	1.180	1.091	1.114	1.117	1.047	1.025	1.030	1.042	1.062	1.020	1.030	1.005	1.012	1.011	1.016	1.006	1.006	1.010	1.009	1.006	1.000	1.000	1.000	NA	NA	NA	NA	
VOL WTD ALL	2.783	1.400	1.260	1.153	1.134	1.075	1.079	1.087	1.084	1.047	1.088	1.037	1.041	1.027	1.036	1.028	1.017	1.014	1.013	1.005	1.005	1.010	1.009	1.006	1.000	1.000	1.000	NA	NA	NA	NA	
ARITH 3	2.918	1.550	1.266	1.151	1.245	1.067	1.081	1.121	1.080	1.068	1.007	1.033	1.103	1.030	1.032	1.000	1.003	1.013	1.018	1.007	1.001	1.017	1.009	1.003	1.000	1.000	1.000	NA	NA	NA	NA	
ARITH 5	28.710	1.511	1.239	1.186	1.200	1.142	1.167	1.081	1.064	1.046	1.035	1.055	1.066	1.019	1.027	1.003	1.009	1.011	1.016	1.009	1.003	1.010	1.005	1.002	1.000	1.000	1.000	NA	NA	NA	NA	
ARITH ALL	9.481	1.636	1.405	1.164	1.164	1.090	1.105	1.078	1.280	1.116	1.118	1.047	1.046	1.029	1.025	1.021	1.014	1.009	1.011	1.006	1.002	1.008	1.005	1.002	1.000	1.000	1.000	NA	NA	NA	NA	
5 YR HI LO	3.643	1.490	1.209	1.173	1.204	1.067	1.158	1.065	1.055	1.025	1.014	1.044	1.019	1.019	1.013	1.001	1.007	1.010	1.018	1.007	1.001	1.003	1.004	1.000	1.000	NA	NA	NA	NA	NA	NA	
7 YR HI LO	3.398	1.536	1.229	1.196	1.213	1.064	1.130	1.065	1.072	1.046	1.022	1.032	1.020	1.024	1.011	1.005	1.015	1.013	1.014	1.004	1.001	1.002	1.004	1.000	1.000	NA	NA	NA	NA	NA	NA	
ALL YR HI LO	4.767	1.475	1.344	1.158	1.156	1.077	1.098	1.074	1.096	1.053	1.063	1.042	1.032	1.027	1.022	1.013	1.011	1.008	1.010	1.004	1.001	1.002	1.004	1.000	1.000	NA	NA	NA	NA	NA	NA	TAIL
SELECTED	1.520	1.475	1.344	1.173	1.180	1.067	1.081	1.074	1.096	1.047	1.030	1.042	1.032	1.027	1.013	1.013	1.017	1.015	1.016	1.009	1.001	1.003	1.009	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.050

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance AST
Paid Losses

Development in Months

BY	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360	372	384
1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1996	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
1997	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
1998	-	16,713	16,713	16,713	16,713	16,713	16,713	16,713	16,713	78,028	174,102	358,349	411,237	438,258	478,042	478,042	478,042	478,042	478,042	478,042	478,042	478,042	478,042	478,042	478,042	478,042	478,042	478,042				
1999	34,176	543,408	676,196	1,567,972	1,601,529	1,608,182	1,625,584	1,692,876	1,717,189	1,863,780	2,008,295	2,125,717	2,204,155	2,214,424	2,250,269	2,250,269	2,529,597	2,529,597	2,532,094	2,532,094	2,532,831	2,532,831	2,532,831	2,532,831	2,532,831	2,532,831	2,532,831					
2000	370,129	651,957	822,756	850,390	862,198	877,375	971,906	999,462	1,037,135	1,123,070	1,139,298	1,154,165	1,182,661	1,184,428	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793						
2001	1,334,769	2,056,418	2,236,336	2,404,395	2,628,060	2,759,085	2,817,023	2,896,871	3,183,541	3,519,996	3,623,500	4,589,112	4,674,733	4,876,595	5,018,242	5,488,608	5,638,087	5,757,861	5,925,597	6,033,763	6,045,530	6,116,687	6,169,987	6,253,097	6,311,605							
2002	25,391	271,845	573,933	704,799	818,350	881,841	924,693	1,047,264	1,187,136	1,386,044	1,436,815	1,464,223	1,479,159	1,556,347	1,638,304	1,677,022	1,692,921	1,796,372	1,812,290	1,861,975	1,909,066	1,913,996	1,994,064	2,020,996								
2003	55,198	182,491	265,162	413,872	493,384	585,783	665,773	694,461	783,706	823,855	878,721	1,047,401	1,100,227	1,145,541	1,200,282	1,276,743	1,358,101	1,398,792	1,412,642	1,412,642	1,432,117	1,432,117	1,432,117									
2004	154,438	481,188	709,451	889,323	1,154,237	1,550,136	1,738,876	1,795,147	1,978,584	2,219,493	2,316,258	2,443,349	2,565,442	2,616,804	2,645,562	2,666,495	2,698,686	2,762,524	2,780,056	2,780,056	2,780,056	2,780,056										
2005	76,161	890,444	1,013,676	1,114,425	1,203,629	1,266,271	1,326,703	1,350,155	1,385,185	1,396,276	1,407,470	1,431,885	1,477,651	1,616,331	1,657,857	1,670,265	1,673,598	1,691,931	1,714,527	1,762,598	1,772,836											
2006	60,491	272,313	423,641	682,375	875,535	1,035,779	1,072,081	1,190,682	1,221,925	1,334,084	1,534,980	1,631,669	1,755,125	1,812,291	1,876,290	1,951,782	1,977,382	1,995,945	2,044,448	2,098,796												
2007	107,082	353,965	564,316	635,862	852,470	936,817	967,505	1,018,844	1,069,756	1,108,422	1,126,553	1,150,527	1,173,608	1,173,608	1,173,608	1,173,608	1,173,608	1,173,608	1,173,608													
2008	76,453	189,175	241,331	325,929	380,673	391,046	417,098	458,918	516,229	541,900	554,141	565,941	570,718	579,066	581,362	581,362	581,362	581,362														
2009	6,274	65,671	122,193	236,292	251,768	366,562	459,776	569,158	696,182	758,059	819,677	858,838	896,129	904,524	923,112	923,112	923,112															
2010	25,118	101,329	119,772	202,531	218,274	289,061	327,938	439,479	466,760	646,920	695,674	787,662	891,779	903,292	933,528	1,021,835																
2011	105,665	351,316	535,992	579,582	651,347	711,550	759,749	815,994	858,956	898,414	899,616	919,162	955,996	1,208,783	1,251,474																	
2012	492,662	792,235	1,110,684	1,305,178	1,533,202	1,668,186	1,849,816	2,059,499	2,222,469	2,323,261	2,380,133	2,422,544	2,449,027	2,523,473																		
2013	89,198	341,477	541,380	753,022	813,524	909,739	970,104	977,192	999,814	1,036,131	1,044,234	1,046,421	1,096,165																			
2014	3,119	3,119	19,091	61,186	74,003	109,866	111,997	144,666	147,359	169,547	195,732	195,732																				
2015	35,104	172,789	277,518	359,484	525,069	608,686	884,338	1,150,455	1,263,610	1,269,343	1,321,825																					
2016	145,829	566,906	727,719	851,131	995,600	1,165,875	1,228,997	1,314,960	1,411,117	1,530,087																						
2017	139,537	771,285	1,317,458	1,749,609	2,072,429	2,264,234	2,384,220	2,531,175	3,015,311																							
2018	153,788	583,697	878,341	1,060,851	1,370,309	1,774,133	1,912,756	2,127,503																								
2019	689,496	1,561,490	2,102,629	2,507,017	2,802,620	3,258,411	3,486,879																									
2020	105,627	390,166	608,554	734,769	861,719	1,100,406																										
2021	6,140	805,000	1,548,565	1,874,323	2,178,304																											
2022	128,434	613,647	959,231	1,322,847																												
2023	463,090	703,696	818,036																													
2024	388,229	953,763																														
2025	1,057,619																															

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance AST
Summary of Incurred Development Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	INC LDM	PAID	INCURRED	CASE	IBNR	UNPAID
RY	ULTIMATE	LOSS	LOSS	RESERVE	RESERVE	LOSS
1994	-	-	-	-	-	-
1995	-	-	-	-	-	-
1996	-	-	-	-	-	-
1997	-	-	-	-	-	-
1998	478,042	478,042	478,042	-	-	-
1999	2,689,230	2,532,831	2,689,230	156,399	-	156,399
2000	1,195,793	1,195,793	1,195,793	-	-	-
2001	6,675,614	6,311,605	6,675,614	364,009	-	364,009
2002	2,099,064	2,020,996	2,099,064	78,068	-	78,068
2003	1,607,917	1,432,117	1,607,917	175,800	-	175,800
2004	3,424,778	2,780,056	3,424,778	644,722	-	644,722
2005	2,153,485	1,772,836	2,153,485	380,649	-	380,649
2006	2,351,840	2,098,796	2,351,840	253,044	-	253,044
2007	1,173,609	1,173,608	1,173,609	1	-	1
2008	581,362	581,362	581,362	-	-	-
2009	963,638	923,112	963,112	40,000	526	40,526
2010	1,449,652	1,021,835	1,434,006	412,171	15,647	427,818
2011	1,483,458	1,251,474	1,467,447	215,973	16,012	231,984
2012	2,636,418	2,523,473	2,580,049	56,577	56,369	112,946
2013	1,295,878	1,096,165	1,262,213	166,048	33,665	199,713
2014	901,454	195,732	844,706	648,974	56,748	705,722
2015	1,823,079	1,321,825	1,686,521	364,696	136,558	501,254
2016	2,645,380	1,530,087	2,432,608	902,522	212,771	1,115,293
2017	5,389,013	3,015,311	4,824,686	1,809,375	564,327	2,373,702
2018	4,182,813	2,127,503	3,382,293	1,254,790	800,520	2,055,310
2019	6,177,257	3,486,879	4,913,212	1,426,333	1,264,045	2,690,379
2020	2,218,282	1,100,406	1,688,380	587,974	529,902	1,117,876
2021	5,160,232	2,178,304	3,654,450	1,476,145	1,505,783	2,981,928
2022	3,750,359	1,322,847	2,502,537	1,179,690	1,247,822	2,427,512
2023	2,917,686	818,036	1,771,154	953,118	1,146,532	2,099,650
2024	3,289,401	953,763	1,797,737	843,974	1,491,665	2,335,638
2025	6,596,673	1,057,619	2,699,078	1,641,459	3,897,595	5,539,054
TOTAL	77,311,410	48,302,412	64,334,922	16,032,510	12,976,488	29,008,998

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance AST
Development of Losses to Ultimate

Development Period in Months

RY	12 - 24	24 - 36	36 - 48	48 - 60	60 - 72	72 - 84	84 - 96	96 - 108	108 - 120	120 - 132	132 - 144	144 - 156	156 - 168	168 - 180	180 - 192	192 - 204	204 - 216	216 - 228	228 - 240	240 - 252	252 - 264	264 - 276	276 - 288	288 - 300	300 - 312	312 - 324	324 - 336	336 - 348	348 - 360	360 - 372	372 - 384	384 - ULT
1994																																1.000
1995																															1.000	1.000
1996																													1.000	1.000	1.000	1.000
1997																												1.000	1.000	1.000	1.000	1.000
1998	0.919	1.000	1.000	1.000	1.000	1.000	1.000	1.000	5.060	1.000	1.000	1.000	0.941	0.860	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1999	2.823	1.728	1.311	1.028	1.000	1.002	1.000	1.223	1.011	1.020	1.017	0.999	0.985	1.000	1.000	1.050	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2000	0.962	1.129	1.031	0.939	0.956	1.047	1.016	1.044	1.052	1.000	1.000	0.998	1.001	0.993	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2001	1.249	1.030	0.860	0.957	1.024	1.053	1.037	1.158	1.088	1.010	1.145	1.020	1.010	1.065	1.015	1.050	1.005	1.014	0.990	1.000	1.000	1.000	0.998	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2002	1.400	0.975	0.747	0.999	1.094	1.051	0.969	1.000	0.961	1.006	1.000	1.208	0.910	1.031	0.994	1.073	1.000	0.978	1.000	0.991	1.000	1.000	0.909	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2003	1.007	0.827	1.143	1.042	1.096	1.030	1.030	1.011	1.061	1.240	0.987	1.006	0.967	0.960	1.071	0.986	0.997	0.967	1.000	0.988	1.109	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2004	1.017	1.163	1.104	1.447	1.013	1.039	1.007	1.279	1.013	0.998	0.994	0.994	0.998	0.988	1.018	1.008	1.016	0.995	1.000	1.160	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2005	0.924	1.035	1.032	0.955	1.137	1.010	1.011	0.988	1.000	1.002	1.000	1.208	1.077	1.004	0.969	1.000	1.000	1.000	1.017	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2006	1.741	1.117	1.068	1.045	1.040	1.074	1.037	1.282	0.879	1.057	1.033	1.025	1.016	1.019	1.000	0.996	1.000	1.012	1.055	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2007	0.990	0.996	0.948	0.974	1.000	1.099	1.009	0.999	0.954	1.000	1.001	0.983	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2008	1.200	1.023	0.966	1.026	1.127	1.000	1.000	1.083	0.941	1.000	1.017	1.000	1.000	0.985	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2009	1.279	1.001	1.295	1.058	1.133	1.003	1.000	1.184	0.977	1.021	1.000	0.978	1.000	0.981	1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2010	0.567	1.112	1.246	1.147	1.203	1.000	1.032	1.197	1.287	1.000	1.126	1.363	1.000	1.000	1.000	1.010	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2011	1.092	1.390	0.942	0.989	1.006	1.023	1.038	1.145	1.049	1.000	1.000	1.103	1.183	1.000	1.000	1.010	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2012	1.145	1.406	0.953	1.053	1.078	1.053	1.058	0.995	0.995	0.983	1.005	1.009	1.003	1.011	1.000	1.010	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2013	1.186	1.007	1.090	1.038	0.971	1.031	1.000	1.102	1.005	0.978	1.000	1.000	1.005	1.011	1.000	1.010	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2014	5.046	0.919	1.039	1.000	0.981	1.000	1.000	1.023	0.995	1.000	1.000	1.039	1.005	1.011	1.000	1.010	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2015	1.533	0.993	1.033	1.548	0.987	1.118	1.153	1.009	1.000	0.999	1.013	1.039	1.005	1.011	1.000	1.010	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2016	1.667	1.154	1.165	0.995	1.110	1.000	1.000	1.343	1.000	1.006	1.013	1.039	1.005	1.011	1.000	1.010	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2017	2.319	1.027	1.185	1.010	1.199	1.000	1.000	1.078	1.027	1.006	1.013	1.039	1.005	1.011	1.000	1.010	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2018	1.078	1.126	1.096	1.207	1.002	1.147	1.050	1.107	1.027	1.006	1.013	1.039	1.005	1.011	1.000	1.010	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2019	1.322	1.111	1.074	1.013	1.037	1.025	1.017	1.107	1.027	1.006	1.013	1.039	1.005	1.011	1.000	1.010	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2020	1.194	1.267	1.022	1.035	0.989	1.045	1.017	1.107	1.027	1.006	1.013	1.039	1.005	1.011	1.000	1.010	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2021	1.291	1.053	1.139	1.096	1.075	1.045	1.017	1.107	1.027	1.006	1.013	1.039	1.005	1.011	1.000	1.010	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2022	1.331	1.191	1.020	1.061	1.075	1.045	1.017	1.107	1.027	1.006	1.013	1.039	1.005	1.011	1.000	1.010	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2023	1.399	0.997	1.099	1.061	1.075	1.045	1.017	1.107	1.027	1.006	1.013	1.039	1.005	1.011	1.000	1.010	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2024	1.326	1.111	1.099	1.061	1.075	1.045	1.017	1.107	1.027	1.006	1.013	1.039	1.005	1.011	1.000	1.010	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2025	1.336	1.111	1.099	1.061	1.075	1.045	1.017	1.107	1.027	1.006	1.013	1.039	1.005	1.011	1.000	1.010	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

RY	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360	372	384	ULT
1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1996	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1997	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1998	127,001	116,714	116,714	116,714	116,714	116,714	116,714	116,714	116,714	590,611	590,611	590,611	590,611	555,611	478,042	478,042	478,042	478,042	478,042	478,042	478,042	478,042	478,042	478,042	478,042	478,042	478,042	478,042	478,042	478,042	478,042	478,042	478,042
1999	308,314	870,343	1,504,209	1,971,983	2,027,001	2,026,436	2,030,044	2,030,044	2,482,580	2,510,580	2,561,027	2,603,820	2,601,196	2,561,795	2,561,795	2,561,795	2,689,230	2,689,230	2,689,230	2,689,230	2,689,230	2,689,230	2,689,230	2,689,230	2,689,230	2,689,230	2,689,230	2,689,230	2,689,230	2,689,230	2,689,230	2,689,230	2,689,230	2,689,230
2000	1,026,004	986,880	1,114,568	1,148,569	1,078,568	1,030,942	1,079,607	1,097,363	1,145,515	1,205,440	1,205,440	1,205,440	1,202,646	1,203,928	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793
2001	3,289,000	4,108,645	4,233,509	3,642,391	3,484,058	3,566,802	3,756,792	3,895,867	4,511,171	4,910,015	4,958,003	5,677,351	5,790,979	5,849,503	6,227,944	6,318,643	6,632,090	6,664,686	6,756,186	6,690,965	6,690,965	6,690,965	6,690,965	6,690,965	6,675,614	6,675,614	6,675,614	6,675,614	6,675,614	6,675,614	6,675,614	6,675,614	6,675,614	6,675,614
2002	1,797,008	2,516,405	2,453,720	1,833,500	1,832,500	2,004,966	2,106,298	2,041,647	2,041,647	1,961,513	1,972,533	1,972,533	2,381,937	2,167,740	2,234,838	2,221,133	2,382,845	2,382,845	2,330,982	2,330,982	2,309,328	2,309,328	2,309,328	2,099,064	2,099,064	2,099,064	2,099,064	2,099,064	2,099,064	2,099,064	2,099,064	2,099,064	2,099,064	2,099,064
2003	1,020,098	1,027,589	849,418	970,556	1,011,191	1,108,245	1,141,783	1,175,610	1,188,633	1,261,406	1,563,735	1,542,848	1,552,847	1,501,010	1,441,010	1,543,256	1,520,985	1,516,742	1,466,741	1,466,741	1,449,461	1,607,917	1,607,917	1,607,917	1,607,917	1,607,917	1,607,917	1,607,917	1,607,917	1,607,917	1,607,917	1,607,917	1,607,917	1,607,917
2004	1,126,417	1,145,722	1,332,467	1,471,542	2,129,824	2,157,171	2,241,962	2,257,589	2,888,114	2,925,815	2,920,815	2,902,227	2,885,920	2,880,127	2,846,805	2,896,847	2,921,054	2,966,831	2,953,221	2,953,221	3,424,778	3,424,778	3,424,778	3,424,778	3,424,778	3,424,778	3,424,778	3,424,778	3,424,778	3,424,778	3,424,778	3,424,778	3,424,778	3,424,778
2005	1,543,485	1,425,516	1,475,649	1,522,726	1,454,148	1,653,994	1,671,234	1,688,897	1,668,486	1,668,486	1,672,486	1,672,486	2,019,809	2,175,022	2,184,707	2,117,185	2,117,185	2,117,185	2,117,185	2,153,485	2,153,485	2,153,485	2,153,485	2,153,485	2,153,485	2,153,485	2,153,485	2,153,485	2,153,485	2,153,485	2,153,485	2,153,485	2,153,485	2,153,485
2006	674,273	1,174,072	1,310,933	1,399,553	1,462,786	1,521,109	1,634,236	1,694,721	2,173,374	1,909,874	2,018,289	2,085,285	2,138,100	2,172,164	2,212,418	2,212,418	2,203,318	2,203,318	2,228,883	2,351,840	2,351,840	2,351,840	2,351,840	2,351,840	2,351,840	2,351,840	2,351,840	2,351,840	2,351,840	2,351,840	2,351,840	2,351,840	2,351,840	2,351,840
2007	1,238,240	1,225,463	1,220,733	1,156,901	1,127,089	1,127,090	1,238,935	1,250,577	1,249,903	1,192,870	1,192,870	1,194,026	1,173,608	1,173,608	1,173,608	1,173,608	1,173,608	1,173,608	1,173,609	1,173,609	1,173,609	1,173,609	1,173,609	1,173,609	1,173,609	1,173,609	1,173,609	1,173,609	1,173,609	1,173,609	1,173,609	1,173,609	1,173,609	1,173,609
2008	415,004	497,948	509,298	492,059	504,948	569,232	569,232	569,232	616,446	580,293	580,153	590,261	590,261	590,261	581,362	581,362	581,362	581,362	581,362	581,362	581,362	581,362	581,362	581,362	581,362	581,362	581,362	581,362	581,362	581,362	581,362	581,362	581,362
2009	426,280	545,273	545,773	706,544	747,814	847,182	849,952	849,952	1,006,233	982,683	1,003,653	1,003,653	981,649	981,649	963,112	963,112	963,112	963,638	963,638	963,638	963,638	963,638	963,638	963,638	963,638	963,638	963,638	963,638	963,638	963,638	963,638	963,638	963,638
2010	542,005	307,495	341,816	426,049	488,528	587,710	587,710	606,228	725,760	933,806	933,806	1,051,870	1,434,006	1,434,006	1,434,006	1,434,006	1,448,861	1,449,652	1,449,652	1,449,652	1,449,652	1,449,652	1,449,652	1,449,652	1,449,652	1,449,652	1,449,652	1,449,652	1,449,652	1,449,652	1,449,652	1,449,652	1,449,652	1,449,652
2011	620,290	677,052	941,166	886,347	876,177	881,632	901,896	935,803	1,071,755	1,124,802	1,124,802	1,124,802	1,240,503	1,467,447	1,467,447	1,467,447	1,482,648	1,483,458	1,483,458	1,483,458	1,483,458	1,483,458	1,483,458	1,483,458	1,483,458	1,483,458	1,483,458	1,483,458	1,483,458	1,483,458	1,483,458	1,483,458	1,483,458	1,483,458
2012	1,343,875	1,538,925	2,163,183	2,062,128	2,171,132	2,339,654	2,464,291	2,607,826	2,593,724	2,580,382	2,536,632	2,550,471	2,572,226	2,580,049	2,607,963	2,607,963	2,634,980	2,636,418	2,636,418	2,636,418	2,636,418	2,636,418	2,636,418	2,636,418	2,636,418	2,636,418	2,636,418	2,636,418	2,636,418	2,636,418	2,636,418	2,636,418	2,636,418	2,636,418
2013	860,008	1,020,291	1,027,875	1,120,854	1,163,773	1,130,369	1,165,331	1,165,331	1,284,396	1,290,963	1,262,213	1,262,213	1,262,213	1,268,171	1,281,891	1,281,891	1,295,171	1,295,878	1,295,878	1,295,878	1,295,878	1,295,878	1,295,878	1,295,878	1,295,878	1,295,878	1,295,878	1,295,878	1,295,878	1,295,878	1,295,878	1,295,878	1,295,878	1,295,878
2014	175,503	885,620	814,206	845,942	845,942	830,162	830,162	830,162	848,925	844,706	844,706	844,706	878,035	882,180	891,724	891,724	900,962	901,454	901,454	901,454	901,454	901,454	901,454	901,454	901,454	901,454	901,454	901,454	901,454	901,454	901,454	901,454	901,454
2015	540,144	827,915	821,797	848,986	1,314,585	1,297,946	1,450,916	1,673,552	1,688,085	1,688,085	1,686,521	1,708,313	1,775,718	1,784,100	1,803,402	1,803,402	1,822,084	1,823,079	1,823,079	1,823,079	1,823,079	1,823,079	1,823,079	1,823,079	1,823,079	1,823,079	1,823,079	1,823,079	1,823,079	1,823,079	1,823,079	1,823,079	1,823,079	1,823,079
2016	732,004	1,219,943	1,407,791	1,639,699	1,631,067	1,810,869	1,810,869	1,810,869	2,432,608	2,432,608	2,447,227	2,478,849	2,576,656	2,588,819	2,616,827	2,616,827	2,643,936	2,645,380	2,645,380	2,645,380	2,645,380	2,645,380	2,645,380	2,645,380	2,645,380	2,645,380	2,645,380	2,645,380	2,645,380	2,645,380	2,645,380	2,645,380	2,645,380	2,645,380
2017	1,308,376	3,034,614	3,117,194	3,693,863	3,731,363	4,475,724	4,475,724	4,475,724	4,824,686	4,955,568	4,985,349	5,049,767	5,249,014	5,273,790	5,330,847	5,330,847	5,386,072	5,389,013	5,389,013	5,389,013	5,389,013	5,389,013	5,389,013	5,389,013	5,389,013	5,389,013	5,389,013	5,389,013	5,389,013	5,389,013	5,389,013	5,389,013	5,389,013	5,389,013
2018	1,743,651	1,880,233	2,117,839	2,320,790	2,802,029	2,808,645	3,221,353	3,382,293	3,744,797	3,846,384	3,869,500	3,919,500	4,074,150	4,093,381	4,137,667	4,137,667	4,180,531	4,182,813	4,182,813	4,182,813	4,182,813	4,182,813	4,182,813	4,182,813	4,182,813	4,182,813	4,182,813	4,182,813	4,182,813	4,182,813	4,182,813	4,182,813	4,182,813	4,182,813
2019	2,895,383	3,827,313	4,250,591	4,565,470	4,624,173	4,795,400	4,913,212	4,995,034	5,530,387	5,680,413	5,714,550	5,788,391	6,016,781	6,045,181	6,110,584	6,110,584	6,173,886	6,177,257	6,177,257	6,177,257	6,177,257	6,177,257	6,177,257	6,177,257	6,177,257	6,177,257	6,177,257	6,177,257	6,177,257	6,177,257	6,177,257	6,177,257	6,177,257	6,177,257
2020	1,066,901	1,273,982	1,613,963	1,649,858	1,707,075	1,688,380	1,764,358	1,793,740	1,985,988	2,039,863	2,052,122	2,078,638	2,160,654	2,170,853	2,194,339	2,194,339	2,217,072	2,218,282	2,218,282	2,218,282	2,218,282	2,218,282	2,218,282	2,218,282	2,218,282	2,218,282	2,218,282	2,218,282	2,218,282	2,218,282	2,218,282	2,218,282	2,218,282	2,218,282
2021	2,154,103	2,780,016	2,927,030	3,334,726	3,654,450	3,927,559	4,104,300	4,172,650	4,619,863	4,745,188	4,773,705	4,835,389	5,026,177	5,049,901	5,104,536	5,104,536	5,157,416	5,160,232	5,160,232	5,160,232	5,160,232	5,160,232	5,160,232	5,160,232	5,160,232	5,160,232	5,160,232	5,160,232	5,160,232	5,160,232	5,160,232	5,160,232	5,160,232	5,160,232
2022	1,548,655	2,060,642	2,453,496	2,502,537	2,655,985	2,854,475	2,982,927	3,032,603	3,357,629	3,448,713	3,469,438	3,514,269	3,652,930	3,670,173	3,709,880	3,709,880	3,748,312	3,750,359	3,750,359	3,750,359	3,750,359	3,750,359	3,750,359	3,750,359	3,750,359	3,750,359	3,750,359	3,750,359	3,750,359	3,750,359	3,750,359	3,750,359	3,750,359	3,750,359
2023	1,270,205	1,776,677	1,771,154	1,946,911	2,066,290	2,220,710	2,320,643	2,359,290	2,612,151	2,683,012	2,699,137	2,734,013	2,841,889	2,855,303	2,886,194	2,886,194	2,916,093	2,917,686	2,917,686	2,917,686	2,917,686	2,917,686	2,917,686	2,917,686	2,917,686	2,917,686	2,917,686	2,917,686	2,917,686	2,917,686	2,917,686	2,917,686	2,917,686	2,917,686
2024	1,355,742	1,797,737	1,996,800	2,194,949	2,329,537	2,503,631	2,616,295	2,659,865	2,944,941	3,024,830	3,043,009	3,082,329	3,203,947	3,219,070	3,253,897	3,253,897	3,287,606	3,289,401	3,289,401	3,289,401	3,289,401	3,289,401	3,289,401	3,289,401	3,289,401	3,289,401	3,289,401	3,289,401	3,289,401	3,289,401	3,289,401	3,289,401	3,289,401	3,289,401
2025	2,699,078	3,605,240	4,004,448	4,401,823	4,671,729	5,020,863	5,246,803	5,334,180	5,905,882	6,066,094	6,102,549	6,181,403	6,425,301	6,455,629	6,525,473	6,525,473	6,593,073	6,596,673	6,596,673	6,596,673	6,596,673	6,596,673	6,596,673	6,596,673	6,596,673	6,596,673	6,596,673	6,596,673	6,596,673	6,596,673	6,596,673	6,596,673	6,596,673	6,596,673

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance AST
Selection of Loss Development Factors

Development Period in Months

AY	12 - 24	24 - 36	36 - 48	48 - 60	60 - 72	72 - 84	84 - 96	96 - 108	108 - 120	120 - 132	132 - 144	144 - 156	156 - 168	168 - 180	180 - 192	192 - 204	204 - 216	216 - 228	228 - 240	240 - 252	252 - 264	264 - 276	276 - 288	288 - 300	300 - 312	312 - 324	324 - 336	336 - 348	348 - 360	360 - 372	372 - 384	
1994																															
1995																															
1996																															
1997																															
1998	0.919	1.000	1.000	1.000	1.000	1.000	1.000	1.000	5.060	1.000	1.000	1.000	0.941	0.860	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
1999	2.823	1.728	1.311	1.028	1.000	1.002	1.000	1.223	1.011	1.020	1.017	0.999	0.985	1.000	1.000	1.050	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
2000	0.962	1.129	1.031	0.939	0.956	1.047	1.016	1.044	1.052	1.000	1.000	0.998	1.001	0.993	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
2001	1.249	1.030	0.860	0.957	1.024	1.053	1.037	1.158	1.088	1.010	1.145	1.020	1.010	1.065	1.015	1.050	1.005	1.014	0.990	1.000	1.000	1.000	1.000	1.000	0.998						
2002	1.400	0.975	0.747	0.999	1.094	1.051	0.969	1.000	0.961	1.006	1.000	1.208	0.910	1.031	0.994	1.073	1.000	0.978	1.000	0.991	1.000	1.000	0.909								
2003	1.007	0.827	1.143	1.042	1.096	1.030	1.030	1.011	1.061	1.240	0.987	1.006	0.967	0.960	1.071	0.986	0.997	0.967	1.000	0.988	1.109	1.000									
2004	1.017	1.163	1.104	1.447	1.013	1.039	1.007	1.279	1.013	0.998	0.994	0.994	0.998	0.988	1.018	1.008	1.016	0.995	1.000	1.160	1.000										
2005	0.924	1.035	1.032	0.955	1.137	1.010	1.011	0.988	1.000	1.002	1.000	1.208	1.077	1.004	0.969	1.000	1.000	1.000	1.017	1.000											
2006	1.741	1.117	1.068	1.045	1.040	1.074	1.037	1.282	0.879	1.057	1.033	1.025	1.016	1.019	1.000	0.996	1.000	1.012	1.055												
2007	0.990	0.996	0.948	0.974	1.000	1.099	1.009	0.999	0.954	1.000	1.001	0.983	1.000	1.000	1.000	1.000	1.000	1.000													
2008	1.200	1.023	0.966	1.026	1.127	1.000	1.000	1.083	0.941	1.000	1.017	1.000	1.000	0.985	1.000	1.000	1.000														
2009	1.279	1.001	1.295	1.058	1.133	1.003	1.000	1.184	0.977	1.021	1.000	0.978	1.000	0.981	1.000	1.000															
2010	0.567	1.112	1.246	1.147	1.203	1.000	1.032	1.197	1.287	1.000	1.126	1.363	1.000	1.000	1.000																
2011	1.092	1.390	0.942	0.989	1.006	1.023	1.038	1.145	1.049	1.000	1.000	1.103	1.183	1.000																	
2012	1.145	1.406	0.953	1.053	1.078	1.053	1.058	0.995	0.995	0.983	1.005	1.009	1.003																		
2013	1.186	1.007	1.090	1.038	0.971	1.031	1.000	1.102	1.005	0.978	1.000	1.000																			
2014	5.046	0.919	1.039	1.000	0.981	1.000	1.000	1.023	0.995	1.000	1.000																				
2015	1.533	0.993	1.033	1.548	0.987	1.118	1.153	1.009	1.000	0.999																					
2016	1.667	1.154	1.165	0.995	1.110	1.000	1.000	1.343	1.000																						
2017	2.319	1.027	1.185	1.010	1.199	1.000	1.000	1.078																							
2018	1.078	1.126	1.096	1.207	1.002	1.147	1.050																								
2019	1.322	1.111	1.074	1.013	1.037	1.025																									
2020	1.194	1.267	1.022	1.035	0.989																										
2021	1.291	1.053	1.139	1.096																											
2022	1.331	1.191	1.020																												
2023	1.399	0.997																													
2024	1.326																														
VOL WTD 3	1.350	1.081	1.070	1.046	1.017	1.044	1.017	1.124	0.999	0.992	1.003	1.028	1.045	0.995	1.000	1.000	1.000	1.005	1.022	1.069	1.022	1.000	0.979	0.999	1.000	1.000	1.000	NA	NA	NA	NA	
VOL WTD 5	1.310	1.111	1.076	1.061	1.075	1.045	1.033	1.113	0.999	0.990	1.020	1.071	1.034	0.995	1.000	0.999	1.005	0.996	1.014	1.028	1.011	1.000	0.984	0.999	1.000	1.000	1.000	NA	NA	NA	NA	
VOL WTD ALL	1.302	1.095	1.041	1.054	1.053	1.041	1.023	1.115	1.027	1.015	1.032	1.048	1.005	1.011	1.006	1.025	1.003	1.000	1.004	1.022	1.009	1.000	0.984	0.999	1.000	1.000	1.000	NA	NA	NA	NA	
ARITH 3	1.352	1.080	1.061	1.048	1.009	1.057	1.017	1.143	0.998	0.992	1.002	1.037	1.062	0.994	1.000	1.000	1.000	1.004	1.024	1.049	1.036	1.000	0.970	0.999	1.000	1.000	1.000	NA	NA	NA	NA	
ARITH 5	1.308	1.124	1.070	1.072	1.068	1.058	1.041	1.111	0.999	0.992	1.026	1.091	1.037	0.993	1.000	0.999	1.003	0.995	1.014	1.028	1.022	1.000	0.982	0.999	1.000	1.000	1.000	NA	NA	NA	NA	
ARITH ALL	1.445	1.107	1.060	1.067	1.052	1.037	1.021	1.107	1.228	1.017	1.019	1.056	1.006	0.992	1.005	1.013	1.002	0.997	1.007	1.017	1.016	1.000	0.982	0.999	1.000	1.000	1.000	NA	NA	NA	NA	
5 YR HI LO	1.316	1.118	1.064	1.048	1.050	1.047	1.017	1.068	0.998	0.994	1.002	1.037	1.001	0.995	1.000	1.000	1.000	0.998	1.006	0.997	1.000	1.000	1.000	1.000	1.000	NA	NA	NA	NA	NA	NA	
7 YR HI LO	1.293	1.102	1.099	1.072	1.025	1.035	1.022	1.071	1.010	0.996	1.005	1.019	1.004	0.998	1.000	0.999	1.000	0.997	1.003	0.998	1.000	1.000	1.000	1.000	1.000	NA	NA	NA	NA	NA	NA	
ALL YR HI LO	1.336	1.093	1.063	1.051	1.049	1.033	1.017	1.101	1.023	1.006	1.013	1.039	1.000	0.997	1.002	1.010	1.001	0.998	1.002	0.998	1.000	1.000	1.000	1.000	1.000	NA	NA	NA	NA	NA	NA	Tail
SELECTED	1.336	1.111	1.099	1.061	1.075	1.045	1.017	1.107	1.027	1.006	1.013	1.039	1.005	1.011	1.000	1.010	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance AST
Incurred Losses

	Development in Months																																	
AY	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360	372	384		
1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
1996	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
1997	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
1998	127,001	116,714	116,714	116,714	116,714	116,714	116,714	116,714	116,714	590,611	590,611	590,611	590,611	555,611	478,042	478,042	478,042	478,042	478,042	478,042	478,042	478,042	478,042	478,042	478,042	478,042	478,042	478,042						
1999	308,314	870,343	1,504,209	1,971,983	2,027,001	2,026,436	2,030,044	2,030,044	2,482,580	2,510,580	2,561,027	2,603,820	2,601,196	2,561,795	2,561,795	2,561,795	2,689,230	2,689,230	2,689,230	2,689,230	2,689,230	2,689,230	2,689,230	2,689,230	2,689,230	2,689,230	2,689,230							
2000	1,026,004	986,880	1,114,568	1,148,569	1,078,568	1,030,942	1,079,607	1,097,363	1,145,515	1,205,440	1,205,440	1,205,440	1,202,646	1,203,928	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793	1,195,793								
2001	3,289,000	4,108,645	4,233,509	3,642,391	3,484,058	3,566,802	3,756,792	3,895,867	4,511,171	4,910,015	4,958,003	5,677,351	5,790,979	5,849,503	6,227,944	6,318,643	6,632,090	6,664,686	6,756,186	6,690,965	6,690,965	6,690,965	6,690,965	6,690,965	6,675,614									
2002	1,797,008	2,516,405	2,453,720	1,833,500	1,832,500	2,004,966	2,106,298	2,041,647	2,041,647	1,961,513	1,972,533	1,972,533	2,381,937	2,167,740	2,234,838	2,221,133	2,382,845	2,382,845	2,330,982	2,330,982	2,309,328	2,309,328	2,309,328	2,099,064										
2003	1,020,098	1,027,589	849,418	970,556	1,011,191	1,108,245	1,141,783	1,175,610	1,188,633	1,261,406	1,563,735	1,542,848	1,552,847	1,501,010	1,441,010	1,543,256	1,520,985	1,516,742	1,466,741	1,466,741	1,449,461	1,607,917	1,607,917											
2004	1,126,417	1,145,722	1,332,467	1,471,542	2,129,824	2,157,171	2,241,962	2,257,589	2,888,114	2,925,815	2,920,815	2,902,227	2,885,920	2,880,127	2,846,805	2,896,847	2,921,054	2,966,831	2,953,221	2,953,221	3,424,778	3,424,778												
2005	1,543,485	1,425,516	1,475,649	1,522,726	1,454,148	1,653,994	1,671,234	1,688,897	1,668,486	1,668,486	1,672,486	1,672,486	2,019,809	2,175,022	2,184,707	2,117,185	2,117,185	2,117,185	2,117,185	2,153,485	2,153,485													
2006	674,273	1,174,072	1,310,933	1,399,553	1,462,786	1,521,109	1,634,236	1,694,721	2,173,374	1,909,874	2,018,289	2,085,285	2,138,100	2,172,164	2,212,418	2,212,418	2,203,318	2,203,318	2,228,883	2,351,840														
2007	1,238,240	1,225,463	1,220,733	1,156,901	1,127,089	1,127,090	1,238,935	1,250,577	1,249,903	1,192,870	1,192,870	1,194,026	1,173,608	1,173,608	1,173,608	1,173,608	1,173,608	1,173,608	1,173,609															
2008	415,004	497,948	509,298	492,059	504,948	569,232	569,232	569,232	616,446	580,293	580,153	590,261	590,261	590,261	581,362	581,362	581,362	581,362																
2009	426,280	545,273	545,773	706,544	747,814	847,182	849,952	849,952	1,006,233	982,683	1,003,653	1,003,653	981,649	981,649	963,112	963,112	963,112																	
2010	542,005	307,495	341,816	426,049	488,528	587,710	587,710	606,228	725,760	933,806	933,806	1,051,870	1,434,006	1,434,006	1,434,006	1,434,006																		
2011	620,290	677,052	941,166	886,347	876,177	881,632	901,896	935,803	1,071,755	1,124,802	1,124,802	1,124,802	1,240,503	1,467,447	1,467,447																			
2012	1,343,875	1,538,925	2,163,183	2,062,128	2,171,132	2,339,654	2,464,291	2,607,826	2,593,724	2,580,382	2,536,632	2,550,471	2,572,226	2,580,049																				
2013	860,008	1,020,291	1,027,875	1,120,854	1,163,773	1,130,369	1,165,331	1,165,331	1,284,396	1,290,963	1,262,213	1,262,213	1,262,213																					
2014	175,503	885,620	814,206	845,942	845,942	830,162	830,162	830,162	848,925	844,706	844,706	844,706																						
2015	540,144	827,915	821,797	848,986	1,314,585	1,297,946	1,450,916	1,673,552	1,688,085	1,688,085	1,686,521																							
2016	732,004	1,219,943	1,407,791	1,639,699	1,631,067	1,810,869	1,810,869	1,810,869	2,432,608	2,432,608																								
2017	1,308,376	3,034,614	3,117,194	3,693,863	3,731,363	4,475,724	4,475,724	4,475,724	4,824,686																									
2018	1,743,651	1,880,233	2,117,839	2,320,790	2,802,029	2,808,645	3,221,353	3,382,293																										
2019	2,895,383	3,827,313	4,250,591	4,565,470	4,624,173	4,795,400	4,913,212																											
2020	1,066,901	1,273,982	1,613,963	1,649,858	1,707,075	1,688,380																												
2021	2,154,103	2,780,016	2,927,030	3,334,726	3,654,450																													
2022	1,548,655	2,060,642	2,453,496	2,502,537																														
2023	1,270,205	1,776,677	1,771,154																															
2024	1,355,742	1,797,737																																
2025	2,699,078																																	

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance AST
Determination of Pure Premium

(1) RY	(2) PAID LDM ULTIMATE	(3) INC LDM ULTIMATE	(4) SELECTED ULTIMATE	(5) POLICIES IN FORCE	(6) PURE PREMIUM
1994					
1995					
1996					
1997					
1998					
1999					
2000					
2001					
2002					
2003					
2004					
2005					
2006					
2007					
2008					
2009	1,040,668	963,638	1,002,153	563	1,780
2010	1,434,006	1,449,652	1,441,829	578	2,495
2011	1,467,447	1,483,458	1,475,452	810	1,822
2012	2,997,721	2,636,418	2,817,070	975	2,889
2013	1,344,459	1,295,878	1,320,168	1,003	1,316
2014	844,706	901,454	873,080	1,030	848
2015	1,740,457	1,823,079	1,781,768	1,021	1,745
2016	2,432,608	2,645,380	2,538,994	1,010	2,514
2017	4,824,686	5,389,013	5,106,849	1,005	5,081
2018	3,455,412	4,182,813	3,819,113	999	3,823
2019	6,122,048	6,177,257	6,149,653	989	6,218
2020	2,060,993	2,218,282	2,139,637	978	2,188
2021	4,815,156	5,160,232	4,987,694	965	5,169
2022	3,430,498	3,750,359	3,590,429	942	3,811
2023	2,851,825	2,917,686	2,884,755	914	3,156
2024	4,905,836	3,289,401	4,097,619	892	4,594
2025	8,266,508	6,596,673	7,431,591	886	8,388
TOTAL	54,035,033	52,880,675	53,457,854	15,560	3,436

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance AST
Paid Bornhuetter-Ferguson Method

(1) RY	(2) POLICIES IN FORCE	(3) PROJECTED PURE PREM	(4) TRENDED PURE PREM	(5) DETRENDED PURE PREM	(6) EXPECTED LOSSES	(7) PERCENT UNPAID	(8) EXPECTED UNPAID	(9) PAID LOSSES	(10) INDICATED ULTIMATE	(11) INCURRED LOSSES	(12) IBNR RESERVE	(13) CASE RESERVE	(14) ULTIMATE PURE PREM
1994													
1995													
1996													
1997													
1998													
1999													
2000													
2001													
2002													
2003													
2004													
2005													
2006													
2007													
2008													
2009	563	1,780	3,039	2,409	1,356,139	11.3%	153,193	923,112	1,076,304	963,112	113,193	40,000	1,912
2010	578	2,495	4,119	2,491	1,439,607	12.4%	178,713	1,021,835	1,200,548	1,434,006	(233,458)	412,171	2,077
2011	810	1,822	2,909	2,575	2,086,036	13.6%	283,141	1,251,474	1,534,615	1,467,447	67,168	215,973	1,895
2012	975	2,889	4,462	2,663	2,596,342	15.8%	410,749	2,523,473	2,934,222	2,580,049	354,173	56,577	3,009
2013	1,003	1,316	1,966	2,753	2,761,715	18.5%	510,032	1,096,165	1,606,197	1,262,213	343,984	166,048	1,601
2014	1,030	848	1,224	2,847	2,932,484	21.8%	638,677	195,732	834,409	844,706	(10,297)	648,974	810
2015	1,021	1,745	2,438	2,944	3,005,693	24.1%	722,959	1,321,825	2,044,784	1,686,521	358,263	364,696	2,003
2016	1,010	2,514	3,396	3,044	3,074,403	27.5%	844,590	1,530,087	2,374,677	2,432,608	(57,932)	902,522	2,351
2017	1,005	5,081	6,640	3,147	3,163,196	33.8%	1,070,551	3,015,311	4,085,862	4,824,686	(738,824)	1,809,375	4,066
2018	999	3,823	4,831	3,254	3,251,218	38.4%	1,249,437	2,127,503	3,376,940	3,382,293	(5,353)	1,254,790	3,380
2019	989	6,218	7,599	3,365	3,328,108	43.0%	1,432,548	3,486,879	4,919,427	4,913,212	6,215	1,426,333	4,974
2020	978	2,188	2,586	3,480	3,402,988	46.6%	1,586,063	1,100,406	2,686,470	1,688,380	998,089	587,974	2,747
2021	965	5,169	5,908	3,598	3,471,918	54.8%	1,901,274	2,178,304	4,079,579	3,654,450	425,129	1,476,145	4,228
2022	942	3,811	4,214	3,720	3,504,399	61.4%	2,153,055	1,322,847	3,475,902	2,502,537	973,365	1,179,690	3,690
2023	914	3,156	3,374	3,847	3,515,843	71.3%	2,507,336	818,036	3,325,372	1,771,154	1,554,218	953,118	3,638
2024	892	4,594	4,750	3,977	3,547,878	80.6%	2,858,121	953,763	3,811,884	1,797,737	2,014,147	843,974	4,273
2025	886	8,388	8,388	4,113	3,643,829	87.2%	3,177,637	1,057,619	4,235,256	2,699,078	1,536,178	1,641,459	4,780
TOTAL	15,560				50,081,796		21,678,078	25,924,369	47,602,447	39,904,187	7,698,260	13,979,818	3,059

Pure Premium Selection	
3-Year Average Ex. Latest	4,113
5-Year Average Ex. Latest	4,166
All Year Average Ex. Latest	3,966
Selected Pure Premium	4,113

Trend = 1.034

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Insurance AST
Incurred Bornhuetter-Ferguson Method

(1) RY	(2) POLICIES IN FORCE	(3) PROJECTED PURE PREM	(4) TRENDED PURE PREM	(5) DETRENDED PURE PREM	(6) EXPECTED LOSSES	(7) PERCENT IBNR	(8) EXPECTED IBNR	(9) INCURRED LOSSES	(10) INDICATED ULTIMATE	(11) PAID LOSSES	(12) UNPAID LOSS	(13) CASE RESERVE	(14) ULTIMATE PURE PREM
1994													
1995													
1996													
1997													
1998													
1999													
2000													
2001													
2002													
2003													
2004													
2005													
2006													
2007													
2008													
2009	563	1,780	3,039	2,409	1,356,139	0.1%	740	963,112	963,852	923,112	40,740	40,000	1,712
2010	578	2,495	4,119	2,491	1,439,607	1.1%	15,538	1,434,006	1,449,544	1,021,835	427,709	412,171	2,508
2011	810	1,822	2,909	2,575	2,086,036	1.1%	22,515	1,467,447	1,489,962	1,251,474	238,488	215,973	1,839
2012	975	2,889	4,462	2,663	2,596,342	2.1%	55,512	2,580,049	2,635,562	2,523,473	112,089	56,577	2,703
2013	1,003	1,316	1,966	2,753	2,761,715	2.6%	71,745	1,262,213	1,333,958	1,096,165	237,794	166,048	1,330
2014	1,030	848	1,224	2,847	2,932,484	6.3%	184,604	844,706	1,029,310	195,732	833,578	648,974	999
2015	1,021	1,745	2,438	2,944	3,005,693	7.5%	225,141	1,686,521	1,911,663	1,321,825	589,837	364,696	1,872
2016	1,010	2,514	3,396	3,044	3,074,403	8.0%	247,278	2,432,608	2,679,887	1,530,087	1,149,800	902,522	2,653
2017	1,005	5,081	6,640	3,147	3,163,196	10.5%	331,244	4,824,686	5,155,930	3,015,311	2,140,619	1,809,375	5,130
2018	999	3,823	4,831	3,254	3,251,218	19.1%	622,229	3,382,293	4,004,522	2,127,503	1,877,019	1,254,790	4,009
2019	989	6,218	7,599	3,365	3,328,108	20.5%	681,027	4,913,212	5,594,239	3,486,879	2,107,360	1,426,333	5,656
2020	978	2,188	2,586	3,480	3,402,988	23.9%	812,904	1,688,380	2,501,284	1,100,406	1,400,878	587,974	2,558
2021	965	5,169	5,908	3,598	3,471,918	29.2%	1,013,124	3,654,450	4,667,573	2,178,304	2,489,269	1,476,145	4,837
2022	942	3,811	4,214	3,720	3,504,399	33.3%	1,165,986	2,502,537	3,668,523	1,322,847	2,345,676	1,179,690	3,894
2023	914	3,156	3,374	3,847	3,515,843	39.3%	1,381,584	1,771,154	3,152,737	818,036	2,334,702	953,118	3,449
2024	892	4,594	4,750	3,977	3,547,878	45.3%	1,608,878	1,797,737	3,406,614	953,763	2,452,851	843,974	3,819
2025	886	8,388	8,388	4,113	3,643,829	59.1%	2,152,929	2,699,078	4,852,007	1,057,619	3,794,388	1,641,459	5,476
TOTAL	15,560				50,081,796		10,592,980	39,904,187	50,497,167	25,924,369	24,572,798	13,979,818	3,245

Pure Premium Selection		Trend =	1.034
3-Year Average Ex. Latest	4,113		
5-Year Average Ex. Latest	4,166		
All Year Average Ex. Latest	3,966		
Selected Pure Premium	4,113		

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Remedial AST
Summary of Paid Development Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	PAID LDM	PAID	INCURRED	CASE	IBNR	UNPAID
RY	ULTIMATE	LOSS	LOSS	RESERVE	RESERVE	LOSS
1994	-	-	-	-	-	-
1995	106,826	106,826	106,826	-	-	-
1996	109,456	109,456	109,456	-	-	-
1997	-	-	-	-	-	-
1998	662,628	662,628	662,628	-	-	-
1999	1,765,095	1,611,477	1,765,095	153,618	-	153,618
2000	6,086,837	4,786,957	6,086,837	1,299,880	-	1,299,880
2001	2,289,597	1,776,397	2,289,597	513,200	-	513,200
2002	239,493	239,493	239,493	-	-	-
2003	555,224	555,224	555,224	-	-	-
2004	2,127,247	1,937,099	2,074,609	137,511	52,637	190,148
2005	79,838	79,838	79,838	-	-	-
2006	-	-	-	-	-	-
2007	41,750	41,750	41,750	-	-	-
2008	51,787	51,787	51,787	-	-	-
2009	183,657	183,657	183,657	-	-	-
2010	-	-	-	-	-	-
2011	-	-	-	-	-	-
2012	-	-	-	-	-	-
2013	-	-	-	-	-	-
2014	-	-	-	-	-	-
2015	155,510	155,510	155,510	-	-	-
2016	-	-	-	-	-	-
2017	59,359	59,359	59,359	-	-	-
2018	-	-	-	-	-	-
2019	-	-	-	-	-	-
2020	61,158	61,158	61,158	-	-	-
2021	75,000	21,658	75,000	53,342	-	53,342
2022	-	-	-	-	-	-
2023	-	-	-	-	-	-
2024	-	-	-	-	-	-
2025	-	-	-	-	-	-
TOTAL	14,650,462	12,440,274	14,597,825	2,157,551	52,637	2,210,188

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Remedial AST
Development of Losses to Ultimate

Development Period in Months

RY	12 - 24	24 - 36	36 - 48	48 - 60	60 - 72	72 - 84	84 - 96	96 - 108	108 - 120	120 - 132	132 - 144	144 - 156	156 - 168	168 - 180	180 - 192	192 - 204	204 - 216	216 - 228	228 - 240	240 - 252	252 - 264	264 - 276	276 - 288	288 - 300	300 - 312	312 - 324	324 - 336	336 - 348	348 - 360	360 - 372	372 - 384	384 - ULT
1994																																1.060
1995							2.144	1.250	1.102	1.016	1.278	1.153	1.000	1.048	1.141	1.010	1.042	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.060
1996										1.967	1.516	1.030	1.000	1.104	1.620	1.057	1.109	1.113	1.009	1.011	1.055	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.060
1997																																1.060
1998		2.879	1.306	1.090	1.020	1.000	1.056	1.070	1.037	1.019	1.055	1.046	1.006	1.009	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.040	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.060
1999	1.701	2.649	1.129	1.235	1.136	1.319	1.105	1.061	1.055	1.049	1.055	1.024	1.016	1.002	1.007	1.007	1.035	1.032	1.041	1.027	1.006	1.000	1.031	1.012	1.000	1.075	1.000	1.000	1.000	1.000	1.000	1.060
2000	1.962	1.171	1.107	1.048	1.046	1.070	1.068	1.150	1.105	1.047	1.036	1.019	1.040	1.028	1.016	1.035	1.216	1.066	1.049	1.028	1.049	1.033	1.007	1.028	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.060
2001			7.454	2.945	2.045	1.350	1.237	1.305	1.137	1.164	1.109	1.073	1.141	1.052	1.205	1.093	1.118	1.050	1.028	1.039	1.142	1.047	1.096	1.035	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.060
2002		4.517	2.551	1.068	1.086	1.000	1.038	1.904	1.113	1.019	1.000	1.065	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.060
2003	1.224	1.255	1.000	1.000	1.000	1.317	1.736	1.067	1.029	1.286	1.111	1.054	1.071	1.053	1.010	1.061	1.044	1.000	1.000	1.000	1.000	1.000	1.010	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.060
2004		3.475	1.113	1.759	1.221	1.157	1.322	1.092	1.254	1.712	1.027	1.055	1.028	1.066	1.053	1.028	1.000	1.051	1.000	1.000	1.000	1.015	1.010	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.060
2005	1.794	1.493	1.622	1.000	1.316	1.173	1.202	1.079	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.016	1.015	1.010	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.060
2006																					1.011	1.016	1.015	1.010	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.060
2007		2.517	1.169	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.013	1.011	1.016	1.015	1.010	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.060
2008		1.226	1.100	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.022	1.013	1.011	1.016	1.015	1.010	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.060
2009			1.105	1.340	1.052	1.375	1.089	1.347	1.098	1.122	1.000	1.000	1.000	1.000	1.000	1.000	1.035	1.022	1.013	1.011	1.016	1.015	1.010	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.060
2010																1.033	1.035	1.022	1.013	1.011	1.016	1.015	1.010	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.060
2011															1.042	1.033	1.035	1.022	1.013	1.011	1.016	1.015	1.010	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.060
2012														1.032	1.042	1.033	1.035	1.022	1.013	1.011	1.016	1.015	1.010	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.060
2013													1.038	1.032	1.042	1.033	1.035	1.022	1.013	1.011	1.016	1.015	1.010	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.060
2014												1.037	1.038	1.032	1.042	1.033	1.035	1.022	1.013	1.011	1.016	1.015	1.010	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.060
2015		2.167	1.222	1.092	1.000	1.000	1.000	1.000	1.000	1.000	1.049	1.037	1.038	1.032	1.042	1.033	1.035	1.022	1.013	1.011	1.016	1.015	1.010	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.060
2016										1.151	1.049	1.037	1.038	1.032	1.042	1.033	1.035	1.022	1.013	1.011	1.016	1.015	1.010	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.060
2017	1.233	1.115	1.000	1.000	1.000	1.000	1.000	1.000	1.100	1.151	1.049	1.037	1.038	1.032	1.042	1.033	1.035	1.022	1.013	1.011	1.016	1.015	1.010	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.060
2018								1.135	1.100	1.151	1.049	1.037	1.038	1.032	1.042	1.033	1.035	1.022	1.013	1.011	1.016	1.015	1.010	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.060
2019							1.133	1.135	1.100	1.151	1.049	1.037	1.038	1.032	1.042	1.033	1.035	1.022	1.013	1.011	1.016	1.015	1.010	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.060
2020			1.329	1.072	1.000	1.131	1.133	1.135	1.100	1.151	1.049	1.037	1.038	1.032	1.042	1.033	1.035	1.022	1.013	1.011	1.016	1.015	1.010	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.060
2021			1.470	1.231	1.137	1.131	1.133	1.135	1.100	1.151	1.049	1.037	1.038	1.032	1.042	1.033	1.035	1.022	1.013	1.011	1.016	1.015	1.010	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.060
2022				1.142	1.137	1.131	1.133	1.135	1.100	1.151	1.049	1.037	1.038	1.032	1.042	1.033	1.035	1.022	1.013	1.011	1.016	1.015	1.010	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.060
2023			1.325	1.142	1.137	1.131	1.133	1.135	1.100	1.151	1.049	1.037	1.038	1.032	1.042	1.033	1.035	1.022	1.013	1.011	1.016	1.015	1.010	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.060
2024		2.092	1.325	1.142	1.137	1.131	1.133	1.135	1.100	1.151	1.049	1.037	1.038	1.032	1.042	1.033	1.035	1.022	1.013	1.011	1.016	1.015	1.010	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.060
2025	1.824	2.092	1.325	1.142	1.137	1.131	1.133	1.135	1.100	1.151	1.049	1.037	1.038	1.032	1.042	1.033	1.035	1.022	1.013	1.011	1.016	1.015	1.010	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.060

RY	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360	372	384	ULT
1995	-	-	-	-	-	-	19,195	41,156	51,445	56,701	57,626	73,664	84,921	84,921	88,971	101,542	102,511	106,826	106,826	106,826	106,826	106,826	106,826	106,826	106,826	106,826	106,826	106,826	106,826	106,826	106,826	106,826	113,267
1996	-	-	-	-	-	-	-	-	-	14,203	27,940	42,359	43,615	43,615	48,148	77,977	82,406	91,416	101,779	102,681	103,782	109,456	109,456	109,456	109,456	109,456	109,456	109,456	109,456	109,456	109,456	109,456	116,056
1997	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1998	-	113,506	326,771	426,734	465,016	474,091	474,091	500,870	536,142	555,872	566,448	597,852	625,365	629,257	635,092	635,092	635,092	635,092	635,092	635,092	635,092	635,092	660,330	662,628	662,628	662,628	662,628	662,628	662,628	662,628	662,628	662,628	702,584
1999	91,601	155,804	412,759	466,204	575,644	653,770	862,519	953,244	1,011,272	1,067,094	1,119,362	1,181,084	1,209,850	1,229,249	1,232,121	1,241,346	1,250,602	1,294,320	1,335,943	1,390,883	1,428,204	1,437,060	1,437,060	1,481,747	1,499,337	1,499,337	1,611,477	1,611,477	1,611,477	1,611,477	1,611,477	1,611,477	1,708,648
2000	600,543	1,178,120	1,380,065	1,527,820	1,601,730	1,675,915	1,792,516	1,914,991	2,202,232	2,433,794	2,547,274	2,638,146	2,687,862	2,795,225	2,873,605	2,920,207	3,022,541	3,675,996	3,920,130	4,111,183	4,225,970	4,432,029	4,577,720	4,609,460	4,737,540	4,786,957	4,786,957	4,786,957	4,786,957	4,786,957	4,786,957	4,786,957	5,075,607
2001	-	-	4,285	31,943	94,057	192,393	258,731	321,220	419,351	476,821	555,214	615,741	660,726	753,773	792,848	955,109	1,043,903	1,166,740	1,225,467	1,260,270	1,309,174	1,495,557	1,566,522	1,716,797	1,776,397	1,776,397	1,776,397	1,776,397	1,776,397	1,776,397	1,776,397	1,776,397	1,883,512
2002	-	7,498	33,870	86,415	92,333	100,309	100,309	104,163	198,304	220,667	224,817	224,817	239,493	239,493	239,493	239,493	239,493	239,493	239,493	239,493	239,493	239,493	239,493	239,493	241,867	241,867	241,867	241,867	241,867	241,867	241,867	241,867	256,452
2003	75,879	92,879	116,529	116,529	116,529	116,529	153,490	266,468	284,207	292,415	376,033	417,688	440,376	471,503	496,493	501,430	532,032	555,224	555,224	555,224	555,224	555,224	555,224	560,986	566,548	566,548	566,548	566,548	566,548	566,548	566,548	566,548	600,710
2004	-	48,087	167,082	185,942	327,157	399,428	462,288	611,344	667,682	837,489	1,433,954	1,473,129	1,554,162	1,598,045	1,703,105	1,792,711	1,843,534	1,843,534	1,937,099	1,937,099	1,937,099	1,937,099	1,966,170	1,986,574	2,006,270	2,006,270	2,006,270	2,006,270	2,006,270	2,006,270	2,006,270	2,006,270	2,127,247
2005	9,181	16,467	24,588	39,884	39,884	52,485	61,585	74,021	79,838	79,838	79,838	79,838	79,838	79,838	79,838	79,838	79,838	79,838	79,838	79,838	79,838	81,135	82,353	83,208	84,033	84,033	84,033	84,033	84,033	84,033	84,033	84,033	89,100
2006	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2007	-	14,192	35,720	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	42,281	42,744	43,439	44,090	44,548	44,990	44,990	44,990	44,990	44,990	44,990	44,990	44,990	47,703
2008	-	38,408	47,087	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	52,936	53,609	54,196	55,077	55,903	56,483	57,043	57,043	57,043	57,043	57,043	57,043	57,043	60,483
2009	-	-	47,443	52,422	70,244	73,919	101,655	110,661	149,107	163,657	183,657	183,657	183,657	183,657	183,657	183,657	183,657	183,657	190,042	194,258	196,727	198,881	202,114	205,147	207,276	209,331	209,331	209,331	209,331	209,331	209,331	209,331	221,954
2010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2015	-	53,789	116,564	142,401	155,510	155,510	155,510	155,510	155,510	155,510	155,510	163,126	169,159	175,553	181,220	188,819	194,966	201,745	206,220	208,842	211,129	214,560	217,780	220,040	222,222	222,222	222,222	222,222	222,222	222,222	222,222	222,222	235,622
2016	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2017	43,180	53,255	59,359	59,359	59,359	59,359	59,359	59,359	59,359	65,294	75,154	78,834	81,750	84,839	87,578	91,251	94,221	97,497	99,660	100,927	102,032	103,691	105,247	106,339	107,393	107,393	107,393	107,393	107,393	107,393	107,393	107,393	113,869
2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2020	-	-	42,917	57,042	61,158	61,158	69,157	78,348	88,903	97,792	112,559	118,071	122,438	127,066	131,168	136,668	141,118	146,024	149,263	151,161	152,816	155,300	157,630	159,266	160,845	160,845	160,845	160,845	160,845	160,845	160,845	160,845	170,544
2021	-	-	11,965	17,593	21,658	24,632	27,854	31,556	35,807	39,387	45,334	47,555	49,313	51,177	52,829	55,045	56,837	58,813	60,117	60,882	61,548	62,549	63,487	64,146	64,782	64,782	64,782	64,782	64,782	64,782	64,782	64,782	68,688
2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2024	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DRAFT

Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Remedial AST
Selection of Loss Development Factors

	Development Period in Months																															
RY	12 - 24	24 - 36	36 - 48	48 - 60	60 - 72	72 - 84	84 - 96	96 - 108	108 - 120	120 - 132	132 - 144	144 - 156	156 - 168	168 - 180	180 - 192	192 - 204	204 - 216	216 - 228	228 - 240	240 - 252	252 - 264	264 - 276	276 - 288	288 - 300	300 - 312	312 - 324	324 - 336	336 - 348	348 - 360	360 - 372	372 - 384	
1994																																
1995							2.144	1.250	1.102	1.016	1.278	1.153	1.000	1.048	1.141	1.010	1.042	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
1996										1.967	1.516	1.030	1.000	1.104	1.620	1.057	1.109	1.113	1.009	1.011	1.055	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
1997																																
1998		2.879	1.306	1.090	1.020	1.000	1.056	1.070	1.037	1.019	1.055	1.046	1.006	1.009	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.040	1.003	1.000	1.000	1.000	1.000					
1999	1.701	2.649	1.129	1.235	1.136	1.319	1.105	1.061	1.055	1.049	1.055	1.024	1.016	1.002	1.007	1.007	1.035	1.032	1.041	1.027	1.006	1.000	1.031	1.012	1.000	1.075						
2000	1.962	1.171	1.107	1.048	1.046	1.070	1.068	1.150	1.105	1.047	1.036	1.019	1.040	1.028	1.016	1.035	1.216	1.066	1.049	1.028	1.049	1.033	1.007	1.028	1.010							
2001			7.454	2.945	2.045	1.350	1.237	1.305	1.137	1.164	1.109	1.073	1.141	1.052	1.205	1.093	1.118	1.050	1.028	1.039	1.142	1.047	1.096	1.035								
2002		4.517	2.551	1.068	1.086	1.000	1.038	1.904	1.113	1.019	1.000	1.065	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000									
2003	1.224	1.255	1.000	1.000	1.000	1.317	1.736	1.067	1.029	1.286	1.111	1.054	1.071	1.053	1.010	1.061	1.044	1.000	1.000	1.000	1.000	1.000										
2004		3.475	1.113	1.759	1.221	1.157	1.322	1.092	1.254	1.712	1.027	1.055	1.028	1.066	1.053	1.028	1.000	1.051	1.000	1.000	1.000											
2005	1.794	1.493	1.622	1.000	1.316	1.173	1.202	1.079	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000												
2006																																
2007		2.517	1.169	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000														
2008		1.226	1.100	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000															
2009			1.105	1.340	1.052	1.375	1.089	1.347	1.098	1.122	1.000	1.000	1.000	1.000	1.000	1.000																
2010																																
2011																																
2012																																
2013																																
2014																																
2015		2.167	1.222	1.092	1.000	1.000	1.000	1.000	1.000	1.000																						
2016																																
2017	1.233	1.115	1.000	1.000	1.000	1.000	1.000	1.000																								
2018																																
2019																																
2020			1.329	1.072	1.000																											
2021			1.470	1.231																												
2022																																
2023																																
2024																																
VOL WTD 3	NA	NA	1.360	1.110	1.000	1.000	1.000	1.000	1.000	1.000	NA	NA	NA	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.031	1.029	1.026	1.007	1.052	1.000	1.000	1.000	1.000	NA	
VOL WTD 5	NA	NA	1.360	1.061	1.000	1.000	1.000	1.000	1.000	1.000	NA	1.000	1.000	1.000	1.000	1.000	1.000	1.037	1.000	1.012	1.047	1.027	1.027	1.024	1.007	1.047	1.000	1.000	1.000	1.000	NA	
VOL WTD ALL	1.824	1.535	1.169	1.142	1.095	1.131	1.133	1.135	1.100	1.151	1.049	1.037	1.038	1.032	1.042	1.033	1.096	1.046	1.028	1.019	1.039	1.027	1.026	1.024	1.007	1.047	1.000	1.000	1.000	1.000	NA	
ARITH 3	NA	NA	1.400	1.152	1.000	1.000	1.000	1.000	1.000	1.000	NA	NA	NA	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.016	1.034	1.025	1.003	1.037	1.000	1.000	1.000	1.000	NA	
ARITH 5	NA	NA	1.400	1.101	1.000	1.000	1.000	1.000	1.000	1.000	NA	1.000	1.000	1.000	1.000	1.000	1.000	1.013	1.000	1.008	1.038	1.016	1.027	1.019	1.003	1.019	1.000	1.000	1.000	1.000	NA	
ARITH ALL	1.583	2.224	1.712	1.259	1.137	1.136	1.214	1.166	1.072	1.172	1.091	1.040	1.023	1.028	1.081	1.022	1.047	1.028	1.013	1.010	1.028	1.015	1.020	1.012	1.002	1.019	1.000	1.000	1.000	1.000	NA	
5 YR HI LO	NA	NA	NA	1.072	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.016	1.011	1.014	1.020	1.000	1.000	1.000	NA	NA	NA	NA	
7 YR HI LO	NA	NA	1.329	1.082	1.000	NA	NA	NA	NA	NA	NA	1.000	1.000	1.000	1.000	1.007	1.000	1.013	1.007	1.011	1.011	1.018	1.010	1.010	1.000	1.000	1.000	NA	NA	NA	NA	
ALL YR HI LO	1.576	2.092	1.325	1.149	1.073	1.126	1.155	1.118	1.061	1.120	1.061	1.033	1.015	1.023	1.039	1.018	1.035	1.022	1.010	1.008	1.016	1.012	1.008	1.010	1.000	1.000	1.000	NA	NA	NA	NA	TAIL
SELECTED	1.824	2.092	1.325	1.142	1.137	1.131	1.133	1.135	1.100	1.151	1.049	1.037	1.038	1.032	1.042	1.033	1.035	1.022	1.013	1.011	1.016	1.015	1.010	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.060

DRAFT

Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Remedial AST
Paid Losses

Development in Months

RY	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360	372	384
1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	-	-	-	-	-	-	19,195	41,156	51,445	56,701	57,626	73,664	84,921	84,921	88,971	101,542	102,511	106,826	106,826	106,826	106,826	106,826	106,826	106,826	106,826	106,826	106,826	106,826	106,826	106,826	106,826	
1996	-	-	-	-	-	-	-	-	-	14,203	27,940	42,359	43,615	43,615	48,148	77,977	82,406	91,416	101,779	102,681	103,782	109,456	109,456	109,456	109,456	109,456	109,456	109,456	109,456	109,456		
1997	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
1998	-	113,506	326,771	426,734	465,016	474,091	474,091	500,870	536,142	555,872	566,448	597,852	625,365	629,257	635,092	635,092	635,092	635,092	635,092	635,092	635,092	635,092	660,330	662,628	662,628	662,628	662,628	662,628				
1999	91,601	155,804	412,759	466,204	575,644	653,770	862,519	953,244	1,011,272	1,067,094	1,119,362	1,181,084	1,209,850	1,229,249	1,232,121	1,241,346	1,250,602	1,294,320	1,335,943	1,390,883	1,428,204	1,437,060	1,437,060	1,481,747	1,499,337	1,499,337	1,611,477					
2000	600,543	1,178,120	1,380,065	1,527,820	1,601,730	1,675,915	1,792,516	1,914,991	2,202,232	2,433,794	2,547,274	2,638,146	2,687,862	2,795,225	2,873,605	2,920,207	3,022,541	3,675,996	3,920,130	4,111,183	4,225,970	4,432,029	4,577,720	4,609,460	4,737,540	4,786,957						
2001	-	-	4,285	31,943	94,057	192,393	259,731	321,220	419,351	476,821	555,214	615,741	660,726	753,773	792,848	955,109	1,043,903	1,166,740	1,225,467	1,260,270	1,309,174	1,495,557	1,566,522	1,716,797	1,776,397							
2002	7,498	33,870	86,415	92,333	100,309	100,309	104,163	198,304	220,667	224,817	224,817	239,493	239,493	239,493	239,493	239,493	239,493	239,493	239,493	239,493	239,493	239,493	239,493	239,493								
2003	75,879	92,879	116,529	116,529	116,529	116,529	153,490	266,468	284,207	292,415	376,033	417,688	440,376	471,503	496,493	501,430	532,032	555,224	555,224	555,224	555,224	555,224	555,224									
2004	-	48,087	167,082	185,942	327,157	399,428	462,288	611,344	667,682	837,489	1,433,954	1,473,129	1,554,162	1,598,045	1,703,105	1,792,711	1,843,534	1,843,534	1,937,099	1,937,099	1,937,099	1,937,099										
2005	9,181	16,467	24,588	39,884	39,884	52,485	61,585	74,021	79,838	79,838	79,838	79,838	79,838	79,838	79,838	79,838	79,838	79,838	79,838	79,838	79,838											
2006	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
2007	-	14,192	35,720	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750													
2008	-	38,408	47,087	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787														
2009	-	-	47,443	52,422	70,244	73,919	101,655	110,661	149,107	163,657	183,657	183,657	183,657	183,657	183,657	183,657	183,657															
2010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																
2011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																	
2012	-	-	-	-	-	-	-	-	-	-	-	-	-	-																		
2013	-	-	-	-	-	-	-	-	-	-	-	-	-																			
2014	-	-	-	-	-	-	-	-	-	-	-	-																				
2015	-	53,789	116,564	142,401	155,510	155,510	155,510	155,510	155,510	155,510	155,510																					
2016	-	-	-	-	-	-	-	-	-	-																						
2017	43,180	53,255	59,359	59,359	59,359	59,359	59,359	59,359	59,359																							
2018	-	-	-	-	-	-	-	-																								
2019	-	-	-	-	-	-	-																									
2020	-	-	42,917	57,042	61,158	61,158																										
2021	-	-	11,965	17,593	21,658																											
2022	-	-	-	-																												
2023	-	-	-																													
2024	-	-																														
2025	-																															

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Remedial AST
Summary of Incurred Development Method

(1) RY	(2) INC LDM ULTIMATE	(3) PAID LOSS	(4) INCURRED LOSS	(5) CASE RESERVE	(6) IBNR RESERVE	(7) UNPAID LOSS
1994	-	-	-	-	-	-
1995	106,826	106,826	106,826	-	-	-
1996	109,456	109,456	109,456	-	-	-
1997	-	-	-	-	-	-
1998	662,628	662,628	662,628	-	-	-
1999	1,765,095	1,611,477	1,765,095	153,618	-	153,618
2000	6,086,837	4,786,957	6,086,837	1,299,880	-	1,299,880
2001	2,289,597	1,776,397	2,289,597	513,200	-	513,200
2002	239,493	239,493	239,493	-	-	-
2003	555,224	555,224	555,224	-	-	-
2004	2,074,609	1,937,099	2,074,609	137,511	-	137,511
2005	79,838	79,838	79,838	-	-	-
2006	-	-	-	-	-	-
2007	41,750	41,750	41,750	-	-	-
2008	51,787	51,787	51,787	-	-	-
2009	183,657	183,657	183,657	-	-	-
2010	-	-	-	-	-	-
2011	-	-	-	-	-	-
2012	-	-	-	-	-	-
2013	-	-	-	-	-	-
2014	-	-	-	-	-	-
2015	177,179	155,510	155,510	-	21,668	21,668
2016	-	-	-	-	-	-
2017	75,066	59,359	59,359	-	15,707	15,707
2018	-	-	-	-	-	-
2019	-	-	-	-	-	-
2020	83,073	61,158	61,158	-	21,914	21,914
2021	109,760	21,658	75,000	53,342	34,760	88,102
2022	-	-	-	-	-	-
2023	-	-	-	-	-	-
2024	-	-	-	-	-	-
2025	-	-	-	-	-	-
TOTAL	14,691,874	12,440,274	14,597,825	2,157,551	94,049	2,251,600

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Remedial AST
Development of Losses to Ultimate

Development Period in Months

RY	12 - 24	24 - 36	36 - 48	48 - 60	60 - 72	72 - 84	84 - 96	96 - 108	108 - 120	120 - 132	132 - 144	144 - 156	156 - 168	168 - 180	180 - 192	192 - 204	204 - 216	216 - 228	228 - 240	240 - 252	252 - 264	264 - 276	276 - 288	288 - 300	300 - 312	312 - 324	324 - 336	336 - 348	348 - 360	360 - 372	372 - 384	384 - ULT
1994																															1.000
1995	1.000	100000.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.067	1.000	1.000	0.805	1.291	1.096	0.885	0.994	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1996	0.231	1.000	1.000	2.333	2.000	1.000	0.286			1.079	1.260	1.000	1.000	1.000	1.505	1.058	1.000	1.108	1.000	1.000	0.913	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1997																												1.000	1.000	1.000	1.000	1.000
1998	1.062	2.451	1.173	0.998	1.460	1.000	0.738	0.814	0.872	1.015	1.047	0.920	1.000	0.988	1.000	1.000	1.000	1.000	1.000	1.000	1.110	1.000	0.940	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1999	2.490	0.658	1.022	1.103	1.251	0.943	1.026	1.041	1.044	0.966	1.024	1.015	1.000	0.964	1.015	1.000	1.023	1.012	1.055	1.000	0.990	1.121	1.000	1.046	1.000	1.014	1.000	1.000	1.000	1.000	1.000
2000	1.181	1.060	1.072	1.020	0.993	1.022	1.108	1.020	1.244	1.054	0.991	1.172	0.992	0.996	1.049	1.007	1.043	0.983	0.981	1.069	1.000	1.000	1.000	1.088	0.992	1.000	1.000	1.000	1.000	1.000	1.000
2001	3.310	1.300	0.822	0.962	0.906	1.064	1.091	1.010	1.093	1.149	0.969	1.017	1.009	0.927	1.193	0.986	0.989	1.076	1.010	1.110	1.111	1.036	1.033	1.086	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2002	3.261	0.902	0.742	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.549	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2003	1.004	1.185	1.031	1.000	1.114	1.298	1.128	0.958	1.150	1.051	1.000	0.832	1.147	1.000	1.000	1.011	0.994	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2004	0.860	3.207	0.981	1.000	0.999	1.000	1.211	0.977	1.540	1.142	1.031	1.043	1.000	1.022	1.120	0.997	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2005	0.922	0.888	1.000	0.974	1.119	1.000	1.367	0.872	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2006																			1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2007	0.860	1.000	0.485	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2008	0.577	1.000	0.898	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2009	1.000	2.119	1.000	1.000	1.000	1.346	1.260	1.000	1.000	1.022	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2010															1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2011															1.043	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2012														1.000	1.043	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2013													1.002	1.000	1.043	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2014												1.064	1.002	1.000	1.043	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2015	195789.070	1.000	1.000	0.794	1.000	1.000	1.000	1.000	1.000	1.000	1.025	1.064	1.002	1.000	1.043	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2016										1.059	1.025	1.064	1.002	1.000	1.043	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2017	1.314	0.904	1.000	1.000	1.000	1.000	1.000	1.000	1.048	1.059	1.025	1.064	1.002	1.000	1.043	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2018								1.000	1.048	1.059	1.025	1.064	1.002	1.000	1.043	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2019							1.043	1.000	1.048	1.059	1.025	1.064	1.002	1.000	1.043	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2020	121700.000	1.000	1.000	0.503	1.000	1.030	1.043	1.000	1.048	1.059	1.025	1.064	1.002	1.000	1.043	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2021	32000.000	2.344	1.000	1.000	1.077	1.030	1.043	1.000	1.048	1.059	1.025	1.064	1.002	1.000	1.043	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2022				1.004	1.077	1.030	1.043	1.000	1.048	1.059	1.025	1.064	1.002	1.000	1.043	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2023		1.000	1.000	1.004	1.077	1.030	1.043	1.000	1.048	1.059	1.025	1.064	1.002	1.000	1.043	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2024	1.160	1.000	1.000	1.004	1.077	1.030	1.043	1.000	1.048	1.059	1.025	1.064	1.002	1.000	1.043	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2025	1.588	1.160	1.000	1.004	1.077	1.030	1.043	1.000	1.048	1.059	1.025	1.064	1.002	1.000	1.043	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

RY	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360	372	384	ULT
1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	1	1	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	106,701	106,701	106,701	85,921	110,921	121,542	107,511	106,826	106,826	106,826	106,826	106,826	106,826	106,826	106,826	106,826	106,826	106,826	106,826	106,826	106,826	106,826	106,826
1996	65,000	15,001	15,001	15,001	35,001	70,001	70,001	20,000	-	50,001	53,940	67,940	67,940	67,940	67,940	102,248	108,206	108,206	119,916	119,916	119,916	109,456	109,456	109,456	109,456	109,456	109,456	109,456	109,456	109,456	109,456	109,456	109,456
1997	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1998	282,000	299,445	733,820	861,104	859,104	1,254,635	1,254,635	925,870	753,994	657,142	667,199	698,719	642,886	642,886	635,092	635,092	635,092	635,092	635,092	635,092	635,093	705,092	705,092	662,628	662,628	662,628	662,628	662,628	662,628	662,628	662,628	662,628	662,628
1999	576,051	1,434,131	943,131	963,453	1,062,740	1,329,280	1,254,083	1,286,407	1,338,653	1,397,656	1,350,524	1,383,455	1,403,917	1,403,917	1,353,916	1,373,691	1,373,691	1,405,690	1,422,494	1,500,783	1,500,783	1,486,070	1,665,560	1,665,560	1,741,560	1,741,560	1,765,095	1,765,095	1,765,095	1,765,095	1,765,095	1,765,095	1,765,095
2000	2,102,118	2,481,719	2,630,091	2,819,603	2,876,383	2,857,666	2,921,119	3,236,351	3,301,717	4,107,207	4,330,460	4,291,057	5,028,326	4,988,326	4,966,652	5,210,073	5,247,171	5,471,620	5,376,625	5,275,990	5,639,825	5,639,825	5,640,481	5,640,481	6,136,838	6,086,837	6,086,837	6,086,837	6,086,837	6,086,837	6,086,837	6,086,837	6,086,837
2001	302,093	1,000,040	1,300,021	1,068,230	1,027,912	931,183	990,920	1,080,921	1,092,081	1,193,126	1,371,136	1,329,154	1,352,300	1,364,770	1,264,768	1,508,745	1,487,564	1,470,523	1,582,335	1,597,982	1,773,281	1,970,366	2,041,167	2,107,985	2,289,597	2,289,597	2,289,597	2,289,597	2,289,597	2,289,597	2,289,597	2,289,597	2,289,597
2002	200,004	652,311	588,414	436,415	436,415	436,415	436,415	436,415	436,415	436,415	436,415	436,415	436,415	436,415	436,415	436,415	239,493	239,493	239,493	239,493	239,493	239,493	239,493	239,493	239,493	239,493	239,493	239,493	239,493	239,493	239,493	239,493	239,493
2003	250,003	250,882	297,387	306,532	306,532	341,531	443,402	500,006	478,961	550,916	578,916	578,916	481,483	552,376	552,376	552,376	558,548	555,224	555,224	555,224	555,224	555,224	555,224	555,224	555,224	555,224	555,224	555,224	555,224	555,224	555,224	555,224	555,224
2004	300,004	258,090	827,611	812,287	812,287	811,862	811,862	983,570	961,290	1,480,232	1,690,604	1,743,171	1,818,773	1,818,773	1,859,341	2,081,628	2,074,609	2,074,609	2,074,609	2,074,609	2,074,609	2,074,609	2,074,609	2,074,609	2,074,609	2,074,609	2,074,609	2,074,609	2,074,609	2,074,609	2,074,609	2,074,609	2,074,609
2005	75,000	69,181	61,467	61,467	59,884	66,985	66,985	91,585	79,838	79,838	79,838	79,838	79,838	79,838	79,838	79,838	79,838	79,838	79,838	79,838	79,838	79,838	79,838	79,838	79,838	79,838	79,838	79,838	79,838	79,838	79,838	79,838	79,838
2006	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2007	100,001	86,012	86,012	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750
2008	100,000	57,687	57,687	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787
2009	50,001	50,001	105,943	105,943	105,943	105,943	142,619	179,761	179,761	179,722	183,657	183,657	183,657	183,657	183,657	183,657	183,657	183,657	183,657	183,657	183,657	183,657	183,657	183,657	183,657	183,657	183,657	183,657	183,657	183,657	183,657	183,657	183,657
2010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2015	1	195,789	195,789	195,789	155,510	155,510	155,510	155,510	155,510	155,510	155,510	159,369	169,564	169,891	169,891	177,179	177,179	177,179	177,179	177,179	177,179	177,179	177,179	177,179	177,179	177,179	177,179	177,179	177,179	177,179	177,179	177,179	177,179
2016	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2017	50,000	65,680	59,359	59,359	59,359	59,359	59,359	59,359	59,359	62,222	65,886	67,520	71,840	71,979	71,979	75,066	75,066	75,066	75,066	75,066	75,066	75,066	75,066	75,066	75,066	75,066	75,066	75,066	75,066	75,066	75,066	75,066	75,066
2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2020	1	121,700	121,700	121,700	61,158	61,158	62,968	65,690	65,690	68,859	72,913	74,722	79,502	79,656	79,656	83,073	83,073	83,073	83,073	83,073	83,073	83,073	83,073	83,073	83,073	83,073	83,073	83,073	83,073	83,073	83,073	83,073	83,073
2021	1	32,000	75,000	75,000	75,000	80,806	83,197	86,794	86,794	90,980	96,337	98,727	105,043	105,246	105,246	109,760	109,760	109,760	109,760	109,760	109,760	109,760	109,760	109,760	109,760	109,760	109,760	109,760	109,760	109,760	109,760	109,760	109,760
2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2024	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Remedial AST
Selection of Loss Development Factors

Development Period in Months

RY	12 - 24	24 - 36	36 - 48	48 - 60	60 - 72	72 - 84	84 - 96	96 - 108	108 - 120	120 - 132	132 - 144	144 - 156	156 - 168	168 - 180	180 - 192	192 - 204	204 - 216	216 - 228	228 - 240	240 - 252	252 - 264	264 - 276	276 - 288	288 - 300	300 - 312	312 - 324	324 - 336	336 - 348	348 - 360	360 - 372	372 - 384	
1994																																
1995	1.000	100000.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.067	1.000	1.000	0.805	1.291	1.096	0.885	0.994	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
1996	0.231	1.000	1.000	2.333	2.000	1.000	0.286			1.079	1.260	1.000	1.000	1.000	1.505	1.058	1.000	1.108	1.000	1.000	0.913	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
1997																																
1998	1.062	2.451	1.173	0.998	1.460	1.000	0.738	0.814	0.872	1.015	1.047	0.920	1.000	0.988	1.000	1.000	1.000	1.000	1.000	1.000	1.110	1.000	0.940	1.000	1.000	1.000	1.000					
1999	2.490	0.658	1.022	1.103	1.251	0.943	1.026	1.041	1.044	0.966	1.024	1.015	1.000	0.964	1.015	1.000	1.023	1.012	1.055	1.000	0.990	1.121	1.000	1.046	1.000	1.014						
2000	1.181	1.060	1.072	1.020	0.993	1.022	1.108	1.020	1.244	1.054	0.991	1.172	0.992	0.996	1.049	1.007	1.043	0.983	0.981	1.069	1.000	1.000	1.000	1.088	0.992							
2001	3.310	1.300	0.822	0.962	0.906	1.064	1.091	1.010	1.093	1.149	0.969	1.017	1.009	0.927	1.193	0.986	0.989	1.076	1.010	1.110	1.111	1.036	1.033	1.086								
2002	3.261	0.902	0.742	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.549	1.000	1.000	1.000	1.000	1.000	1.000	1.000									
2003	1.004	1.185	1.031	1.000	1.114	1.298	1.128	0.958	1.150	1.051	1.000	0.832	1.147	1.000	1.000	1.011	0.994	1.000	1.000	1.000	1.000	1.000										
2004	0.860	3.207	0.981	1.000	0.999	1.000	1.211	0.977	1.540	1.142	1.031	1.043	1.000	1.022	1.120	0.997	1.000	1.000	1.000	1.000	1.000											
2005	0.922	0.888	1.000	0.974	1.119	1.000	1.367	0.872	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000												
2006																																
2007	0.860	1.000	0.485	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000														
2008	0.577	1.000	0.898	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000															
2009	1.000	2.119	1.000	1.000	1.000	1.346	1.260	1.000	1.000	1.022	1.000	1.000	1.000	1.000	1.000	1.000																
2010																																
2011																																
2012																																
2013																																
2014																																
2015	195789.070	1.000	1.000	0.794	1.000	1.000	1.000	1.000	1.000	1.000																						
2016																																
2017	1.314	0.904	1.000	1.000	1.000	1.000	1.000	1.000																								
2018																																
2019																																
2020	121700.000	1.000	1.000	0.503	1.000																											
2021	32000.000	2.344	1.000	1.000																												
2022																																
2023																																
2024																																
VOL WTD 3	NA	2.344	1.000	0.692	1.000	1.000	1.000	1.000	1.000	1.000	NA	NA	NA	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.026	1.008	1.080	0.994	1.010	1.000	1.000	1.000	1.000	NA	
VOL WTD 5	76850.000	1.280	1.000	0.764	1.000	1.000	1.000	1.000	1.000	1.000	NA	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.039	1.019	1.025	1.002	1.075	0.994	1.009	1.000	1.000	1.000	1.000	NA	
VOL WTD ALL	1.588	1.160	0.987	1.004	1.077	1.022	1.040	0.989	1.163	1.059	1.005	1.064	1.002	0.990	1.067	0.985	1.020	1.004	0.999	1.044	1.019	1.023	1.002	1.073	0.994	1.009	1.000	1.000	1.000	1.000	NA	
ARITH 3	NA	2.344	1.000	0.751	1.000	1.000	1.000	1.000	1.000	1.000	NA	NA	NA	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.012	1.011	1.073	0.997	1.007	1.000	1.000	1.000	1.000	NA	
ARITH 5	76850.000	1.672	1.000	0.834	1.000	1.000	1.000	1.000	1.000	1.000	NA	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.022	1.022	1.031	0.995	1.055	0.998	1.003	1.000	1.000	1.000	1.000	NA	
ARITH ALL	20559.302	5883.648	0.954	1.040	1.115	1.045	1.014	0.978	1.072	1.039	1.025	1.000	0.996	1.014	1.075	0.961	1.004	1.016	1.005	1.018	1.014	1.020	0.996	1.037	0.998	1.003	1.000	1.000	1.000	1.000	NA	
5 YR HI LO	NA	NA	NA	1.000	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.012	1.000	1.066	1.000	1.000	1.000	NA	NA	NA	NA	
7 YR HI LO	NA	1.000	1.000	0.897	1.000	NA	NA	NA	NA	NA	NA	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.014	1.022	1.009	1.000	1.033	1.000	1.000	1.000	NA	NA	NA	NA	
ALL YR HI LO	10247.923	1.424	0.971	0.990	1.067	1.030	1.043	0.986	1.048	1.036	1.009	1.000	1.000	0.997	1.043	0.990	1.001	1.010	1.001	1.009	1.014	1.006	1.000	1.033	1.000	1.000	1.000	NA	NA	NA	NA	Tail
SELECTED	1.588	1.160	1.000	1.004	1.077	1.030	1.043	1.000	1.048	1.059	1.025	1.064	1.002	1.000	1.043	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Remedial AST
Incurred Losses

Development in Months

RY	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360	372	384
1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	1	1	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	106,701	106,701	106,701	85,921	110,921	121,542	107,511	106,826	106,826	106,826	106,826	106,826	106,826	106,826	106,826	106,826	106,826	106,826	106,826	106,826	106,826	
1996	65,000	15,001	15,001	15,001	35,001	70,001	70,001	20,000	-	50,001	53,940	67,940	67,940	67,940	67,940	102,248	108,206	108,206	119,916	119,916	119,916	109,456	109,456	109,456	109,456	109,456	109,456	109,456	109,456	109,456		
1997	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
1998	282,000	299,445	733,820	861,104	859,104	1,254,635	1,254,635	925,870	753,994	657,142	667,199	698,719	642,886	642,886	635,092	635,092	635,092	635,092	635,092	635,092	635,093	705,092	705,092	662,628	662,628	662,628	662,628	662,628				
1999	576,051	1,434,131	943,131	963,453	1,062,740	1,329,280	1,254,083	1,286,407	1,338,653	1,397,656	1,350,524	1,383,455	1,403,917	1,403,917	1,353,916	1,373,691	1,373,691	1,405,690	1,422,494	1,500,783	1,500,783	1,486,070	1,665,560	1,665,560	1,741,560	1,741,560	1,765,095					
2000	2,102,118	2,481,719	2,630,091	2,819,603	2,876,383	2,857,666	2,921,119	3,236,351	3,301,717	4,107,207	4,330,460	4,291,057	5,028,326	4,988,326	4,966,652	5,210,073	5,247,171	5,471,620	5,376,625	5,275,990	5,639,825	5,639,825	5,640,481	5,640,481	6,136,838	6,086,837						
2001	302,093	1,000,040	1,300,021	1,068,230	1,027,912	931,183	990,920	1,080,921	1,092,081	1,193,126	1,371,136	1,329,154	1,352,300	1,364,770	1,264,768	1,508,745	1,487,564	1,470,523	1,582,335	1,597,982	1,773,281	1,970,366	2,041,167	2,107,985	2,289,597							
2002	200,004	652,311	588,414	436,415	436,415	436,415	436,415	436,415	436,415	436,415	436,415	436,415	436,415	436,415	436,415	436,415	436,415	239,493	239,493	239,493	239,493	239,493	239,493	239,493								
2003	250,003	250,882	297,387	306,532	306,532	341,531	443,402	500,006	478,961	550,916	578,916	578,916	481,483	552,376	552,376	552,376	558,548	555,224	555,224	555,224	555,224	555,224	555,224									
2004	300,004	258,090	827,611	812,287	812,287	811,862	811,862	983,570	961,290	1,480,232	1,690,604	1,743,171	1,818,773	1,818,773	1,859,341	2,081,628	2,074,609	2,074,609	2,074,609	2,074,609	2,074,609	2,074,609										
2005	75,000	69,181	61,467	61,467	59,884	66,985	66,985	91,585	79,838	79,838	79,838	79,838	79,838	79,838	79,838	79,838	79,838	79,838	79,838	79,838	79,838											
2006	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
2007	100,001	86,012	86,012	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750	41,750													
2008	100,000	57,687	57,687	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787	51,787														
2009	50,001	50,001	105,943	105,943	105,943	105,943	142,619	179,761	179,761	179,722	183,657	183,657	183,657	183,657	183,657	183,657	183,657															
2010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2015	1	195,789	195,789	195,789	155,510	155,510	155,510	155,510	155,510	155,510	155,510																					
2016	-	-	-	-	-	-	-	-	-	-	-																					
2017	50,000	65,680	59,359	59,359	59,359	59,359	59,359	59,359	59,359																							
2018	-	-	-	-	-	-	-	-																								
2019	-	-	-	-	-	-	-																									
2020	1	121,700	121,700	121,700	61,158	61,158																										
2021	1	32,000	75,000	75,000	75,000																											
2022	-	-	-	-																												
2023	-	-	-																													
2024	-	-																														
2025	-																															

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Remedial AST
Determination of Pure Premium

(1) RY	(2) PAID LDM ULTIMATE	(3) INC LDM ULTIMATE	(4) SELECTED ULTIMATE	(5) POTENTIAL SITES	(6) PURE PREMIUM
1994					
1995					
1996					
1997					
1998					
1999					
2000					
2001					
2002					
2003					
2004					
2005					
2006					
2007					
2008					
2009	183,657	183,657	183,657	2,051	90
2010	-	-	-	2,049	-
2011	-	-	-	2,044	-
2012	-	-	-	2,040	-
2013	-	-	-	2,040	-
2014	-	-	-	2,039	-
2015	155,510	177,179	166,344	2,038	82
2016	-	-	-	2,038	-
2017	59,359	75,066	67,212	2,037	33
2018	-	-	-	2,036	-
2019	-	-	-	2,036	-
2020	61,158	83,073	72,115	2,035	35
2021	75,000	109,760	92,380	2,034	45
2022	-	-	-	2,034	-
2023	-	-	-	2,034	-
2024	-	-	-	2,034	-
2025	-	-	-	2,034	-
TOTAL	534,684	628,734	581,709	34,653	17

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Remedial AST
Paid Bornhuetter-Ferguson Method

(1) RY	(2) POTENTIAL SITES	(3) PROJECTED PURE PREM	(4) TRENDED PURE PREM	(5) DETRENDED PURE PREM	(6) EXPECTED LOSSES	(7) PERCENT UNPAID	(8) EXPECTED UNPAID	(9) PAID LOSSES	(10) INDICATED ULTIMATE	(11) INCURRED LOSSES	(12) IBNR RESERVE	(13) CASE RESERVE	(14) ULTIMATE PURE PREM
1994													
1995													
1996													
1997													
1998													
1999													
2000													
2001													
2002													
2003													
2004													
2005													
2006													
2007													
2008													
2009	2,051	90	123	16	32,623	17.3%	5,629	183,657	189,286	183,657	5,629	-	92
2010	2,049	-	-	16	33,243	19.9%	6,603	-	6,603	-	6,603	-	3
2011	2,044	-	-	17	33,825	23.1%	7,810	-	7,810	-	7,810	-	4
2012	2,040	-	-	17	34,434	25.5%	8,779	-	8,779	-	8,779	-	4
2013	2,040	-	-	17	35,123	28.2%	9,907	-	9,907	-	9,907	-	5
2014	2,039	-	-	18	35,808	30.8%	11,017	-	11,017	-	11,017	-	5
2015	2,038	82	99	18	36,506	34.0%	12,412	155,510	167,923	155,510	12,412	-	82
2016	2,038	-	-	18	37,236	42.7%	15,885	-	15,885	-	15,885	-	8
2017	2,037	33	39	19	37,963	47.9%	18,173	59,359	77,532	59,359	18,173	-	38
2018	2,036	-	-	19	38,703	54.1%	20,923	-	20,923	-	20,923	-	10
2019	2,036	-	-	19	39,477	59.4%	23,469	-	23,469	-	23,469	-	12
2020	2,035	35	39	20	40,247	64.1%	25,814	61,158	86,972	61,158	25,814	-	43
2021	2,034	45	49	20	41,031	68.5%	28,094	21,658	49,752	75,000	(25,248)	53,342	24
2022	2,034	-	-	21	41,852	72.4%	30,299	-	30,299	-	30,299	-	15
2023	2,034	-	-	21	42,689	79.2%	33,795	-	33,795	-	33,795	-	17
2024	2,034	-	-	21	43,543	90.0%	39,207	-	39,207	-	39,207	-	19
2025	2,034	-	-	22	44,414	94.5%	41,989	-	41,989	-	41,989	-	21
TOTAL	34,653				648,718		339,804	481,342	821,147	534,684	286,462	53,342	24

Pure Premium Selection	
3-Year Average x Latest	-
5-Year Average x Latest	18
All Year Average x Latest	22
Selected Pure Premium	22

Trend = 1.020

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Missouri Petroleum Storage Tank Insurance Fund
Reserve Study as of June 30, 2025
Remedial AST
Incurred Bornhuetter-Ferguson Method

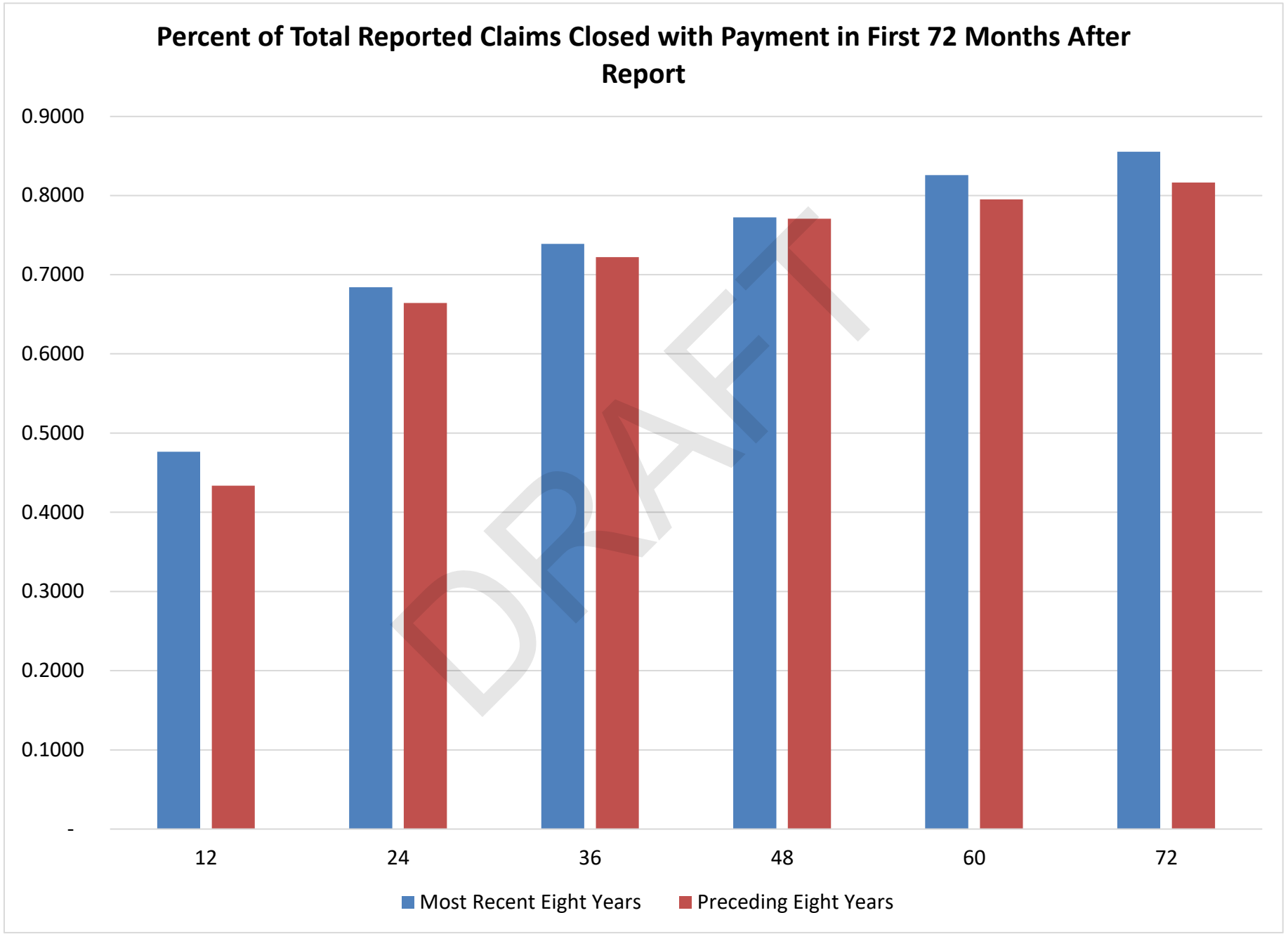
(1) RY	(2) POTENTIAL SITES	(3) PROJECTED PURE PREM	(4) TRENDED PURE PREM	(5) DETRENDED PURE PREM	(6) EXPECTED LOSSES	(7) PERCENT IBNR	(8) EXPECTED IBNR	(9) INCURRED LOSSES	(10) INDICATED ULTIMATE	(11) PAID LOSSES	(12) UNPAID LOSS	(13) CASE RESERVE	(14) ULTIMATE PURE PREM
1994													
1995													
1996													
1997													
1998													
1999													
2000													
2001													
2002													
2003													
2004													
2005													
2006													
2007													
2008													
2009	2,051	90	123	16	32,623	0.0%	-	183,657	183,657	183,657	-	-	90
2010	2,049	-	-	16	33,243	0.0%	-	-	-	-	-	-	-
2011	2,044	-	-	17	33,825	4.1%	1,391	-	1,391	-	1,391	-	1
2012	2,040	-	-	17	34,434	4.1%	1,416	-	1,416	-	1,416	-	1
2013	2,040	-	-	17	35,123	4.3%	1,509	-	1,509	-	1,509	-	1
2014	2,039	-	-	18	35,808	10.1%	3,599	-	3,599	-	3,599	-	2
2015	2,038	82	99	18	36,506	12.2%	4,465	155,510	159,975	155,510	4,465	-	78
2016	2,038	-	-	18	37,236	17.1%	6,371	-	6,371	-	6,371	-	3
2017	2,037	33	39	19	37,963	20.9%	7,943	59,359	67,302	59,359	7,943	-	33
2018	2,036	-	-	19	38,703	20.9%	8,098	-	8,098	-	8,098	-	4
2019	2,036	-	-	19	39,477	24.2%	9,554	-	9,554	-	9,554	-	5
2020	2,035	35	39	20	40,247	26.4%	10,617	61,158	71,775	61,158	10,617	-	35
2021	2,034	45	49	20	41,031	31.7%	12,994	75,000	87,994	21,658	66,336	53,342	43
2022	2,034	-	-	21	41,852	31.9%	13,364	-	13,364	-	13,364	-	7
2023	2,034	-	-	21	42,689	31.9%	13,632	-	13,632	-	13,632	-	7
2024	2,034	-	-	21	43,543	41.3%	17,985	-	17,985	-	17,985	-	9
2025	2,034	-	-	22	44,414	63.0%	27,996	-	27,996	-	27,996	-	14
TOTAL	34,653				648,718		140,936	534,684	675,621	481,342	194,278	53,342	19

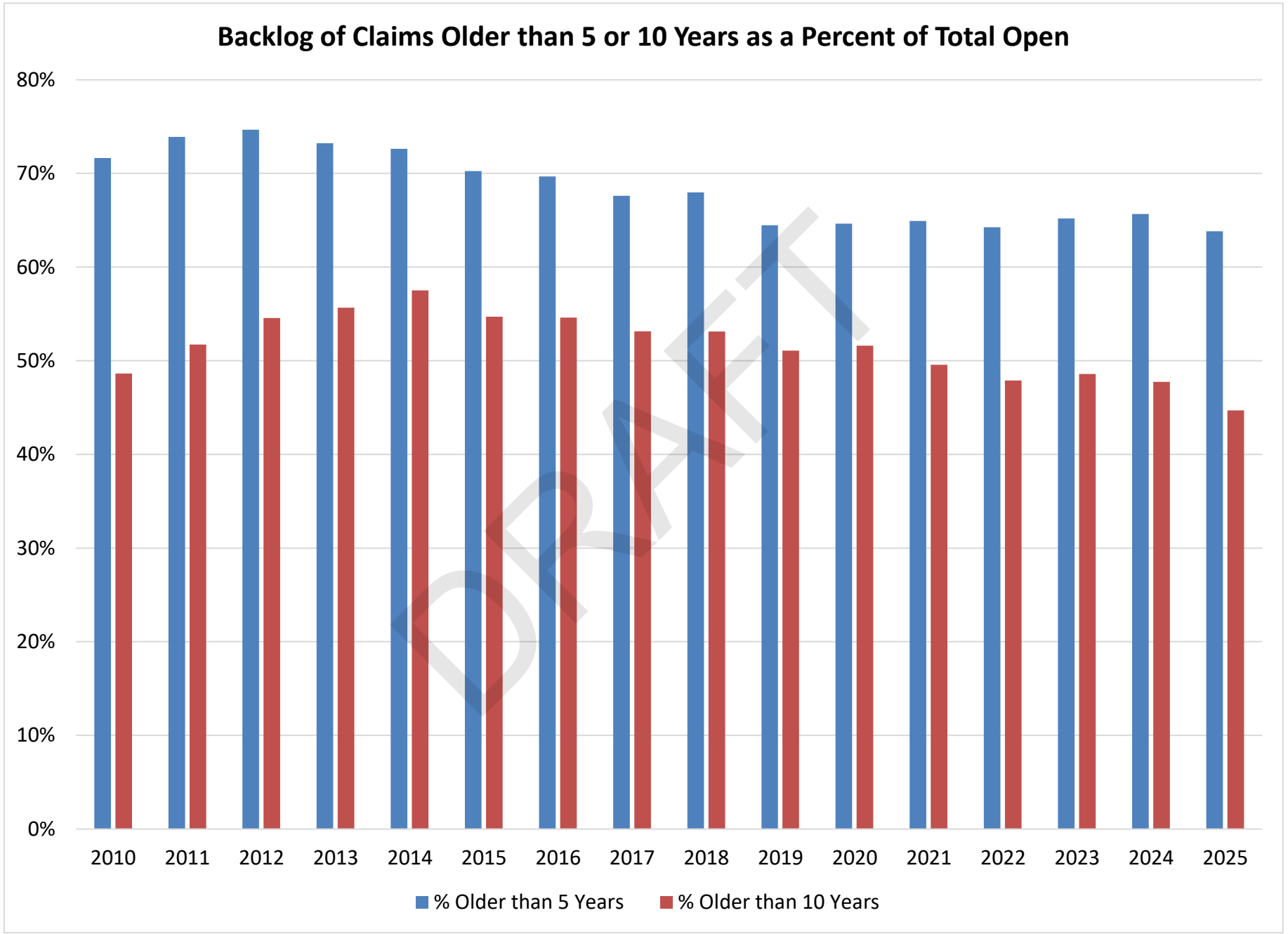
Pure Premium Selection

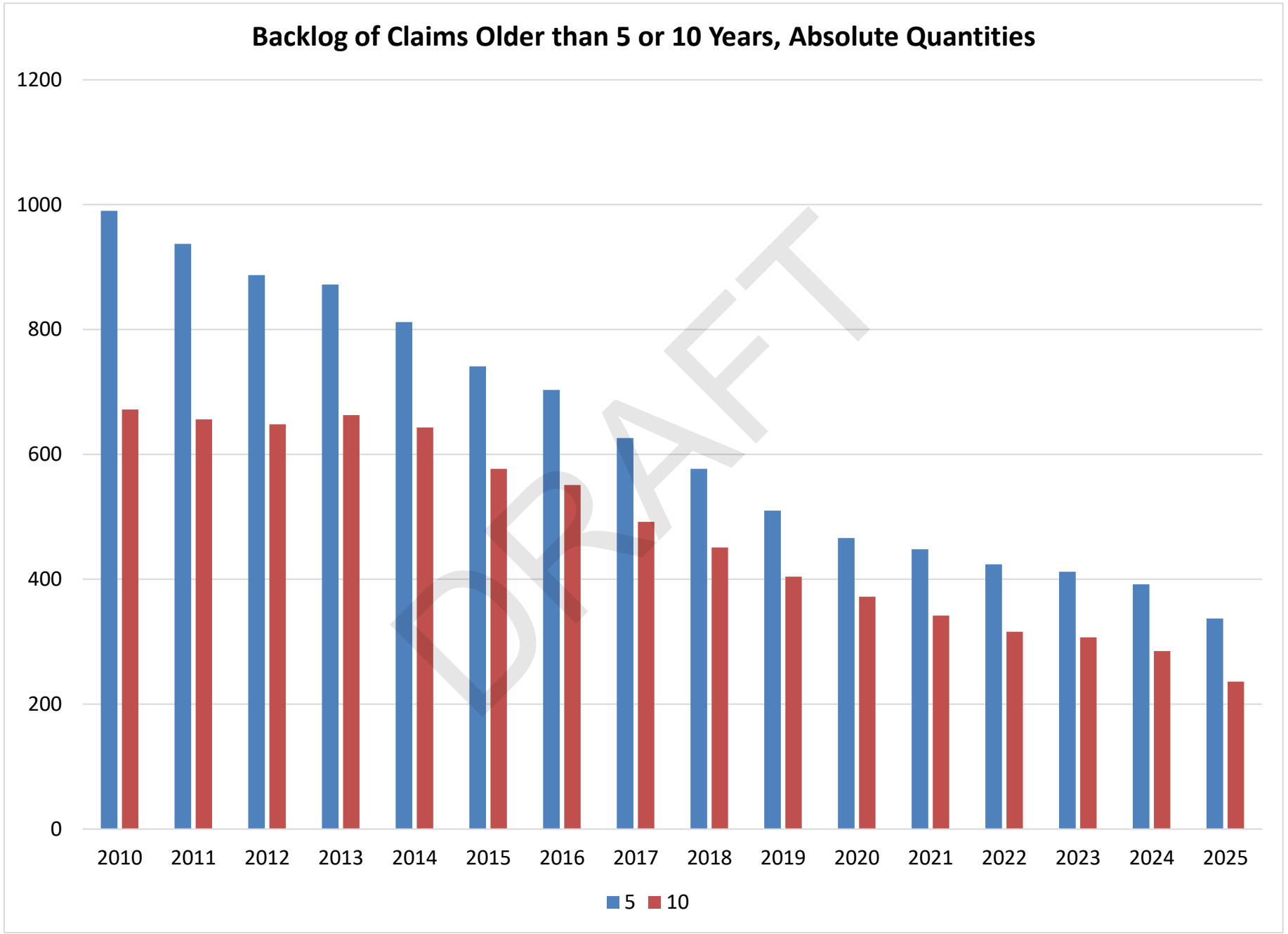
Trend = 1.020

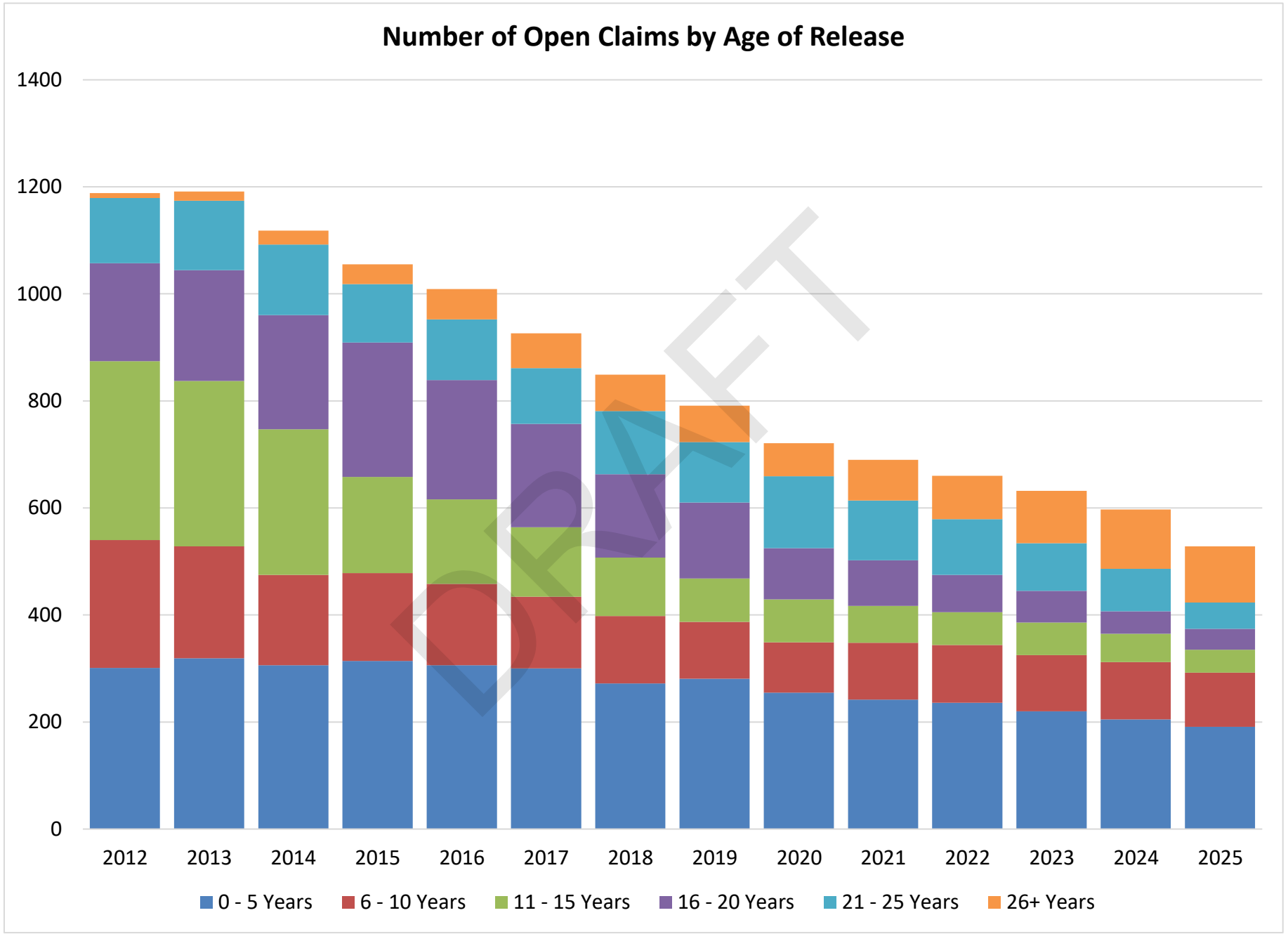
3-Year Average x Latest	-
5-Year Average x Latest	18
All Year Average x Latest	22
Selected Pure Premium	22

DRAFT


Percent of Total Reported Claims Closed with Payment in First 72 Months After Report
0.9000
0.8000
0.7000
0.6000
0.5000
0.4000
0.3000
0.2000
0.1000
-
12
24
36
48
60
72
Most Recent Eight Years
Preceding Eight Years
DRAFT


Backlog of Claims Older than 5 or 10 Years as a Percent of Total Open
80%
70%
60%
50%
40%
30%
20%
10%
0%
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
% Older than 5 Years
% Older than 10 Years
DRAFT


Backlog of Claims Older than 5 or 10 Years, Absolute Quantities
1200
1000
800
600
400
200
0
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
5
10
DRAFT


Number of Open Claims by Age of Release
1400
1200
1000
800
600
400
200
0
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
0 - 5 Years
6 - 10 Years
11 - 15 Years
16 - 20 Years
21 - 25 Years
26+ Years

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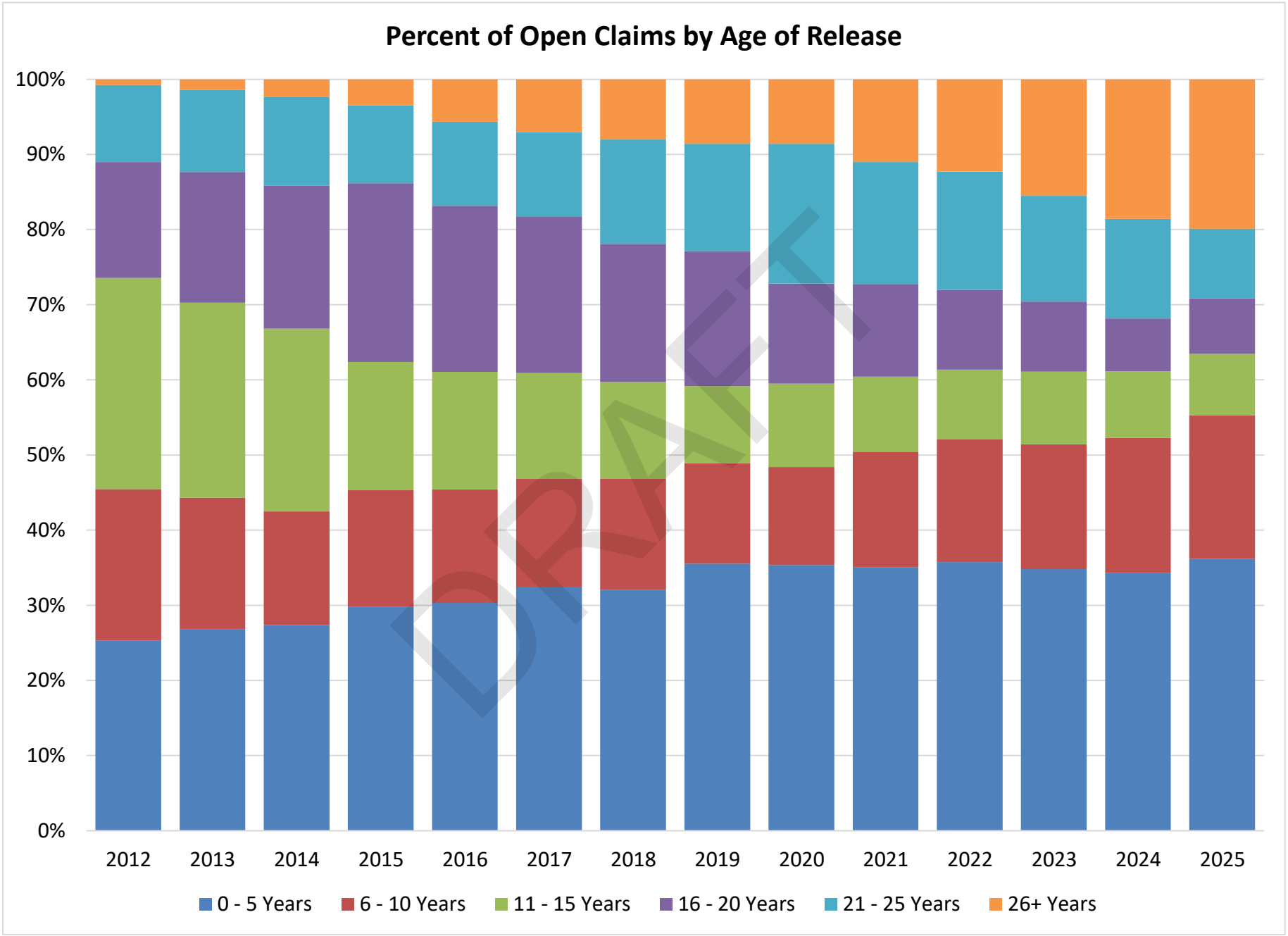
Percent of Open Claims by Age of Release
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
0 - 5 Years
6 - 10 Years
11 - 15 Years
16 - 20 Years
21 - 25 Years
26+ Years

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