



Joint Study of Transportation Network Company (TNC) Insurance Coverage Requirements in California



**California Department of Insurance
California Public Utilities Commission**

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I. Executive Summary and Conclusion

The development of online applications to arrange transportation of passengers led to the evolution of what are now called Transportation Network Companies (TNCs). TNCs created online mobile applications which enable individual drivers using their own vehicles to connect with passengers willing to pay for rides to their destinations. Because virtually all personal auto insurance policies exclude coverage while the driver is transporting passengers for a fee, these enterprises created public safety and liability concerns for various regulatory agencies such as the California Public Utilities Commission (CPUC), the California Department of Insurance (CDI), as well as for local city and county governments, airport authorities, and lawmakers.

Assembly Bill (AB) 2293 (Bonilla-2014) set forth minimum TNC insurance requirements and mandated that the CDI and the CPUC collaborate on a study to assess whether those “coverage requirements are appropriate to the risk of the TNC services in order to promote data-driven decisions on insurance requirements....”

The CDI and the CPUC both issued data requests to their respective regulatory entities, the TNCs and TNC insurers. This report is based primarily on the insurers’ data obtained through the data request since the insurer’s data is most relevant to TNC insurance coverage requirements.

To summarize the report’s findings with respect to TNC claims and loss dollars, under current coverage limits requirements the indication is that over 97% of all TNC claims are expected to be fully covered. In terms of loss dollars, the indication is that 77.46% of losses are expected to be covered in Period 1, 94.98% of losses are expected to be covered in Period 2, and 59.98% of losses are expected to be covered in Period 3.

If the Excess Coverage limit in Period 1 was increased from \$200,000 to \$1,000,000, the percentage of loss dollars expected to be covered would increase to 88.07%.

If the Combined Single Limit coverage limit in Period 3 was increased from \$1,000,000 to \$2,000,000, the amount of loss dollars expected to be covered would only increase to 67.50%.

The Legislature may want to consider performing a cost benefit analysis to determine whether or not such increases in limits are justified. For reference, various coverage limits scenarios are provided in Tables 3.4 to 3.10 in Section III.

It is recommended that the Public Utilities Code be amended to expressly state that Uninsured/Underinsured Motorist (UM/UIM) coverage in Period 3 applies also to TNC drivers.

It is also recommended that comprehensive and collision, Uninsured/Underinsured Motorist, and Medical Payments coverages be mandated whenever a TNC driver is working with an open TNC app.

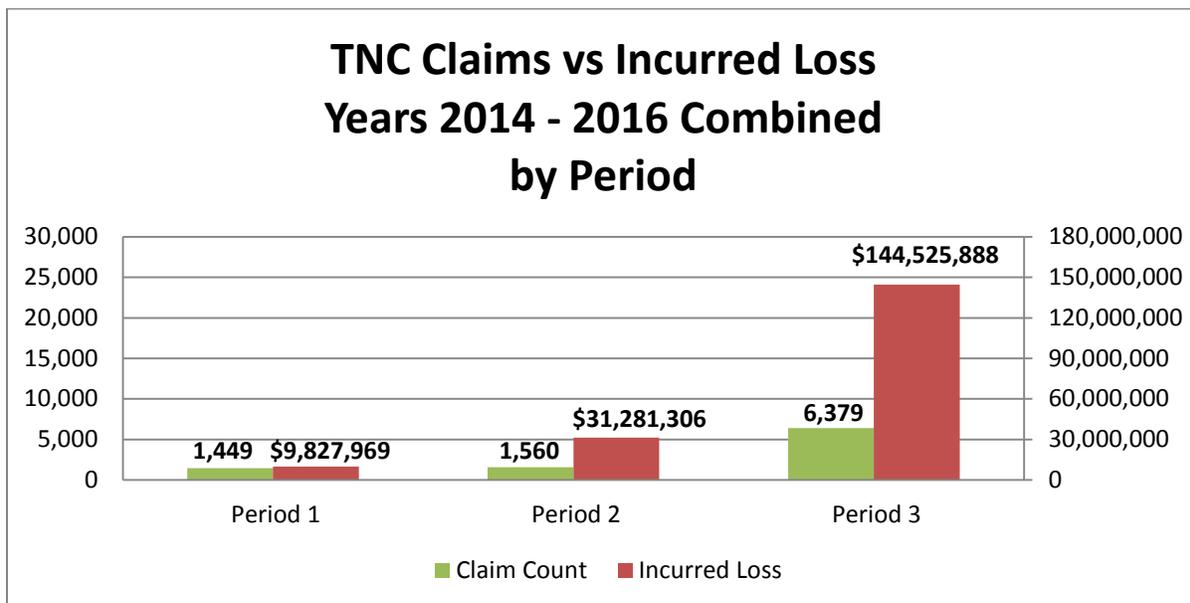
With respect to the above conclusions, the agencies hereby jointly submit this report for legislative review. The groundwork for the report’s recommendations are based on the following summaries and TNC Insurance Data Analysis contained herein.

1.1 TNC Insurance Market in California

Currently, 16 insurance companies offer TNC coverage in California. Among the 16 companies, 13 are admitted personal auto insurers that sell insurance to TNC drivers and 3 are non-admitted commercial auto insurers that sell insurance to TNCs covering liability of TNCs and TNC drivers. All 13 personal auto insurers that participate in the TNC market write TNC insurance by endorsement for Period 1, and some of them extend certain coverages to Periods 2 and 3. A comprehensive list of coverage provided by the participating personal auto insurers is set forth in the TNC coverage chart attached as Appendix A.

1.2 TNC Insurance Loss Experience

From 2014 to 2016, the total TNC insurance losses amounted to \$185.6 million for all periods and all coverages combined. Of the \$185.6 million, 77.9% was attributed to Period 3, 16.9% to Period 2 and 5.3% to Period 1. Most TNC claims and losses were incurred during Period 3, as shown below.



1.3 TNC Insurance Coverage Limits Analysis

Our analysis shows that, actuarially speaking, over 97% of claims are expected to be fully covered by the currently mandated TNC insurance coverage limits (see Table 3.3 – TNC Insurance Coverage Limits in Section III.) However, the “Percentage of Losses Covered” shows a lower level of coverage indication in the following areas which caught our attention:

- (1) Death & Personal Injury Per Person (Period 1) at \$50,000 Coverage Limit: 58.05% of the total expected losses are expected to be covered.
- (2) Death & Personal Injury Per Incident (Period 1) at \$100,000 Coverage Limit: 61.75% of the total expected losses are expected to be covered.
- (3) The primary 50/100/30 limits in Period 1 combined with the \$200,000 Excess Coverage in Period 1: 77.46% of the total expected losses are expected to be covered.
- (4) The Combined Single Limit of \$1,000,000 Coverage Limit in Period 3: 59.98% of the total expected losses are expected to be covered.

Thus, although over 97% of claims are indicated to be fully covered, the dollar amount of losses covered is significantly lower at 77.46% and 59.98% in Periods 1 and 3 respectively. This indicates that a small percentage of accidents are resulting in very high dollar claims that are not fully covered.

If the Excess Coverage limit in Period 1 was increased to \$1,000,000, the “Percentage of Losses covered” would increase to 88.07%.

If the Combined Single Limit Coverage limit in Period 3 was increased to \$2,000,000, it would make only an incremental increase on the projected “Percentage of Claims Covered”. Doubling the coverage limit only raises the “Percentage of Losses Covered” from 59.98% to 67.50% (see Table 3.9 in Section III.) The Legislature would need to perform a cost benefit analysis to determine whether or not the increase in losses covered justifies the cost associated with higher insurance limits.

With regard to the \$200,000 Excess Coverage required in Period 1, the substantial benefit of the excess layer was obvious. Without the Excess Coverage, only about 58% of dollar losses are expected to be covered by the primary Bodily Injury (BI) limits in Period 1. Adding the required \$200,000 Excess Coverage in Period 1 raises the covered loss percentage to 77.46%. As noted above, an increase to the \$200,000 limit would result in a significant benefit to injured claimants.

With regard to Uninsured/Underinsured Motorist Coverage (UM/UIM) required in Period 3, the analysis confirmed that UM/UIM is an essential component of TNC insurance. This was borne

out by the data showing that the average claim severity for UM/UIM was significantly higher than the average claim severity for Death and Personal Injury as shown in the chart below.

	Period 3 claims severity for Death and PI (non UM/UIM)	Period 3 claims severity for UM/UIM
2014	\$39,283	\$73,793
2015	\$22,970	\$61,925
2016	\$15,767	\$38,075

1.4 Potential Insurance Coverage Gaps Still Exist

We still see potential coverage gaps with regard to comprehensive/collision, medical payments and UM/UIM for drivers, all of which were pointed out by Insurance Commissioner Dave Jones but none of which are mandated by the statutory TNC insurance requirements. While some of the TNCs may voluntarily provide comprehensive and collision covering physical damage to a TNC driver’s car, this coverage is not mandatory and may be cancelled by TNCs at any time. We recommend that that comprehensive and collision coverage provided by the TNC’s be mandatory.

The fact that UM/UIM plays such a critical role in TNC insurance in Period 3 (the period during which one or more passengers is in the TNC vehicle) reinforces this Report’s recommendation that the PU Code be amended to expressly state that UM/UIM coverage in Period 3 applies also to TNC drivers. We also recommend that UM/UIM should be mandated at all times the TNC app is open – not just when a passenger is in the car.

Finally, we also recommend that Medical Payments coverage be required. Drivers injured while providing this increasingly popular service should have access to medical payments coverage.

II. Background

On December 20, 2012, the CPUC issued an Order Instituting Rulemaking R12-12-011¹ to seek public comments on various issues regarding the new online-enabled transportation services. The purposes of the Rulemaking was to 1) determine whether the CPUC held the authority to regulate TNCs; 2) establish guidelines and protocols to ensure public safety was not compromised; and 3) assure insurance with appropriate limits is properly maintained in the event of an accident. In 2013, the CPUC received comments from 21 parties and held a public workshop.

On September 23, 2013, the CPUC determined that TNCs are transportation charter-party (TCP) carriers subject to CPUC jurisdiction,² and established comprehensive safety and regulatory requirements which, among other rules, require a TNC to:

- Require TNC drivers to provide proof of both their personal and commercial insurance in the event of an accident.
- Hold a commercial liability insurance policy that is more stringent than the CPUC's current requirement for limousines³, which shall include a minimum of one million dollars (\$1,000,000) per-incident coverage for incidents involving TNC vehicles and drivers in transit to or during a TNC trip, regardless of whether personal insurance allows for coverage;
- Annually submit specified operational data to the CPUC, which includes reports regarding incidents/accidents and zero tolerance complaints.

In the meantime, the CDI identified potential gaps in TNC coverage.⁴ CDI warned drivers that: “While TNCs approved by the California Public Utilities Commission are required to maintain \$1 million in liability insurance, TNCs are not required to have medical payments coverage, comprehensive, collision, uninsured/underinsured motorist (UM/UIM) coverage or other optional coverages. This means that the TNC's liability policy does not have to provide coverage for: 1) bodily injury to the TNC driver; 2) damages to the TNC driver's car, or 3) bodily injury or physical damage caused by an uninsured or underinsured motorist.” While certain TNCs may voluntarily provide these coverages, there is no statutory or other mandate in place which can be an issue for drivers. Most standard personal auto policies (PAPs) exclude “public or livery conveyance”, which means driving a private passenger vehicle for hire is not covered.

¹ <http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M040/K862/40862944.PDF>

² <http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M077/K192/77192335.PDF>

³ CPUC General Order 115-G requires a carrier operating a vehicle that seats seven passengers or fewer to carry \$750,000 of insurance coverage.

⁴ <https://www.insurance.ca.gov/0250-insurers/0300-insurers/0200-bulletins/bulletin-notices-commiss-opinion/TransNetwkDrvr.cfm>.

On March 21, 2014, the CDI held an investigatory hearing and subsequently produced a [white paper](#) regarding insurance issues for TNCs and participating drivers. As a result of the hearing, Insurance Commissioner Dave Jones included eight recommendations in an [April 7, 2014 letter](#) to the CPUC's then-President Michael Peevey and to the California Legislature. Specifically, Commissioner Jones explained that a TNC driver's existing PAP did not cover TNC-related driving, and recommended that TNCs be made responsible for the insurance burden. Commissioner Jones recommended that the CPUC adopt regulations to redefine the term "when providing TNC service" to encompass three distinct operational periods.

Commissioner Jones further recommended that TNCs should maintain at least one million dollars (\$1,000,000) of automobile liability insurance beginning from the moment the driver switches on their TNC application. In addition, TNCs should carry one million dollars (\$1,000,000) Uninsured Motorist/Underinsured Motorist coverage to protect both drivers and passengers; and comprehensive and collision that mirror what the drivers have purchased on their personal automobile insurance policy subject to a reasonable deductible of no more than \$1,000.

The Legislature subsequently considered TNC insurance requirements. On September 17, 2014, the Governor signed AB 2293 into law. The new statute (1) specified mandatory TNC insurance coverages and limits; (2) required a TNC to notify participating drivers regarding certain coverages that were not required by AB2293, and that a driver's standard PAP will not cover losses incurred during TNC operations; and (3) required the CDI and CPUC to submit a joint TNC insurance study to the Legislature⁵.

On November 20, 2014, the CPUC modified TNC insurance rules to require a TNC to carry a minimum of \$100,000 commercial insurance for Period 1 until AB 2293 became effective on July 1, 2015.

2.1 What is a Transportation Network Company (TNC)?

Public Utilities Code section 5431(c) defines a TNC as:

An organization, including, but not limited to, a corporation, limited liability company, partnership, sole proprietor, or any other entity, operating in California that provides prearranged transportation services for compensation using an online-enabled application or platform to connect passengers with drivers using a personal vehicle⁶.

Between 2014 and 2015, the CPUC granted permits to 6 TNCs: Lyft, Rasier-CA, LLC (UberX), RideLabs (Summon), SideCar, Shuddle and Wingz. To date, 14 TNCs received permits to operate in California. See Appendix B for chart of each permitted TNC and its insurer(s).

⁵ California Public Utilities Code § 918.2. (Formerly PU Code § 5436 under AB 2293. The section was renumbered to PU Code §918.2 effective January 1, 2017).

⁶ PU Code §5431(c).

2.2 Current TNC Insurance Requirements

Effective July 1, 2015, AB2293 set forth TNC insurance requirements in distinct service periods each with mandated insurance coverages and limits. The three periods of TNC service are generally recognized as follows:

Period 1 – The TNC driver has logged onto the App, but has not yet accepted a ride request.

Period 2 – The TNC driver has accepted a ride request and is driving to the pick-up location.

Period 3 – The TNC driver has picked up the passenger – this period starts when the passenger enters the TNC driver’s vehicle and ends when the passenger exits the vehicle or the driver ends the transaction on the app, whichever occurs later.

PU Code § 5433 (a) provides that “A transportation network company and any participating driver shall maintain transportation network company insurance as provided in this section.” The TNC insurance requirements may be satisfied by any of the following:

- (A) TNC insurance maintained by a participating driver
- (B) TNC insurance maintained by a TNC
- (C) Any combination of (A) and (B).

In Period 1, PU Code §5433 (c) (1) provides that “[TNC] insurance shall be primary and in the amount of at least fifty thousand dollars (\$50,000) for death and personal injury per person, one hundred thousand dollars (\$100,000) for death and personal injury per incident, and thirty thousand dollars (\$30,000) for property damage”.

In Periods 2 and 3, PU Code §5433 (b) (1) provides that “[TNC] insurance shall be primary and in the amount of one million dollars (\$1,000,000) for death, personal injury, and property damage.”

In Period 3, PU Code §5433 (b) (2) provides that TNC insurance shall also include one million dollars (\$1,000,000) uninsured motorist (UM) coverage and underinsured motorist (UIM) coverage.

Finally, PU Code §5433 (c) (2) provides that TNC companies shall also maintain Excess Coverage in the amount of at least two hundred thousand dollars (\$200,000) for Period 1. Table 2.1 summarizes the TNC insurance requirements.

Table 2.1 - TNC Insurance Requirements (Public Utilities Code §5433 et. seq.)

		Period 1	Period 2	Period 3
Primary Insurance	for death & personal injury (per person)	\$50,000	\$1,000,000	\$1,000,000
	for death & personal injury (per incident)	\$100,000		
	for property damage	\$30,000		
Excess Coverage (per occurrence)		\$200,000	Not Required	Not Required
Uninsured Motorist Coverage & Underinsured Motorist Coverage (UM/UIM)		Not Required	Not Required	\$1,000,000

The CPUC requires all insurers that provide coverage to a transportation carrier, including TNCs, to attest that they will provide the coverage required by law, whether in statute or required by the CPUC. The CPUC also requires the insurance companies to notify the CPUC when coverage is no longer in effect. Unless an insurer notifies the CPUC to the contrary, the CPUC holds the insurer responsible for insurance coverage. If an insurer notifies the CPUC that a carrier’s insurance coverage is no longer in effect, the CPUC automatically suspends the carrier. In sum, the CPUC requires a carrier’s insurance company to provide and pay out on the legally required coverage, whether the actual policy indicates the coverage or not.

2.3 TNC Insurance Products

All TNCs are required to maintain commercial auto liability insurance. To date, TNCs have obtained the required TNC insurance from three (3) non-admitted⁷ insurers. These policies cover the TNCs and also cover the liabilities of TNC drivers when their personal policies do not provide coverage. Mandated TNC coverage does not include coverage for the driver’s injuries or physical damage to the driver’s car.

TNC coverage for drivers through their personal auto policies was not historically available because personal auto policies generally exclude coverage for livery also known as transporting passengers for a fee. With the enactment of AB2293, the definition of personal auto policies was amended to allow personal auto insurers to provide coverage for TNC drivers. The CDI subsequently encouraged personal auto insurers to develop new products to provide TNC coverage for drivers.

During the reporting period, thirteen personal auto insurers created new TNC insurance products and sought approval of those products via submission of rate filings with the CDI’s Rate Filing Bureaus. The new products generally added TNC insurance coverage by endorsement to

⁷ Non-admitted insurers are not subject to California regulatory approval of their rates and forms, nor are they generally covered by state guarantee funds. The non-admitted insurers can transact business through surplus lines brokers in California.

traditional personal auto policies. The endorsement would eliminate the “Livery” exclusion and include TNC driving activities for the coverages specified in the TNC endorsement. All of the filed TNC endorsements provide some coverage during Period 1, some insurers also extended coverage to Periods 2 and 3.

To date, the CDI approved new TNC insurance endorsements for ten personal auto insurance groups⁸ covering TNC drivers for Period 1. Companies include Metromile Insurance Company, Farmers Specialty Insurance, CSAA Insurance Exchange, Metropolitan Direct Property and Casualty Insurance Company, Mercury Insurance Company, USAA Group, State Farm Mutual Automobile Insurance Company, Allstate Group, Kemper Financial Indemnity Company and Farmers Insurance Group. The CDI maintains a chart of TNC insurance offered by personal auto insurers which can be found at Appendix A.

2.4 Current Insurance Coverage Gaps

Current TNC insurance requirements include important liability coverage to protect passengers, pedestrians, other vehicles and their occupants and third party property damage. TNC insurance requirements also include UM/UIM coverage in Period 3 for TNC passengers and possibly TNC drivers.

However, as noted previously, TNC insurance requirements do not currently include other traditional coverages such as medical payments, comprehensive, collision, UM/UIM coverage or other optional coverages. This means that TNC Insurance does not mandate coverage for: 1) bodily injury to the TNC driver; 2) physical damage to the TNC driver's car, or 3) bodily injury or physical damage caused by an uninsured or underinsured motorist in Period 1 and 2. Furthermore, some argue it is unclear whether UM/UIM coverage required in Period 3 applies to drivers or is only intended to protect passengers.

While certain TNCs voluntarily provide some of these coverages, they are not required to do so which means they can cancel that coverage at any time with no recourse – thereby leaving gaps in coverage. And although drivers may purchase some of these coverages via endorsement to their personal auto policy, many of the endorsements only provide coverage in Period 1. See Chart of TNC personal coverage available at Appendix A. This may leave drivers without important coverage in Periods 2 and 3.

The CDI and CPUC recommend that TNC Insurance requirements be updated to mandate coverage for Medical Payments, Comprehensive/Collision and UM/UIM in all three TNC periods. In most cases, this would mandate coverage TNCs are already voluntarily providing.

⁸ The ten admitted personal auto insurer groups are comprised of 14 major personal auto insurance writers in California. In 2016, they wrote PPA auto liability insurance premiums valued at \$5,859,374,091 in California, which represent 41.17% of state market share.

2.5 Data Calls

To evaluate whether TNC insurance coverage requirements are appropriate to the risk of transportation network company service, and to promote data-driven decisions on insurance requirements as mandated by AB 2293, the CDI and CPUC started to plan this report in September 2015, and met multiple times to determine the data elements needed for the study. The CDI and CPUC independently designed two sets of data calls to its own respective regulatory entities: insurance providers and TNCs.

California Public Utility Commission Data Call

On January 6, 2017, the CPUC sent out Instructions to TNCs regarding the AB 2293 TNC insurance study, with responses due on March 31, 2017 to licensed TNC companies (Appendix H). The January 6, 2017 Instructions sought information regarding all traffic collisions, accidents and any other incidents that resulted in a TNC's insurance company receiving a claim against the TNC's insurance policy. The CPUC also requested information regarding the personal vehicles and insurance policies of participating drivers, intended to facilitate a cross-reference of policy information provided in the respective data requests. All TNCs responded. Of the 14 TNCs, nine were new and did not have any accidents, collisions or claims during the time period defined. Five TNCs provided data as requested.

California Department of Insurance Data Call

On February 21, 2017, the CDI sent out its data call package – Survey of Transportation Network Company Insurance Coverage (Appendix I) with a due date of July 1, 2017 to 462 admitted insurers and 92 non-admitted insurers that are permitted to write either personal auto liability or commercial auto liability lines of insurance. Insurers that did not offer insurance to TNCs or participating drivers could check the appropriate box on the signature page to confirm that they did not write TNC insurance. Once an insurer returned the signed signature page to the CDI, it became exempt from the remainder of the survey. After two follow-ups, all the insurers responded. As anticipated, 97% of companies responded that they did not write any TNC insurance policy or TNC endorsement during the years 2014 to 2016. Only 16 insurers (13 admitted personal auto insurers and three non-admitted commercial auto insurers) that responded to the data call wrote TNC insurance endorsement or TNC insurance coverages as defined in PU Code §5433. Currently, California's TNCs maintain commercial liability insurance policies issued by three non-admitted insurers transacting business through surplus lines brokers: James River Insurance Company, Steadfast Insurance Company, and Nautilus Insurance Company.

III. TNC Insurance Data Analysis

The CDI data call contains three sections: (1) Questionnaire; (2) Policy Information Exhibit (PIE); and (3) Individual Claim Data Worksheet. The objective of each of these sections was to capture each company's TNC insurance information in order to gain a better understanding of the current TNC insurance market in California. Sixteen (16) insurers have submitted their data or information. Of the 16 insurers, 13 are admitted personal auto insurers and three are non-admitted companies writing commercial auto insurance through surplus line brokers. Throughout this report, "non-admitted insurers" are also referred to as "surplus lines insurers".

There was one additional commercial auto writer that stated it did not offer TNC insurance as specifically described in the survey, but that TNC coverage may exist on a case by case basis. This company did not have any qualitative or quantitative data to report. This company's statement is reported in Q11 of the summary section.

The following summaries explain the results of each data call section compiled by the CDI. To protect each company's privacy for their proprietary data, we have omitted each company's identity. The quantitative data as found in the Policy Information Exhibits (PIE) and the individual claim data are presented in aggregate form.

3.1 Summary Results of CDI's Questionnaire

The Questionnaire consists of 11 questions - ten multiple choice questions, and a concluding open-end question that asked each insurer to describe any issues they thought should be noted in the survey. The following is a summary of the questionnaire results:

Q1. Which lines of business did your company write in the State of California for TNCs or participating drivers for any time during the reporting period from Jan. 1, 2014 to December 31, 2016?

Results: 13 personal automobile insurers placed the TNC insurance in Private Passenger Auto Liability insurance (Line 19.2) and they also offered Private Passenger Auto Physical Damage (Line 21.1) insurance. The three non-admitted insurers placed the TNC insurance in Commercial Auto Liability insurance (Line 19.4). Two of them were also licensed to write Commercial Auto Physical Damage (Line 21.2) insurance.

Q2. When did your company begin writing policies for TNCs or participating drivers?

Results: The following summarizes the number of insurers that began writing TNC insurance policies in each year beginning in 2013:

2013 = 2 insurers
2014 = 0 insurers
2015 = 6 insurers
2016 = 8 insurers

Q3. What TNC Coverage Periods did your company write?

Results: 11 companies wrote only Period 1; five insurers wrote all the three Periods (1, 2 and 3). Of these five insurers, two are personal auto insurers.

Q4. How does your company write TNC insurance?

Results: All of the 13 personal auto insurers used a TNC endorsement. Two surplus lines insurers wrote TNC insurance by a separate policy. The other surplus lines company used current commercial auto policies.

Q5. For Period 1, Public Utilities Code §5433(c)(1) requires that TNC insurance shall provide \$50,000/\$100,000/\$30,000 coverage for Death, Personal Injury and Property Damage. Please indicate the limits that your company offered.

See summary results in Question 5 of Appendix C – Summary of Questionnaires.

Q6. How many TNC participating vehicles did your company insure for each period at the end of each calendar year?

Results: The reported number of vehicles insured with TNC insurance totaled 9,460 for Period 1 in 2015; 35,045 for Period 1; and 7,070 for Period 2 and 3 in 2016. The three non-admitted insurers used mile-driven as the basis for their rates, with no vehicles count reported.

Q7. Your company's TNC insurance coverages for Period 1 are written on a(n) Primary Basis or Excess Basis?

Results: 12 insurers wrote Period 1 on a primary basis. 5 insurers wrote Period 1 on an excess basis. Of the 5 insurers, 3 are personal auto insurers, 2 are surplus lines writers. (1 insurer wrote both primary and excess coverage for Period 1)

Q8. According to Public Utilities Code §5433(c)(2), TNCs shall also maintain insurance that provides excess coverage insuring the TNC and the participating drivers in the amount of at least \$200,000 per occurrence for excess coverage of TNC service. Please indicate which Period(s) your company provided this excess coverage.

Results: None of the 13 admitted personal auto insurers offered the \$200,000 Excess Coverage. The Three surplus lines insurers offered \$200,000 Excess Coverage for Period 1. Only one

surplus line company also offered the \$200,000 Excess Coverage for Periods 2 and 3.

Q9. In addition to the required automobile liability and UM/UIM coverages, which of the following coverages did your company also offer at an additional premium to the TNC or participating drivers?

Results: 15 of the 16 insurers also offered physical damage (Collision or Comprehensive). 12 insurers also offered Medical Payment Coverage. Three surplus lines insurers wrote TNC insurance on a Combine Single Limit (CSL) basis. Four insurers also offered Other coverages, but they did not specify what other coverages they offered.

Q10. Has your insurance company experienced any challenges obtaining information from TNCs, their insurers, or personal auto insurers, regarding the exchange of information (dates, times, whether the driver was logged on to the TNC application at the time of an accident), as required by Public Utilities Code §5435?

Results: Two insurers indicated they have experienced challenges. 14 indicated no problems or challenges.

Q11. Please use the following space to describe any other issues that you believe should be noted in this survey or the Department's report to the Legislature.

Results: One insurer that did not submit any claims data stated that; “We do not offer TNC insurance as specifically described in the survey. However, because commercial policies do not necessarily exclude TNC activities, coverage may exist on a case by case basis. For personal insurance policies, TNC activities are specifically excluded. Because we do not offer specific TNC insurance in California, but may cover certain risks that arise from TNC activity, we have attempted to be responsive to the survey. All answers to the survey should be viewed with this in mind.”

Please refer to “Appendix C - Summary of Questionnaires” for the details of each insurer’s response to the 10 multiple choice questions in the Questionnaires.

3.2 Policy Information Exhibit (PIE)

In order to understand what policy limits TNC insurers offered to their policyholders, the CDI compiled aggregate reports labeling “TNC Insurance Policy Information Exhibit” for all of the insurers writing TNC insurance from 2014 to 2016.

Based on the data reported in the PIE section, 13 admitted insurance companies offered TNC insurance coverage by endorsement to their policyholders at additional premiums. These 13 companies are major personal auto insurance writers which represent 41.2% of the personal auto liability insurance market share business in California for the year 2016. All of the 13

companies offered TNC coverage for Period 1; some also extended coverage to Period 2 and Period 3.

Personal auto insurers started writing TNC insurance coverage in 2015 and 2016. They offered a TNC insurance endorsement as an optional coverage to be added to their traditional Personal Auto Policy (PAP) with various policy limits ranging from basic Financial Responsibility (FR) limits at 15/30/5 to as high as one million dollars (\$1,000,000). In 2016, 47.52% of TNC personal auto policyholders had TNC insurance Bodily Injury (BI) limits of fifty thousand dollars (\$50,000) per person and one hundred thousand dollars (\$100,000) per accident, and about 51.36% of TNC personal auto policyholders had PD policy limits of fifty thousand dollars (\$50,000). The fifty thousand dollars (\$50,000) PD coverage is higher than the required thirty thousand dollars (\$30,000) limit on Property Damage.

In the personal auto insurance market, UM/UIM coverage for TNC drivers was available in Period 1 at various policy limits ranging from 15/30 to 1000/1000, with a 50/100 limit being the majority choice (41.41% of TNC policyholders).

AB2293 provides that TNC insurance coverage “shall also provide uninsured motorist and underinsured motorist coverage (UM/UIM) in the amount of one million dollars (\$1,000,000) from the moment a passenger enters the vehicle of a participating driver until the passenger exits the vehicle [otherwise known as Period 3]. The policy may also provide this [UM/UIM] coverage during any other time period, if requested by a participating driver relative to insurance maintained by the driver.”

Based on the language in AB2293, the Legislature clearly intended AB2293 to provide UM/UIM for TNC passengers in Period 3. Some argue that it is not clear whether the Legislature intended to provide UM/UIM for *drivers* in Period 3.

In Period 3, the average claim severity for UM/UIM is significantly higher than the claim severity for Death and Personal Injury. This indicates that the UM/UIM coverage is an essential component of TNC insurance coverage. A review of the PIEs for each report year shows the following:

	Period 3 claims severity for Death and PI (non UM/UIM)	Period 3 claims severity for UM/UIM
2014	\$39,283	\$73,793
2015	\$22,970	\$61,925
2016	\$15,767	\$38,075

Sixteen insurers completed the PIE data. Of the 16 companies, 13 were admitted personal insurers and three were non-admitted commercial auto insurers. One of 13 admitted insurers reported PIE data but did not have any incurred loss data since it started writing TNC insurance business in December 2016.

The three non-admitted insurers wrote TNC insurance starting in 2014 or earlier. They offered policies on a Combined Single Limit (CSL) basis with a policy limit at one million dollars (\$1,000,000) for death, personal injury and property damage. Also, these companies use “mileage” driven as unit of exposure for rating purposes rather than earned car years. They offered insurance coverage to the TNCs which also covered participating drivers. A master policy was issued to the TNCs that provided coverage mainly in Periods 2 and 3. The policy could also cover Period 1 if the TNC driver’s personal auto policy failed to cover Period 1.

The CDI analyzed the policy information worksheets and the individual claim data in order to compile the incurred loss by policy limit. Each individual exhibit shows the following column heading:

- Coverage: BI, PD, UM/UIM, CSL, EC
- Coverage Limit: BI - the policy limits start with 15/30, up to 1000/1000 (000s)
PD - the limits starts from 5 to 1000
UM/UIM - 15/30 to 1000/1000
CSL - 500 to 2000
EC - 200
- Col [1]: Number of Policies with TNC Coverage
- Col [2]: # of Policies % of Distribution
- Col [3]: Earned Car Years with TNC Insurance
- Col [4]: Earned Car Years with TNC Ins % Distribution
- Col [5]: Number of Claims
- Col [6]: Total Incurred Loss
- Col [7]: Total Incurred Loss % Distribution
- Col [8]: Claim Severity
- Col [9]: Claim Frequency per 1000 cars

The Policy Information Exhibits in Appendix D illustrate aggregate policy data, claim counts, and incurred loss results by personal auto insurer, surplus lines insurer, and all TNC insurance writers. Each individual exhibit shows the number of policies with TNC coverage, earned car years, number of claims, and total incurred loss by year and by Period. The CDI computed the

claim severity (average loss per claim) and claim frequency (claim occurrence in every 1,000 cars insured) based on the reported claims data provided. The individual exhibits depict policy and claims data by coverage limit under the coverage categories of BI (Bodily Injury), PD (Property Damage), UM/UIM (Uninsured/Underinsured Motorist), EC (Excess Coverage), and CSL (Combined Single Limit for Death, Personal Injury and Property Damage).

The terms of “Bodily Injury” in Period 1 and “Death and Personal Injury” are used interchangeably in this report; these two terms offer the same coverage.

3.3 Individual Claim Data

Individual claim data is the most important part of this study. Fifteen insurance companies submitted a total of 18,188 claim records for the reporting period of January 1, 2014 to December 31, 2016. CDI staff reviewed and checked each insurer’s data very carefully to ensure the reliability of the database. When CDI found data sets to be questionable, CDI staff contacted the insurers, held a teleconference and confirmed data accuracy with the insurers.

Through the editing process, CDI removed 8,809 records from the initial database for various reasons such as zero dollar amount of loss, outside the scope of the reporting period, unknown period, questionable data entries, etc. CDI also excluded 254 data elements amounting to a total of \$1,055,116 incurred losses from the database because they were marked “Unknown” in the Period coding.

CDI combined some records when they had the same claim number or multiple claimants with the same accident date and policy number. Excess Coverage (EC) records were combined into either Bodily Injury (BI) or Property Damage (PD) coverage for the same claim. As a result, CDI did not include EC as one of the coverage types in the finalized database or histogram chart.

In Periods 2 and 3, CDI combined BI and PD coverage records into Combined Single Limit (CSL) coverage if they were related to the same accident. The final aggregate data set includes 9,377 individual claim records for 3 periods and four coverage types: BI, PD, CSL, and UM/UIM (Uninsured Motorists/Underinsured Motorists). The total amount of losses is \$185,635,164.

Claim and Loss Summary

The following table and charts⁹ summarize the loss distribution by Insurers (Personal Auto Insurers, Surplus Lines Insurers and Total Insurers), by Year (2016, 2015, 2014, and 3 year Combined), and by Period (1, 2, 3, and 3 Periods Combined).

The individual claim data of each of the 15 companies¹⁰ was used in the analysis of TNC insurance experience results. For Personal Auto Insurers, the table below shows that the TNC insurance incurred loss experience has an average claim severity for all periods of \$5,656 on an all years combined basis. For Surplus Lines Insurers, the all periods, all-years average claim severity is \$21,462. For the combination of personal and surplus lines insurers, the corresponding average claim severity is \$19,774. The average claims for all periods for PPA insurers was much lower because they were primarily insuring Period 1 when no passengers are in the car.

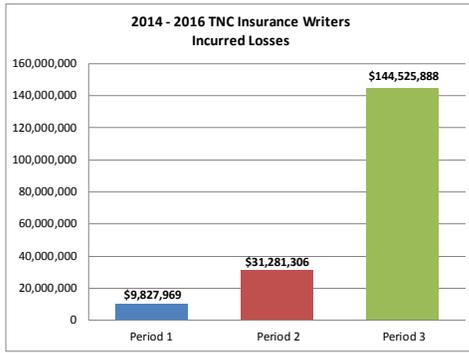
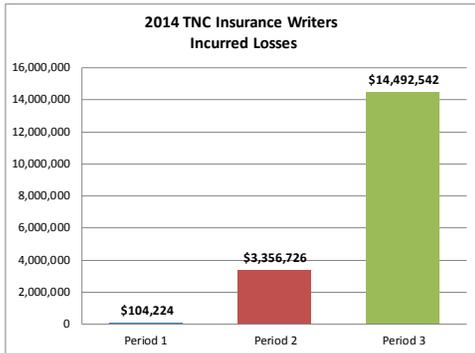
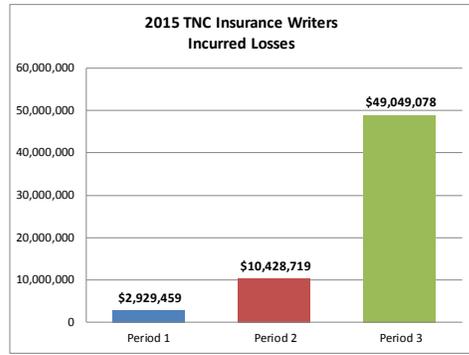
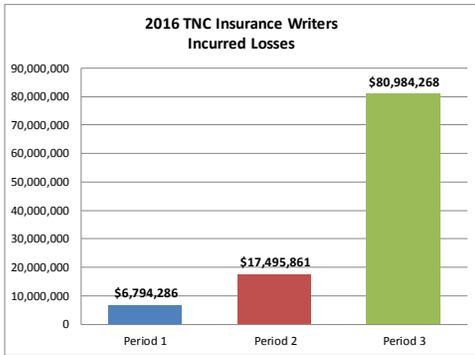
⁹ For the table and charts in this section, claim records for Excess Coverage were captured separately.

¹⁰ Of the 16 insurers reporting data in the Policy Information Exhibit worksheets, only 15 insurers had claim data.

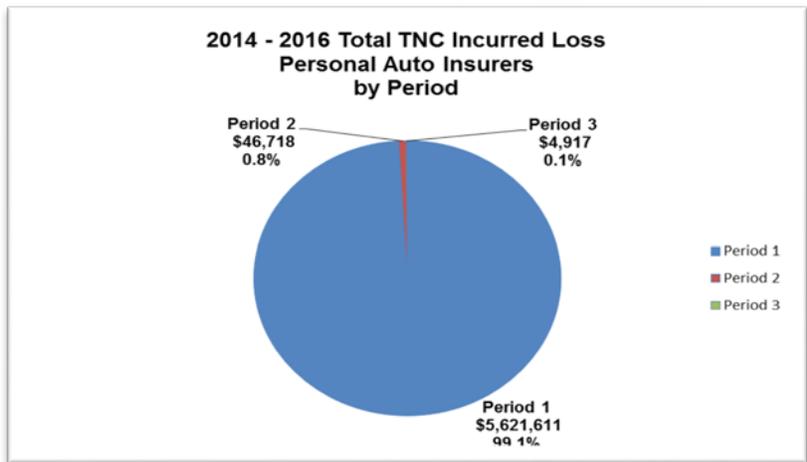
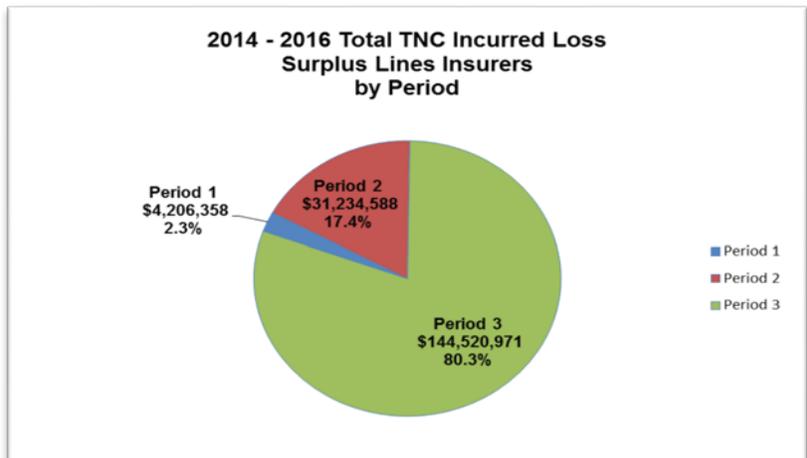
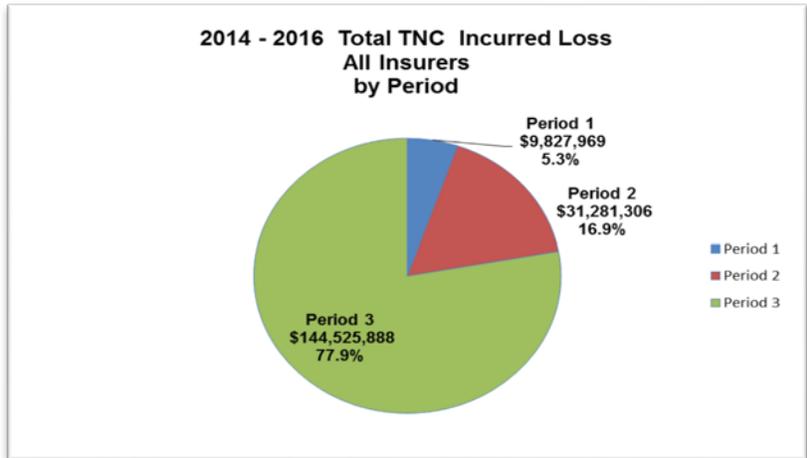
TRANSPORTATION NETWORK COMPANY INSURANCE POLICY INFORMATION EXHIBIT

Claim Count and Incurred Losses - by Year and Period

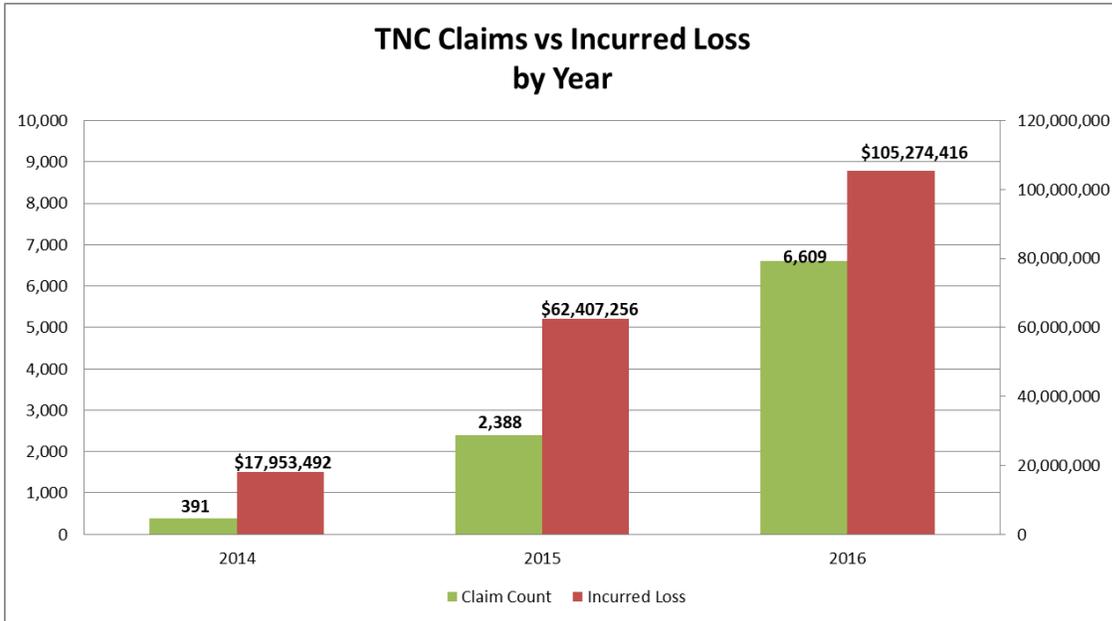
Period	PERSONAL AUTO INSURERS					SURPLUS LINES INSURERS					TOTAL				
	Number of Claims	% Distribution	Incurred Loss	% Distribution	Claim Severity	Number of Claims	% Distribution	Incurred Loss	% Distribution	Claim Severity	Number of Claims	% Distribution	Incurred Loss	% Distribution	Claim Severity
2016															
1	745	98.8%	4,033,335	98.7%	5,414	352	6.0%	2,760,951	2.7%	7,844	1,097	16.6%	6,794,286	6.5%	6,194
2	6	0.8%	46,718	1.1%	7,786	1,121	19.1%	17,449,143	17.2%	15,566	1,127	17.1%	17,495,861	16.6%	15,524
3	3	0.4%	4,917	0.1%	1,639	4,382	74.8%	80,979,351	80.0%	18,480	4,385	66.3%	80,984,268	76.9%	18,468
	754	100%	4,084,970	100%	5,418	5,855	100%	101,189,445	100%	17,283	6,609	100%	105,274,416	100%	15,929
2015															
1	249	100.0%	1,588,276	100.0%	6,379	89	4.2%	1,341,183	2.2%	15,069	338	14.2%	2,929,459	4.7%	8,667
2						381	17.8%	10,428,719	17.1%	27,372	381	16.0%	10,428,719	16.7%	27,372
3						1,669	78.0%	49,049,078	80.6%	29,388	1,669	69.9%	49,049,078	78.6%	29,388
	249	100%	1,588,276	100%	6,379	2,139	100%	60,818,980	100%	28,433	2,388	100%	62,407,256	100%	26,134
2014															
1						14	3.6%	104,224	0.6%	7,445	14	3.6%	104,224	0.6%	7,445
2						52	13.3%	3,356,726	18.7%	64,552	52	13.3%	3,356,726	18.7%	64,552
3						325	83.1%	14,492,542	80.7%	44,592	325	83.1%	14,492,542	80.7%	44,592
						391	100%	17,953,492	100%	45,917	391	100%	17,953,492	100%	45,917
2014 to 2016															
1	994	99.1%	5,621,611	99.1%	5,656	455	5.4%	4,206,358	2.3%	9,245	1,449	15.4%	9,827,969	5.3%	6,783
2	6	0.6%	46,718	0.8%	7,786	1,554	18.5%	31,234,588	17.4%	20,099	1,560	16.6%	31,281,306	16.9%	20,052
3	3	0.3%	4,917	0.1%	1,639	6,376	76.0%	144,520,971	80.3%	22,666	6,379	67.9%	144,525,888	77.9%	22,657
	1,003	100%	5,673,246	100%	5,656	8,385	100%	179,961,917	100%	21,462	9,388	100%	185,635,164	100%	19,774



The total incurred loss for all three periods and all three years is \$185.6 million. Of the \$185.6 million, \$144.5 million or 77.9% is from Period 3; \$31.3 million or 16.9% is from Period 2; and \$9.8 million or 5.3% is from Period 1. The following pie charts illustrate the loss distribution by Period for All Insurers, Surplus Lines Insurers, and Personal Auto Insurers, respectively:

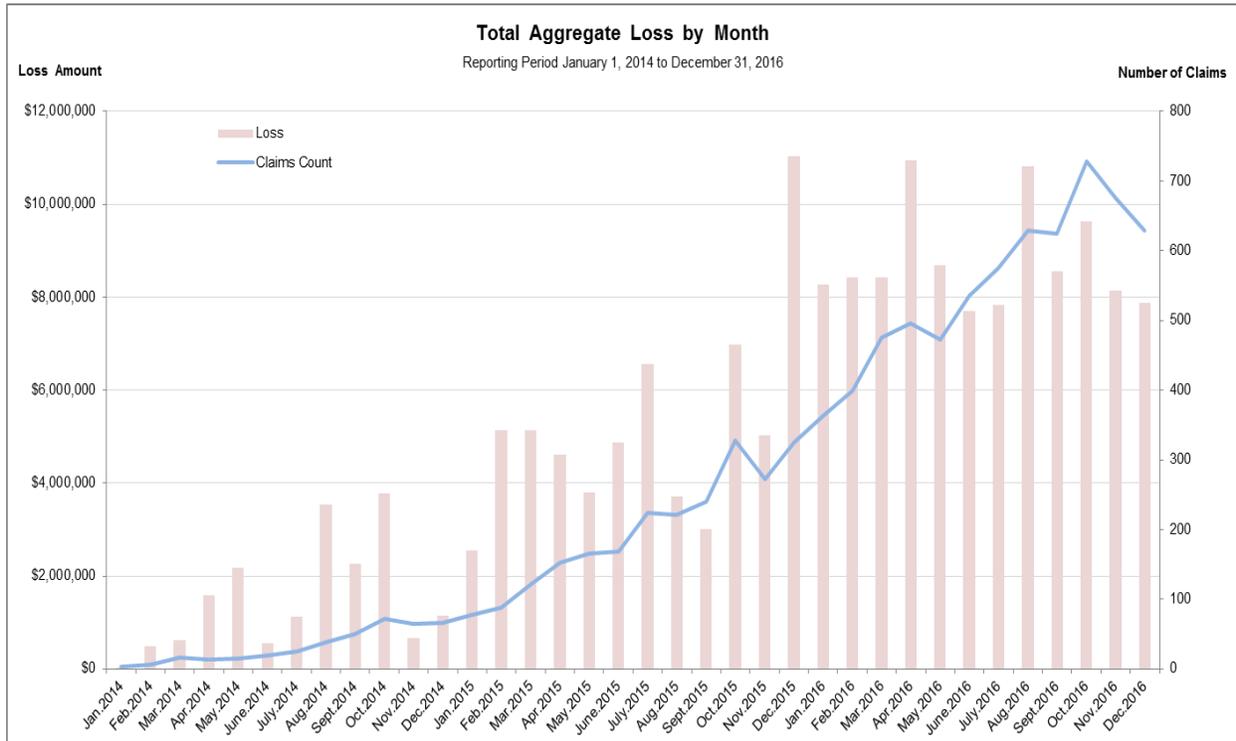


The claim count and incurred loss from TNC activities also increased significantly as shown in the graph below. TNC related incurred losses increased by 248.6% from 2014 to 2015, and by 488.3% in 2016.



Histogram and Loss Distribution by Coverage

After analyzing the individual claims data submitted by insurers, CDI was left with an aggregate data set of 9,377 records for the three-year reporting period. The chart, labeled “Total Aggregate Loss by Month,” shows an exponential growth of the total number of claims and incurred loss amounts by month from January 2014 to December 2016.



In order to assess whether TNC insurance coverage as required by AB2293 (CPUC Code §5433) is appropriate, three years of aggregated data was analyzed after completing a data editing process.

The three-year combined aggregated database was sorted by coverage type and Period as specified in CPUC Code §5433. Each histogram was reviewed carefully to observe the results of the empirical data behavior for each of the coverages.

Based on the review of Policy Information Exhibits and histograms, CDI staff applied statistical and actuarial techniques¹¹ to fit the empirical claim counts and individual losses to various loss distribution models. More than 30 parametric distribution models were first selected for the analysis.

A series of hypothesis testing was applied to select the probability distribution function that best fit the empirical claims data. With the best selected loss distributions, CDI staff was able to compute the various parameters values and make better data-driven decisions on TNC insurance coverage.

The process of fitting of loss distributions was done by coverage and based on the seven required Coverages as summarized in Table 3.1, and the parametric distribution of best fit and the corresponding parameter value are summarized in Table 3.2. Since credible data for Excess Coverage (EC) did not exist, the Death and Personal Injury (Per Person Period 1) data set was used as a proxy for EC.

¹¹ Traditionally, statisticians or actuaries use parametric distributions for claim counts (frequency) and loss size (severity). A parametric distribution is one that is defined by a fixed number of parameters, notably the normal distribution is a parametric distribution with two parameters: mean and variance.

Table 3.1

TNC Insurance Requirements Coverage Summary (Public Utilities Code §5433 et. seq.)

		Period 1	Period 2	Period 3
		The TNC driver has logged onto the App, but has not yet accepted a ride request.	The TNC driver has accepted a ride request and is driving to the pick-up location.	The passenger enters the TNC driver's vehicle until the passenger exits the vehicle.
Primary Insurance	for death & personal injury (per person)	\$50,000	\$1,000,000	\$1,000,000
	for death & personal injury (per incident)	\$100,000		
	for property damage	\$30,000		
Excess Coverage (per occurrence)		\$200,000	Not Required	Not Required
Uninsured Motorist Coverage & Underinsured Motorist Coverage (UM/UIM)		Not Required	Not Required	\$1,000,000

There are seven different coverage limits; each coverage is fitted by a probability loss distribution function for the coverage limits study.

The steps used in fitting a statistical distribution to the claims severity were as follows:

- (1) Selecting multiple loss distributions. Thirty distributions with the following two insurance severity coverage characteristics are examined:
 - Claims are greater than zero and
 - Skewed to the right¹²
- (2) Estimating each distribution’s statistical parameters. Two methods are applied:
 - Method of moments (MOM)
 - Maximum likelihood estimates (MLE)
- (3) Goodness of Fit Tests. Three tests are used:
 - Kolmogorov-Smirnov
 - Anderson-Darling
 - Chi-Squared
- (4) Models fit by data visualization. Five different plots are used in selection:
 - Probability Density Function vs. Histogram Graph
 - Cumulative Density Function Graph
 - P-P Plot
 - Q-Q Plot
 - Probability Difference Graph

¹² A distribution “skewed to the right” means that a distribution has a long right tail. It is also called positive skewed.

(5) Revising the model if necessary.

Based on the modeling fitted procedures, different distributions are fitted to the claims severity data for different coverages and limits. The best fitted results with various calculated parameters are listed in Table 3.2 below:

Table 3.2
Statistical Distribution with Calculated Parameters

Coverage	Statistical Distribution	Parameters
Death & Personal Injury (Per Person, Period 1)	Frechet (3P) ¹³	$\alpha=1.3433$ $\beta=6715.6$ $\gamma=-2277.3$
Death & Personal Injury (Per Incident, Period 1)	Frechet (3P)	$\alpha=1.278$ $\beta=6083.1$ $\gamma=-2141.1$
Property Damage (Period 1)	Inverse Gaussian (3P)	$\lambda=2473.1$ $\mu=3994.4$ $\gamma=-172.11$
Excess Coverage (Period 1)	Frechet (3P) was used as proxy*	$\alpha=1.3433$ $\beta=6715.6$ $\gamma=-2277.3$
Combined Single Limit (Period 2)	Log-Gamma	$\alpha=33.91$ $\beta=0.24868$
Combined Single Limit (Period 3)	Pearson 6	$\alpha_1=1.4446$ $\alpha_2=0.97598$ $\beta=2182.1$
Uninsured & Underinsured Motorist Coverage (Period 3)	Burr	$k=1.0308$ $\alpha=1.2012$ $\beta=15079.0$

*Note: The available Excess Coverage data is not credible for a reasonable study of Excess Coverage to take place. As a result, Frechet (3P) of Death & Personal Injury (per person, Period 1) is used as a proxy for Excess Coverage.

Applying the insurers' aggregate claims data, the Fitted Loss Distribution has been overlaid to the Histogram for each coverage.

In Appendix E, the three-year aggregate histogram and loss distribution by coverage type is illustrated for each of six coverage types:

- Histogram Chart 1 - Death and Personal Injury (aka Bodily Injury) – Per Person, Period 1
- Histogram Chart 2 - Death and Personal Injury (aka Bodily Injury) – Per Incident, Period 1
- Histogram Chart 3 - Property Damage (PD) – Period 1
- Histogram Chart 4 - Combined Single Limit (CSL) – Period 2
- Histogram Chart 5 - Combined Single Limit (CSL) – Period 3
- Histogram Chart 6 - Uninsured Motorist/Underinsured Motorist (UM/UIM) – Period 3

¹³ The Frechet distribution is named after French mathematician Maurice Rene Frechet, who developed it in the 1920s as a maximum value distribution. 3 P means 3 parameters.

In each of the histogram charts, CDI staff also computed the empirical actual severity for each coverage limit shown in the column “Coverage Limit Severity [2.2]”. For example: For bodily injury, per person, Period 1, at \$50,000 per person limit, the calculated “Actual Severity” is \$10,059.

A summary page of statistics entitled “Descriptive Statistics for Histogram Charts” is also included after Histogram Chart 6 in Appendix E.

TNC Insurance Coverage Limits Comparison

Using the loss distribution of best fit for each required TNC coverage, an estimate is made of the percentage of claims that are expected to be covered for each coverage limit, and to what extent a loss can be covered at that policy limit level. For example: for the TNC insurance coverage of “Death and Personal Injury Per Person for Period 1 at \$50,000” level, the result shows that 92.46% of claims are expected to be covered at the fifty thousand dollars (\$50,000) policy limit level; and 58.05% of losses are expected to be covered. That means about 42% of claimed loss will be capped out because of the policy limit. Because of the fortuitous nature of insurance claims, some claims will fall under the mean, and some will exceed the mean. If a claim exceeds the policy limit, the Excess Coverage of two hundred thousand dollars (\$200,000) limit will activate.

Based on a statistical analysis of the individual claims data, the tables that follow show the results of the percentage of claims and losses that will be covered under current TNC insurance requirements as stipulated in PUC Code §5433. Basic financial responsibility (FR) limits of 15/30/5 are also shown for reference.

Furthermore, we reviewed coverage limits required by other carrier types listed in the CPUC report, <http://cpuc.ca.gov/General.aspx?id=2416>. We did a comparison of the limit set forth in PUC Code §5433 et. seq. and other possible coverage limits from our data. These results are also presented in the tables that follow. For a more detailed analysis, please refer to Appendix F.

Different coverage limits and percentages of claims and losses expected to be covered for each of the required TNC insurance coverages are presented in Table 3.4 to 3.10 for the Legislature to review.

Table 3.3 - TNC Insurance Coverage Limits

Coverage	PUC 5433 Requirements	Percentage of Claims covered	Percentage of Losses covered	Expected Severity (Average Loss Per Claim)	Actual Severity (From Histogram Col [2.2])
Death & Personal Injury (per Person, Period 1)	\$50,000	92.46%	58.05%	\$8,830	\$10,059
Death & Personal Injury (per Incident, Period 1)	\$100,000	95.66%	61.75%	\$11,859	\$13,065
Property Damage (Period 1)	\$30,000	99.41%	98.66%	\$3,603	\$3,686
Excess Coverage (Period 1)	\$200,000	97.84%	77.46%	\$13,977	\$12,961
Combined Single Limit (Period 2)	\$1,000,000	99.93%	94.98%	\$14,700	\$15,191
Combined Single Limit (Period 3)	\$1,000,000	99.64%	59.98%	\$16,285	\$17,587
Uninsured & Underinsured Motorist Coverage (Period 3)	\$1,000,000	99.45%	76.42%	\$38,019	\$45,787

* Excess Coverage is from Death & Personal Injury (per person, period1). Frechet (3P) is used as the proxy distribution.

List of different coverage limits and percentage claims and losses covered:

Table 3.4 - Death & Personal Injury (Per Person, Period 1) Frechet (3P) Distribution

Coverage Limits	Percentage of Claims covered	Percentage of Losses covered	Expected Severity (Average Loss Per Claim)	Actual Severity (From Histogram Col [2.2])
15,000	74.11%	37.82%	4,082	\$5,836
20,000	80.50%	42.95%	5,187	\$6,679
25,000	84.49%	46.84%	6,078	\$6,979
30,000	87.18%	49.94%	6,812	\$7,491
**50,000	92.46%	58.05%	8,830	\$10,059
75,000	94.92%	63.83%	10,326	\$11,003
100,000	96.06%	67.55%	11,310	\$11,867
125,000	96.70%	70.23%	12,025	\$11,867
150,000	97.11%	72.29%	12,577	\$11,867

**PU Code §5433 (b) (2) current requirement

Table 3.5 - Death & Personal Injury (Per Incident, Period 1) Frechet (3P) Distribution

Coverage Limits	Percentage of Claims covered	Percentage of Losses covered	Expected Severity (Average Loss Per Claim)	Actual Severity (From Histogram Col [2.2])
30,000	85.91%	44.36%	6,883	\$7,462
50,000	91.61%	52.21%	9,067	\$10,246
**100,000	95.66%	61.75%	11,859	\$13,065
150,000	96.88%	66.68%	13,339	\$13,065
200,000	97.45%	69.89%	14,313	\$14,294
250,000	97.77%	72.23%	15,024	\$17,590
300,000	97.97%	74.03%	15,576	\$18,400

Table 3.6 - Property Damage (Period 1) Inv. Gaussian (3P) Distribution

Coverage Limits	Percentage of Claims covered	Percentage of Losses covered	Expected Severity (Average Loss Per Claim)	Actual Severity (From Histogram Col [2.2])
5,000	77.46%	66.36%	1,411	\$1,806
10,000	91.54%	84.66%	2,393	\$2,480
15,000	96.14%	92.21%	2,949	\$3,143
20,000	98.05%	95.81%	3,279	\$3,422
25,000	98.96%	97.67%	3,479	\$3,578
**30,000	99.41%	98.66%	3,603	\$3,686
35,000	99.66%	99.22%	3,682	\$3,686
50,000	99.91%	99.83%	3,784	\$3,718

Table 3.7 - Excess Coverage (Period 1) Distribution

Coverage Limits	Percentage of Claims covered	Percentage of Losses covered	Expected Severity (Average Loss Per Claim)	Actual Severity (From Histogram Col [2.2])
100,000	97.11%	72.29%	12,577	\$11,867
**200,000	97.84%	77.46%	13,977	\$12,961
250,000	98.01%	79.10%	14,425	\$16,712
300,000	98.12%	80.42%	14,785	\$16,712
500,000	98.34%	83.91%	15,742	\$16,712
750,000	98.44%	86.43%	16,433	\$16,712
1,000,000	98.50%	88.07%	16,884	\$16,712

Death & Personal Injury (Period 1, per person) Frechet (3P) was used as proxy

**PU Code §5433 (b) (2) current requirement

Table 3.8 - Combined Single Limit (Period 2) Log-Gamma Distribution

Coverage Limits	Percentage of Claims covered	Percentage of Losses covered	Expected Severity (Average Loss Per Claim)	Actual Severity (From Histogram Col [2.2])
250,000	99.33%	85.02%	12,116	\$11,634
300,000	99.49%	86.83%	12,560	\$11,988
350,000	99.60%	88.24%	12,911	\$12,186
500,000	99.77%	91.04%	13,633	\$12,456
750,000	99.88%	93.57%	14,309	\$13,600
**1,000,000	99.93%	94.98%	14,700	\$15,449
1,200,000	99.95%	95.74%	14,914	\$16,884

Table 3.9 - Combined Single Limit (Period 3) Pearson 6 Distribution

Coverage Limits	Percentage of Claims covered	Percentage of Losses covered	Expected Severity (Average Loss Per Claim)	Actual Severity (From Histogram Col [2.2])
350,000	99.00%	48.75%	12,643	\$12,590
500,000	99.30%	52.54%	13,866	\$13,784
750,000	99.52%	56.88%	15,275	\$14,643
**1,000,000	99.64%	59.98%	16,285	\$18,749
1,200,000	99.70%	61.95%	16,930	\$18,749
1,500,000	99.76%	64.37%	17,724	\$18,749
2,000,000	99.82%	67.50%	18,754	\$18,749

Table 3.10 - UM/UIM (Period 3) Burr Distribution

Coverage Limits	Percentage of Claims covered	Percentage of Losses covered	Expected Severity (Average Loss Per Claim)	Actual Severity (From Histogram Col [2.2])
350,000	98.00%	64.97%	30,037	\$30,260
500,000	98.71%	69.17%	32,944	\$32,408
750,000	99.21%	73.55%	36,004	\$38,555
**1,000,000	99.45%	76.42%	38,019	\$47,801
1,200,000	99.56%	78.15%	39,231	\$47,801
1,500,000	99.66%	80.15%	40,649	\$47,801
2,000,000	99.77%	82.59%	42,372	\$47,801

**PU Code §5433 (b) (2) current requirement

IV. Acknowledgment

The Study of TNC Insurance Requirements in California was conducted by the staff of the Rate Specialist Bureau (RSB) of the California Department of Insurance in collaboration with California Public Utilities Commission. The bureau accepts full responsibility for the accuracy of the factual data presented, the research methodology and statistical techniques used. The findings and conclusions contained in this report are those of the research team and in no way represent the official position of the Insurance Commissioner, the California Department of Insurance, the California Public Utilities Commission or the State of California.

We are indebted to Insurance Commissioner Dave Jones and Chief Deputy Commissioner Joel Laucher for their confidence in my bureau by assigning this important and challenging project to us. We would like to thank Joel Laucher for his support and help in removing all obstacles, so that we can smoothly continue making progress towards the successful completion of this research project. We are particularly pleased that this study is deemed to be of such significance that it will be used to determine whether the TNC insurance requirements in California are appropriate to the risk associated with TNC service in the emerging TNC service market.

We would also like to thank and recognize Ms. Valerie Beck and Mr. Brewster Fong of the California Public Utilities Commission for their assistance in obtaining and sharing of the essential TNC data for the completion of our data analysis and the conclusions of our findings.

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Mr. Adam Gammell - Division Chief, Rate Regulation Branch, CDI

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Ja-Lin Chen, ACAS, Senior Insurance Rate Analyst

William Hirschhorn, Associate Insurance Rate Analyst

Carol Choy, Associate Insurance Rate Analyst

Noelle Shum, Associate Insurance Rate Analyst

Fion Ho, Associate Insurance Rate Analyst

Christopher Layug, Insurance Rate Analyst

Jia Lee, Insurance Rate Analyst

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In summary, completion of the Study of Transportation Network Company (TNC) Insurance Coverage Requirements in California is attributable to the tireless efforts of a large number of people who possess a wide variety of knowledge, skills and experiences. We are hopeful that their hard work and the objective nature of this study will shed some light upon this highly significant issue.

GEORGE YEN
Chief, Rate Specialist Bureau
Rate Regulation Branch
California Department of Insurance

December 31, 2017

V. Key Terms

1. Actuarial Science - Actuarial science is in some ways older than probability and statistics itself and was in many ways instrumental in the development of probability and statistics. One of the earliest applications is to life distributions or mortality laws, in order to be able to determine life insurance fees. But there are many more uses, including claim frequency and claim size distributions.
<https://reference.wolfram.com/language/guide/DistributionsUsedInActuarialScience.html>
2. Bodily Injury (BI) – When you are found legally responsible for a car accident, bodily injury liability coverage is the part of your insurance policy that pays for the costs associated with injuries to the other person or people involved.
3. Burr distribution – In probability theory, statistics and econometrics, the Burr Type XII distribution or simply the Burr distribution is a continuous probability distribution for a non-negative random variable. It is also known as the Singh–Maddala distribution and is one of a number of different distributions sometimes called the "generalized log-logistic distribution". It is most commonly used to model household income (See: Household income in the U.S. and compare to magenta graph at right).
4. Combined Single Limit (CSL) - This type of auto insurance coverage is a **combination** of *all* the liability limits (Bodily injury AND Property Damage). Liability is *combined* into one single limit. So if you purchase a \$300 CSL policy, your policy will cover up to \$300,000 total for any bodily injury or property damage.
<https://www.berkshireinsuranceservices.com/arecombinedsinglelimitsbetter>
5. Death & Personal Injury – It is also known as bodily injury. See Item 2 above.
6. Excess Basis vs Primary Basis – Whenever there is a claim, we want to establish whether that claim is covered by the policy and whether the policy is written on a primary or an excess basis. If the policy pays last after all other insurance contracts exhausted their limit, then the policy is said to be on an excess basis. The converse of excess is primary.
7. Excess Coverage – In our report, we refer this to mean the minimum amount of \$200,000 Excess Coverage (per occurrence) TNC insurance company or TNC driver must carry during period 1. This coverage will apply only after the primary insurance of \$50,000/\$100,000/\$30,000 limit is exhausted.
8. Financial Responsibility (FR) – When a driver operates a vehicle in California, he/she must show proof of financial responsibility. Each state sets its own FR limit. In CA, the basic FR limit is \$15,000 per person / \$30,000 per incident / \$5,000 property damage.

This requirement can also be satisfied in the forms of cash deposit of \$35,000 with DMV, DMV-issued self-insurance certificate, or surety bond for \$35,000 from a company licensed to do business in California.

https://www.dmv.ca.gov/portal/dmv/detail/pubs/brochures/fast_facts/ffvr18

9. Frechet Distribution – It is named after French mathematician, Maurice Rene Frechet, who developed it in the 1920s as a maximum value distribution.
10. Inverse Gaussian distribution – In probability theory and statistics, the generalized inverse Gaussian distribution (GIG) is a three-parameter family of continuous probability distributions with probability density function. This distribution was first proposed by Étienne Halphen. It was rediscovered and popularized by Ole Barndorff-Nielsen, who called it the generalized inverse Gaussian distribution. It is also known as the Sichel distribution, after Herbert Sichel.
11. Location Parameter – A location parameter simply shifts the graph left or right on the horizontal axis.
12. Log-Gamma distribution – In probability theory and statistics, the generalized multivariate log-gamma (G-MVLG) distribution is a multivariate distribution introduced by Demirhan and Hamurkaroglu in 2011. The G-MVLG is a flexible distribution. Skewness and kurtosis are well controlled by the parameters of the distribution. This enables one to control dispersion of the distribution. Because of this property, the distribution is effectively used as a joint prior distribution in Bayesian analysis, especially when the likelihood is not from the location-scale family of distributions such as normal distribution.
13. Pearson 6 distribution –The Pearson distribution is a family of continuous probability distributions. It was first published by Karl Pearson in 1895 and subsequently extended by him in 1901 and 1916.
14. Personal Auto Policy (PAP) - A standard form promulgated by Insurance Services Office, Inc. (ISO), for insuring private-passenger-type autos owned by individuals. The policy may be structured to provide a combination of liability, personal injury protection (PIP), medical payments, uninsured and underinsured motorists (UM/UIM), and physical damage coverages.
<https://www.irmi.com/online/insurance-glossary/terms/p/personal-auto-policy-pap.aspx>
15. Property Damage (PD) - This coverage protects you against financial loss when your vehicle damages another person's property, such as their vehicle, if you are legally liable.
https://www.wawanesa.com/us/california/products/automobile/automobile-coverage.html?language_id=1#b
16. Scale Parameter – A scale parameter is to stretch out the graph.

17. Shape Parameter – a shape parameter is any parameter of a probability distribution that is neither a location parameter nor a scale parameter (nor a function of either or both of these only, such as a rate parameter). Such a parameter must affect the shape of a distribution rather than simply shifting it (as a location parameter does) or stretching/shrinking it (as a scale parameter does). For the normal distribution, the location and scale parameters correspond to the mean and standard deviation, respectively. However, this is not necessarily true for other distributions. In fact, it is not true for most distributions.
18. Transportation Network Companies (TNCs) – They provide prearranged transportation services for compensation using an online-enabled application or platform (such as smart phone apps) to connect drivers using their personal vehicles with passengers.
<http://www.cpuc.ca.gov/tncinfo/>
19. TNC Period 1 – TNC driver has logged onto the App, but has not yet accepted a ride request.
20. TNC Period 2 – TNC driver has accepted a ride request and is driving to the pick-up location.
21. TNC Period 3 – TNC driver enters the TNC driver’s vehicle until the passenger exits the vehicle.
22. Uninsured Motorist/Underinsured Motorist (UM/UIM) - This coverage provides protection against the peril of bodily injury caused by someone who has no auto liability insurance or whose bodily injury limits are lower than your chosen limit for this coverage.
https://www.wawanesa.com/us/california/products/automobile/automobile-coverage.html?language_id=1#g

VI. References

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VII. Appendix

Appendix A

California Insurance Products Available to TNC Drivers

Appendix B

California Authorized Transportation Network Companies and Their Insurers

Appendix C

Summary of CDI's Data Questionnaire to Insurers

Appendix D

TNC Insurance Policy Information Exhibit

Appendix E

Histogram of Aggregate Loss Distribution by Coverage Type

Appendix F

CDI Statistical and Loss Distribution Analysis

Appendix G

AB 2293, Bonilla (2014). Transportation Network Companies: Insurance Coverage

Appendix H

California Public Utilities Commission January 6, 2017 Data Call

Appendix I

California Department of Insurance February 6, 2017 Data Call

Appendix A

California Insurance Products Available to TNC Drivers

California Department of Insurance								
California Insurance Products Available to TNC Drivers - updated 12-29-17								
Insurer	Liability Coverage for TNC Driving	UM/UIM coverages	Comp/ Collision Med Pay Rental/Tow coverages	Liability Amounts for TNC services	Coverage while driving for which TNC?	Cost for TNC coverage	Primary or Excess	Product Link
Metromile Ins Co. (formerly written by Natl General)	Period 1 only. Period 1 = TNC App on but no passenger request has been accepted	Period 1 IE driver opts to buy it on personal policy	Period 1 IE driver opts to buy it on personal policy	Minimum 50/100/50 recommended by Metromile. But drivers that qualify as statutory "good drivers" may buy 15/30/5	UberX (and other TNCs as long as UberX app is open.) No coverage unless the UberX app is open	Premium based on TNC miles driven in Period 1 (per-mile rate for TNC miles is same as for personal miles)	Primary subject to other insurance clause	https://www.metromile.com/
Farmers Ins. Exchange; Mid-Century Ins.; Truck Ins. Exchange	Period 1 only	Period 1 IE driver opts to buy it on personal policy	Period 1 IE driver opts to buy it on personal policy	Minimum 50/100/50 recommended by Farmers. But drivers that qualify as statutory "good drivers" may buy 15/30/5	All TNCs	Adds 16% to the premium for the TNC vehicle	Primary subject to other insurance clause	https://www.farmers.com/rideshare.html
Farmers Specialty Insurance Company; Coast National Insurance Company	Period 1 only	Period 1 IE driver opts to buy it on personal policy	Period 1 IE driver opts to buy it on personal policy	Minimum 50/100/50 recommended by Farmers. But drivers that qualify as statutory "good drivers" may buy 15/30/5	All TNCs	Adds 8% to the premium for the TNC vehicle.	Primary subject to other insurance clause	https://www.farmers.com/rideshare.html
CSAA	All Three Periods	All three TNC periods IE driver opts to buy it on personal policy	All three TNC periods IE driver opts to buy it on personal policy	Minimum 50/100/30 recommended by CSAA. But drivers that qualify as statutory "good drivers" may buy 15/30/5	All TNCs	Adds approximately 38% to the premium for the TNC vehicle. Must buy auto club membership	Primary subject to other insurance clause	
Met Direct Property & Casualty	All Three Periods	All three TNC periods IE driver opts to buy it on personal policy	All three TNC periods IE driver opts to buy it on personal policy	Minimum 50/100/50 recommended by Met Direct. But drivers that qualify as statutory "good drivers" may buy 15/30/5	Lyft (and other TNCs as long as Lyft app is open). No coverage unless Lyft app open	Based on ratio of Lyft miles driven to total personal miles driven	Primary subject to other insurance clause	https://www.metlife.com/
USAA Group: USAA; USAA Cas; USAA Gen; and Garrison	Period 1 only	Period 1 IE driver opts to buy it on personal policy	Period 1 IE driver opts to buy it on personal policy	Minimum 50/100/50 recommended by USAA. But drivers that qualify as statutory "good drivers" may buy 15/30/5	All TNCs	Adds 7% to the premium for the TNC vehicle only	Primary subject to other insurance clause	
State Farm	Period 1 only	State Farm does not cover TNC passengers for UM/UIM. It does provide UM/UIM for named insureds & resident relatives in all three Periods. UM/UIM coverage extends from the personal policy. It's not part of the TNC Endorsement.	All Periods IE driver opts to buy it on personal policy	Minimum 15/30/5 offered to all drivers. Higher limits are available and may be recommended	All TNCs	Adds approx. 16% to premium on all-coverage basis for TNC vehicle (10% to liability, 10% to medical payments if chosen; 25% to collision if chosen; 25% to comprehensive if chosen)	Primary subject to other insurance clause	Call your local State Farm agent
Allstate Northbrook Ind. Co.	Period 1 only	All three TNC periods IE driver opts to buy it on personal policy	Period 1 IE driver opts to buy it on personal policy. In Periods 2-3, provides comp/ collision deductible assistance IE driver opts to buy comp/collision on personal policy. For example, if a policyholder has a \$1,000 Allstate deductible but they have to pay Lyft's \$2,500 deductible, Allstate will pay the difference up to \$2,500. For Med Pay: no coverage For rental/tow: coverage applies	Minimum 15/30/5 offered to all drivers. Higher limits are available and may be recommended	All TNCs	Adds 4% to the premium for the TNC vehicle only	Excess coverage only. Allstate has no obligation to pay until the TNC's insurance pays the first \$250k per person, \$300k per accident and \$230k for property damage coverage. Allstate does not pay until the TNC exhausts its coverage.	1-800-Allstate
Mercury	Period 1 only	Personal auto policy provides UM/UIM coverage in Period 1 independent of the TNC endorsement being purchased	Period 1 IE driver opts to buy it on personal policy	Minimum 15/30/5 offered to all drivers. Higher limits are available and may be recommended	All TNCs	Adds premium by applying business use factors to TNC vehicle (Adds 13% to bodily injury, 17% to property damage, 5% to medical payments if medical chosen, no charge for comprehensive, 5% to collision premium if chosen)	Excess coverage only. Mercury has no obligation to pay until the TNC's insurance pays the first \$250k per person, \$300k per accident and \$230k for property damage coverage. Mercury does not pay until the TNC exhausts its coverage.	
Kemper (Financial Indemnity Company)	Period 1 only	Period 1 IE driver opts to buy it on personal policy	Period 1 IE driver opts to buy it on personal policy. Also provides comp/collision deductible assistance during Periods 2 and 3 IE driver opts to buy it on personal policy. For example, if a policyholder has a \$1,000 comp/collision deductible on their Kemper policy, but they drive for Lyft and have to pay Lyft's \$2,500 comp/collision deductible, Kemper will pay the \$1500 difference.	Minimum 15/30/5 offered to all drivers. Higher limits are available and may be recommended	All TNCs	Adds 10% to the premium for the TNC vehicle only	Excess coverage only. Kemper has no obligation to pay until the TNC's insurance pays the first \$250k per person, \$300k per accident and \$230k for property damage coverage. Kemper does not pay until the TNC exhausts its coverage.	http://pages.email: kemper.com/KemperSpecialty@rideshare@indem.com/

Visit www.insurance.ca.gov/TNC for more info. or call 1-800-927-4357

Appendix B

California Authorized Transportation Network Companies and Their Insurers

Appendix B - CALIFORNIA TRANSPORTATION NETWORK COMPANIES*Data Source: California Public Utilities Commission*

Date: 11/30/2017

Rec	TNC Company	Insurance Type	Insurance Company	Policy #
1	Ainos	Commercial Liability Policy Workers Compensation Coverage	James River Insurance Company Employers Preferred Insurance Company	CA43600686 EIG2503370
2	Altruistic Inc.	Commercial Liability Policy	James River Insurance Company	CA43600754
3	Executive Ride, LLC	Commercial Liability Policy Workers Compensation Coverage	James River Insurance Company Twin City Fire Insurance Company	CA4360031802 83WECBV36670
4	Lyft, Inc.	Commercial Liability Policy PL and PD Policy Workers Compensation Coverage	Zurich American Insurance Company Zurich American Insurance Company Self-Insured	BAP4281401 BAP4281401 2353
5	Rasier-CA, LLC	Commercial Liability Policy	James River Insurance Company	CA436100CA02
6	Ride Plus, LLC	Commercial Liability Policy Workers Compensation Coverage	James River Insurance Company ACE American Insurance Company	CA4360063501 C64400445
7	See Jane Go Inc	Commercial Liability Policy Workers Compensation Coverage	Princeton Excess and Surplus Lines Insurance State Compensation Insurance Fund	3RA3CA000000800 9161380
8	Silver Ride LLC	Commercial Liability Policy PL and PD Policy Workers Compensation Coverage	Gateway Insurance Company Global Liberty Insurance Company of New York State Compensation Insurance Fund	CA28256P2017 FHP07324991 9084257
9	Sitbaq Inc.	Commercial Liability Policy	Nautilus Insurance Company	CAA2019651
10	Socialdrv, LLC	Commercial Liability Policy	Nautilus Insurance Company	CAA202088410
11	Wingz, Inc.	Commercial Liability Policy Commercial Liability Policy Workers Compensation Coverage	James River Insurance Company Nautilus Insurance Company Hartford Accident and Indemnity Company	CA43600806 CAA2021276014 GG9013
<i>TNCs that primarily transport minors</i>				
12	Dolightful, Inc.	Commercial Liability Policy	Nautilus Insurance Company	CAA201568812
13	Hopskipdrive Inc.	Commercial Liability Policy Commercial Liability Policy Commercial Liability Policy Workers Compansation Coverage	Nautilus Insurance Company Nautilus Insurance Company Princeton Excess and Surplus Lines Insurance ACE American Insurance Company	CAA2013239-12 EGM2236-16 3RA3CA0000005 C6447041
14	Zum Services, Inc.	Commercial Liability Policy Commercial Liability Policy	Nautilus Insurance Company Hamilton Specialty Insurance Company	CAA201545112 YRHS010000047

Appendix C

Summary of CDI's Data Questionnaire to Insurers

Appendix C - Summary of the Questionnaire:

Question 1	Which lines of business did your company write in the State of California for TNCs or participating drivers for any time during the reporting period from Jan. 1, 2014 to Dec. 31, 2016? (Check all that apply)					
	Private Passenger Auto Liability (Line 19.2)	Private Passenger Auto Physical Damage (Line 21.1)	Commercial Auto Liability (Line 19.4)	Commercial Auto Physical Damage (Line 21.2)	Commercial General Liability Insurance	Other, please specify:
Company A	x	x				
Company B	x	x				
Company C	x	x				
Company D	x	x				
Company E	x	x				
Company F	x	x				
Company G			x	x		
Company H	x	x				
Company I	x	x				
Company J	x	x				
Company K			x			
Company L	x	x				
Company M			x	x		
Company N	x	x				
Company O	x	x				
Company P	x	x				
TOTAL	13	13	3	2	0	0

Question 2	When did your company begin writing policies for TNCs or participating drivers?
Company A	4/6/2016
Company B	11/22/2015
Company C	12/8/2016
Company D	1/1/2016
Company E	5/28/2015
Company F	1/7/2016
Company G	12/21/2013
Company H	11/22/2015
Company I	New Business: 10/15/2015, Renewal Business: 12/19/2015
Company J	2/17/2015
Company K	10/1/2013
Company L	3/21/2016
Company M	10/1/2015
Company N	1/7/2016
Company O	1/7/2016
Company P	1/7/2016

Question 3	What TNC Coverage Periods did your company write? (Check all that apply)		
	Period 1	Period 2	Period 3
Company A	x		
Company B	x		
Company C	x		
Company D	x	x	x
Company E	x		
Company F	x		
Company G	x	x	x
Company H	x		
Company I	x		
Company J	x		
Company K	x	x	x
Company L	x	x	x
Company M	x	x	x
Company N	x		
Company O	x		
Company P	x		
TOTAL	16	5	5

Question 4	How does your company write TNC insurance?			
	By an endorsement	By a separate policy	Covered by current policy	Other, please specify
Company A	x			
Company B	x			
Company C	x			
Company D	x			
Company E	x			
Company F	x			
Company G		x		
Company H	x			
Company I	x			
Company J	x			
Company K		x		
Company L	x			
Company M			x	
Company N	x			
Company O	x			
Company P	x			
TOTAL	13	2	1	0

Question 5	For Period 1, Public Utilities Code Section 5433(c)(1) requires that TNC insurance shall provide \$50,000/\$100,000/\$30,000 coverage for Death, Personal Injury and Property Damage. Please indicate the limits that your company offered			
	\$15,000/\$30,000/\$5,000 (for eligible good drivers)	\$50,000/\$100,000/\$30,000	\$100,000/\$500,000/\$50,000	Other(s), please specify:
Company A				x
Company B	x	x		x
Company C	x			
Company D				x
Company E				x
Company F		x	x	x
Company G		x		
Company H	x	x		x
Company I				x
Company J	x	x		
Company K				x
Company L	x	x	x	x
Company M		x		
Company N		x	x	x
Company O		x	x	x
Company P		x	x	x
TOTAL	5	10	5	12

Question 6	How many TNC participating vehicles did your company insure for each period at the end of each calendar year?								
	2014			2015			2016		
	Period 1	Period 2	Period 3	Period 1	Period 2	Period 3	Period 1	Period 2	Period 3
Company A							o		
Company B				*			o		
Company C							o		
Company D							*	*	*
Company E				*			o		
Company F							o		
Company G	Rate on per mile basis			Rate on per mile basis			Rate on per mile basis		
Company H				*			o		
Company I				*			o		
Company J				*			o		
Company K	Rate on per mile basis			Rate on per mile basis			Rate on per mile basis		
Company L							*	*	*
Company M	Rate on per mile basis			Rate on per mile basis			Rate on per mile basis		
Company N							o		
Company O							o		
Company P							o		
TOTAL	-	-	-	9,640	-	-	35,045	7,070	7,070

Question 7	Your company's TNC insurance coverages for Period 1 are written on a(n):	
	Primary Basis	Excess Basis
Company A		x
Company B		x
Company C	x	
Company D	x	
Company E	x	
Company F	x	
Company G	x	x
Company H		x
Company I	x	
Company J	x	
Company K		x
Company L	x	
Company M	x	
Company N	x	
Company O	x	
Company P	x	
TOTAL	12	5

Question 8	According to Public Utilities Code Section 5433(c)(2), TNCs shall also maintain insurance that provides excess coverage insuring the TNC and the participating driver in the amount of at least \$200,000 per occurrence for excess coverage of TNC service. Please indicate which Period(s) your company provided this excess coverage (Check all that apply):			
	Did not provide \$200,000 excess coverage.	Period 1	Period 2	Period 3
Company A	x			
Company B	x			
Company C	x			
Company D	x			
Company E	x			
Company F	x			
Company G		x		
Company H	x			
Company I	x			
Company J	x			
Company K		x	x	x
Company L	x			
Company M		x		
Company N	x			
Company O	x			
Company P	x			
TOTAL	13	3	1	1

Question 9	In addition to the required automobile liability and UM/UIM coverages, which of the following coverages did your company also offer at an additional premium to the TNC or participating drivers?			
	Physical Damage Coverage (Collision or Comprehensive)	Medical Payment	Commercial General Liability Insurance	Other
Company A	x			
Company B	x	x		x
Company C	x	x		
Company D	x	x		x
Company E	x	x		x
Company F	x	x		
Company G	x			
Company H	x	x		x
Company I	x	x		
Company J	x	x		
Company K	N/A			
Company L	x	x		
Company M	x			
Company N	x	x		
Company O	x	x		
Company P	x	x		
TOTAL	15	12	0	4

Question 10	Has your insurance company experienced any challenges obtaining information from TNCs, their insurers, or personal auto insurers, regarding the exchange of information (dates, times, whether the driver was logged on to the TNC application at the time of an accident), as required by Public Utilities Code Section 5435?	
	Yes	No
Company A		x
Company B	x	
Company C		x
Company D		x
Company E		x
Company F		x
Company G		x
Company H	x	
Company I		x
Company J		x
Company K		x
Company L		x
Company M		x
Company N		x
Company O		x
Company P		x
TOTAL	2	14

Appendix D

TNC Insurance Policy Information Exhibit

TNC INSURANCE POLICY INFORMATION EXHIBIT
PERSONAL AUTO INSURERS - 2016 Period 1

Coverage Code	Coverage Limit (000)	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
		Number of Policies with TNC Coverage	# of Policies % Distribution	Earned Car Years with TNC Insurance	Earned Car Yrs w/ TNC Ins % Distribution	Number of Claims	Total Incurred Loss	Total Incurred Loss % Distribution	Claim Severity [6]/[5]	Claim Frequency Per 1000 Cars [5]/[3]
BI	15/30	2,356	7.75%	1,097	4.44%	3	24,100	1.4%	8,033	3
BI	20/40	37	0.12%	10	0.04%					
BI	25/50	1,934	6.36%	794	3.21%	1	1,000	0.1%	1,000	1
BI	25/100	26	0.09%	8	0.03%					
BI	30/60	322	1.06%	98	0.40%					
BI	30/85	1	0.00%	0.3	0.00%					
BI	50/100	14,439	47.52%	10,413	42.16%	76	851,249	48.5%	11,201	7
BI	100/200	145	0.48%	153	0.62%					
BI	100/300	8,207	27.01%	9,640	39.03%	59	600,213	34.2%	10,173	6
BI	200/300	2	0.01%	1	0.00%					
BI	250/500	1,965	6.47%	1,713	6.94%	7	276,990	15.8%	39,570	4
BI	300/300	37	0.12%	8	0.03%					
BI	300/500	495	1.63%	501	2.03%					
BI	500/500	226	0.74%	105	0.42%					
BI	500/1000	64	0.21%	62	0.25%					
BI	1000/1000	130	0.43%	99	0.40%					
Total - BI		30,386	100%	24,701	100%	146	1,753,552	100%	12,011	6
PD	5	223	0.73%	142	0.57%	7	18,664	0.9%	2,666	49
PD	10	1,393	4.59%	722	2.92%	1	1,456	0.1%	1,456	1
PD	15	24	0.08%	18	0.07%					
PD	25	2,089	6.88%	897	3.63%	3	21,006	1.0%	7,002	3
PD	50	15,587	51.36%	12,174	49.26%	291	1,049,253	51.8%	3,606	24
PD	100	10,496	34.58%	10,454	42.30%	265	932,000	46.0%	3,517	25
PD	200	82	0.27%	25	0.10%					
PD	250	137	0.45%	81	0.33%	1	1,264	0.1%	1,264	12
PD	300	176	0.58%	108	0.44%	1	3,103	0.2%	3,103	9
PD	400	2	0.01%	1	0.00%					
PD	500	110	0.36%	81	0.33%					
PD	1000	32	0.11%	11	0.04%					
Total - PD		30,351	100%	24,714	100%	569	2,026,747	100%	3,562	23
UM/UIM	15/30	2,740	11.66%	1,779	8.20%	1	1,000	0.4%	1,000	1
UM/UIM	20/40	62	0.26%	55	0.25%					
UM/UIM	25/50	1,742	7.41%	1,468	6.77%	1	2,500	1.0%	2,500	1
UM/UIM	25/100	31	0.13%	10	0.05%					
UM/UIM	30/60	908	3.86%	544	2.51%					
UM/UIM	30/85	3	0.01%	1	0.00%					
UM/UIM	50/100	9,731	41.41%	8,623	39.74%	18	195,286	77.2%	10,849	2
UM/UIM	100/200	147	0.63%	151	0.70%					
UM/UIM	100/300	6,321	26.90%	7,481	34.47%	9	48,550	19.2%	5,394	1
UM/UIM	200/300	1	0.00%	1	0.01%					
UM/UIM	250/500	1,065	4.53%	904	4.16%	1	5,700	2.3%	5,700	1
UM/UIM	300/300	9	0.04%	2	0.01%					
UM/UIM	300/500	462	1.97%	471	2.17%					
UM/UIM	500/500	145	0.62%	84	0.39%					
UM/UIM	500/1000	54	0.23%	53	0.25%					
UM/UIM	1000/1000	78	0.33%	74	0.34%					
Total - UM/UIM		23,499	100%	21,701	100%	30	253,036	100%	8,435	1
CSL	500	2	66.67%	1	50.00%					
CSL	2000	1	33.33%	1	50.00%					
Total - CSL		3	100%	2	100%					

TNC INSURANCE POLICY INFORMATION EXHIBIT
PERSONAL AUTO INSURERS - 2016 Period 2

Coverage Code	Coverage Limit (000)	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
		Number of Policies with TNC Coverage %	# of Policies Distribution	Earned Car Years with TNC Insurance	Earned Car Yrs w/ TNC Ins % Distribution	Number of Claims	Total Incurred Loss	Total Incurred Loss % Distribution	Claim Severity [6]/[5]	Claim Frequency Per 1000 Cars [5]/[3]
BI	15/30	107	8.20%	35	11.44%					
BI	25/50	134	10.27%	31	10.13%					
BI	50/100	295	22.61%	75	24.51%	1	8,501	50.0%	8,501	13
BI	100/300	598	45.82%	130	42.48%	1	8,501	50.0%	8,501	8
BI	300/500	56	4.29%	14	4.58%					
BI	500/500	87	6.67%	15	4.90%					
BI	500/1000	8	0.61%	3	0.98%					
BI	1000/1000	20	1.53%	3	0.98%					
Total - BI		1,305	100%	306	100%	2	17,002	100%	8,501	7
PD	10	47	3.60%	17	5.56%					
PD	25	92	7.05%	24	7.84%	1	2,652	8.9%	2,652	42
PD	50	394	30.19%	90	29.41%					
PD	100	721	55.25%	165	53.92%	3	27,064	91.1%	9,021	18
PD	300	35	2.68%	7	2.29%					
PD	500	12	0.92%	3	0.98%					
PD	1000	4	0.31%	-	0.00%					
Total - PD		1,305	100%	306	100%	4	29,716	100%	7,429	13
UM/UIM	15/30	123	9.43%	39	12.70%					
UM/UIM	25/50	142	10.89%	33	10.75%					
UM/UIM	30/60	41	3.14%	8	2.61%					
UM/UIM	50/100	302	23.16%	77	25.08%					
UM/UIM	100/300	577	44.25%	125	40.72%					
UM/UIM	300/500	50	3.83%	10	3.26%					
UM/UIM	500/500	56	4.29%	11	3.58%					
UM/UIM	500/1000	4	0.31%	2	0.65%					
UM/UIM	1000/1000	9	0.69%	2	0.65%					
Total - UM/UIM		1,304	100%	307	100%					

TNC INSURANCE POLICY INFORMATION EXHIBIT
PERSONAL AUTO INSURERS - 2016 Period 3

Coverage Code	Coverage Limit (000)	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
		Number of Policies with TNC Coverage %	# of Policies Distribution	Earned Car Years with TNC Insurance	Earned Car Yrs w/ TNC Ins % Distribution	Number of Claims	Total Incurred Loss	Total Incurred Loss % Distribution	Claim Severity [6]/[5]	Claim Frequency Per 1000 Cars [5]/[3]
BI	15/30	107	8.20%	35	11.44%					
BI	25/50	134	10.27%	31	10.13%					
BI	50/100	295	22.61%	75	24.51%					
BI	100/300	598	45.82%	130	42.48%					
BI	300/500	56	4.29%	14	4.58%					
BI	500/500	87	6.67%	15	4.90%					
BI	500/1000	8	0.61%	3	0.98%					
BI	1000/1000	20	1.53%	3	0.98%					
Total - BI		1,305	100%	306	100%					
PD	10	47	3.60%	17	5.56%					
PD	25	92	7.05%	24	7.84%	1	732	14.9%	732	42
PD	50	394	30.19%	90	29.41%					
PD	100	721	55.25%	165	53.92%	2	4,185	85.1%	2,093	12
PD	300	35	2.68%	7	2.29%					
PD	500	12	0.92%	3	0.98%					
PD	1000	4	0.31%	-	0.00%					
Total - PD		1,305	100%	306	100%	3	4,917	100%	1,639	10
UM/UIM	15/30	123	9.43%	39	12.70%					
UM/UIM	25/50	142	10.89%	33	10.75%					
UM/UIM	30/60	41	3.14%	8	2.61%					
UM/UIM	50/100	302	23.16%	77	25.08%					
UM/UIM	100/300	577	44.25%	125	40.72%					
UM/UIM	300/500	50	3.83%	10	3.26%					
UM/UIM	500/500	56	4.29%	11	3.58%					
UM/UIM	500/1000	4	0.31%	2	0.65%					
UM/UIM	1000/1000	9	0.69%	2	0.65%					
Total - UM/UIM		1,304	100%	307	100%					

TNC INSURANCE POLICY INFORMATION EXHIBIT
PERSONAL AUTO INSURERS - 2015 Period 1

Coverage Code	Coverage Limit (000)	[1] Number of Policies with TNC Coverage	[2] # of Policies % Distribution	[3] Earned Car Years with TNC Insurance	[4] Earned Car Yrs w/ TNC Ins % Distribution	[5] Number of Claims	[6] Total Incurred Loss	[7] Total Incurred Loss % Distribution	[8] Claim Severity [6]/[5]	[9] Claim Frequency Per 1000 Cars [5]/[3]
BI	15/30	115	1.25%	29	0.72%	1	45,625	7.9%	45,625	34
BI	25/50	41	0.45%	2	0.06%					
BI	50/100	4,584	49.86%	1,902	47.01%	23	281,775	48.7%	12,251	12
BI	100/300	3,625	39.43%	1,610	39.80%	16	224,139	38.7%	14,009	10
BI	250/500	826	8.99%	502	12.41%	1	27,375	4.7%	27,375	2
BI	300/300	2	0.02%	0.1	0.00%					
Total - BI		9,193	100%	4,045	100%	41	578,914	100%	14,120	10
PD	5	50	0.54%	25	0.62%	1	5,000	0.6%	5,000	40
PD	10	65	0.71%	4	0.10%					
PD	15	2	0.02%	0	0.00%					
PD	25	45	0.49%	3	0.06%					
PD	50	5,018	54.61%	2,107	52.03%	94	418,090	50.0%	4,448	45
PD	100	3,997	43.50%	1,910	47.17%	97	412,657	49.4%	4,254	51
PD	250	12	0.13%	1	0.02%					
Total - PD		9,189	100%	4,050	100%	192	835,747	100%	4,353	47
UM/UIM	15/30	550	6.19%	344	8.85%					
UM/UIM	20/40	32	0.36%	16	0.41%					
UM/UIM	25/50	258	2.90%	248	6.38%					
UM/UIM	30/60	124	1.40%	50	1.29%					
UM/UIM	50/100	3,884	43.71%	1,551	39.89%	10	115,032	66.3%	11,503	6
UM/UIM	100/300	3,319	37.35%	1,320	33.95%	6	58,583	33.7%	9,764	5
UM/UIM	250/500	719	8.09%	358	9.22%					
Total - UM/UIM		8,886	100%	3,887	100%	16	173,615	100%	10,851	4

TNC INSURANCE POLICY INFORMATION EXHIBIT
SURPLUS LINES INSURERS - 2016 Period 1

Coverage Code	Coverage Limit (000)	[1] Number of Policies with TNC Coverage	[2] # of Policies % Distribution	[3] Earned Car Years with TNC Insurance	[4] Earned Car Yrs w/ TNC Ins % Distribution	[5] Number of Claims	[6] Total Incurred Loss	[7] Total Incurred Loss % Distribution	[8] Claim Severity [6]/[5]	[9] Claim Frequency Per 1000 Cars [5]/[3]
BI	50/100	2		Unknown		97	1,160,293		11,962	
PD	30	2		Unknown		249	956,366		3,841	
EC	200	2		Unknown		6	644,292		107,382	
CSL	300	1		Unknown						
CSL	1000	9		Unknown						
Total - CSL		10		Unknown						
UMUIM	1000	9		Unknown						

TNC INSURANCE POLICY INFORMATION EXHIBIT
SURPLUS LINES INSURERS - 2016 Period 2

Coverage Code	Coverage Limit (000)	[1] Number of Policies with TNC Coverage	[2] # of Policies % Distribution	[3] Earned Car Years with TNC Insurance	[4] Earned Car Yrs w/ TNC Ins % Distribution	[5] Number of Claims	[6] Total Incurred Loss	[7] Total Incurred Loss % Distribution	[8] Claim Severity [6]/[5]	[9] Claim Frequency Per 1000 Cars [5]/[3]
CSL	1000	12		Unknown		1,059	14,522,438		13,713	
UMUIM	1000	12		Unknown		62	2,926,705		47,205	

TNC INSURANCE POLICY INFORMATION EXHIBIT
SURPLUS LINES INSURERS - 2016 Period 3

Coverage Code	Coverage Limit (000)	[1] Number of Policies with TNC Coverage	[2] # of Policies % Distribution	[3] Earned Car Years with TNC Insurance	[4] Earned Car Yrs w/ TNC Ins % Distribution	[5] Number of Claims	[6] Total Incurred Loss	[7] Total Incurred Loss % Distribution	[8] Claim Severity [6]/[5]	[9] Claim Frequency Per 1000 Cars [5]/[3]
CSL	1000	12		Unknown		3,849	60,685,597		15,767	
UMUIM	1000	12		Unknown		533	20,293,754		38,075	

TNC INSURANCE POLICY INFORMATION EXHIBIT
SURPLUS LINES INSURERS - 2015 Period 1

Coverage Code	Coverage Limit (000)	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
		Number of Policies with TNC Coverage	# of Policies % Distribution	Earned Car Years with TNC Insurance	Earned Car Yrs w/ TNC Ins % Distribution	Number of Claims	Total Incurred Loss	Total Incurred Loss % Distribution	Claim Severity [6]/[5]	Claim Frequency Per 1000 Cars [5]/[3]
BI	50/100	3		Unknown		27	507,550		18,798	
PD	30	3		Unknown		59	233,633		3,960	
EC	200	2		Unknown		3	600,000		200,000	
CSL	300	1		Unknown						
CSL	1000	7		Unknown						
Total - CSL		8		Unknown						
UMUIM	1000	7		Unknown						

TNC INSURANCE POLICY INFORMATION EXHIBIT
SURPLUS LINES INSURERS - 2015 Period 2

Coverage Code	Coverage Limit (000)	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
		Number of Policies with TNC Coverage	# of Policies % Distribution	Earned Car Years with TNC Insurance	Earned Car Yrs w/ TNC Ins % Distribution	Number of Claims	Total Incurred Loss	Total Incurred Loss % Distribution	Claim Severity [6]/[5]	Claim Frequency Per 1000 Cars [5]/[3]
CSL	1000	10		Unknown		356	8,463,162		23,773	
UMUIM	1000	10		Unknown		25	1,965,557		78,622	

TNC INSURANCE POLICY INFORMATION EXHIBIT
SURPLUS LINES INSURERS - 2015 Period 3

Coverage Code	Coverage Limit (000)	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
		Number of Policies with TNC Coverage	# of Policies % Distribution	Earned Car Years with TNC Insurance	Earned Car Yrs w/ TNC Ins % Distribution	Number of Claims	Total Incurred Loss	Total Incurred Loss % Distribution	Claim Severity [6]/[5]	Claim Frequency Per 1000 Cars [5]/[3]
CSL	1000	10		Unknown		1,394	32,019,589		22,970	
UMUIM	1000	10		Unknown		275	17,029,489		61,925	

TNC INSURANCE POLICY INFORMATION EXHIBIT
SURPLUS LINES INSURERS - 2014 Period 1

Coverage Code	Coverage Limit (000)	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
		Number of Policies with TNC Coverage	# of Policies % Distribution	Earned Car Years with TNC Insurance	Earned Car Yrs w/ TNC Ins % Distribution	Number of Claims	Total Incurred Loss	Total Incurred Loss % Distribution	Claim Severity [6]/[5]	Claim Frequency Per 1000 Cars [5]/[3]
BI	50/100	2		Unknown		5	66,601		13,320	
PD	25	1		Unknown		9	37,623		4,180	
PD	30	1		Unknown						
Total - PD		2		Unknown		9	37,623		4,180	

TNC INSURANCE POLICY INFORMATION EXHIBIT
SURPLUS LINES INSURERS - 2014 Period 2

Coverage Code	Coverage Limit (000)	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
		Number of Policies with TNC Coverage	# of Policies % Distribution	Earned Car Years with TNC Insurance	Earned Car Yrs w/ TNC Ins % Distribution	Number of Claims	Total Incurred Loss	Total Incurred Loss % Distribution	Claim Severity [6]/[5]	Claim Frequency Per 1000 Cars [5]/[3]
CSL	1000	7		Unknown		48	1,736,726		36,182	
UM/UIM	1000	3		Unknown		4	1,620,000		405,000	

TNC INSURANCE POLICY INFORMATION EXHIBIT
SURPLUS LINES INSURERS - 2014 Period 3

Coverage Code	Coverage Limit (000)	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
		Number of Policies with TNC Coverage	# of Policies % Distribution	Earned Car Years with TNC Insurance	Earned Car Yrs w/ TNC Ins % Distribution	Number of Claims	Total Incurred Loss	Total Incurred Loss % Distribution	Claim Severity [6]/[5]	Claim Frequency Per 1000 Cars [5]/[3]
CSL	1000	7		Unknown		275	10,802,877		39,283	
UM/UIM	1000	3		Unknown		50	3,689,665		73,793	

TNC INSURANCE POLICY INFORMATION EXHIBIT
ALL TNC INSURANCE WRITERS - 2016 Period 1

Coverage Code	Coverage Limit (000)	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
		Number of Policies with TNC Coverage	# of Policies % Distribution	Earned Car Years with TNC Insurance	Earned Car Yrs w/ TNC Ins % Distribution	Number of Claims	Total Incurred Loss	Total Incurred Loss % Distribution	Claim Severity [6]/[5]	Claim Frequency Per 1000 Cars [5]/[3]
BI	15/30	2,356	7.75%	1,097	4.44%	3	24,100	0.8%	8,033	3
BI	20/40	37	0.12%	10	0.04%					
BI	25/50	1,934	6.36%	794	3.21%	1	1,000	0.0%	1,000	1
BI	25/100	26	0.09%	8	0.03%					
BI	30/60	322	1.06%	98	0.40%					
BI	30/85	1	0.00%	0.3	0.00%					
BI	50/100	14,441	47.52%	10,413	42.16%	173	2,011,542	69.0%	11,627	17
BI	100/200	145	0.48%	153	0.62%					
BI	100/300	8,207	27.01%	9,640	39.03%	59	600,213	20.6%	10,173	6
BI	200/300	2	0.01%	1	0.00%					
BI	250/500	1,965	6.47%	1,713	6.94%	7	276,990	9.5%	39,570	4
BI	300/300	37	0.12%	8	0.03%					
BI	300/500	495	1.63%	501	2.03%					
BI	500/500	226	0.74%	105	0.42%					
BI	500/1000	64	0.21%	62	0.25%					
BI	1000/1000	130	0.43%	99	0.40%					
Total - BI		30,388	100%	24,701	100%	243	2,913,845	100%	11,991	10
PD	5	223	0.73%	142	0.57%	7	18,664	0.6%	2,666	49
PD	10	1,393	4.59%	722	2.92%	1	1,456	0.0%	1,456	1
PD	15	24	0.08%	18	0.07%					
PD	25	2,089	6.88%	897	3.63%	3	21,006	0.7%	7,002	3
PD	30	2	0.01%	Unknown		249	956,366	32.1%	3,841	
PD	50	15,587	51.35%	12,174	49.26%	291	1,049,253	35.2%	3,606	24
PD	100	10,496	34.58%	10,454	42.30%	265	932,000	31.2%	3,517	25
PD	200	82	0.27%	25	0.10%					
PD	250	137	0.45%	81	0.33%	1	1,264	0.0%	1,264	12
PD	300	176	0.58%	108	0.44%	1	3,103	0.1%	3,103	9
PD	400	2	0.01%	1	0.00%					
PD	500	110	0.36%	81	0.33%					
PD	1000	32	0.11%	11	0.04%					
Total - PD		30,353	100%	24,714	100%	818	2,983,113	100%	3,647	33
UM/UIM	15/30	2,740	11.66%	1,779	8.20%	1	1,000	0.4%	1,000	1
UM/UIM	20/40	62	0.26%	55	0.25%					
UM/UIM	25/50	1,742	7.41%	1,468	6.77%	1	2,500	1.0%	2,500	1
UM/UIM	25/100	31	0.13%	10	0.05%					
UM/UIM	30/60	908	3.86%	544	2.51%					
UM/UIM	30/85	3	0.01%	1	0.00%					
UM/UIM	50/100	9,731	41.39%	8,623	39.74%	18	195,286	77.2%	10,849	2
UM/UIM	100/200	147	0.63%	151	0.70%					
UM/UIM	100/300	6,321	26.89%	7,481	34.47%	9	48,550	19.2%	5,394	1
UM/UIM	200/300	1	0.00%	1	0.01%					
UM/UIM	250/500	1,065	4.53%	904	4.16%	1	5,700	2.3%	5,700	1
UM/UIM	300/300	9	0.04%	2	0.01%					
UM/UIM	300/500	462	1.97%	471	2.17%					
UM/UIM	500/500	145	0.62%	84	0.39%					
UM/UIM	500/1000	54	0.23%	53	0.25%					
UM/UIM	1000/1000	87	0.37%	74	0.34%					
Total - UM/UIM		23,508	100%	21,701	100%	30	253,036	100%	8,435	1
EC	200	2	100.00%	Unknown		6	644,292	100.0%	107,382	
Total - EC		2	100%	Unknown		6	644,292	100%	107,382	
CSL	300	1	7.69%	Unknown						
CSL	500	2	15.38%	1	50.00%					
CSL	1000	9	69.23%	Unknown						
CSL	2000	1	7.69%	1	50.00%					
Total - CSL		13	100%	2	100%					

TNC INSURANCE POLICY INFORMATION EXHIBIT
ALL TNC INSURANCE WRITERS - 2016 Period 2

Coverage Code	Coverage Limit (000)	[1] Number of Policies with TNC Coverage	[2] # of Policies % Distribution	[3] Earned Car Years with TNC Insurance	[4] Earned Car Yrs w/ TNC Ins % Distribution	[5] Number of Claims	[6] Total Incurred Loss	[7] Total Incurred Loss % Distribution	[8] Claim Severity [6]/[5]	[9] Claim Frequency Per 1000 Cars [5]/[3]
BI	15/30	107	8.20%	35	11.44%					
BI	25/50	134	10.27%	31	10.13%					
BI	50/100	295	22.61%	75	24.51%	1	8,501	50.0%	8,501	13
BI	100/300	598	45.82%	130	42.48%	1	8,501	50.0%	8,501	8
BI	300/500	56	4.29%	14	4.58%					
BI	500/500	87	6.67%	15	4.90%					
BI	500/1000	8	0.61%	3	0.98%					
BI	1000/1000	20	1.53%	3	0.98%					
Total - BI		1,305	100%	306	100%	2	17,002	100%	8,501	7
PD	10	47	3.60%	17	5.56%					
PD	25	92	7.05%	24	7.84%	1	2,652	8.9%	2,652	42
PD	50	394	30.19%	90	29.41%					
PD	100	721	55.25%	165	53.92%	3	27,064	91.1%	9,021	18
PD	300	35	2.68%	7	2.29%					
PD	500	12	0.92%	3	0.98%					
PD	1000	4	0.31%	-	0.00%					
Total - PD		1,305	100%	306	100%	4	29,716	100%	7,429	13
UM/UIM	15/30	123	9.35%	39	12.70%					
UM/UIM	25/50	142	10.79%	33	10.75%					
UM/UIM	30/60	41	3.12%	8	2.61%					
UM/UIM	50/100	302	22.95%	77	25.08%					
UM/UIM	100/300	577	43.84%	125	40.72%					
UM/UIM	300/500	50	3.80%	10	3.26%					
UM/UIM	500/500	56	4.26%	11	3.58%					
UM/UIM	500/1000	4	0.30%	2	0.65%					
UM/UIM	1000/1000	21	1.60%	2	0.65%	62	2,926,705	100.0%	47,205	
Total - UM/UIM		1,316	100%	307	100%	62	2,926,705	100%	47,205	
CSL	1000	12	100.00%	Unknown		1,059	14,522,438	100.0%	13,713	
Total - CSL		12	100%	Unknown		1,059	14,522,438	100%	13,713	

TNC INSURANCE POLICY INFORMATION EXHIBIT
ALL TNC INSURANCE WRITERS - 2016 Period 3

Coverage Code	Coverage Limit (000)	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
		Number of Policies with TNC Coverage	# of Policies % Distribution	Earned Car Years with TNC Insurance	Earned Car Yrs w/ TNC Ins % Distribution	Number of Claims	Total Incurred Loss	Total Incurred Loss % Distribution	Claim Severity [6]/[5]	Claim Frequency Per 1000 Cars [5]/[3]
BI	15/30	107	8.20%	35	11.44%					
BI	25/50	134	10.27%	31	10.13%					
BI	50/100	295	22.61%	75	24.51%					
BI	100/300	598	45.82%	130	42.48%					
BI	300/500	56	4.29%	14	4.58%					
BI	500/500	87	6.67%	15	4.90%					
BI	500/1000	8	0.61%	3	0.98%					
BI	1000/1000	20	1.53%	3	0.98%					
Total - BI		1,305	100%	306	100%					
PD	10	47	3.60%	17	5.56%					
PD	25	92	7.05%	24	7.84%	1	732	14.9%	732	42
PD	50	394	30.19%	90	29.41%					
PD	100	721	55.25%	165	53.92%	2	4,185	85.1%	2,093	12
PD	300	35	2.68%	7	2.29%					
PD	500	12	0.92%	3	0.98%					
PD	1000	4	0.31%	-	0.00%					
Total - PD		1,305	100%	306	100%	3	4,917	100%	1,639	10
UM/UIM	15/30	123	9.35%	39	12.70%					
UM/UIM	25/50	142	10.79%	33	10.75%					
UM/UIM	30/60	41	3.12%	8	2.61%					
UM/UIM	50/100	302	22.95%	77	25.08%					
UM/UIM	100/300	577	43.84%	125	40.72%					
UM/UIM	300/500	50	3.80%	10	3.26%					
UM/UIM	500/500	56	4.26%	11	3.58%					
UM/UIM	500/1000	4	0.30%	2	0.65%					
UM/UIM	1000/1000	21	1.60%	2	0.65%	533	20,293,754	100.0%	38,075	
Total - UM/UIM		1,316	100%	307	100%	533	20,293,754	100%	38,075	
CSL	1000	12	100.00%	Unknown		3,849	60,685,597	100.0%	15,767	
Total - CSL		12	100%	Unknown		3,849	60,685,597	100%	15,767	

TNC INSURANCE POLICY INFORMATION EXHIBIT

ALL TNC INSURANCE WRITERS - 2015 Period 1

Coverage Code	Coverage Limit (000)	[1] Number of Policies with TNC Coverage	[2] # of Policies % Distribution	[3] Earned Car Years with TNC Insurance	[4] Earned Car Yrs w/ TNC Ins % Distribution	[5] Number of Claims	[6] Total Incurred Loss	[7] Total Incurred Loss % Distribution	[8] Claim Severity [6]/[5]	[9] Claim Frequency Per 1000 Cars [5]/[3]
BI	15/30	115	1.25%	29	0.72%	1	45,625	4.2%	45,625	34
BI	25/50	41	0.45%	2	0.06%					
BI	50/100	4,587	49.88%	1,902	47.01%	50	789,325	72.7%	15,787	26
BI	100/300	3,625	39.42%	1,610	39.80%	16	224,139	20.6%	14,009	10
BI	250/500	826	8.98%	502	12.41%	1	27,375	2.5%	27,375	2
BI	300/300	2	0.02%	0.1	0.00%					
Total - BI		9,196	100%	4,045	100%	68	1,086,464	100%	15,977	17
PD	5	50	0.54%	25	0.62%	1	5,000	0.5%	5,000	40
PD	10	65	0.71%	4	0.10%					
PD	15	2	0.02%	0	0.00%					
PD	25	45	0.49%	3	0.06%					
PD	30	3	0.03%	Unknown		59	233,633	21.8%	3,960	
PD	50	5,018	54.59%	2,107	52.03%	94	418,090	39.1%	4,448	45
PD	100	3,997	43.48%	1,910	47.17%	97	412,657	38.6%	4,254	51
PD	250	12	0.13%	1	0.02%					
Total - PD		9,192	100%	4,050	100%	251	1,069,380	100%	4,260	62
UM/UIM	15/30	550	6.18%	344	8.85%					
UM/UIM	20/40	32	0.36%	16	0.41%					
UM/UIM	25/50	258	2.90%	248	6.38%					
UM/UIM	30/60	124	1.39%	50	1.29%					
UM/UIM	50/100	3,884	43.67%	1,551	39.89%	10	115,032	66.3%	11,503	6
UM/UIM	100/300	3,319	37.32%	1,320	33.95%	6	58,583	33.7%	9,764	5
UM/UIM	250/500	719	8.09%	358	9.22%					
UM/UIM	1000	7	0.08%	Unknown						
Total - UM/UIM		8,893	100%	3,887	100%	16	173,615	100%	10,851	4
EC	200	2	100.00%	Unknown		3	600,000	100.0%	200,000	
Total - EC		2	100%	Unknown		3	600,000	100%	200,000	
CSL	300	1	12.50%	Unknown						
CSL	1000	7	87.50%	Unknown						
Total - CSL		8	100%	Unknown						

TNC INSURANCE POLICY INFORMATION EXHIBIT

ALL TNC INSURANCE WRITERS - 2015 Period 2

Coverage Code	Coverage Limit (000)	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
		Number of Policies with TNC Coverage	# of Policies % Distribution	Earned Car Years with TNC Insurance	Earned Car Yrs w/ TNC Ins % Distribution	Number of Claims	Total Incurred Loss	Total Incurred Loss % Distribution	Claim Severity [6]/[5]	Claim Frequency Per 1000 Cars [5]/[3]
CSL	1000	10		Unknown		356	8,463,162		23,773	
UMUIM	1000	10		Unknown		25	1,965,557		78,622	

TNC INSURANCE POLICY INFORMATION EXHIBIT

ALL TNC INSURANCE WRITERS - 2015 Period 3

Coverage Code	Coverage Limit (000)	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
		Number of Policies with TNC Coverage	# of Policies % Distribution	Earned Car Years with TNC Insurance	Earned Car Yrs w/ TNC Ins % Distribution	Number of Claims	Total Incurred Loss	Total Incurred Loss % Distribution	Claim Severity [6]/[5]	Claim Frequency Per 1000 Cars [5]/[3]
CSL	1000	10		Unknown		1,394	32,019,589		22,970	
UMUIM	1000	10		Unknown		275	17,029,489		61,925	

TNC INSURANCE POLICY INFORMATION EXHIBIT

ALL TNC INSURANCE WRITERS - 2014 Period 1

Coverage Code	Coverage Limit (000)	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
		Number of Policies with TNC Coverage	# of Policies % Distribution	Earned Car Years with TNC Insurance	Earned Car Yrs w/ TNC Ins % Distribution	Number of Claims	Total Incurred Loss	Total Incurred Loss % Distribution	Claim Severity [6]/[5]	Claim Frequency Per 1000 Cars [5]/[3]
BI	50/100	2		Unknown		5	66,601		13,320	
PD	25	1	50.00%	Unknown		9	37,623		4,180	
PD	30	1	50.00%	Unknown						
Total - PD		2	100%	Unknown		9	37,623		4,180	

TNC INSURANCE POLICY INFORMATION EXHIBIT

ALL TNC INSURANCE WRITERS - 2014 Period 2

Coverage Code	Coverage Limit (000)	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
		Number of Policies with TNC Coverage	# of Policies % Distribution	Earned Car Years with TNC Insurance	Earned Car Yrs w/ TNC Ins % Distribution	Number of Claims	Total Incurred Loss	Total Incurred Loss % Distribution	Claim Severity [6]/[5]	Claim Frequency Per 1000 Cars [5]/[3]
CSL	1000	7		Unknown		48	1,736,726		36,182	
UM/UIM	1000	3		Unknown		4	1,620,000		405,000	

TNC INSURANCE POLICY INFORMATION EXHIBIT

ALL TNC INSURANCE WRITERS - 2014 Period 3

Coverage Code	Coverage Limit (000)	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
		Number of Policies with TNC Coverage	# of Policies % Distribution	Earned Car Years with TNC Insurance	Earned Car Yrs w/ TNC Ins % Distribution	Number of Claims	Total Incurred Loss	Total Incurred Loss % Distribution	Claim Severity [6]/[5]	Claim Frequency Per 1000 Cars [5]/[3]
CSL	1000	7		Unknown		275	10,802,877		39,283	
UM/UIM	1000	3		Unknown		50	3,689,665		73,793	

Appendix E

Histogram of Aggregate Loss Distribution by Coverage Type

Histogram Chart 1: Death & Personal Injury (aka BI) - per person, Period 1

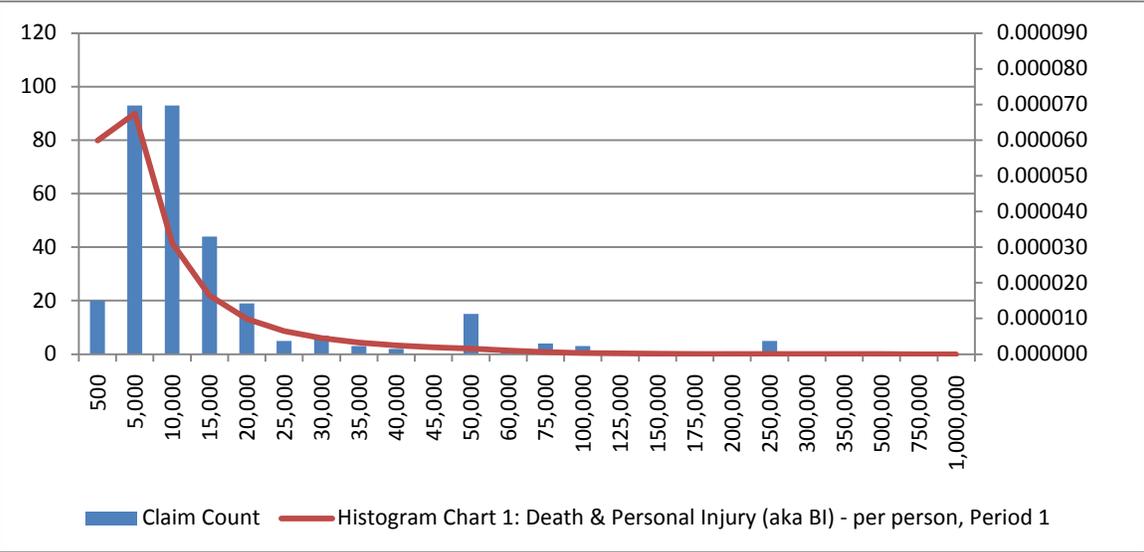
Three-Parameter Frechet Distribution

Alpha = 1.3433
Beta = 6715.6
Gamma = -2277.3

Probability Density Function

$$f(x) = \frac{\alpha}{\beta} \left(\frac{\beta}{x-\gamma}\right)^{\alpha+1} \exp\left(-\left(\frac{\beta}{x-\gamma}\right)^\alpha\right)$$

		Claim Data			Loss Data			
Loss Range	x	Claim Count [1]	Cumulative Claim Count	Cumulative Claim Count %	Incurred Loss Range	Cumulative Incurred Loss	Coverage Limits Severity [2.1]/[1.1]	f(x)
			[1.1]	[1.2]	Total (in \$) [2]	Loss [2.1]	[2.2]	
1	to 500	20	20	6.33%	\$5,854	\$5,854	\$293	0.0000599363
501	to 5,000	93	113	35.76%	\$265,049	\$270,903	\$2,397	0.0000675256
5,001	to 10,000	93	206	65.19%	\$630,985	\$901,888	\$4,378	0.0000311879
10,001	to 15,000	44	250	79.11%	\$557,187	\$1,459,075	\$5,836	0.0000164960
15,001	to 20,000	19	269	85.13%	\$337,494	\$1,796,569	\$6,679	0.0000098630
20,001	to 25,000	5	274	86.71%	\$115,775	\$1,912,344	\$6,979	0.0000064357
25,001	to 30,000	7	281	88.92%	\$192,495	\$2,104,839	\$7,491	0.0000044739
30,001	to 35,000	3	284	89.87%	\$102,250	\$2,207,089	\$7,771	0.0000032613
35,001	to 40,000	2	286	90.51%	\$75,188	\$2,282,277	\$7,980	0.0000024664
40,001	to 45,000	0	286	90.51%	\$0	\$2,282,277	\$7,980	0.0000019205
45,001	to 50,000	15	301	95.25%	\$745,625	\$3,027,902	\$10,059	0.0000015314
50,001	to 60,000	1	302	95.57%	\$60,000	\$3,087,902	\$10,225	0.0000010298
60,001	to 75,000	4	306	96.84%	\$279,008	\$3,366,910	\$11,003	0.0000006289
75,001	to 100,000	3	309	97.78%	\$300,000	\$3,666,910	\$11,867	0.0000003300
100,001	to 125,000	0	309	97.78%	\$0	\$3,666,910	\$11,867	0.0000001990
125,001	to 150,000	0	309	97.78%	\$0	\$3,666,910	\$11,867	0.0000001312
150,001	to 175,000	1	310	98.10%	\$169,000	\$3,835,910	\$12,374	0.0000000922
175,001	to 200,000	1	311	98.42%	\$195,000	\$4,030,910	\$12,961	0.0000000678
200,001	to 250,000	5	316	100.00%	\$1,250,000	\$5,280,910	\$16,712	0.0000000405
250,001	to 300,000	0	316	100.00%	\$0	\$5,280,910	\$16,712	0.0000000266
300,001	to 350,000	0	316	100.00%	\$0	\$5,280,910	\$16,712	0.0000000186
350,001	to 500,000	0	316	100.00%	\$0	\$5,280,910	\$16,712	0.0000000081
500,001	to 750,000	0	316	100.00%	\$0	\$5,280,910	\$16,712	0.0000000031
750,001	to 1,000,000	0	316	100.00%	\$0	\$5,280,910	\$16,712	0.0000000016
1,000,001	to over	0	316	100.00%	\$0	\$5,280,910	\$16,712	
Total:		316	316	100.00%	\$5,280,910			



Histogram Chart 2: Death & Personal Injury (aka BI) - per Incident, Period 1

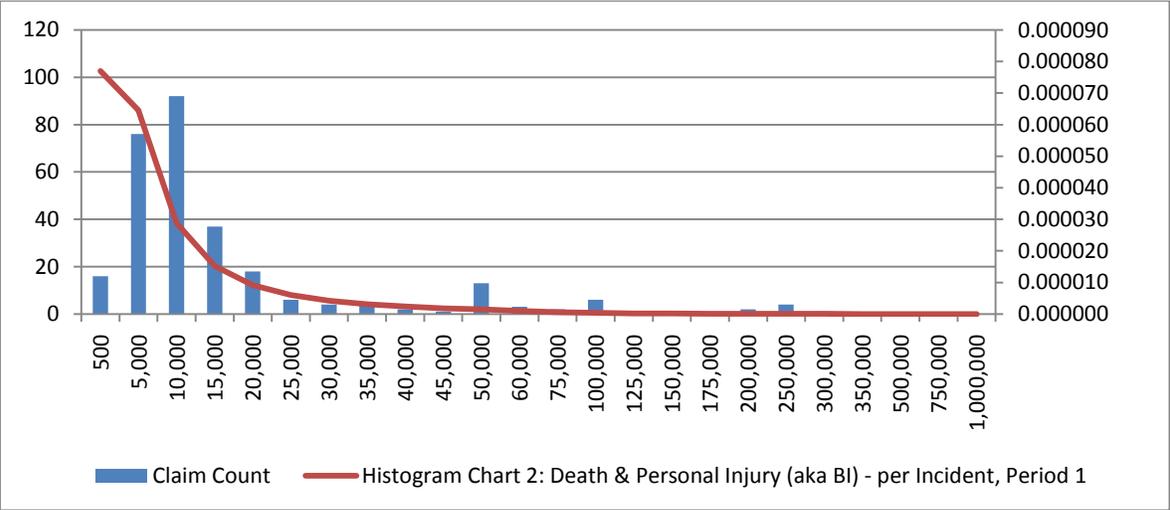
Three-Parameter Frechet Distribution

Alpha = 1.2780
 Beta = 6083.1
 Gamma = -2141.1

Probability Density Function

$$f(x) = \frac{\alpha}{\beta} \left(\frac{\beta}{x-\gamma}\right)^{\alpha+1} \exp\left(-\left(\frac{\beta}{x-\gamma}\right)^\alpha\right)$$

		Claim Data			Loss Data			
Loss Range	x	Claim Count [1]	Cumulative	Cumulative	Incurred Loss Range Total (in \$) [2]	Cumulative Incurred Loss [2.1]	Coverage Limits Severity [2.1]/[1.1] [2.2]	f(x)
			Claim Count [1.1]	Claim Count % [1.2]				
1	to 500	16	16	5.57%	\$4,654	\$4,654	\$291	0.0000769858
501	to 5,000	76	92	32.06%	\$199,434	\$204,088	\$2,218	0.0000645571
5,001	to 10,000	92	184	64.11%	\$630,600	\$834,688	\$4,536	0.0000287833
10,001	to 15,000	37	221	77.00%	\$461,687	\$1,296,375	\$5,866	0.0000152036
15,001	to 20,000	18	239	83.28%	\$315,994	\$1,612,369	\$6,746	0.0000091403
20,001	to 25,000	6	245	85.37%	\$134,275	\$1,746,644	\$7,129	0.0000060064
25,001	to 30,000	4	249	86.76%	\$111,495	\$1,858,139	\$7,462	0.0000042055
30,001	to 35,000	4	253	88.15%	\$133,250	\$1,991,389	\$7,871	0.0000030867
35,001	to 40,000	2	255	88.85%	\$75,188	\$2,066,577	\$8,104	0.0000023494
40,001	to 45,000	1	256	89.20%	\$45,000	\$2,111,577	\$8,248	0.0000018404
45,001	to 50,000	13	269	93.73%	\$644,625	\$2,756,202	\$10,246	0.0000014758
50,001	to 60,000	3	272	94.77%	\$170,100	\$2,926,302	\$10,758	0.0000010024
60,001	to 75,000	2	274	95.47%	\$134,008	\$3,060,310	\$11,169	0.0000006202
75,001	to 100,000	6	280	97.56%	\$598,000	\$3,658,310	\$13,065	0.0000003310
100,001	to 125,000	0	280	97.56%	\$0	\$3,658,310	\$13,065	0.0000002024
125,001	to 150,000	0	280	97.56%	\$0	\$3,658,310	\$13,065	0.0000001350
150,001	to 175,000	0	280	97.56%	\$0	\$3,658,310	\$13,065	0.0000000957
175,001	to 200,000	2	282	98.26%	\$372,500	\$4,030,810	\$14,294	0.0000000710
200,001	to 250,000	4	286	99.65%	\$1,000,000	\$5,030,810	\$17,590	0.0000000431
250,001	to 300,000	1	287	100.00%	\$250,100	\$5,280,910	\$18,400	0.0000000286
300,001	to 350,000	0	287	100.00%	\$0	\$5,280,910	\$18,400	0.0000000202
350,001	to 500,000	0	287	100.00%	\$0	\$5,280,910	\$18,400	0.0000000090
500,001	to 750,000	0	287	100.00%	\$0	\$5,280,910	\$18,400	0.0000000036
750,001	to 1,000,000	0	287	100.00%	\$0	\$5,280,910	\$18,400	0.0000000019
1,000,001	to over	0	287	100.00%	\$0	\$5,280,910	\$18,400	
Total:		287	287	100.00%	\$5,280,910			



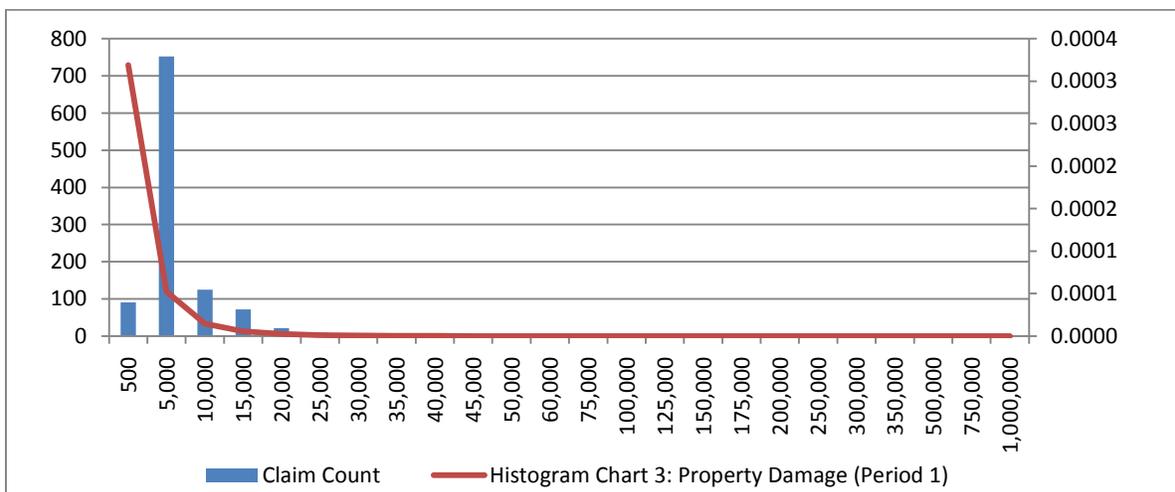
Histogram Chart 3: Property Damage (Period 1)

Three-Parameter Inverse Gaussian

Alpha = 2473.1
 Beta = -172.11
 Gamma = 3994.4

$$f(x; \gamma, \beta, \alpha) = \left[\frac{\beta \alpha^2}{2\pi(x - \gamma)^3} \right]^{1/2} \exp \left\{ -\frac{(x - \gamma - \beta \alpha)^2}{2\beta(x - \gamma)} \right\}$$

			Claim Data			Loss Data			
Loss Range	x	Claim Count	Cumulative	Cumulative	Incurred Loss Range Total (in \$)	Cumulative	Coverage Limits Severity [2.1]/[1.1]	f(x)	
			Claim Count [1]	Claim Count [1.1]		Claim Count % [1.2]			Incurred Loss [2.1]
1 to 500	500	91	91	8.44%	\$28,546	\$28,546	\$314	3.1888E-04	
501 to 5,000	5,000	752	843	78.20%	\$1,494,101	\$1,522,647	\$1,806	5.2240E-05	
5,001 to 10,000	10,000	125	968	89.80%	\$877,937	\$2,400,584	\$2,480	1.4459E-05	
10,001 to 15,000	15,000	72	1040	96.47%	\$867,963	\$3,268,547	\$3,143	5.6077E-06	
15,001 to 20,000	20,000	21	1061	98.42%	\$361,845	\$3,630,391	\$3,422	2.5334E-06	
20,001 to 25,000	25,000	9	1070	99.26%	\$198,200	\$3,828,591	\$3,578	1.2487E-06	
25,001 to 30,000	30,000	5	1075	99.72%	\$134,052	\$3,962,644	\$3,686	6.5113E-07	
30,001 to 35,000	35,000	0	1075	99.72%	\$0	\$3,962,644	\$3,686	3.5320E-07	
35,001 to 40,000	40,000	1	1076	99.81%	\$38,108	\$4,000,752	\$3,718	1.9726E-07	
40,001 to 45,000	45,000	0	1076	99.81%	\$0	\$4,000,752	\$3,718	1.1267E-07	
45,001 to 50,000	50,000	0	1076	99.81%	\$0	\$4,000,752	\$3,718	6.5511E-08	
50,001 to 60,000	60,000	1	1077	99.91%	\$59,364	\$4,060,116	\$3,770	2.3073E-08	
60,001 to 75,000	75,000	1	1078	100.00%	\$60,292	\$4,120,408	\$3,822	5.1883E-09	
75,001 to 100,000	100,000	0	1078	100.00%	\$0	\$4,120,408	\$3,822	4.8788E-10	
100,001 to 125,000	125,000	0	1078	100.00%	\$0	\$4,120,408	\$3,822	5.0441E-11	
125,001 to 150,000	150,000	0	1078	100.00%	\$0	\$4,120,408	\$3,822	5.5388E-12	
150,001 to 175,000	175,000	0	1078	100.00%	\$0	\$4,120,408	\$3,822	6.3409E-13	
175,001 to 200,000	200,000	0	1078	100.00%	\$0	\$4,120,408	\$3,822	7.4846E-14	
200,001 to 250,000	250,000	0	1078	100.00%	\$0	\$4,120,408	\$3,822	1.1131E-15	
250,001 to 300,000	300,000	0	1078	100.00%	\$0	\$4,120,408	\$3,822	1.7590E-17	
300,001 to 350,000	350,000	0	1078	100.00%	\$0	\$4,120,408	\$3,822	2.8990E-19	
350,001 to 500,000	500,000	0	1078	100.00%	\$0	\$4,120,408	\$3,822	1.5195E-24	
500,001 to 750,000	750,000	0	1078	100.00%	\$0	\$4,120,408	\$3,822	3.1872E-33	
750,001 to 1,000,000	1,000,000	0	1078	100.00%	\$0	\$4,120,408	\$3,822	7.9730E-42	
Total:			1,078	1,078	100.00%	\$4,120,408			



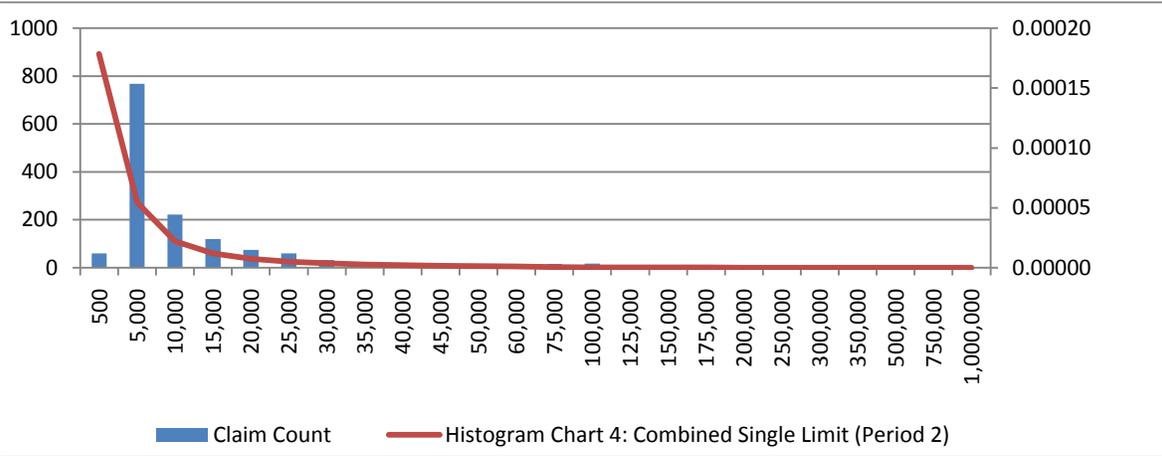
Histogram Chart 4: Combined Single Limit (Period 2)

Log Gamma Distribution

$$f(x) = \frac{(\ln(x))^{\alpha-1}}{x\beta^\alpha\Gamma(\alpha)} \exp(-\ln(x)/\beta)$$

Alpha = 33.91
Beta = 0.24868

			Claim Data			Loss Data			
Loss Range	x	Claim Count [1]	Cumulative Claim Count [1.1]	Cumulative Claim Count % [1.2]	Incurred Loss Range Total (in \$) [2]	Cumulative Incurred Loss [2.1]	Coverage Limits Severity [2.1]/[1.1] [2.2]	f(x)	
1 to 500	500	59	59	4.02%	\$17,454	\$17,454	\$296	0.0001784133	
501 to 5,000	5,000	768	827	56.37%	\$1,761,797	\$1,779,251	\$2,151	0.0000543259	
5,001 to 10,000	10,000	222	1049	71.51%	\$1,662,431	\$3,441,682	\$3,281	0.0000219644	
10,001 to 15,000	15,000	120	1169	79.69%	\$1,467,988	\$4,909,670	\$4,200	0.0000118378	
15,001 to 20,000	20,000	74	1243	84.73%	\$1,295,793	\$6,205,463	\$4,992	0.0000073664	
20,001 to 25,000	25,000	60	1303	88.82%	\$1,343,024	\$7,548,487	\$5,793	0.0000050016	
25,001 to 30,000	30,000	32	1335	91.00%	\$873,798	\$8,422,285	\$6,309	0.0000036021	
30,001 to 35,000	35,000	23	1358	92.57%	\$758,031	\$9,180,316	\$6,760	0.0000027073	
35,001 to 40,000	40,000	8	1366	93.12%	\$304,836	\$9,485,152	\$6,944	0.0000021019	
40,001 to 45,000	45,000	9	1375	93.73%	\$381,926	\$9,867,078	\$7,176	0.0000016739	
45,001 to 50,000	50,000	13	1388	94.61%	\$622,498	\$10,489,576	\$7,557	0.0000013610	
50,001 to 60,000	60,000	15	1403	95.64%	\$808,755	\$11,298,331	\$8,053	0.0000009443	
60,001 to 75,000	75,000	16	1419	96.73%	\$1,079,998	\$12,378,329	\$8,723	0.0000005963	
75,001 to 100,000	100,000	17	1436	97.89%	\$1,473,835	\$13,852,165	\$9,646	0.0000003234	
100,001 to 125,000	125,000	3	1439	98.09%	\$363,890	\$14,216,055	\$9,879	0.0000001984	
125,001 to 150,000	150,000	3	1442	98.30%	\$386,819	\$14,602,874	\$10,127	0.0000001319	
150,001 to 175,000	175,000	7	1449	98.77%	\$1,131,953	\$15,734,827	\$10,859	0.0000000929	
175,001 to 200,000	200,000	4	1453	99.05%	\$741,933	\$16,476,759	\$11,340	0.0000000682	
200,001 to 250,000	250,000	2	1455	99.18%	\$450,642	\$16,927,401	\$11,634	0.0000000404	
250,001 to 300,000	300,000	2	1457	99.32%	\$539,092	\$17,466,493	\$11,988	0.0000000261	
300,001 to 350,000	350,000	1	1458	99.39%	\$300,060	\$17,766,553	\$12,186	0.0000000180	
350,001 to 500,000	500,000	1	1459	99.45%	\$406,844	\$18,173,397	\$12,456	0.0000000074	
500,001 to 750,000	750,000	3	1462	99.66%	\$1,709,550	\$19,882,947	\$13,600	0.0000000026	
750,001 to 1,000,000	1,000,000	3	1465	99.86%	\$2,750,100	\$22,633,047	\$15,449	0.0000000012	
1,000,001 to over	over	2	1467	100.00%	\$2,135,997	\$24,769,044	\$16,884		
Total:			1,467	1,467	100.00%	\$24,769,044			



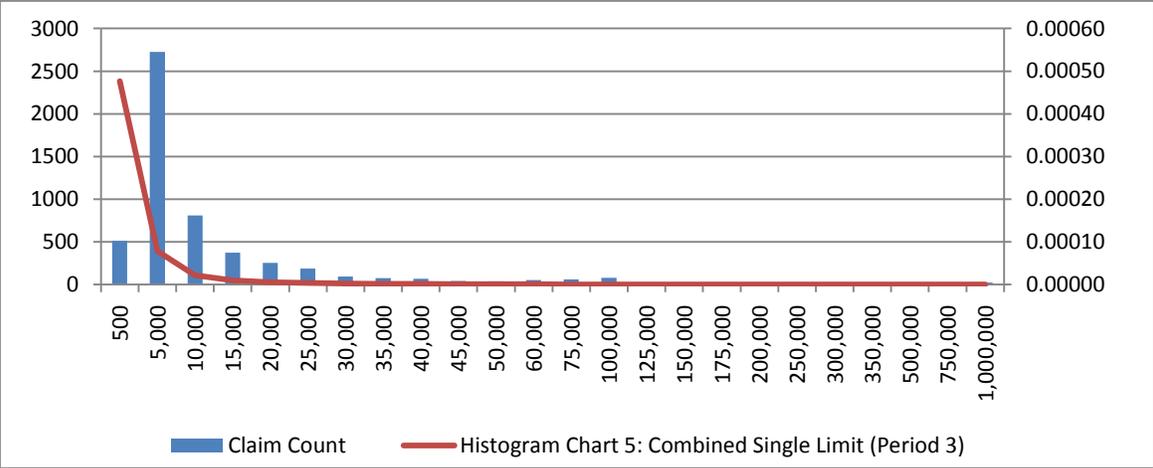
Histogram Chart 5: Combined Single Limit (Period 3)

Three-Parameter Pearson 6 Distribution

$$f(x) = \frac{(x/\beta)^{\alpha_1-1}}{\beta B(\alpha_1, \alpha_2) (1 + x/\beta)^{\alpha_1+\alpha_2}}$$

a1 = 1.4446
 a2 = 0.97598
 Beta = 2182.1

		Claim Data			Loss Data			
Loss Range	x	Claim Count [1]	Cumulative Claim Count	Cumulative Claim %	Incurring Loss Range	Cumulative Incurring Loss	Coverage Limits Severity	f(x)
			[1.1]	[1.2]	Total (in \$) [2]	Loss [2.1]	[2.1]/[1.1] [2.2]	
1	to 500	511	511	9.26%	\$152,003	\$152,003	\$297	0.0004768917
501	to 5,000	2727	3238	58.65%	\$6,096,052	\$6,248,055	\$1,930	0.0000784962
5,001	to 10,000	810	4048	73.32%	\$5,949,886	\$12,197,941	\$3,013	0.0000220794
10,001	to 15,000	372	4420	80.06%	\$4,605,806	\$16,803,747	\$3,802	0.0000100632
15,001	to 20,000	255	4675	84.68%	\$4,456,557	\$21,260,305	\$4,548	0.0000057266
20,001	to 25,000	186	4861	88.05%	\$4,206,311	\$25,466,615	\$5,239	0.0000036919
25,001	to 30,000	93	4954	89.73%	\$2,564,263	\$28,030,879	\$5,658	0.0000025776
30,001	to 35,000	75	5029	91.09%	\$2,434,233	\$30,465,112	\$6,058	0.0000019018
35,001	to 40,000	69	5098	92.34%	\$2,588,460	\$33,053,572	\$6,484	0.0000014612
40,001	to 45,000	42	5140	93.10%	\$1,793,801	\$34,847,372	\$6,780	0.0000011581
45,001	to 50,000	37	5177	93.77%	\$1,785,715	\$36,633,088	\$7,076	0.0000009406
50,001	to 60,000	52	5229	94.71%	\$2,848,106	\$39,481,194	\$7,550	0.0000006561
60,001	to 75,000	62	5291	95.83%	\$4,100,838	\$43,582,032	\$8,237	0.0000004222
75,001	to 100,000	78	5369	97.25%	\$6,760,386	\$50,342,418	\$9,376	0.0000002392
100,001	to 125,000	26	5395	97.72%	\$2,902,513	\$53,244,931	\$9,869	0.0000001539
125,001	to 150,000	15	5410	97.99%	\$2,025,182	\$55,270,114	\$10,216	0.0000001074
150,001	to 175,000	13	5423	98.22%	\$2,058,849	\$57,328,963	\$10,571	0.0000000792
175,001	to 200,000	12	5435	98.44%	\$2,214,148	\$59,543,111	\$10,955	0.0000000608
200,001	to 250,000	21	5456	98.82%	\$4,862,928	\$64,406,039	\$11,805	0.0000000391
250,001	to 300,000	11	5467	99.02%	\$2,890,772	\$67,296,811	\$12,310	0.0000000273
300,001	to 350,000	5	5472	99.11%	\$1,598,013	\$68,894,824	\$12,590	0.0000000201
350,001	to 500,000	17	5489	99.42%	\$6,763,303	\$75,658,127	\$13,784	0.0000000099
500,001	to 750,000	8	5497	99.57%	\$4,833,453	\$80,491,579	\$14,643	0.0000000045
750,001	to 1,000,000	24	5521	100.00%	\$23,021,402	\$103,512,981	\$18,749	0.0000000025
1,000,001	to over	0	5521	100.00%	\$0	\$103,512,981	\$18,749	0.0000000025
Total:		5,521	5,521	100.00%	\$103,512,981			



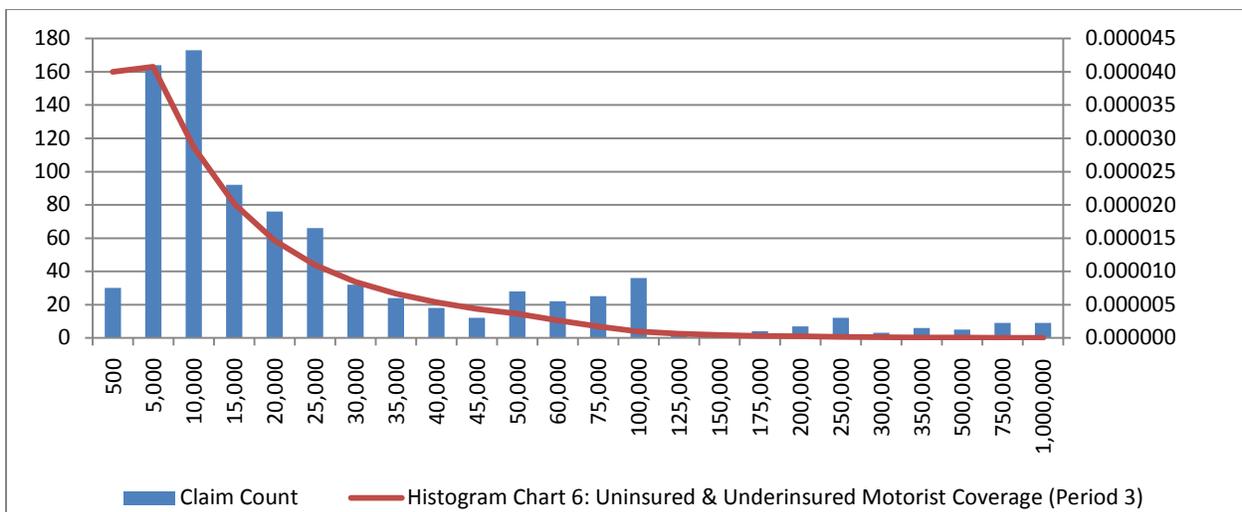
Histogram Chart 6: Uninsured & Underinsured Motorist Coverage (Period 3)

Burr Distribution

$$f(x) = \frac{\alpha k \left(\frac{x}{\beta}\right)^{\alpha-1}}{\beta \left(1 + \left(\frac{x}{\beta}\right)^{\alpha}\right)^{k+1}}$$

Alpha = 1.2012
Beta = 15,079
K = 1.0308

			<u>Claim Data</u>			<u>Loss Data</u>			
Loss Range	x	Claim Count [1]	Cumulative Claim Count [1.1]	Cumulative Claim Count % [1.2]	Incurred Loss Range Total (in \$) [2]	Cumulative Incurred Loss [2.1]	Coverage Limits Severity [2.1]/[1.1] [2.2]	f(x)	
			1	to 500	30	30	3.50%		\$9,752
501	to 5,000	164	194	22.61%	\$541,894	\$551,646	\$2,844	0.0000407619	
5,001	to 10,000	173	367	42.77%	\$1,474,688	\$2,026,333	\$5,521	0.0000287205	
10,001	to 15,000	92	459	53.50%	\$1,244,559	\$3,270,892	\$7,126	0.0000202025	
15,001	to 20,000	76	535	62.35%	\$1,416,962	\$4,687,854	\$8,762	0.0000146397	
20,001	to 25,000	66	601	70.05%	\$1,563,251	\$6,251,105	\$10,401	0.0000109498	
25,001	to 30,000	32	633	73.78%	\$924,095	\$7,175,200	\$11,335	0.0000084253	
30,001	to 35,000	24	657	76.57%	\$801,933	\$7,977,132	\$12,142	0.0000066426	
35,001	to 40,000	18	675	78.67%	\$696,900	\$8,674,032	\$12,850	0.0000053470	
40,001	to 45,000	12	687	80.07%	\$520,379	\$9,194,411	\$13,383	0.0000043810	
45,001	to 50,000	28	715	83.33%	\$1,374,600	\$10,569,011	\$14,782	0.0000036448	
50,001	to 60,000	22	737	85.90%	\$1,235,422	\$11,804,433	\$16,017	0.0000026201	
60,001	to 75,000	25	762	88.81%	\$1,756,600	\$13,561,033	\$17,797	0.0000017187	
75,001	to 100,000	36	798	93.01%	\$3,175,450	\$16,736,483	\$20,973	0.0000009749	
100,001	to 125,000	3	801	93.36%	\$333,512	\$17,069,995	\$21,311	0.0000006189	
125,001	to 150,000	2	803	93.59%	\$282,500	\$17,352,495	\$21,610	0.0000004238	
150,001	to 175,000	4	807	94.06%	\$637,178	\$17,989,672	\$22,292	0.0000003064	
175,001	to 200,000	7	814	94.87%	\$1,331,000	\$19,320,672	\$23,735	0.0000002307	
200,001	to 250,000	12	826	96.27%	\$2,748,400	\$22,069,072	\$26,718	0.0000001429	
250,001	to 300,000	3	829	96.62%	\$850,000	\$22,919,072	\$27,647	0.0000000963	
300,001	to 350,000	6	835	97.32%	\$2,347,636	\$25,266,709	\$30,260	0.0000000688	
350,001	to 500,000	5	840	97.90%	\$1,956,364	\$27,223,072	\$32,408	0.0000000315	
500,001	to 750,000	9	849	98.95%	\$5,510,000	\$32,733,072	\$38,555	0.0000000128	
750,001	to 1,000,000	9	858	100.00%	\$8,279,836	\$41,012,908	\$47,801	0.0000000068	
1,000,001	to over	0	858	100.00%	\$0	\$41,012,908	\$47,801	0.0000000000	
Total:			858	858	100.00%	\$41,012,908			



Descriptive Statistics for Histogram Charts

Histogram Chart 1	
Death & Personal Injury (a.k.a. Bodily Injury)	
- Per Person, Period 1 -	
2014, 2015, 2016 Combined	
Mean	16,712
Standard Error	2,039.29
Median	6,450
Mode	5,000
Standard Deviation	36,251.19
Sample Variance	1,314,148,653.09
Kurtosis	28.00
Skewness	5.05
Range	249,900
Minimum	100
Maximum	250,000
Sum	5,280,910
Count	316

Histogram Chart 2	
Death & Personal Injury (a.k.a. Bodily Injury)	
- Per Incident, Period 1 -	
2014, 2015, 2016 Combined	
Mean	18,400
Standard Error	2,281.46
Median	6,480
Mode	6,450
Standard Deviation	38,650.35
Sample Variance	1,493,849,364.03
Kurtosis	23.06
Skewness	4.58
Range	250,000
Minimum	100
Maximum	250,100
Sum	5,280,910
Count	287

Histogram Chart 3	
Property Damage (PD)	
- Period 1 -	
2014, 2015, 2016 Combined	
Mean	3,822
Standard Error	155.86
Median	1,952
Mode	1,775
Standard Deviation	5,117.20
Sample Variance	26,185,712.23
Kurtosis	30.59
Skewness	4.14
Range	60,249
Minimum	43
Maximum	60,292
Sum	4,120,407
Count	1,078

Histogram Chart 4	
Combined Single Limit (CSL)	
- Period 2 -	
2014, 2015, 2016 Combined	
Mean	16,884
Standard Error	1,774.58
Median	4,084
Mode	5,000
Standard Deviation	67,968.87
Sample Variance	4,619,767,638.93
Kurtosis	156.28
Skewness	11.61
Range	1,104,975
Minimum	25
Maximum	1,105,000
Sum	24,769,044
Count	1,467

Histogram Chart 5	
Combined Single Limit (CSL)	
- Period 3 -	
2014, 2015, 2016 Combined	
Mean	18,749
Standard Error	1,015.46
Median	3,591
Mode	5,000
Standard Deviation	75,452.27
Sample Variance	5,693,045,729.34
Kurtosis	114.68
Skewness	9.98
Range	999,990
Minimum	10
Maximum	1,000,000
Sum	103,512,982
Count	5,521

Histogram Chart 6	
Uninsured Motorist / Underinsured Motorist (UM/UIM)	
- Period 3 -	
2014, 2015, 2016 Combined	
Mean	47,801
Standard Error	4,191.48
Median	15,000
Mode	10,000
Standard Deviation	122,775.23
Sample Variance	15,073,756,093.39
Kurtosis	31.63
Skewness	5.33
Range	999,900
Minimum	100
Maximum	1,000,000
Sum	41,012,908
Count	858

Aggregate Total Count: 9,377

Aggregate Total Incurred Loss Amount: \$185,635,164

Appendix F

CDI Statistical and Loss Distribution Analysis

Note: The process of finding the distribution best fit used for each coverage limit requires the examination of the graphs of many different distributions. There are more comparison combinations than what could be presented in this Appendix. The comparisons of only a few distributions that most closely fit the data are shown, and the distributions shown on each graph are not meant to be exhaustive.

Statistical and Loss Distribution Analysis

Coverage and Distribution

Coverage	Statistical Distribution	Parameters
Death & Personal Injury (Per Person, Period 1)	Frechet (3P)	$\alpha=1.3433$ $\beta=6715.6$ $\gamma=-2277.3$
Death & Personal Injury (Per Incident, Period 1)	Frechet (3P)	$\alpha=1.278$ $\beta=6083.1$ $\gamma=-2141.1$
Property Damage (Period 1)	Inv. Gaussian (3P)	$\lambda=2473.1$ $\mu=3994.4$ $\gamma=-172.11$
Excess Coverage (Period 1)	Frechet (3P) was used as proxy*	$\alpha=1.3433$ $\beta=6715.6$ $\gamma=-2277.3$
Combined Single Limit (Period 2)	Log-Gamma	$\alpha=33.91$ $\beta=0.24868$
Combined Single Limit (Period 3)	Pearson 6	$\alpha_1=1.4446$ $\alpha_2=0.97598$ $\beta=2182.1$
Uninsured & Underinsured Motorist Coverage (Period 3)	Burr	$k=1.0308$ $\alpha=1.2012$ $\beta=15079.0$

Death & Personal Injury (Per Person, Period 1) Distribution Analysis

Descriptive Statistics

Statistic	Value
Sample Size	316
Range	2.4990E+5
Mean	16712.0
Variance	1.3141E+9
Std. Deviation	36251.0
Coef. of Variation	2.1692
Std. Error	2039.3
Skewness	5.0459
Excess Kurtosis	28.003

Percentile	Value
Min	100
5%	500
10%	1000
25% (Q1)	3500
50% (Median)	6450
75% (Q3)	13425
90%	36632.0
95%	51500.0
Max	2.5000E+5

Goodness of Fit - Summary

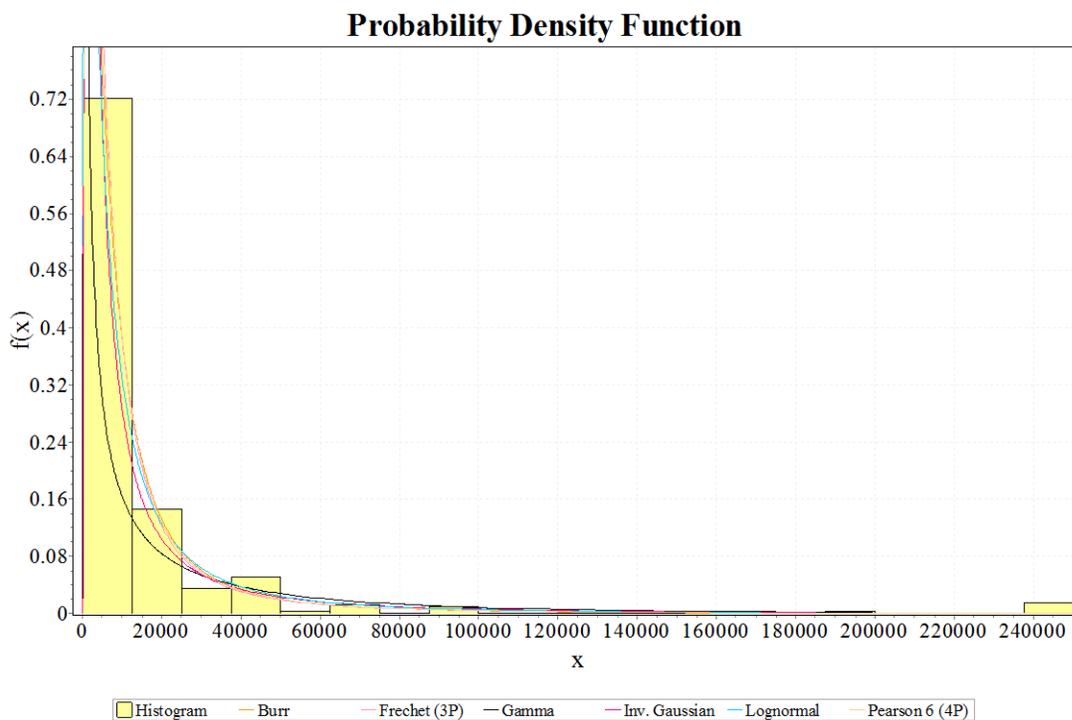
#	Distribution	Kolmogorov Smirnov		Anderson Darling		Chi-Squared	
		Statistic	Rank	Statistic	Rank	Statistic	Rank
1	Burr	0.11847	3	2.3884	3	40.324	1
2	Burr (4P)	0.12877	10	3.034	6	46.547	5
3	Chi-Squared	0.79743	30	55224	32	1521.2	30
4	Chi-Squared (2P)	0.9019	32	14037	31	2000.8	31
5	Dagum	0.83872	31	1386.3	30	2066.5	32
6	Dagum (4P)	0.21872	17	14.987	17	115.47	18
7	Exponential	0.23967	20	27.138	21	108.5	16
8	Exponential (2P)	0.24179	21	36.011	24	110.87	17
9	Fatigue Life	0.20644	16	13.698	15	124.25	19
10	Frechet	0.21903	18	14.365	16	74.42	11
11	Frechet (3P)	0.11953	5	2.2209	2	52.408	7
12	Gamma	0.3427	25	60.09	25	392.61	26
13	Gen. Gamma	0.25054	22	28.55	22	168.79	21
14	Inv. Gaussian	0.19861	15	12.161	14	74.686	12
15	Inv. Gaussian (3P)	0.12631	7	3.9046	10	52.807	8
16	Levy	0.26132	23	23.671	19	184.01	23
17	Levy (2P)	0.17807	14	16.36	18	200.8	24
18	Log-Gamma	0.16856	13	6.0413	12	95.696	15
19	Log-Logistic	0.14458	11	3.2641	9	45.331	4
20	Log-Logistic (3P)	0.1195	4	2.4986	4	65.146	9
21	Lognormal	0.14745	12	4.3615	11	76.785	13
22	Lognormal (3P)	0.12763	8	3.1335	7	66.264	10
23	Pareto	0.34601	26	73.132	27	492.66	27
24	Pareto 2	0.12811	9	3.2462	8	50.671	6
25	Pearson 5	0.26318	24	23.848	20	182.52	22
26	Pearson 5 (3P)	0.23153	19	30.762	23	128.64	20
27	Pearson 6	0.12244	6	2.6507	5	41.054	2
28	Pearson 6 (4P)	0.11255	1	2.1151	1	43.355	3
29	Rayleigh	0.45496	28	201.99	28	581.04	28
30	Rayleigh (2P)	0.36458	27	66.172	26	207.52	25
31	Rice	0.65913	29	500.22	29	1331.6	29
32	Weibull	0.11633	2	6.1904	13	79.7	14

The three most used claim severity distributions in the actuarial field:

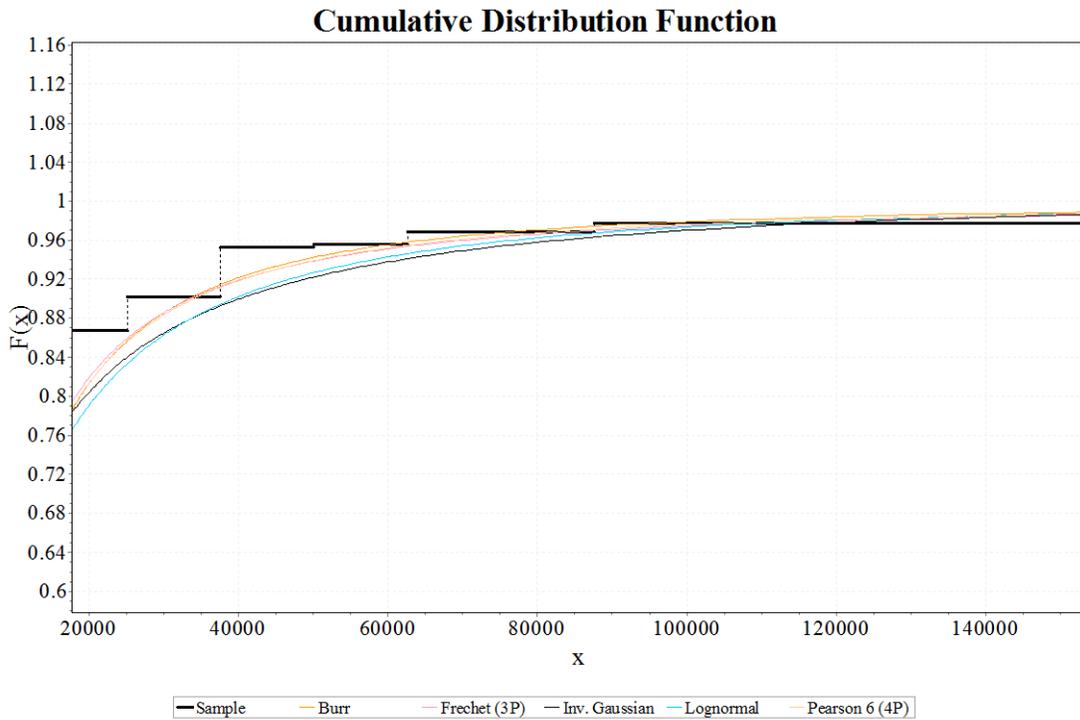
- (12) Gamma
- (14) Inv. Gaussian
- (21) Lognormal

Three additional distributions based on the Goodness of Fit Summary for this coverage:

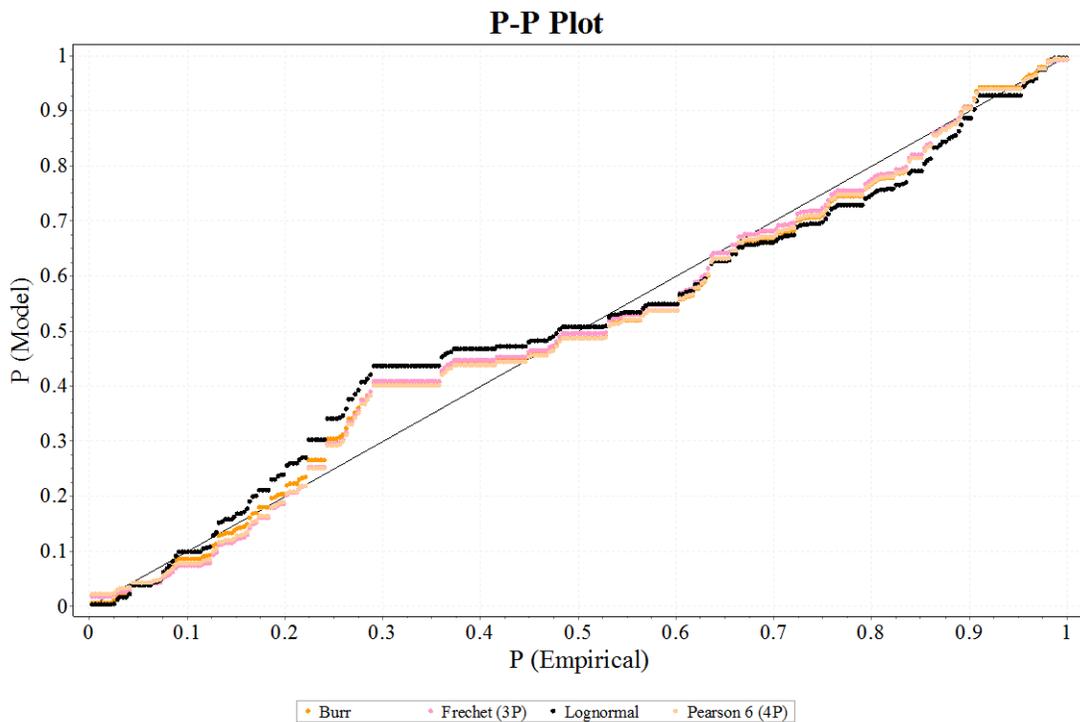
- (1) Burr
- (11) Frechet (3P)
- (28) Pearson 6 (4P)



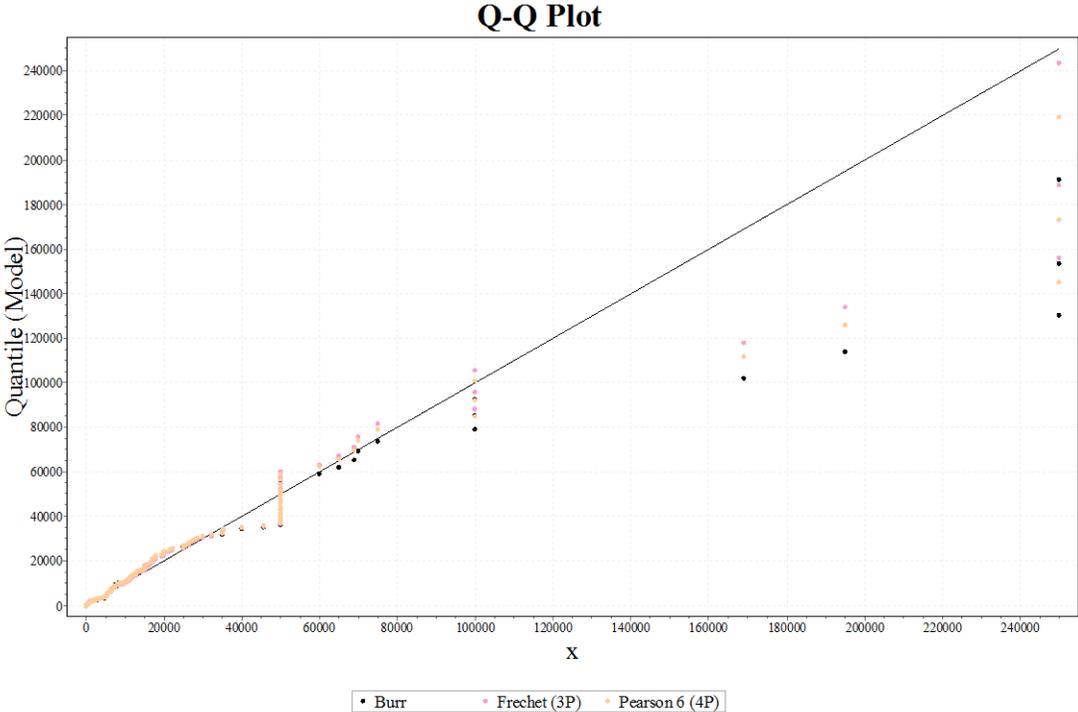
The skew of the Gamma distribution on the Probability Density Function model is more divergent than the skew of the other distributions and is eliminated from further consideration for this coverage.



The Inv. Gaussian distribution on the Cumulative Distribution Function model has the greatest divergence and is eliminated from further consideration for this coverage.

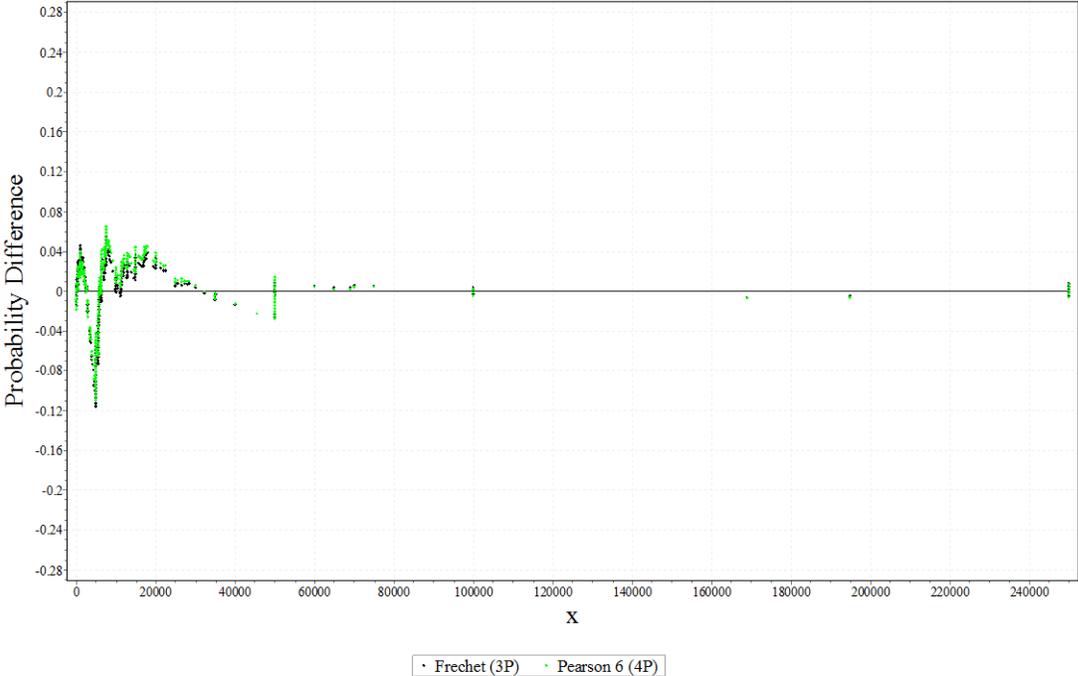


The Lognormal distribution on the P-P Plot model has the greatest divergence from the diagonal line and is eliminated from further consideration for this coverage.



The Burr distribution on the Q-Q Plot model has the greatest divergence of the remaining distributions and is eliminated from further consideration for this coverage.

Probability Difference



The Frechet (3P) and Pearson 6 (4P) distributions are very close on the Probability Difference model, but the Frechet (3P) distribution tracks closer to the zero line. Frechet (3P) is selected as the distribution of best fit for the Death & Personal Injury (Per Person, Period 1) coverage limit study.

From the claims data, the Frechet (3P) fitted parameters are listed below:

<u>Distribution</u>	<u>Parameters</u>
Frechet (3P)	$\alpha=1.3433$ $\beta=6715.6$ $\gamma=-2277.3$

Death & Personal Injury (Per Incident, Period 1) Distribution Analysis

Descriptive Statistics

Statistic	Value	Percentile	Value
Sample Size	287	Min	100
Range	2.5000E+5	5%	500
Mean	18400.0	10%	1000
Variance	1.4938E+9	25% (Q1)	3750
Std. Deviation	38650.0	50% (Median)	6480
Coef. of Variation	2.1005	75% (Q3)	14700
Std. Error	2281.5	90%	50000
Skewness	4.5848	95%	67405.0
Excess Kurtosis	23.058	Max	2.5010E+5

Goodness of Fit - Summary

#	Distribution	Kolmogorov		Anderson		Chi-Squared	
		Smirnov		Darling		Statistic	Rank
		Statistic	Rank	Statistic	Rank		
1	Burr (4P)	0.41479	26	79.775	26	661.15	27
2	Chi-Squared	0.81832	29	36757	30	1455.4	29
3	Chi-Squared (2P)	0.87456	30	1.65E+04	29	1693.7	30
4	Dagum	0.11348	1	2.0512	1	38.405	2
5	Exponential	0.24713	18	27.886	21	162.48	19
6	Exponential (2P)	0.24928	20	33.133	22	164.79	20
7	Fatigue Life	0.20179	15	11.22	14	147.71	17
8	Frechet	0.21365	16	11.721	15	62.43	9
9	Frechet (3P)	0.11888	3	2.1257	2	38.345	1
10	Gamma	0.32046	23	47.988	23	351.39	24
11	Gen. Gamma	0.24912	19	24.652	19	149.88	18
12	Gen. Gamma (4P)	0.12661	8	4.0111	10	47.279	8
13	Inv. Gaussian	0.17433	14	9.3761	13	111.32	14
14	Inv. Gaussian (3P)	0.12651	7	3.5207	8	44.104	7
15	Levy	0.25835	21	19.635	17	185.47	23

Death & Personal Injury (Per Incident, Period 1)

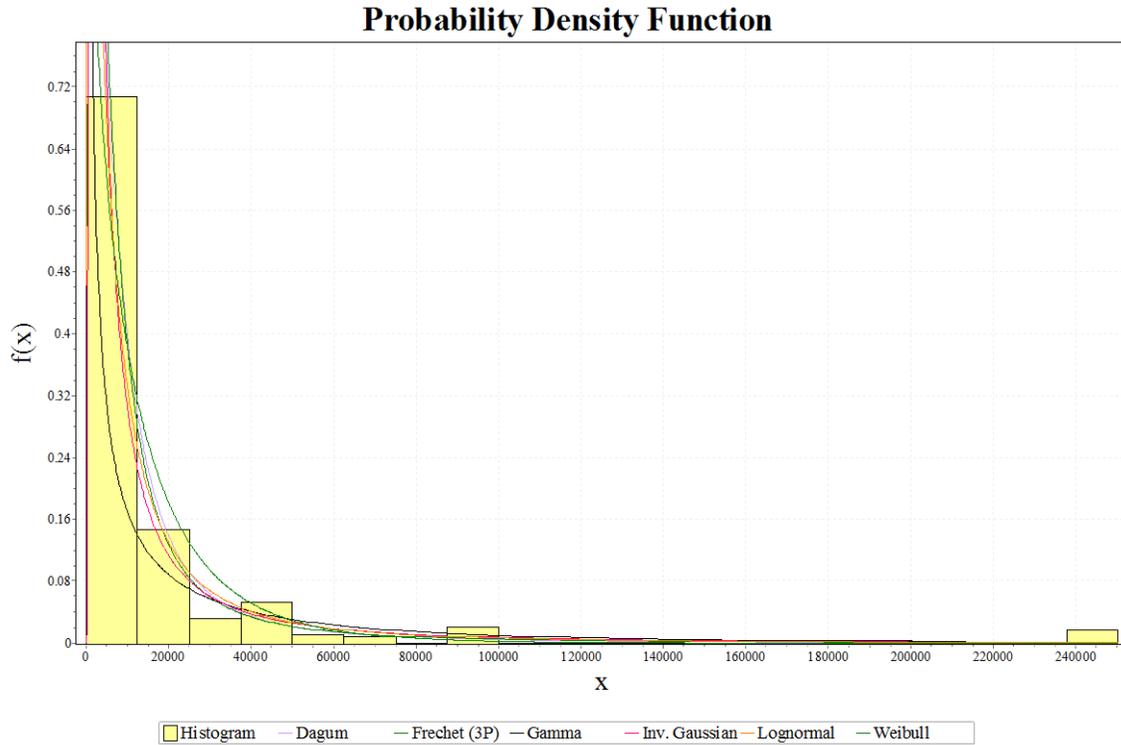
16	Levy (2P)	0.17267	13	14.091	16	134.32	16
17	Log-Gamma	0.16399	12	4.9314	11	80.779	11
18	Log-Logistic	0.13895	10	2.7457	6	77.237	10
19	Log-Logistic (3P)	0.11907	4	2.3219	4	40.558	5
20	Lognormal	0.14347	11	3.7118	9	83.481	12
21	Lognormal (3P)	0.12703	9	2.9647	7	40.577	6
22	Pareto	0.34807	24	63.536	25	420.66	25
23	Pearson 5	0.26287	22	19.992	18	183.21	22
24	Pearson 5 (3P)	0.23686	17	25.417	20	131.28	15
25	Pearson 6	0.1214	6	2.4679	5	38.739	3
26	Pearson 6 (4P)	0.1205	5	2.1673	3	39.601	4
27	Rayleigh	0.45955	27	200.15	27	589.12	26
28	Rayleigh (2P)	0.37187	25	59.994	24	179.8	21
29	Rice	0.66048	28	442.41	28	1193.6	28
30	Weibull	0.11878	2	6.4937	12	96.212	13

The three most used claim severity distributions in the actuarial field:

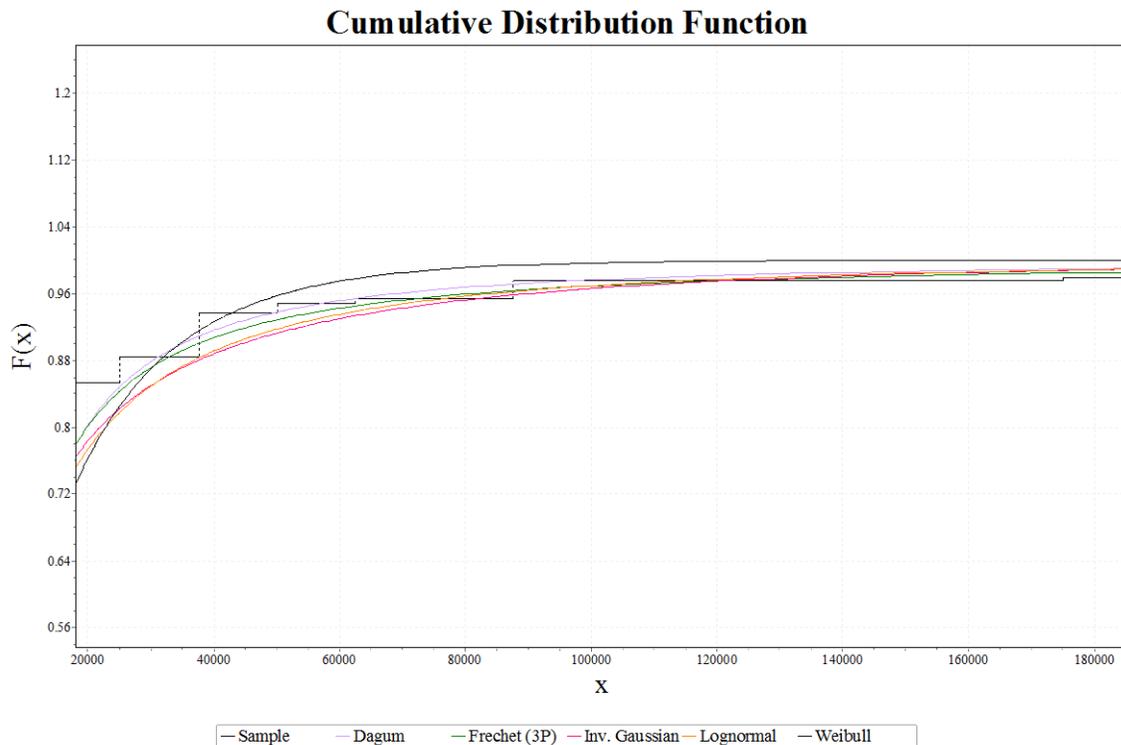
- (10) Gamma
- (13) Inv. Gaussian
- (20) Lognormal

Three additional distributions based on the Goodness of Fit Summary for this coverage:

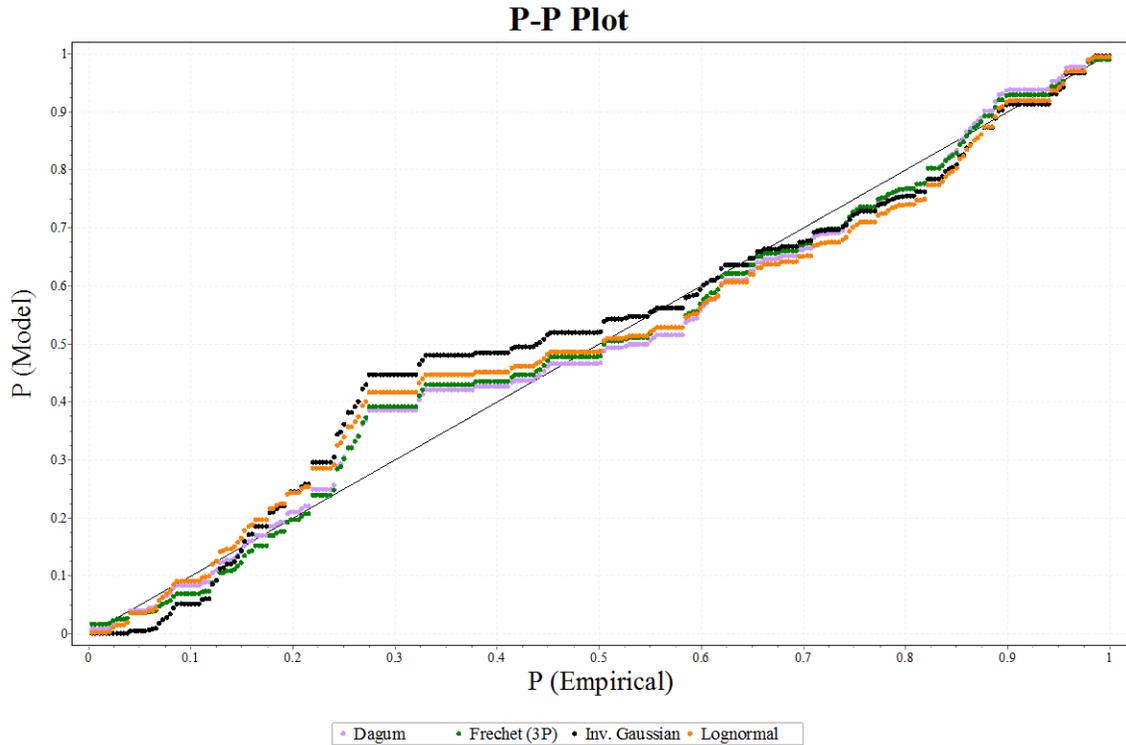
- (4) Dagum
- (9) Frechet (3P)
- (30) Weibull



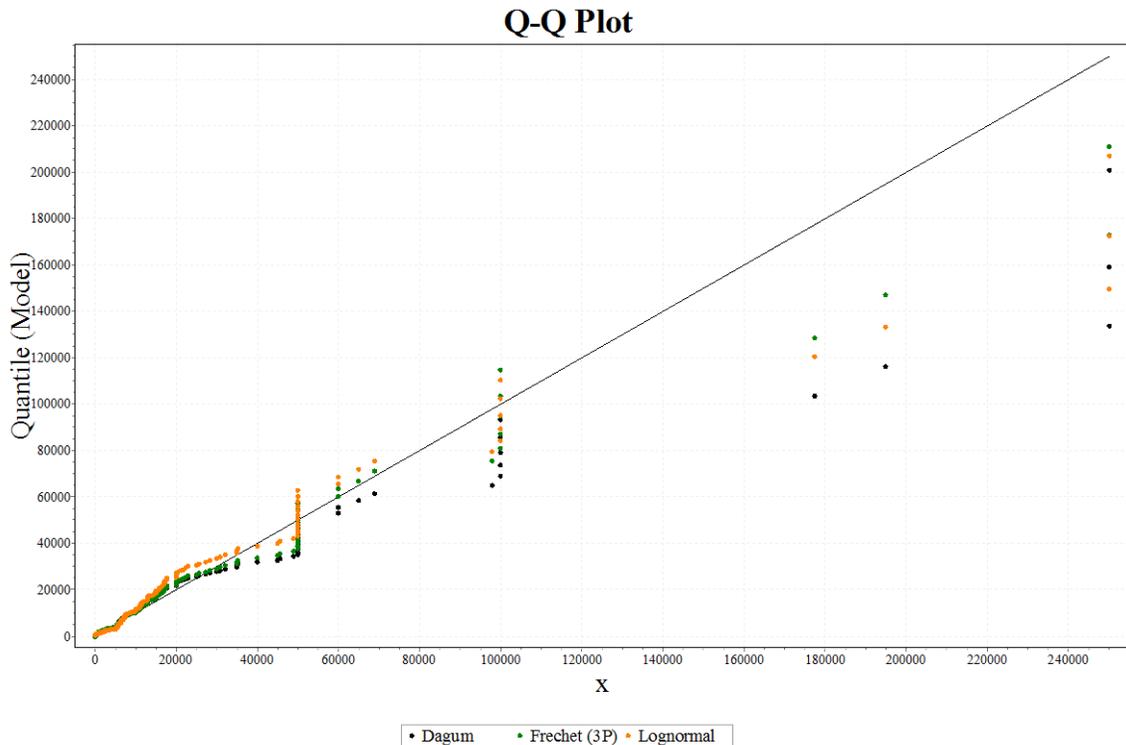
The skew of the Gamma distribution on the Probability Density Function model is more divergent than the skew of the other distributions and is eliminated from further consideration for this coverage.



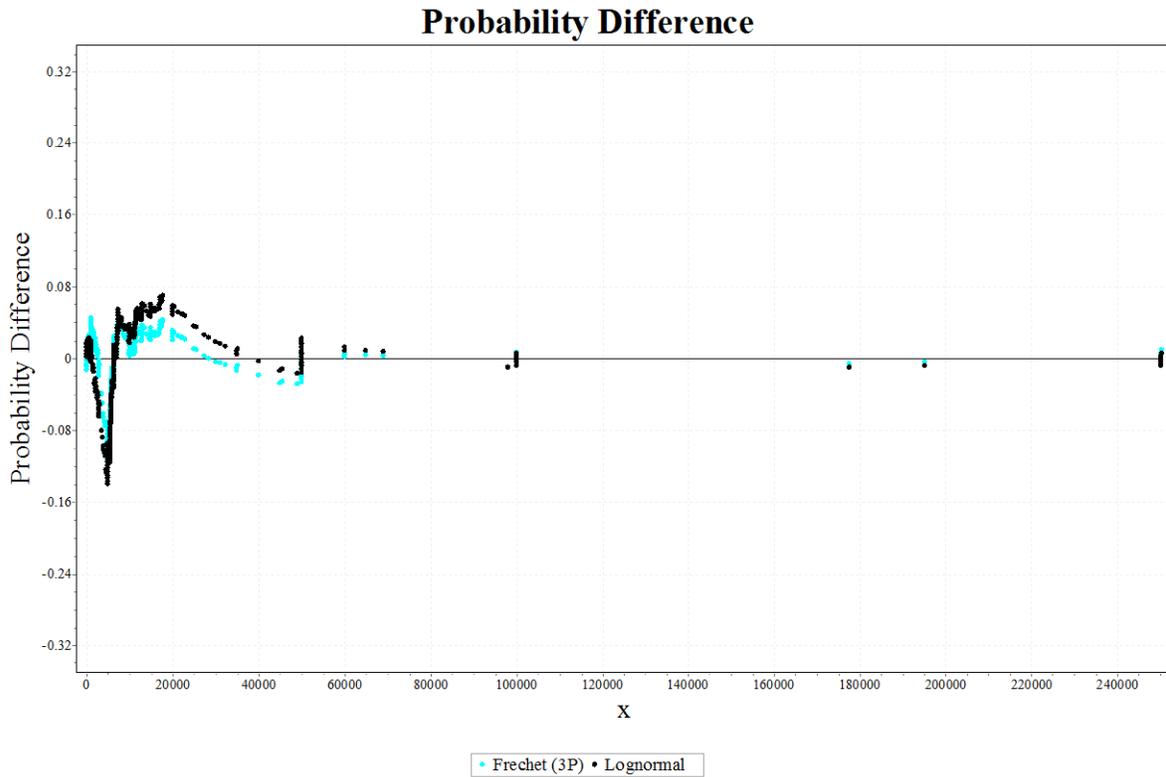
The Weibull distribution on the Cumulative Distribution Function model has the greatest divergence and is eliminated from further consideration for this coverage.



The Inv. Gaussian distribution on the P-P Plot model has the greatest divergence from the diagonal line and is eliminated from further consideration for this coverage.



The Dagum distribution on the Q-Q Plot model has the greatest divergence of the remaining distributions and is eliminated from further consideration for this coverage.



The Frechet (3P) distribution on the Probability Difference model is closest to the zero line and is selected as the distribution of best fit for the Death & Personal Injury (Per Incident, Period 1) coverage limit study.

From the claims data, the Frechet (3P) fitted parameters are listed below:

<u>Distribution</u>	<u>Parameters</u>
Frechet (3P)	$\alpha=1.278$ $\beta=6083.1$ $\gamma=-2141.1$

Property Damage (Period 1) Distribution Analysis

Descriptive Statistics

Statistic	Value	Percentile	Value
Sample Size	1078	Min	43
Range	60249	5%	391.95
Mean	3822.3	10%	560.99
Variance	2.6186E+7	25% (Q1)	976
Std. Deviation	5117.2	50% (Median)	1952.0
Coef. of Variation	1.3388	75% (Q3)	4529.5
Std. Error	155.86	90%	10162.0
Skewness	4.1446	95%	13277.0
Excess Kurtosis	30.595	Max	60292

Goodness of Fit - Summary

#	Distribution	Kolmogorov Smirnov		Anderson Darling		Chi-Squared	
		Statistic	Rank	Statistic	Rank	Statistic	Rank
1	Burr	0.02963	7	2.3488	9	37.543	12
2	Chi-Squared	0.68772	30	145560	31	5612.3	30
3	Dagum	0.82149	31	4065.4	30	8667.3	31
4	Exponential	0.10766	20	19.345	18	156.41	20
5	Exponential (2P)	0.1107	21	21.509	20	145.35	19
6	Fatigue Life	0.0518	13	4.7826	13	51.522	15
7	Fatigue Life (3P)	0.05235	14	3.8422	12	44.172	13
8	Frechet	0.07584	15	12.956	15	24.649	5
9	Frechet (3P)	0.03153	9	1.8685	7	23.543	4
10	Gamma	0.18252	24	45.128	23	284.64	23
11	Gamma (3P)	0.09259	17	15.391	16	133.18	17
12	Gen. Gamma	0.12831	22	30.166	21	215.89	22
13	Gen. Gamma (4P)	0.0471	12	3.2759	11	44.606	14
14	Inv. Gaussian	0.02934	6	5.0359	14	15.266	2
15	Inv. Gaussian (3P)	0.02901	5	1.1905	1	23.293	3
16	Levy	0.178	23	58.573	24	306.67	24
17	Levy (2P)	0.18776	25	65.924	25	326.14	25

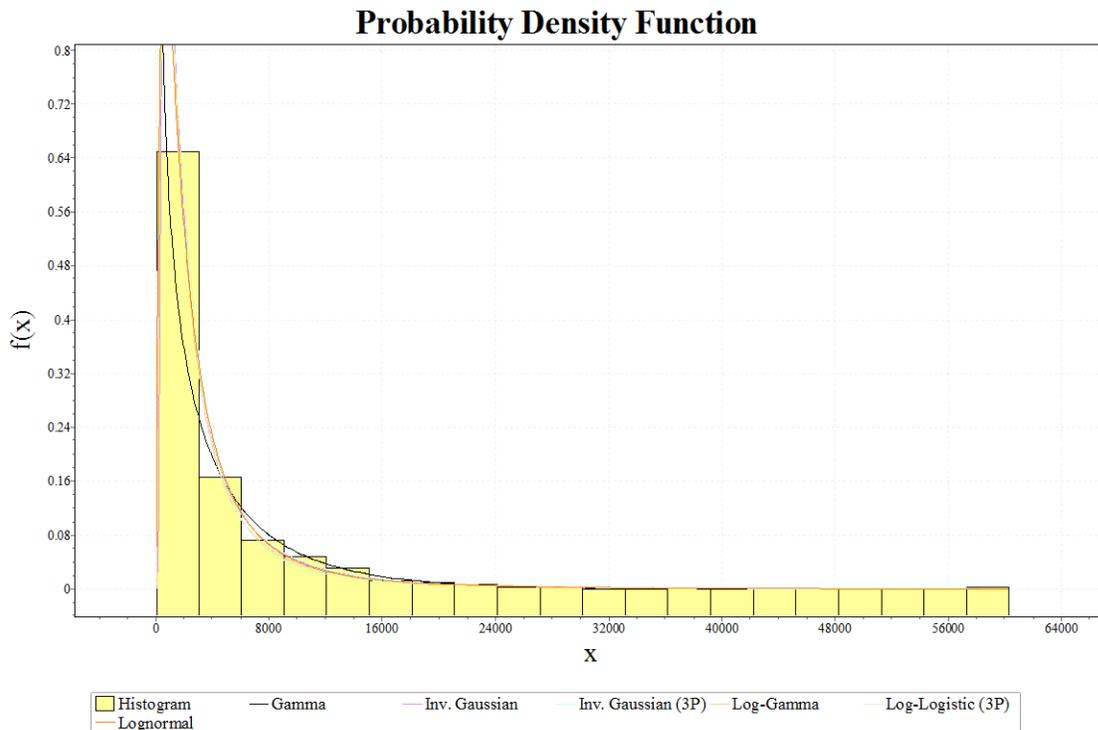
18	Log-Gamma	0.02653	2	1.6925	4	27.602	6
19	Log-Logistic	0.03487	11	2.8648	10	33.076	11
20	Log-Logistic (3P)	0.0262	1	1.9566	8	30.541	7
21	Lognormal	0.02868	4	1.5322	2	30.701	8
22	Lognormal (3P)	0.03173	10	1.6697	3	32.043	10
23	Pareto	0.39627	28	252.5	27	1777.2	28
24	Pearson 5	0.09135	16	17.544	17	61.15	16
25	Pearson 5 (3P)	0.10612	19	30.415	22	133.53	18
26	Pearson 6	0.02784	3	1.844	6	31.417	9
27	Pearson 6 (4P)	0.02992	8	1.7779	5	15.088	1
28	Rayleigh	0.32005	27	361.02	28	1194.5	27
29	Rayleigh (2P)	0.25182	26	119.48	26	433.43	26
30	Rice	0.44774	29	672.4	29	2350.2	29
31	Weibull	0.09712	18	21.301	19	167.13	21

The three most used claim severity distributions in the actuarial field:

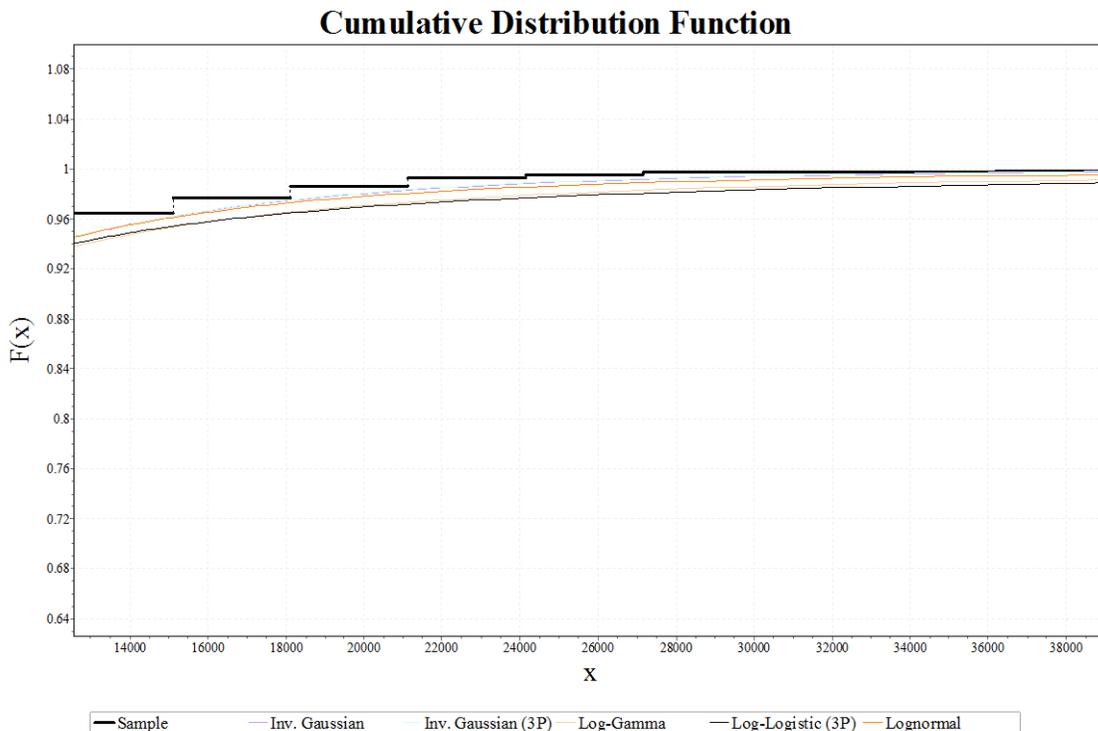
- (10) Gamma
- (14) Inv. Gaussian
- (21) Lognormal

Three additional distributions based on the Goodness of Fit Summary for this coverage:

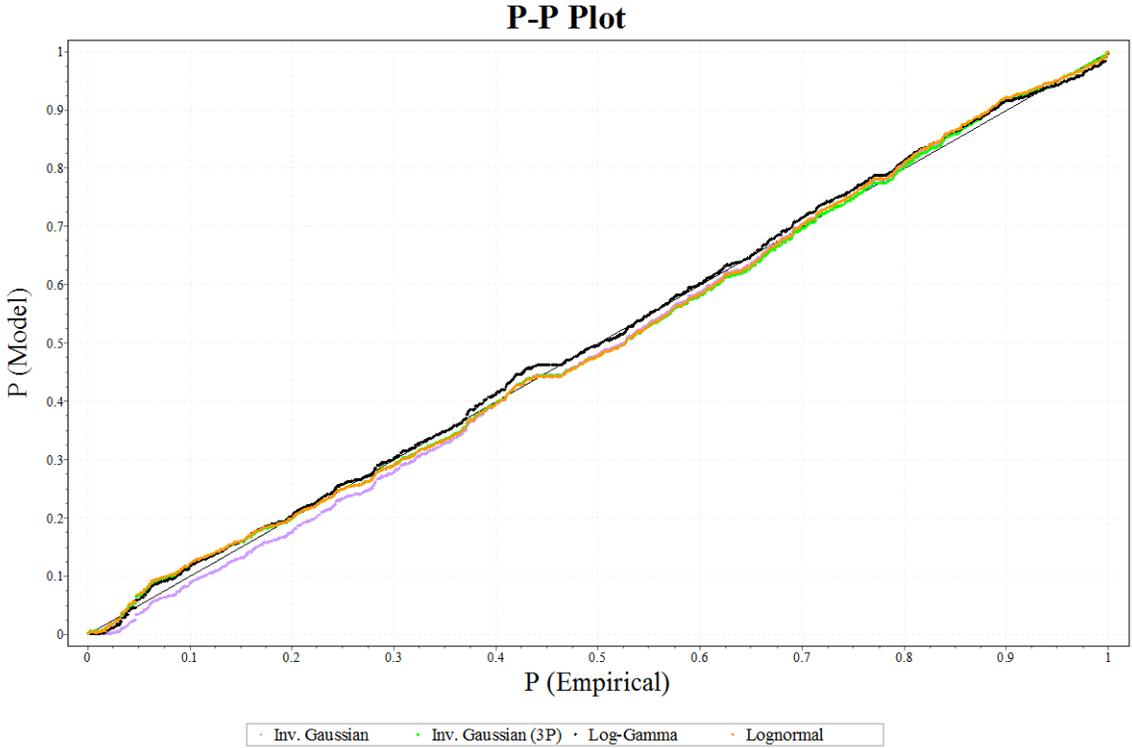
- (15) Inv. Gaussian (3P)
- (18) Log-Gamma
- (20) Log-Logistic (3P)



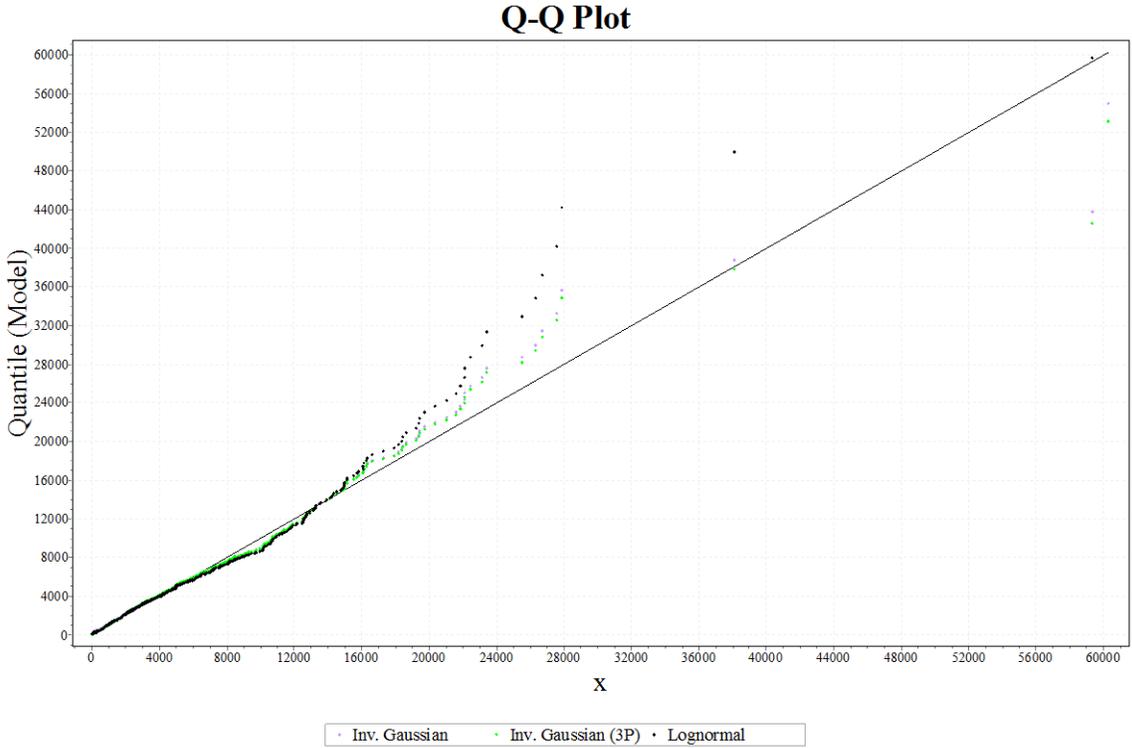
The skew of the Gamma distribution on the Probability Density Function model is more divergent than the skew of the other distributions and is eliminated from further consideration for this coverage.



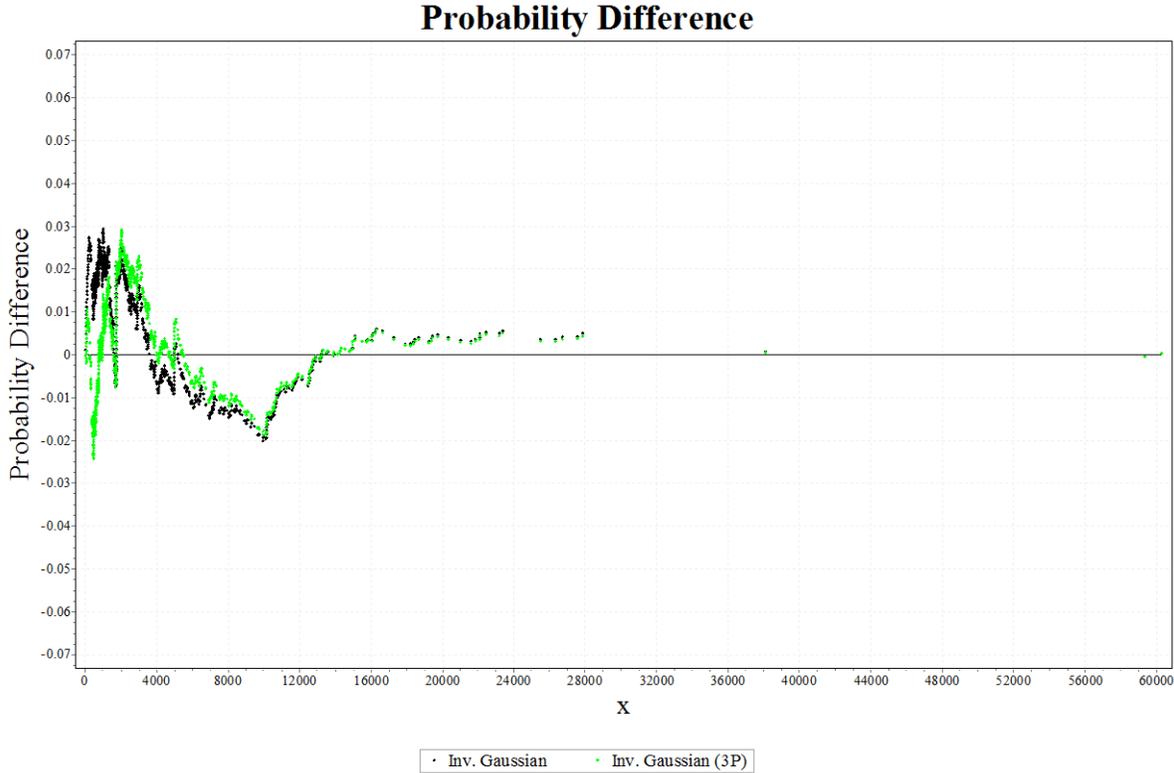
The Log-Logistic (3P) distribution on the Cumulative Distribution Function model has the greatest divergence and is eliminated from further consideration for this coverage.



The Log-Gamma distribution on the P-P Plot model has the greatest divergence from the diagonal line and is eliminated from further consideration for this coverage.



The Lognormal distribution on the Q-Q Plot model has the greatest divergence of the remaining distributions and is eliminated from further consideration for this coverage.



The Inv. Gaussian (3P) distribution on the Probability Difference model is closest to the zero line and is selected as the distribution of best fit for the Property Damage (Period 1) coverage limit study.

From the claims data, the Inv. Gaussian (3P) fitted parameters are listed below:

<u>Distribution</u>	<u>Parameters</u>
Inv. Gaussian (3P)	$\lambda=2473.1$ $\mu=3994.4$ $\gamma=-172.11$

Excess Coverage (Period 1) Distribution Analysis

There is not enough credible data to perform an informational coverage limit study for Excess Coverage (Period 1). Excess Coverage (Period 1) involves per person, per incident, and property damage claims with most of the claims being per person. Therefore, the Death & Personal Injury (Per Person, Period 1) data and distribution (Frechet (3P)) are used as proxies for the Excess Coverage limit study.

<u>Distribution</u>	<u>Parameters</u>
Frechet (3P)	$\alpha=1.3433$ $\beta=6715.6$ $\gamma=-2277.3$

Combined Single Limit (Period 2) Distribution Analysis

Descriptive Statistics

Statistic	Value	Percentile	Value
Sample Size	1467	Min	25.2
Range	1.1050E+6	5%	552.54
Mean	16884.0	10%	861.78
Variance	4.6198E+9	25% (Q1)	1608.9
Std. Deviation	67969.0	50% (Median)	4084.3
Coef. of Variation	4.0256	75% (Q3)	11748.0
Std. Error	1774.6	90%	27494.0
Skewness	11.608	95%	52677.0
Excess Kurtosis	156.28	Max	1.1050E+6

Goodness of Fit - Summary

#	Distribution	Kolmogorov Smirnov		Anderson Darling		Chi-Squared	
		Statistic	Rank	Statistic	Rank	Statistic	Rank
1	Burr	0.0345	6	2.4277	6	47.205	9
2	Burr (4P)	0.36847	26	279.19	24	1667.8	26
3	Chi-Squared	0.80967	30	188490	30	9329.8	30
4	Dagum	0.02842	3	1.5854	3	30.612	4
5	Dagum (4P)	0.56102	28	1320.3	29	3825.7	28
6	Exponential	0.30773	24	324.69	25	840.01	23
7	Exponential (2P)	0.30852	25	327.88	26	850.87	24
8	Fatigue Life	0.11533	18	37.999	17	158.4	16
9	Fatigue Life (3P)	0.1316	20	51.172	20	171.73	17
10	Frechet	0.056	12	9.332	12	49.939	10
11	Frechet (3P)	0.03379	5	1.8636	4	27.77	2
12	Gamma	0.66725	29	954.98	28	4692.9	29
13	Gamma (3P)	0.14919	21	75.577	21	496.42	22
14	Gen. Gamma	0.30474	23	249.08	23	1645.5	25
15	Gen. Gamma (4P)	0.07701	13	16.746	13	122.99	14
16	Inv. Gaussian	0.21487	22	139.11	22	378.97	21
17	Inv. Gaussian (3P)	0.04579	11	4.4037	10	35.742	8

Combined Single Limit (Period 2)

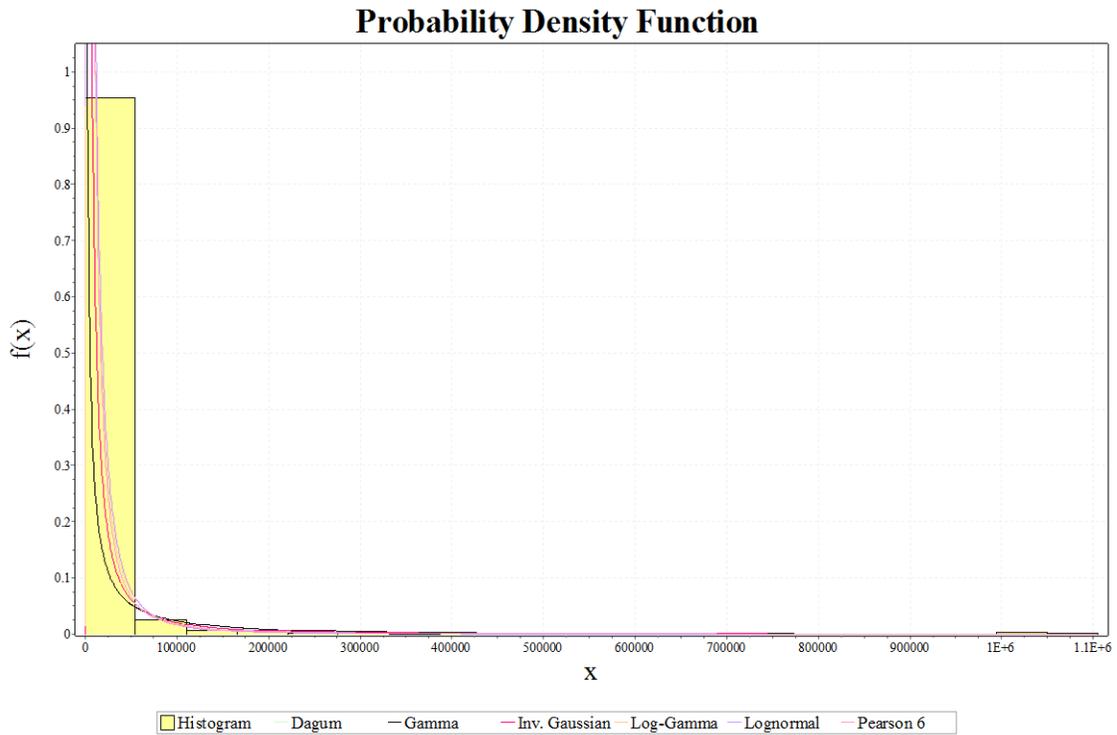
18	Levy	0.10196	16	33.59	16	213.18	20
19	Levy (2P)	0.13081	19	39.764	18	200.39	19
20	Log-Gamma	0.02339	1	1.2008	1	22.902	1
21	Log-Logistic	0.0454	10	4.4623	11	60.766	12
22	Log-Logistic (3P)	0.03067	4	3.1313	7	56.111	11
23	Lognormal	0.04064	9	3.219	9	32.587	5
24	Lognormal (3P)	0.04002	8	3.1401	8	33.276	7
25	Pareto	0.4055	27	359.71	27	2570.5	27
26	Pearson 5	0.08621	14	27.399	14	120.65	13
27	Pearson 5 (3P)	0.09043	15	30.011	15	133.28	15
28	Pearson 6	0.02841	2	1.604	2	32.721	6
29	Pearson 6 (4P)	0.03629	7	2.0908	5	28.212	3
30	Weibull	0.10949	17	43.994	19	192.47	18

The three most used claim severity distributions in the actuarial field:

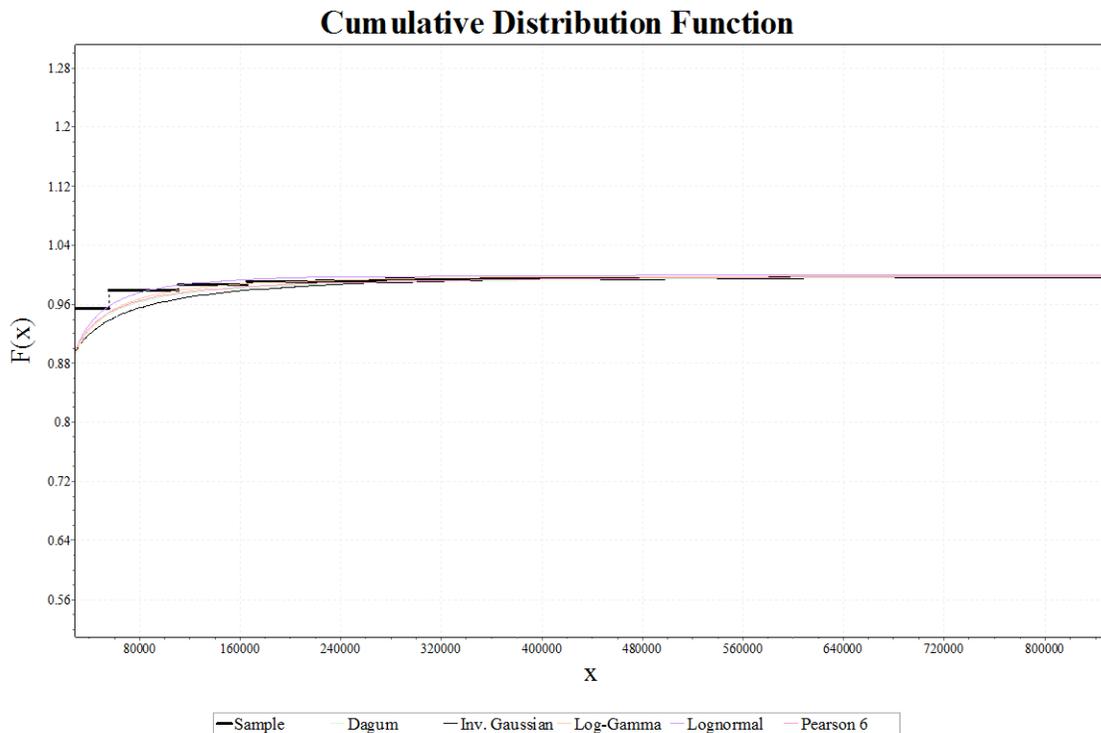
- (12) Gamma
- (16) Inv. Gaussian
- (23) Lognormal

Three additional distributions based on the Goodness of Fit Summary for this coverage:

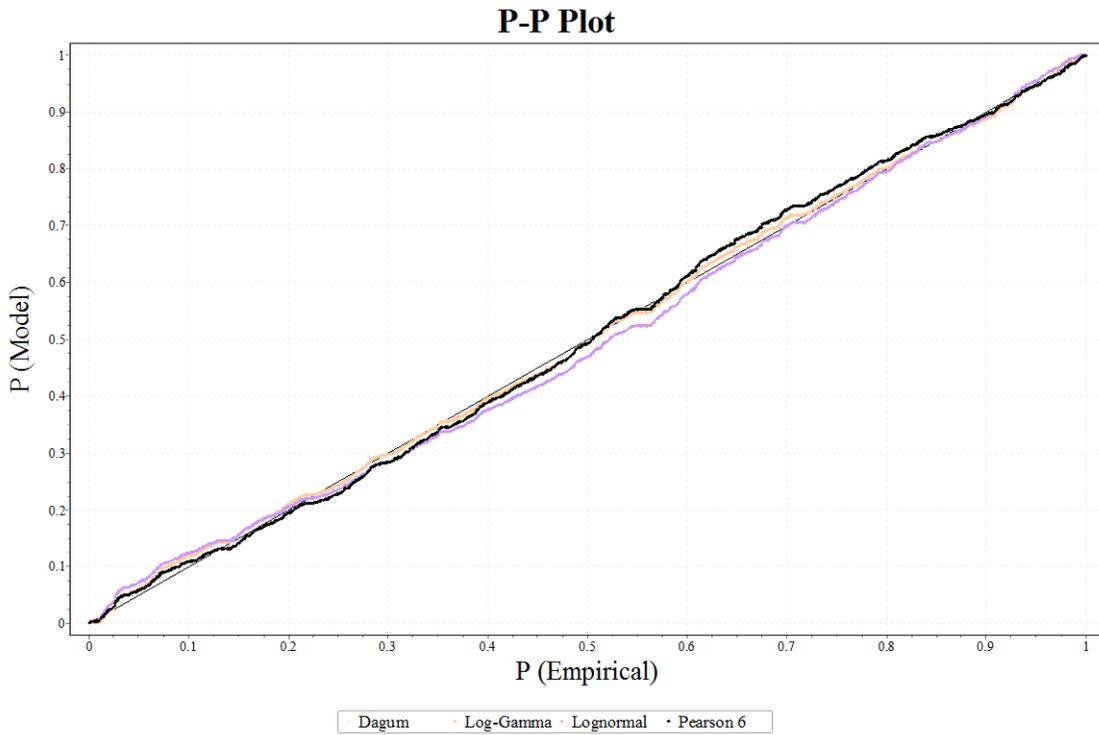
- (4) Dagum
- (20) Log-Gamma
- (28) Pearson 6



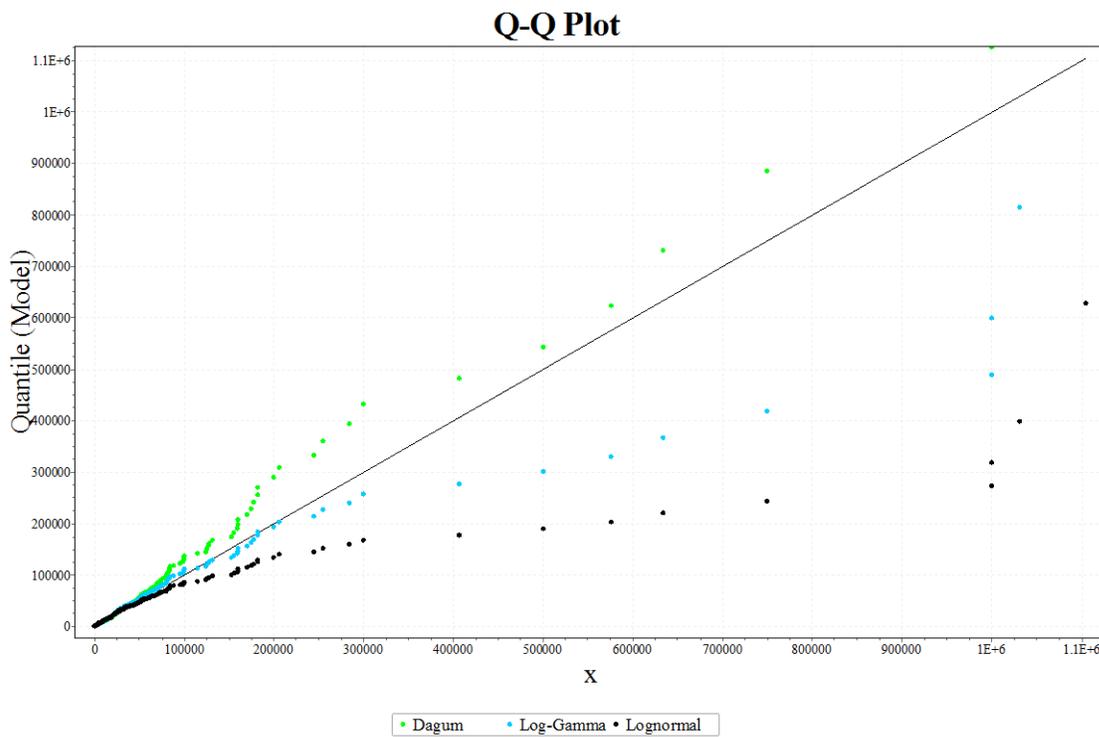
The skew of the Gamma distribution on the Probability Density Function model is more divergent than the skew of the other distributions and is eliminated from further consideration for this coverage.



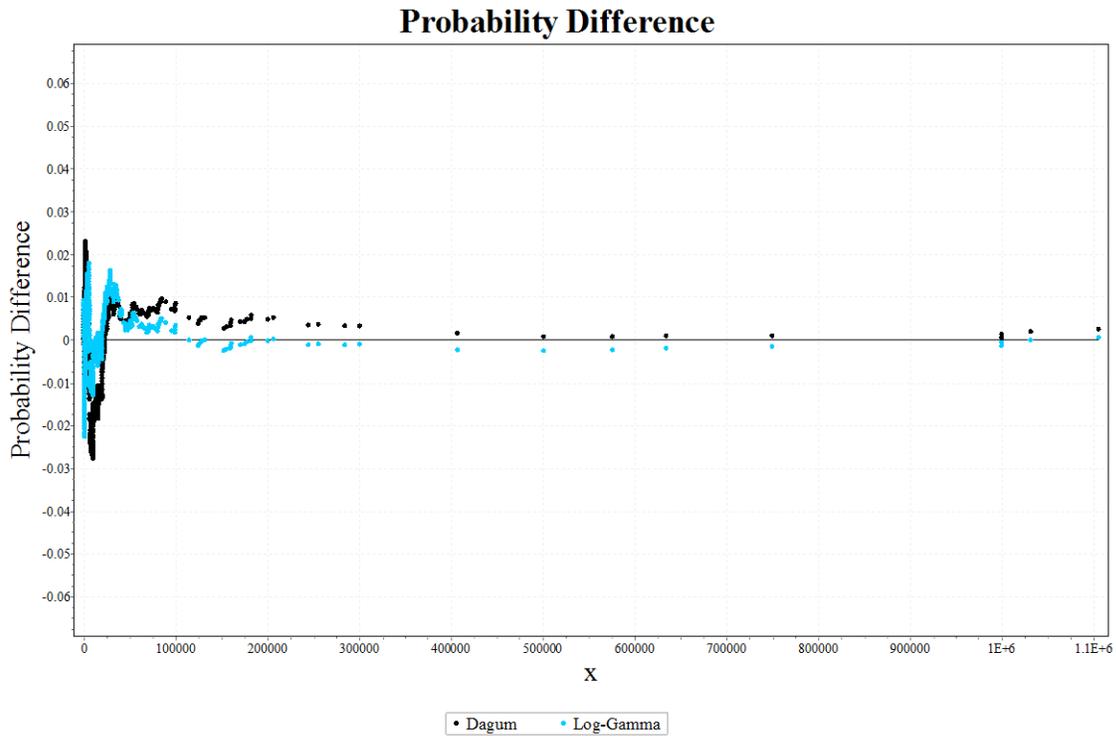
The Inv. Gaussian distribution on the Cumulative Distribution Function model has the greatest divergence and is eliminated from further consideration for this coverage.



The Pearson 6 distribution on the P-P Plot model has the greatest divergence from the diagonal line and is eliminated from further consideration for this coverage.



The Lognormal distribution on the Q-Q Plot model has the greatest divergence of the remaining distributions and is eliminated from further consideration for this coverage.



The Log-Gamma distribution on the Probability Difference model is closest to the zero line and is selected as the distribution of best fit for the Combined Single Limit (Period 2) coverage limit study.

From the claims data, the Log-Gamma fitted parameters are listed below:

<u>Distribution</u>	<u>Parameters</u>
Log-Gamma	$\alpha=33.91$ $\beta=0.24868$

Combined Single Limit (Period 3) Distribution Analysis

Descriptive Statistics

Statistic	Value	Percentile	Value
Sample Size	5521	Min	10
Range	9.9999E+5	5%	300
Mean	18749.0	10%	567.25
Variance	5.6930E+9	25% (Q1)	1350.9
Std. Deviation	75452.0	50% (Median)	3590.5
Coef. of Variation	4.0243	75% (Q3)	11218.0
Std. Error	1015.5	90%	30708.0
Skewness	9.976	95%	62157.0
Excess Kurtosis	114.68	Max	1.0000E+6

Goodness of Fit - Summary

#	Distribution	Kolmogorov		Anderson		Chi-Squared	
		Smirnov		Darling		Statistic	Rank
		Statistic	Rank	Statistic	Rank		
1	Burr	0.02281	3	4.1225	3	68.879	4
2	Burr (4P)	0.03991	11	9.624	11	109.7	11
3	Chi-Squared	0.83029	29	6.31E+05	30	46202	29
4	Chi-Squared (2P)	0.99094	30	22764	29	65010	30
5	Dagum	0.01828	1	2.5492	1	49.955	2
6	Dagum (4P)	0.45868	27	3101.8	27	7158.7	26
7	Exponential	0.3557	24	1789.3	25	4936.5	23
8	Exponential (2P)	0.356	25	1796.8	26	4964	24
9	Fatigue Life	0.12322	19	152.2	18	887.63	22
10	Fatigue Life (3P)	0.14537	22	206.07	22	687.54	18
11	Frechet	0.05998	12	48.463	13	231.59	12
12	Frechet (3P)	0.03199	6	5.6334	5	101.47	8
13	Gamma	0.63203	28	3306.1	28	15494	28
14	Gen. Gamma	0.29142	23	873.62	23	5980.2	25
15	Gen. Gamma (4P)	0.06458	13	37.872	12	282.39	13
16	Inv. Gaussian	0.13458	21	191.09	21	555.64	16
17	Inv. Gaussian (3P)	0.12673	20	173.28	20	509.7	15

Combined Single Limit (Period 3)

18	Levy	0.10647	16	136.11	16	754.91	20
19	Levy (2P)	0.09357	14	85.706	14	495.81	14
20	Log-Gamma	0.02728	5	4.1385	4	20.777	1
21	Log-Logistic	0.03884	10	9.4715	10	107.54	10
22	Log-Logistic (3P)	0.02596	4	5.932	6	84.38	7
23	Lognormal	0.0327	8	7.5933	9	71.733	6
24	Lognormal (3P)	0.03208	7	7.3901	8	69.167	5
25	Pareto	0.40665	26	1372.6	24	10406	27
26	Pearson 5	0.11092	17	139.42	17	708.33	19
27	Pearson 5 (3P)	0.12116	18	166.54	19	801.16	21
28	Pearson 6	0.02019	2	2.9779	2	53.131	3
29	Pearson 6 (4P)	0.03649	9	7.3765	7	103.38	9
30	Weibull	0.10106	15	124.83	15	617.65	17

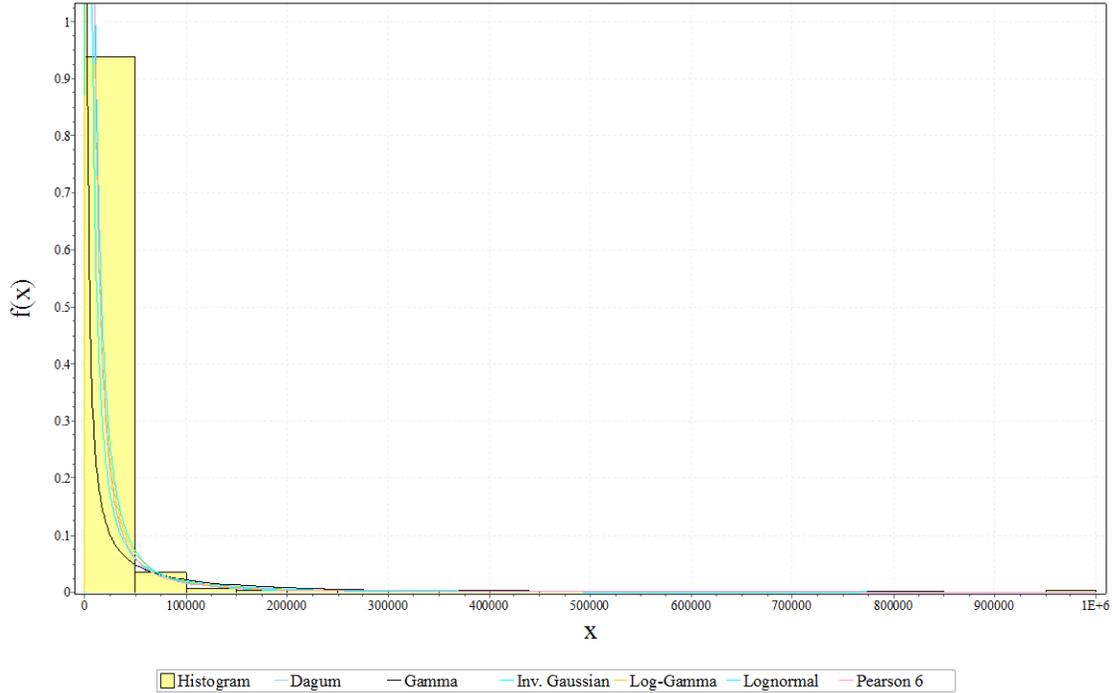
The three most used claim severity distributions in the actuarial field:

- (13) Gamma
- (16) Inv. Gaussian
- (23) Lognormal

Three additional distributions based on the Goodness of Fit Summary for this coverage:

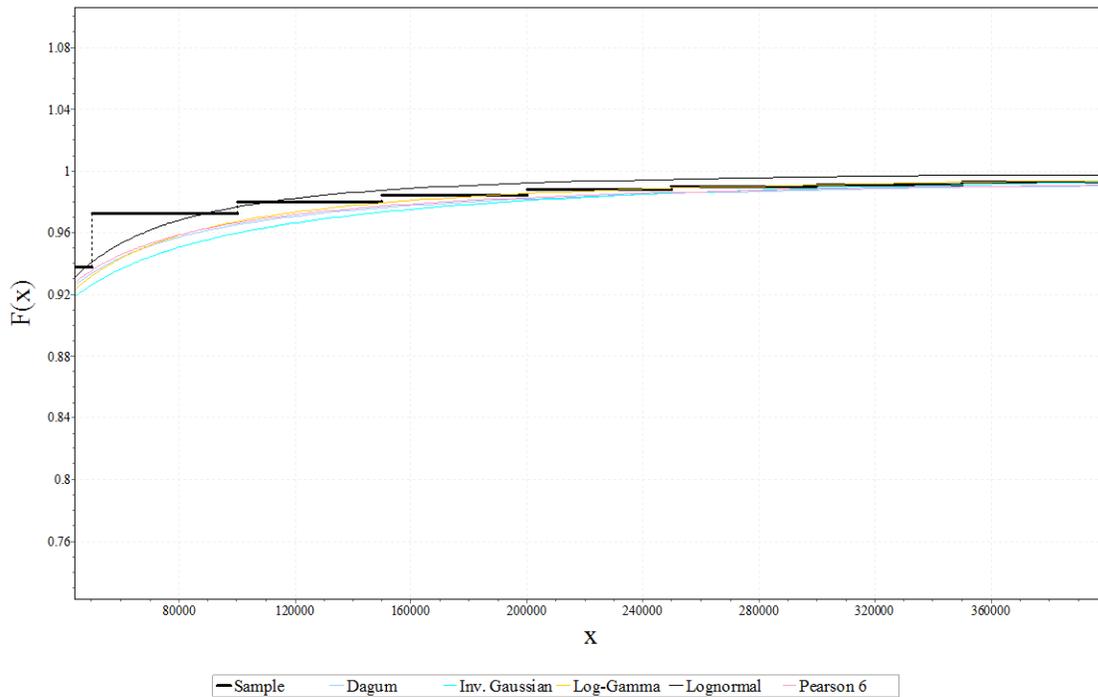
- (5) Dagum
- (20) Log-Gamma
- (28) Pearson 6

Probability Density Function

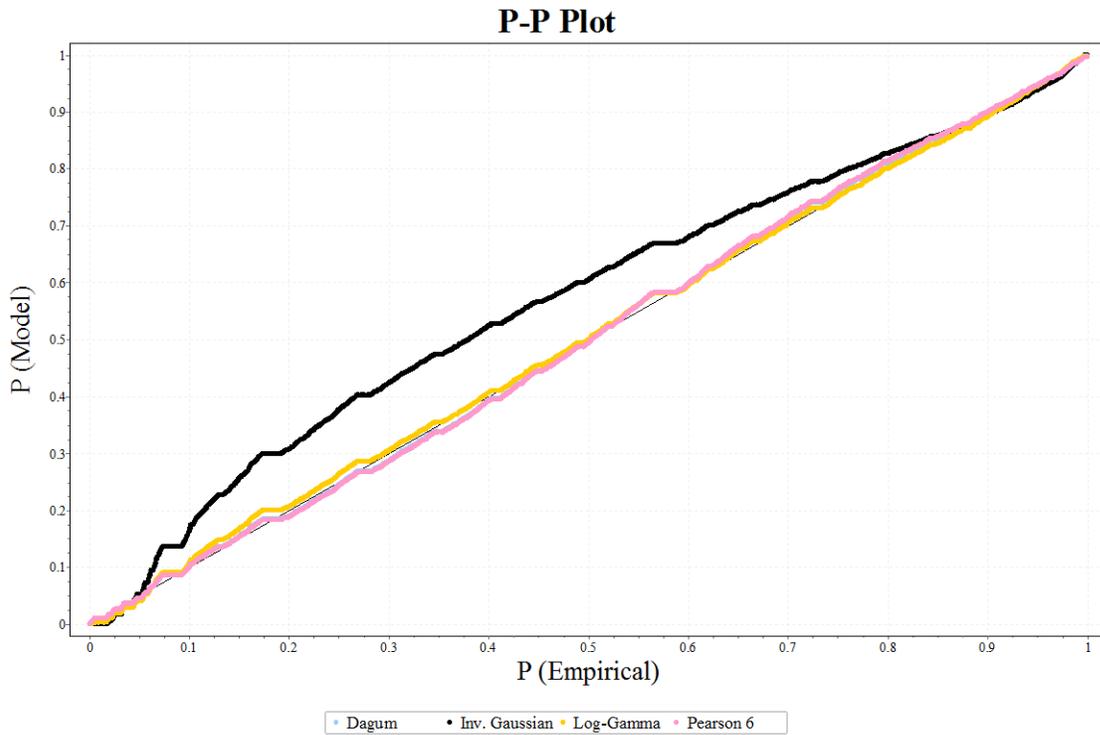


The skew of the Gamma distribution on the Probability Density Function model is more divergent than the skew of the other distributions and is eliminated from further consideration for this coverage.

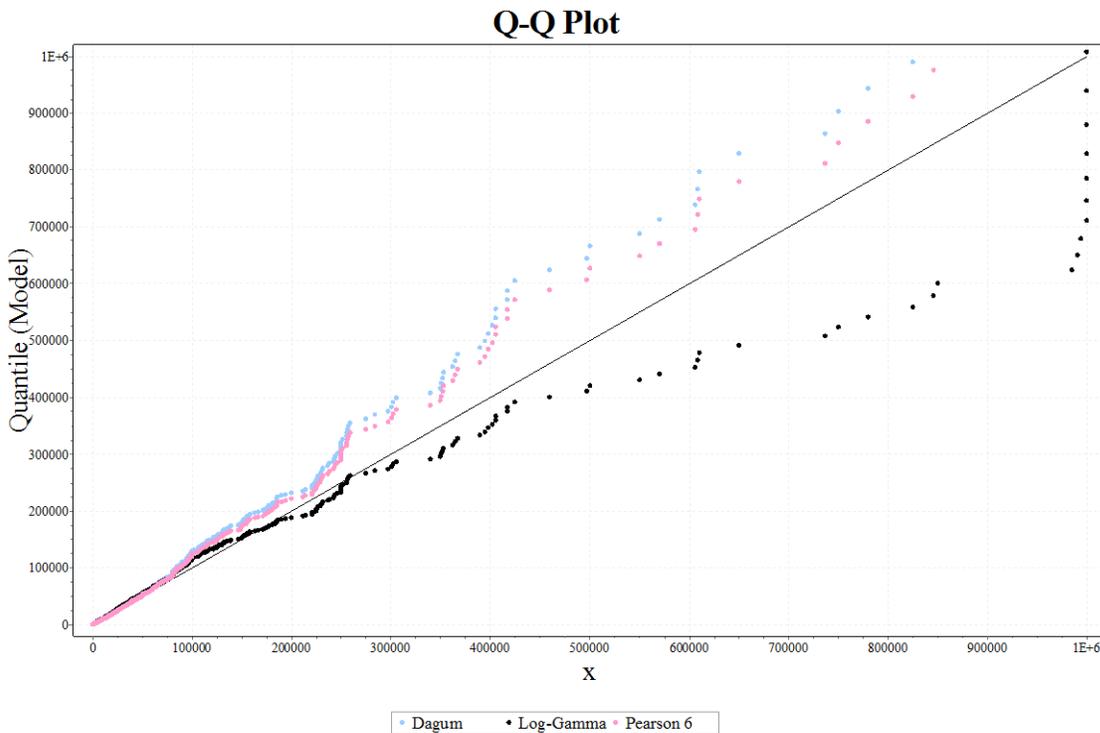
Cumulative Distribution Function



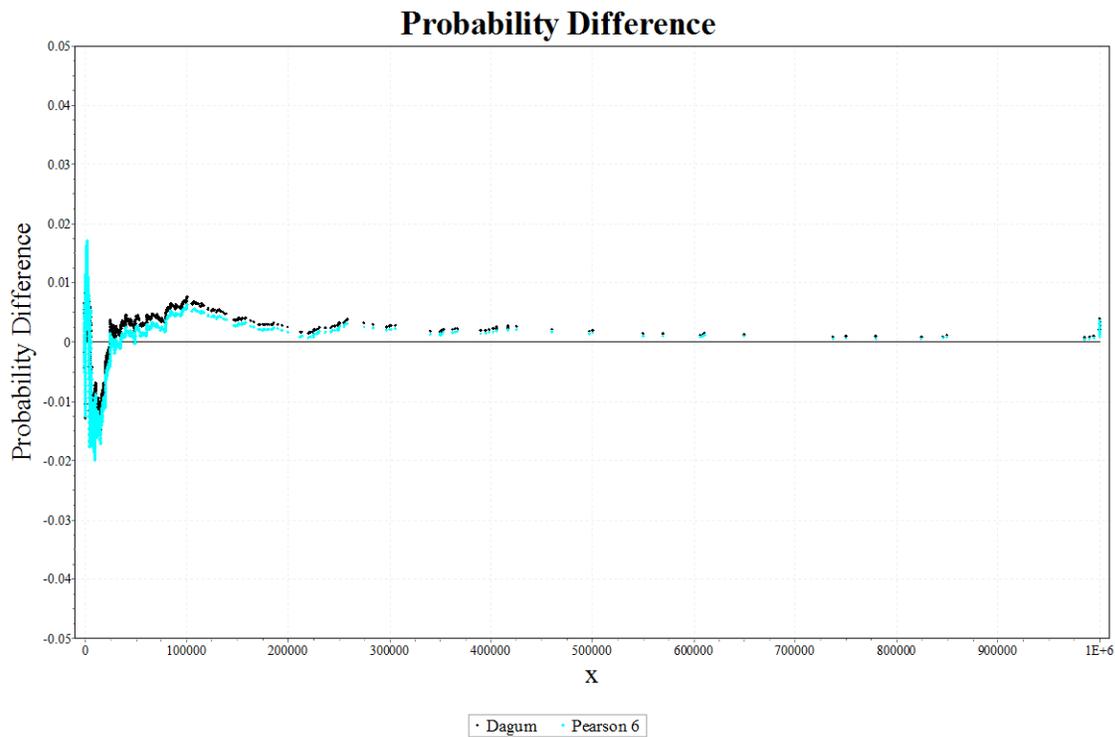
The Lognormal distribution on the Cumulative Distribution Function model has the greatest divergence and is eliminated from further consideration for this coverage.



The Inv. Gaussian distribution on the P-P Plot model has the greatest divergence from the diagonal line and is eliminated from further consideration for this coverage.



The Log-Gamma distribution on the Q-Q Plot model has the greatest divergence of the remaining distributions and is eliminated from further consideration for this coverage.



The Pearson 6 distribution on the Probability Difference model is closest to the zero line and is selected as the distribution of best fit for the Combined Single Limit (Period 3) coverage limit study.

From the claims data, the Pearson 6 fitted parameters are listed below:

Distribution

Pearson 6

Parameters

$\alpha_1=1.4446$ $\alpha_2=0.97598$ $\beta=2182.1$

Uninsured & Underinsured Motorist Coverage (Period 3)

Descriptive Statistics

Statistic	Value	Percentile	Value
Sample Size	858	Min	100
Range	9.9990E+5	5%	1000
Mean	47801.0	10%	2500
Variance	1.5074E+10	25% (Q1)	6500
Std. Deviation	1.2278E+5	50% (Median)	15000
Coef. of Variation	2.5685	75% (Q3)	33050
Std. Error	4191.5	90%	80200.0
Skewness	5.3293	95%	2.1525E+5
Excess Kurtosis	31.626	Max	1.0000E+6

Goodness of Fit - Summary

#	Distribution	Kolmogorov Smirnov		Anderson Darling		Chi-Squared	
		Statistic	Rank	Statistic	Rank	Statistic	Rank
1	Burr	0.05586	2	1.9507	2	84.077	7
2	Burr (4P)	0.41288	28	230.66	29	1593.5	24
3	Chi-Squared	0.80303	33	62391	33	4774.6	28
4	Dagum	0.05634	3	1.8787	1	87.763	9
5	Dagum (4P)	0.77554	32	2029.6	32	10500	30
6	Exponential	0.2932	24	141.83	24	344.28	17
7	Exponential (2P)	0.2938	25	157.82	25	349.53	18
8	Fatigue Life	0.19189	18	36.874	16	258.72	16
9	Frechet	0.1244	15	24.298	14	83.63	6
10	Gamma	0.41947	29	220.78	28	1090.9	23
11	Gen. Gamma	0.25394	22	95.282	21	659.31	22
12	Gen. Gamma (4P)	0.08016	9	7.0779	10	61.799	2
13	Inv. Gaussian (3P)	0.07121	7	6.1373	9	68.725	4
14	Levy	0.25484	23	72.329	20	367.02	19
15	Levy (2P)	0.15058	16	31.639	15	162.1	14
16	Log-Gamma	0.09496	11	8.0965	11	79.019	5

Uninsured & Underinsured Motorist Coverage (Period 3)

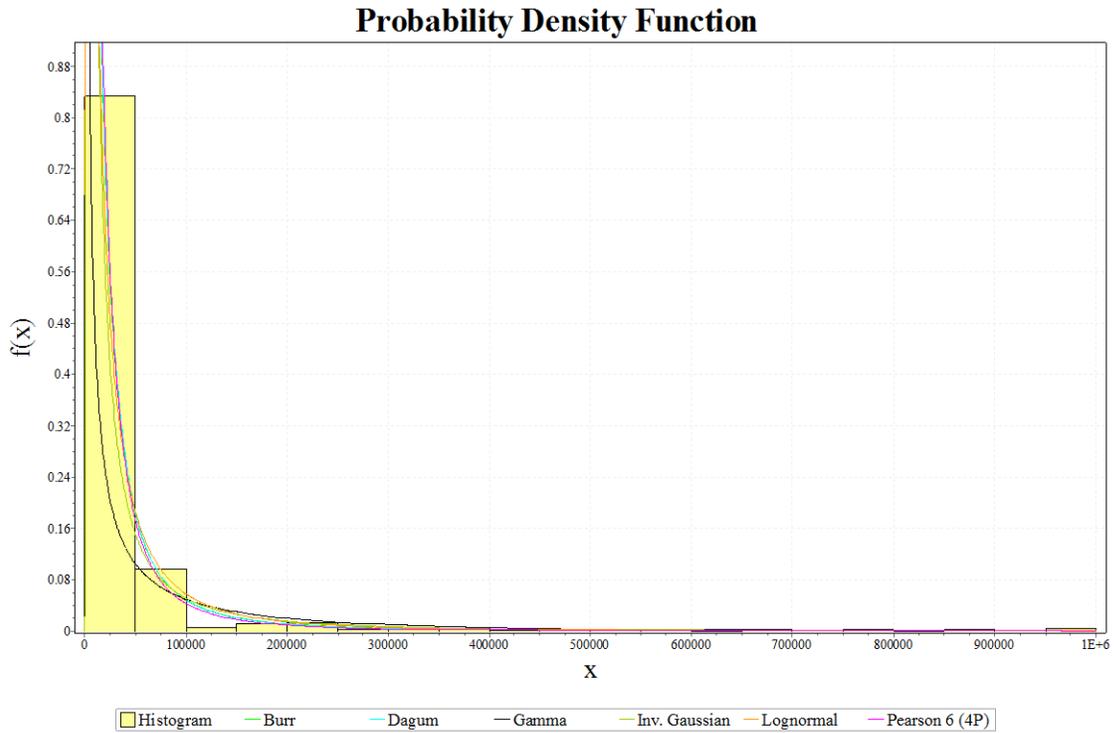
17	Log-Logistic	0.06785	6	2.6073	6	90.971	10
18	Log-Logistic (3P)	0.05645	4	2.0669	4	84.417	8
19	Lognormal	0.08626	10	6.0017	8	63.111	3
20	Lognormal (3P)	0.07124	8	4.3026	7	112.53	13
21	Pareto	0.38682	27	209.55	26	1629.3	25
22	Pearson 5	0.23785	20	63.055	18	372.71	20
23	Pearson 5 (3P)	0.1955	19	64.023	19	254.11	15
24	Pearson 6	0.06333	5	2.5387	5	91.078	11
25	Pearson 6 (4P)	0.03999	1	2.0131	3	49.509	1
26	Rayleigh	0.50714	30	799.78	30	2153.3	26
27	Rayleigh (2P)	0.37497	26	210.64	27	584.26	21
28	Rice	0.69908	31	1844.2	31	4612.1	27
29	Weibull	0.11216	13	17.939	12	101.98	12

The three most used claim severity distributions in the actuarial field:

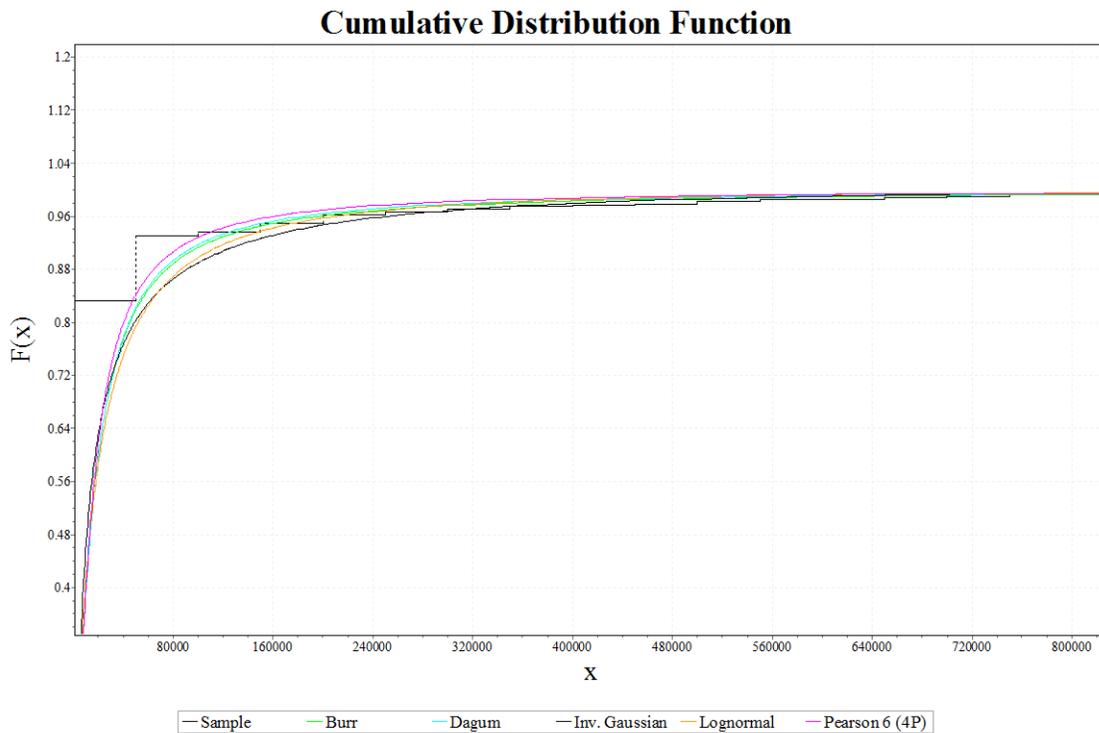
- (10) Gamma
- (13) Inv. Gaussian (3P)
- (19) Lognormal

Three additional distributions based on the Goodness of Fit Summary for this coverage:

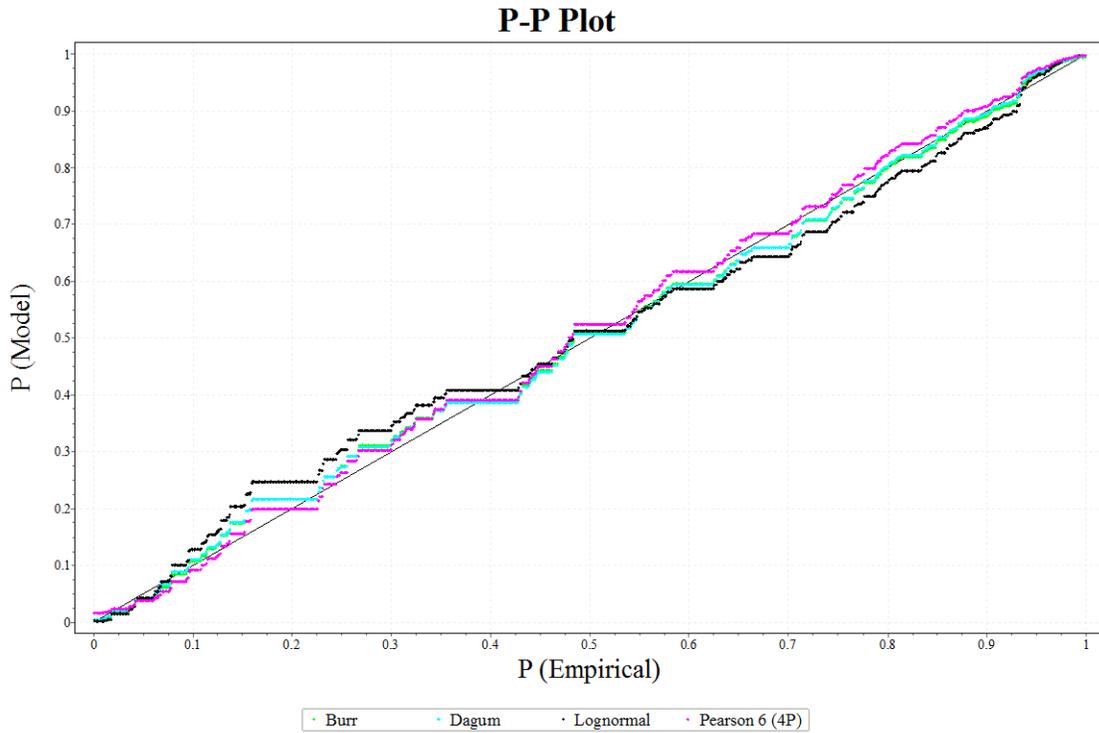
- (1) Burr
- (4) Dagum
- (25) Pearson 6 (4P)



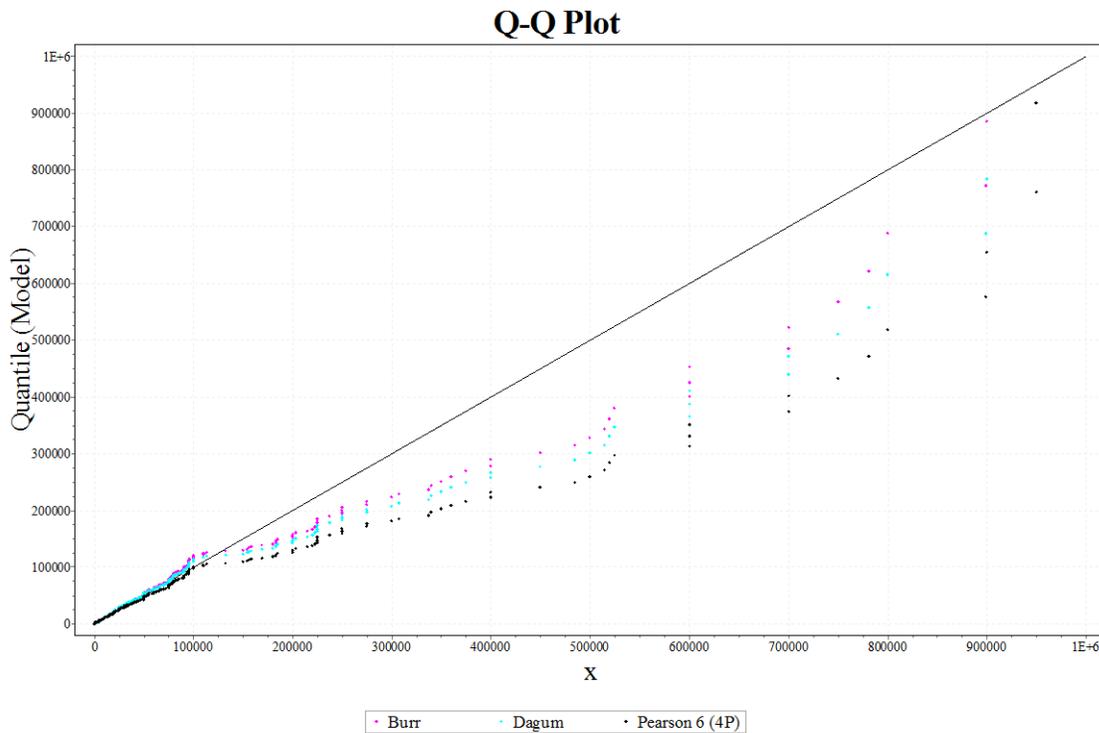
The skew of the Gamma distribution on the Probability Density Function model is more divergent than the skew of the other distributions and is eliminated from further consideration for this coverage.



The Inv. Gaussian distribution on the Cumulative Distribution Function model has the greatest divergence and is eliminated from further consideration for this coverage.

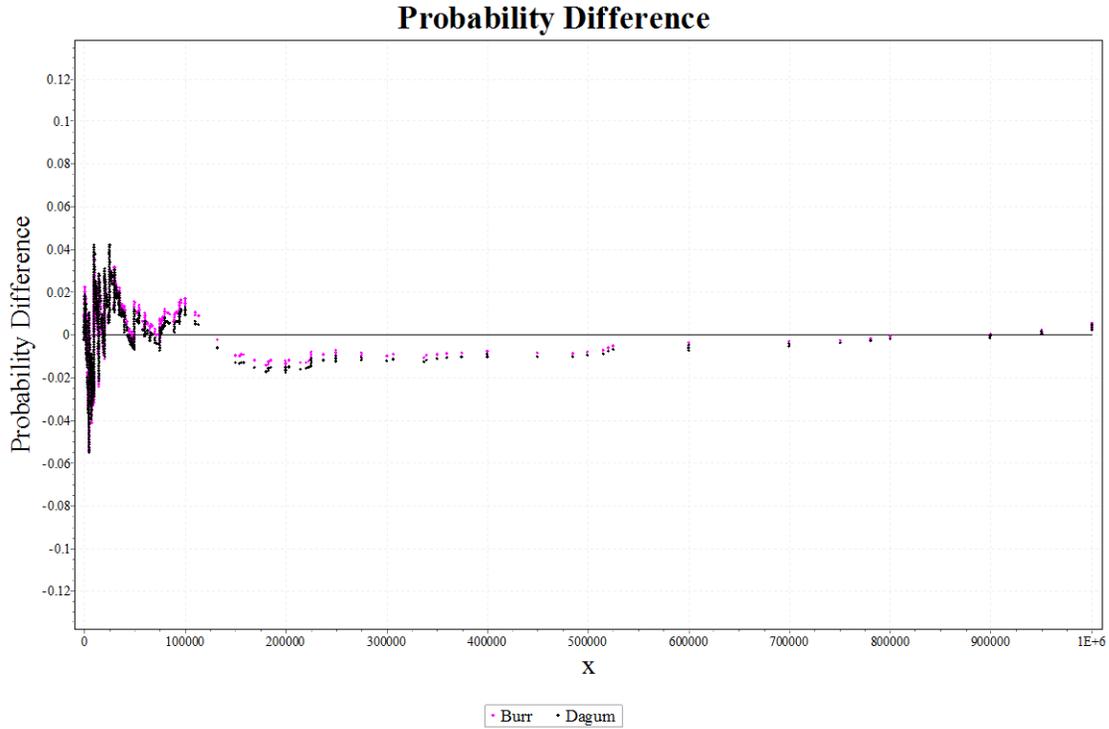


The Lognormal distribution on the P-P Plot model has the greatest divergence from the diagonal line and is eliminated from further consideration for this coverage.



The Pearson 6 (4P) distribution on the Q-Q Plot model has the greatest divergence of the remaining distributions and is eliminated from further consideration for this coverage.

Uninsured & Underinsured Motorist Coverage (Period 3)



The Burr distribution on the Probability Difference model is closest to the zero line and is selected as the distribution of best fit for the Uninsured & Underinsured Motorist Coverage (Period 3) coverage limit study.

From the claims data, the Burr fitted parameters are listed below:

Distribution

Burr

Parameters

$k=1.0308$ $\alpha=1.2012$ $\beta=15079.0$

Appendix G

AB 2293, Bonilla (2014)

Transportation Network Companies: Insurance Coverage


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PUBLIC UTILITIES CODE - PUC
DIVISION 2. REGULATION OF RELATED BUSINESSES BY THE PUBLIC UTILITIES COMMISSION [3901 - 5513] (*Division 2 enacted by Stats. 1951, Ch. 764.*)

CHAPTER 8. Charter-Party Carriers of Passengers [5351 - 5444] (*Chapter 8 added by Stats. 1961, Ch. 2146.*)

ARTICLE 7. Transportation Network Companies [5430 - 5445.2] (*Article 7 added by Stats. 2014, Ch. 389, Sec. 1.*)

5430. Notwithstanding any other provision of this chapter, this article shall apply to transportation network companies.

(*Added by Stats. 2014, Ch. 389, Sec. 1. Effective January 1, 2015.*)

5431. For purposes of this article, the following terms have the following meanings:

(a) "Participating driver" or "driver" means any person who uses a vehicle in connection with a transportation network company's online-enabled application or platform to connect with passengers.

(b) "Personal vehicle" means a vehicle that is used by a participating driver to provide prearranged transportation services for compensation that meets all of the following requirements:

(1) Has a passenger capacity of eight persons or less, including the driver.

(2) Is owned, leased, rented for a term that does not exceed 30 days, or otherwise authorized for use by the participating driver.

(3) Meets all inspection and other safety requirements imposed by the commission.

(4) Is not a taxicab or limousine.

(c) "Transportation network company" means an organization, including, but not limited to, a corporation, limited liability company, partnership, sole proprietor, or any other entity, operating in California that provides prearranged transportation services for compensation using an online-enabled application or platform to connect passengers with drivers using a personal vehicle.

(d) "Transportation network company insurance" means a liability insurance policy that specifically covers liabilities arising from a driver's use of a vehicle in connection with a transportation network company's online-enabled application or platform.

(*Amended by Stats. 2016, Ch. 766, Sec. 1. Effective January 1, 2017.*)

5432. (a) A transportation network company shall disclose in writing to participating drivers, as part of its agreement with those drivers, the insurance coverage and limits of liability that the transportation network company provides while the driver uses a vehicle in connection with a transportation network company's online-enabled application or platform, and shall advise a participating driver in writing that the driver's personal automobile insurance policy will not provide coverage because the driver uses a vehicle in connection with a transportation network company's online-enabled application or platform.

(b) A transportation network company shall also disclose in writing to participating drivers, as part of its agreement with those drivers, that the driver's personal automobile insurance policy will not provide collision or comprehensive coverage for damage to the vehicle used by the driver from the moment the driver logs on to the transportation network company's online-enabled application or platform to the moment the driver logs off the transportation network company's online-enabled application or platform.

(c) This section shall become operative on July 1, 2015.

(*Added by Stats. 2014, Ch. 389, Sec. 1. Effective January 1, 2015. Section operative July 1, 2015, by its own provisions.*)

5433.

(a) A transportation network company and any participating driver shall maintain transportation network company insurance as provided in this section.

(b) The following requirements shall apply to transportation network company insurance from the moment a participating driver accepts a ride request on the transportation network company's online-enabled application or platform until the driver completes the transaction on the online-enabled application or platform or until the ride is complete, whichever is later:

(1) Transportation network company insurance shall be primary and in the amount of one million dollars (\$1,000,000) for death, personal injury, and property damage. The requirements for the coverage required by this subdivision may be satisfied by any of the following:

(A) Transportation network company insurance maintained by a participating driver.

(B) Transportation network company insurance maintained by a transportation network company.

(C) Any combination of subparagraphs (A) and (B).

(2) Transportation network company insurance coverage provided under this subdivision shall also provide for uninsured motorist coverage and underinsured motorist coverage in the amount of one million dollars (\$1,000,000) from the moment a passenger enters the vehicle of a participating driver until the passenger exits the vehicle. The policy may also provide this coverage during any other time period, if requested by a participating driver relative to insurance maintained by the driver.

(3) The insurer, in the case of insurance coverage provided under this subdivision, shall have the duty to defend and indemnify the insured.

(4) A transportation network company may meet its obligations under this subdivision through a policy obtained by a participating driver pursuant to subparagraph (A) or (C) of paragraph (1) only if the transportation network company verifies that the policy is maintained by the driver and is specifically written to cover the driver's use of a vehicle in connection with a transportation network company's online-enabled application or platform.

(c) The following requirements shall apply to transportation network company insurance from the moment a participating driver logs on to the transportation network company's online-enabled application or platform until the driver accepts a request to transport a passenger, and from the moment the driver completes the transaction on the online-enabled application or platform or the ride is complete, whichever is later, until the driver either accepts another ride request on the online-enabled application or platform or logs off the online-enabled application or platform:

(1) Transportation network company insurance shall be primary and in the amount of at least fifty thousand dollars (\$50,000) for death and personal injury per person, one hundred thousand dollars (\$100,000) for death and personal injury per incident, and thirty thousand dollars (\$30,000) for property damage. The requirements for the coverage required by this paragraph may be satisfied by any of the following:

(A) Transportation network company insurance maintained by a participating driver.

(B) Transportation network company insurance maintained by a transportation network company that provides coverage in the event a participating driver's insurance policy under subparagraph (A) has ceased to exist or has been canceled, or the participating driver does not otherwise maintain transportation network company insurance pursuant to this subdivision.

(C) Any combination of subparagraphs (A) and (B).

(2) A transportation network company shall also maintain insurance coverage that provides excess coverage insuring the transportation network company and the driver in the amount of at least two hundred thousand dollars (\$200,000) per occurrence to cover any liability arising from a participating driver using a vehicle in connection with a transportation network company's online-enabled application or platform within the time periods specified in this subdivision, which liability exceeds the required coverage limits in paragraph (1).

(3) The insurer providing insurance coverage under this subdivision shall be the only insurer having the duty to defend any liability claim arising from an accident occurring within the time periods specified in this subdivision.

(4) A transportation network company may meet its obligations under this subdivision through a policy obtained by a participating driver pursuant to subparagraph (A) or (C) of paragraph (1) only if the transportation network company verifies that the policy is maintained by the driver and is specifically written to cover the driver's use of a vehicle in connection with a transportation network company's online-enabled application or platform.

(d) Coverage under a transportation network company insurance policy shall not be dependent on a personal automobile insurance policy first denying a claim nor shall a personal automobile insurance policy be required to first deny a claim.

(e) In every instance where transportation network company insurance maintained by a participating driver to fulfill the insurance obligations of this section has lapsed or ceased to exist, the transportation network company shall provide the coverage required by this section beginning with the first dollar of a claim.

(f) This article shall not limit the liability of a transportation network company arising out of an automobile accident involving a participating driver in any action for damages against a transportation network company for an amount above the required insurance coverage.

(g) This section shall become operative on July 1, 2015.

(Added by Stats. 2014, Ch. 389, Sec. 1. Effective January 1, 2015. Section operative July 1, 2015, by its own provisions.)

5434. (a) Nothing in this section shall be construed to require a private passenger automobile insurance policy to provide primary or excess coverage during the period of time from the moment a participating driver in a transportation network company logs on to the transportation network company's online-enabled application or platform until the driver logs off the online-enabled application or platform or the passenger exits the vehicle, whichever is later.

(b) During the period of time from the moment a participating driver in a transportation network company logs on to the transportation network company's online-enabled application or platform until the driver logs off the online-enabled application or platform or the passenger exits the vehicle, whichever is later, all of the following shall apply:

(1) The participating driver's or the vehicle owner's personal automobile insurance policy shall not provide any coverage to the participating driver, vehicle owner, or any third party, unless the policy expressly provides for that coverage during the period of time to which this subdivision is applicable, with or without a separate charge, or the policy contains an amendment or endorsement to provide that coverage, for which a separately stated premium is charged.

(2) The participating driver's or the vehicle owner's personal automobile insurance policy shall not have the duty to defend or indemnify for the driver's activities in connection with the transportation network company, unless the policy expressly provides otherwise for the period of time to which this subdivision is applicable, with or without a separate charge, or the policy contains an amendment or endorsement to provide that coverage, for which a separately stated premium is charged.

(c) Notwithstanding any other law, a personal automobile insurer may, at its discretion, offer an automobile liability insurance policy, or an amendment or endorsement to an existing policy, that covers a private passenger vehicle, station wagon type vehicle, sport utility vehicle, or similar type of vehicle with a passenger capacity of eight persons or less, including the driver, while used in connection with a transportation network company's online-enabled application or platform only if the policy expressly provides for the coverage during the time period specified in subdivision (b), with or without a separate charge, or the policy contains an amendment or an endorsement to provide that coverage, for which a separately stated premium may be charged.

(d) This section shall become operative on July 1, 2015.

(Added by Stats. 2014, Ch. 389, Sec. 1. Effective January 1, 2015. Section operative July 1, 2015, by its own provisions.)

5435. In a claims coverage investigation, a transportation network company or its insurer shall cooperate with insurers that are involved in the claims coverage investigation to facilitate the exchange of information, including the provision of dates and times at which an accident occurred that involved a participating driver and the precise times that the participating driver logged on and off the transportation network company's online-enabled application or platform.

(Added by Stats. 2014, Ch. 389, Sec. 1. Effective January 1, 2015.)

5437. A transportation network company shall not disclose to a third party any personally identifiable information of a transportation network company passenger unless one of the following applies:

(1) The customer knowingly consents.

(2) Pursuant to a legal obligation.

(3) The disclosure is to the commission in order to investigate a complaint filed with the commission against a transportation network company or a participating driver and the commission treats the information under confidentiality protections.

(Added by Stats. 2014, Ch. 389, Sec. 1. Effective January 1, 2015.)

5438. It is the intent of the Legislature that the Department of Insurance expedite review of any application for approval of transportation network company insurance products, and that these products become available for purchase on or before July 1, 2015.

(Added by Stats. 2014, Ch. 389, Sec. 1. Effective January 1, 2015.)

5439. Transportation network company insurance that meets the requirements of Section 5433 shall be deemed to satisfy the financial responsibility requirements of Sections 16054 and 16056 of the Vehicle Code.

(Added by Stats. 2014, Ch. 389, Sec. 1. Effective January 1, 2015.)

5440. The Legislature makes the following findings:

(a) The commission has initiated regulation of transportation network companies as a new category of charter-party carriers and continues to develop appropriate regulations for this new service.

(b) Given the rapidly evolving transportation network company service, it is the intent of the Legislature to continue ongoing oversight of the commission's regulation of these services in order to enact legislation to adjust commission authority and impose specific requirements or prohibitions as deemed necessary as these services evolve.

(Added by Stats. 2014, Ch. 389, Sec. 1. Effective January 1, 2015.)

5441. The Legislature does not intend, and nothing in this article shall be construed, to prohibit the commission from exercising its rulemaking authority in a manner consistent with this article, or to prohibit enforcement activities related to transportation network companies.

(Added by Stats. 2014, Ch. 389, Sec. 1. Effective January 1, 2015.)

5442. A participating driver of a transportation network company shall carry proof of transportation network company insurance coverage with him or her at all times during his or her use of a vehicle in connection with a transportation network company's online-enabled application or platform. In the event of an accident, a participating driver shall provide this insurance coverage information to any other party involved in the accident, and to a police officer, upon request.

(Added by Stats. 2014, Ch. 389, Sec. 1. Effective January 1, 2015.)

5443. Notwithstanding Section 11580.9 of the Insurance Code, or any other law affecting whether one or more policies of insurance that may apply with respect to an occurrence is primary or excess, this article determines the obligations under insurance policies issued to transportation network companies and, if applicable, drivers using a vehicle in connection with a transportation network company's online-enabled application or platform.

(Added by Stats. 2014, Ch. 389, Sec. 1. Effective January 1, 2015.)

5444. Notwithstanding any limitations contained in Section 1808.1 of the Vehicle Code, a transportation network company is eligible to participate and shall participate in the pull-notice system established pursuant to Section 1808.1 of the Vehicle Code to regularly check the driving records of a participating driver regardless of whether the participating driver is an employee or an independent contractor of the transportation network company.

(Added by Stats. 2015, Ch. 791, Sec. 1. Effective January 1, 2016.)

5445.2. (a) (1) A transportation network company shall conduct, or have a third party conduct, a local and national criminal background check for each participating driver that shall include both of the following:

(A) A multistate and multijurisdiction criminal records locator or other similar commercial nationwide database with validation.

(B) A search of the United States Department of Justice National Sex Offender Public Web site.

(2) A transportation network company shall not contract with, employ, or retain a driver if he or she meets either of the following criteria:

(A) Is currently registered on the United States Department of Justice National Sex Offender Public Web site.

(B) Has been convicted of any of the following offenses:

(i) A violent felony, as defined in Section 667.5 of the Penal Code.

(ii) A violation of Section 11413, 11418, 11418.5, or 11419 of the Penal Code.

(3) A transportation network company shall not contract with, employ, or retain a driver if he or she has been convicted of any of the following offenses within the previous seven years.

(A) Misdemeanor assault or battery.

(B) A domestic violence offense.

(C) Driving under the influence of alcohol or drugs.

(D) A felony violation of Section 18540 of the Elections Code, or of Section 67, 68, 85, 86, 92, 93, 137, 138, 165, 518, 530, or 18500 of, subdivision (a) of Section 484 of, subdivision (a) of Section 487 of, or subdivision (b) of Section 25540 of, the Penal Code.

(4) Paragraphs (2) and (3) shall apply regarding a conviction of any offense committed in another jurisdiction that includes all of the elements of any of the offenses described or defined in those paragraphs.

(5) Nothing in this section shall be interpreted to prevent a transportation network company from imposing additional standards.

(b) A transportation network company that violates, or fails to comply with, this section is subject to a penalty of not less than one thousand dollars (\$1,000) nor more than five thousand dollars (\$5,000) for each offense.

(c) (1) Notwithstanding Section 1786.12 of the Civil Code, an investigative consumer reporting agency may furnish an investigative consumer report to a transportation network company about a person seeking to become a participating driver, regardless of whether the participating driver is to be an employee or an independent contractor of the transportation network company.

(2) Paragraph (7) of subdivision (a) of Section 1786.18 of the Civil Code shall not apply to an investigative consumer report furnished to a transportation network company pursuant to paragraph (1).

(Added by Stats. 2016, Ch. 740, Sec. 1. Effective January 1, 2017.)

Appendix H

California Public Utilities Commission January 6, 2017 Data Call

PUBLIC UTILITIES COMMISSION

505 Van Ness Avenue
San Francisco, CA 94102-3298



January 6, 2017

Subject: Instructions to transportation network companies (TNC) for joint study with California Department of Insurance on TNC insurance requirements

Pursuant to Public Utilities Code §5436, the California Public Utilities Commission in collaboration with the California Department of Insurance requires all transportation network companies (TNC) with an active TCP permit during any time period between January 1, 2014 and December 31, 2016 to provide the following information for all traffic collisions, accidents and any other incidents that resulted in the TNC's insurance company receiving a claim against the TNC's insurance policy.

1. Date of collision/ accident/ incident (mm/dd/yy)
2. Time of collision/ accident/ incident (hh:mm)
3. Period Code
 - 1: Period 1 (the TNC driver turned on the App, but not yet matched with a customer/passenger).
 - 2: Period 2 (the TNC driver has been matched with a customer/passenger, accepted the ride request, and is driving to the pick-up place).
 - 3: Period 3 (the customer/passenger is inside the TNC driver's car until drop off).
4. Coverage Code

CSL: Combined Single Limit for death, personal injury and property damage.

BI: Bodily Injury (per person and per accident for each record). For example: One collision/ accident/ incident with two claimants A and B. Such a collision/ accident/ incident should be reported as two separate records.

PD: Property Damage

UM/UIM: Uninsured / Underinsured Motorist Coverage (per claimant for each record). For example: One collision/ accident/ incident with both bodily injury and property damage. Such a collision/ accident/ incident should be reported as one record for all losses.

EC: Excess coverage.
5. Waybill number associated with collision/ accident/ incident
6. Vehicle identification number
7. Name of Driver (last, first)
8. Applicable policy number (of TNC's insurance)
9. Insurance Claim / file number (of TNC's insurance)

10. Insurance Coverage Limit (of TNC's insurance)
11. If claim is closed, provide date that claim was closed.
12. Name of TNC insurance provider (of driver's TNC insurance)
13. Applicable policy number (of driver's TNC insurance)
14. Insurance coverage limit (of driver's TNC insurance)
15. Portion of loss covered by TNC's insurance
16. Portion of loss covered by driver's insurance
17. Portion of loss covered by any other source

A reporting template, with the above data items as column names, is attached for reference. Please submit the required information to licensing_tnc@cpuc.ca.gov by March 31, 2017.

To the extent that such information was provided in your company's annual Report(s) on Problems with Drivers, you may note or otherwise identify those specific items of information (as having been previously provided). However, your company must provide information responsive to all requested items of information in this communication, so that the specific details of each incident can correctly correspond to each other.

If you have questions please contact Brewster Fong at brewster.fong@cpuc.ca.gov.

Sincerely,

License Section

California Public Utilities Commission
Consumer Protection & Enforcement Division
licensing_tnc@cpuc.ca.gov

Appendix I

California Department of Insurance February 6, 2017 Data Call



Survey of Transportation Network Company Insurance Coverage

Survey of California Transportation Network Company (TNC) Insurance Experience - Due July 1, 2017

Assembly Bill 2293 (Bonilla 2014) required the California Department of Insurance (CDI) and the California Public Utilities Commission to "collaborate on a study of transportation network company insurance to assess whether coverage requirements are appropriate to the risk of transportation network company services in order to promote data-driven decisions on insurance requirements, and shall report the findings of this study to the Legislature no later than December 31, 2017."

In order to meet this Legislative requirement, CDI is issuing this survey or data call to all personal and commercial auto insurers. Insurers that did not offer insurance to Transportation Network Companies (TNCs) or participating drivers will be able to simply check off the appropriate box on the Signature Page, sign, and email us a scanned copy. They are exempt from the remainder of the survey.

Personal or commercial auto insurers that did write insurance for TNCs or participating drivers are required to submit the whole survey.

Who is Required to Report?

All property & casualty companies (regardless of their licensing status in California) having experience in California in the line of Private Passenger Auto Liability (Line 19.2), Private Passenger Physical Damage (Line 21.1), Other Commercial Auto Liability (19.4) or Commercial Physical Damage (Line 21.2) are to submit their report to us according to the General Instructions.

Penalties for Non-Compliance: Companies that fail to submit the Signature Page, Questionnaire and the Data Collection Workbooks (if applicable) by the requested due date will be considered in non-compliance with CIC §700(c) and will be referred to the Department's Legal Division for further action.

Reporting Procedure

Step 1: Please refer to the General Instructions for its reporting specifications.

Step 2: This report is due **July 1, 2017**. Please submit the completed reports to: RSBTNC@insurance.ca.gov.

[Cover Letter \(pdf\)](#)

[General Instructions \(pdf\)](#)

[Signature Page \(pdf\)](#) - Required by all California Auto Writers. Sign, Scan, and Return

[Questionnaire \(Excel\)](#) - Required by all California Auto Writers that have TNC experience.

[Individual Claim Workbook \(Excel\)](#) - Required by all California Auto Writers that have TNC experience.

[Policy Information Exhibit \(Excel\)](#) - Required by all California Auto Writers that have TNC experience

For the documents in PDF format, you will need Adobe Acrobat Reader 3.0 or higher to view it, or download a copy of the software by visiting our [Free Document Readers](#) web page.

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DEPARTMENT OF INSURANCE

RATE SPECIALIST BUREAU
 300 SOUTH SPRING STREET, SOUTH TOWER - 11TH FLOOR
 LOS ANGELES, CA 90013
 (213) 346-6774
 (213) 897-6361 (Fax)
 www.insurance.ca.gov



February 6, 2017

Re: Survey of Transportation Network Company (TNC) Insurance Experience

To: All Personal and Commercial Automobile Insurers Transacting Business in California

The purpose of this letter is to communicate the requirements for a data call which is mandated by California statute. A complete response to the California Department of Insurance (CDI) is required by July 1, 2017. We look forward to your timely response and appreciate your efforts in compiling the necessary information.

On September 17, 2014, the California Legislature approved Assembly Bill 2293 (Bonilla) to add Article 7-Transportation Network Companies, to Chapter 8 of Division 2 of the California Public Utilities Code (PUC Sections 5430-5443). Article 7 requires that a company identified as a transportation network company (TNC) and its participating drivers in California maintain automobile liability insurance coverage. PUC Section 5431(a) defines a TNC as “an organization, including, but not limited to, a corporation, limited liability company, partnership, sole proprietor, or any other entity, operating in California that provides prearranged transportation services for compensation using an online-enabled application or platform to connect passengers with drivers using their personal vehicles.”

AB 2293 also mandates that the California Public Utilities Commission (CPUC) and the CDI “collaborate on a study of transportation network company insurance to assess whether coverage requirements are appropriate to the risk of transportation network company services in order to promote data-driven decisions on insurance requirements, and shall report the findings of this study to the Legislature no later than December 31, 2017.” When mentioned, as defined by PUC Section 5431(c), TNC insurance refers to a “liability insurance policy that specifically covers liabilities arising from a driver’s use of a vehicle in connection with a transportation network company’s online-enabled application or platform.” As part of this study, CDI is sending out this survey to all automobile insurance (personal or commercial) insurers to determine which insurers have already offered TNC insurance coverages to TNCs and/or their participating drivers in California.

The insurance coverage periods and coverage limits are:

A) Coverage Periods:

- 1) Period 1 – The TNC driver has logged onto the App, but has not yet accepted a ride request.
- 2) Period 2 – The TNC driver has accepted a ride request and is driving to the pick-up location.
- 3) Period 3 – The passenger enters the TNC driver's vehicle until the passenger exits the vehicle.

B) Coverage Limits: The coverage limits may be satisfied by the TNC’s commercial automobile and/or by the TNC driver’s automobile insurance coverage.

- 1) TNC insurance shall be primary in the amount of \$50,000 for death & personal injury (per person), \$100,000 for death & personal injury (per incident), and \$30,000 for property damage for Period 1. – PUC Section 5433(c)(1).
- 2) TNC insurance shall be primary and in the amount of one million dollars (\$1,000,000) for death, personal injury, and property damage for Periods 2 and/or 3 – PUC Section 5433 (b)(1).
- 3) TNC insurance shall also provide excess coverage of at least \$200,000 per occurrence to cover any liability arising from a participating driver using a vehicle in connection with TNC services – PUC Section 5433 (c)(2).
- 4) TNC insurance shall also provide uninsured motorist and underinsured motorist coverage of one million dollars (\$1,000,000) for Period 3 – PUC Section 5433 (b)(2).

Additional information on AB2293 can be accessed via the California Legislature website at http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140AB2293.

The CDI survey/data call includes:

- 1) General Instructions
- 2) Signature Page
- 3) Questionnaire
- 4) Policy Information Exhibit Instructions and Worksheet
- 5) Individual Claim Instructions and Worksheet

The survey can be downloaded from the CDI's internet site at:

<https://www.insurance.ca.gov/0250-insurers/0300-insurers/0100-applications/rsb-forms/2016/TNC2017.cfm>.

Please email the completed survey to the Rate Specialist Bureau at: rsbTNC@insurance.ca.gov. The completed and signed Signature Page should be scanned and submitted in PDF format. The completed Questionnaire, Individual Claim, and Policy Information Exhibit data worksheet(s) are to be submitted as Excel files. The data requested in the Individual Claim worksheet can also be submitted as a Comma Delimited Text file with column headers included as the first line.

Each company's submitted data will remain confidential and results will be presented on an aggregate basis.

Any questions or correspondence can be directed to:

California Department of Insurance
 Attention: Rate Specialist Bureau
 E-mail: rsbTNC@insurance.ca.gov

**** The completed survey is due July 1, 2017. ****

Your assistance and cooperation is greatly appreciated.

Sincerely,

GEORGE YEN
 Chief, Rate Specialist Bureau
 California Department of Insurance

CALIFORNIA TRANSPORTATION NETWORK COMPANY (TNC) INSURANCE EXPERIENCE SURVEY

For the period: January 1, 2014 to December 31, 2016

GENERAL INSTRUCTIONS

Pursuant to Assembly Bill 2293 (Bonilla 2014), the California Public Utilities Commission (CPUC) and the California Department of Insurance (CDI) are required to collaborate on a study of Transportation Network Company (TNC) insurance to assess whether coverage requests are appropriate to the risk of TNC service. The results of this study will be reported to the Legislature by December 31, 2017. The following survey is required of each insurance company (regardless of its licensing status) transacting automobile insurance coverage in California. The CDI understands that Public Utilities Code 5432 became operative on July 1, 2015. Some carriers may have already offered TNC insurance before the law took effect. We are requesting data from 2014 to 2016.

- (1) The data reported are to reflect only business written in California.
- (2) This is to be filed on a company basis.
- (3) If your company has not intentionally or knowingly written TNC insurance for a TNC or its participating drivers at any time from January 1, 2014 to December 31, 2016, you are not required to complete the Questionnaire, Individual Claims Data worksheet, or Policy Information Exhibit Data worksheet. Please select the “No” option on the Signature Page, sign, and return via e-mail to: RSBTNC@insurance.ca.gov.
- (4) If your company has written TNC insurance at any time from January 1, 2014 to December 31, 2016, then you are required to complete the Signature Page, Questionnaire, Individual Claims Data worksheet, and Policy Information Exhibit Data worksheet. Please return all completed forms via e-mail to: RSBTNC@insurance.ca.gov.
- (5) Completed forms are to be returned as electronic files in these formats:
 - PDF: Signature Page (scanned copy of completed and signed form)
 - Excel: Questionnaire, Individual Claims Data worksheet, and Policy Information Exhibit Data worksheet.
- (6) This survey is due **July 1, 2017**.
- (7) If any questions arise regarding the completion or filing of this survey, please contact the Rate Specialist Bureau at (213) 346-6771 or by e-mail: RSBTNC@insurance.ca.gov.

QUESTIONNAIRE

SURVEY OF INSURERS WRITING TRANSPORTATION NETWORK COMPANY (TNC) INSURANCE IN CALIFORNIA

Company Name: NAIC code:

Group Name: Group code:

Assembly Bill 2293 (AB 2293) specifies Transportation Network Company (TNC) insurance as follows:

TNC Insurance Requirements (Public Utilities Code Section 5433)

		Period 1	Period 2	Period 3
		The TNC driver has logged onto the App, but has not yet accepted a ride request.	The TNC driver has accepted a ride request and is driving to the pick-up location.	The passenger enters the TNC driver's vehicle until the passenger exits the vehicle.
Primary Insurance	for death & personal injury (per person)	\$50,000	\$1,000,000	
	for death & personal injury (per incident)	\$100,000		
	for property damage	\$30,000		
Excess Coverage (per occurrence)		\$200,000		
Uninsured Motorist Coverage & Underinsured Motorist Coverage (UM/UIM)				\$1,000,000

Period 1: The TNC driver has logged onto the App, but has not yet accepted a ride request.
 Period 2: The TNC driver has accepted a ride request and is driving to the pick-up location.
 Period 3: The passenger enters the TNC driver's vehicle until the passenger exits the vehicle.

1) Which lines of business did your company write in the State of California for TNCs or participating drivers for any time during the reporting period from Jan. 1, 2014 to Dec. 31, 2016? (Check all that apply)

- a. Private Passenger Auto Liability (Line 19.2)
- b. Private Passenger Auto Physical Damage (Line 21.1)
- c. Commercial Auto Liability (Line 19.4)
- d. Commercial Auto Physical Damage (Line 21.2)
- e. Commercial General Liability Insurance
- f. Other, please specify:

2) When did your company begin writing policies for TNCs or participating drivers?

(mm/dd/yyyy)

3) What TNC Coverage Periods did your company write? (Check all that apply)

- a. Period 1
- b. Period 2
- c. Period 3

4) How does your company write TNC insurance?

- a. By an endorsement
- b. By a separate policy
- c. Covered by current policy
- d. Other, please specify:

5) For Period 1, Public Utilities Code Section 5433(c)(1) requires that TNC insurance shall provide \$50,000/\$100,000/\$30,000 coverage for Death, Personal Injury and Property Damage. Please indicate the limits that your company offered. (Check all that apply)

- a. \$15,000/\$30,000/\$5,000 (for eligible good drivers)
- b. \$50,000/\$100,000/\$30,000
- c. \$100,000/\$500,000/\$50,000
- d. Other(s), please specify:

6) How many TNC participating vehicles did your company insure for each period at the end of each calendar year?

	2014	2015	2016
Period 1	<input type="text"/>	<input type="text"/>	<input type="text"/>
Period 2	<input type="text"/>	<input type="text"/>	<input type="text"/>
Period 3	<input type="text"/>	<input type="text"/>	<input type="text"/>

7) Your company's TNC insurance coverages for Period 1 are written on a(n):

- a. Primary Basis.
- b. Excess Coverage Basis.

8) According to Public Utilities Code Section 5433(c)(2), TNCs shall also maintain insurance that provides excess coverage insuring the TNC and the participating driver in the amount of at least \$200,000 per occurrence for excess coverage of TNC service. Please indicate which Period(s) your company provided this excess coverage (Check all that apply):

- a. Did not provide \$200,000 excess coverage.
b. Period 1
c. Period 2
d. Period 3

9) In addition to the required automobile liability and UM/UIM coverages, which of the following coverages did your company also offer at an additional premium to the TNC or participating drivers?

- a. Physical Damage Coverage (Collision or Comprehensive)
b. Medical Payment
c. Commercial General Liability Insurance
d. Other(s), please describe any other TNC coverage(s) that your company offers:

10) Has your insurance company experienced any challenges obtaining information from TNCs, their insurers, or personal auto insurers, regarding the exchange of information (dates, times, whether the driver was logged on to the TNC application at the time of an accident), as required by Public Utilities Code Section 5435?

- a. No
b. Yes (Please explain below):

-
- 11) Please use the following space to describe any other issues that you believe should be noted in this survey or the Department's report to the Legislature:

End of QUESTIONNAIRE Section

TNC INSURANCE POLICY INFORMATION EXHIBIT

INSTRUCTIONS

Reporting Period: January 1, 2014 to December 31, 2016

Data Field Descriptions:

Column [1]: Coverage Code

CSL: Combined Single Limit for death, personal injury and property damage
 BI: Bodily Injury
 PD: Property Damage
 UM/UIM: Uninsured / Underinsured Motorist Coverage
 EC: Excess Coverage

Column [2]: Coverage Limit (in thousands of dollars) **

Example: If the coverage is \$50,000/\$100,000, shorten it to 50/100.

Column [3]: Year

Calendar year 2014, 2015 or 2016

Column [4]: Period Code ***

1: The TNC driver has logged onto the App, but has not yet accepted a ride request.
 2: The TNC driver has accepted a ride request and is driving to the pick-up location.
 3: The passenger enters the TNC driver's vehicle until the passenger exits the vehicle.

Column [5]: Number of Policies with TNC Insurance Coverage *

Number of policies in-force with TNC insurance coverage as of December 31st of the calendar year

Column [6]: Earned Car Years with TNC Insurance *

Example: One vehicle insured for 3 months of TNC insurance during the year is $3/12 = 0.25$ earned car year

Note:

- * For the number of policies (Column 5) and earned car years (Column 6), please report the data separately by coverage, coverage limit, year, and period. Each combination of coverage, coverage limit, year, and period should be reported in one record.
- ** For coverage limit, since each coverage offers multiple limits, only report those coverage limits that have TNC insurance exposure. For example, if the company writes various limits for Bodily Injury coverage and has written TNC insurance business in 50/100, 100/300, 250/500, report only these coverage limits.
- *** For coverage period, if the policy covered multiple periods, report the same data for each individual period.

Included are two hypothetical scenarios for your reference.

TNC INSURANCE POLICY INFORMATION EXHIBIT

Reporting Period: January 1, 2014 to December 31, 2016

CALIFORNIA BUSINESS ONLY

Scenario 1 Worksheet

ABC Insurance Company writes Personal Automobile Insurance for TNC drivers. It provides two different BI coverage limits, 50/100 and 100/300, and two different PD coverage limits, 30 and 40 for all periods 1, 2 and 3 for the three years. Please note that number of policies are the in-force policies at the end of each calendar year.

Company Name: **ABC Insurance Company**

NAIC Code: **12345**

Effective Date of TNC Program: **04/01/14**

[1] Coverage Code	[2] Coverage Limit (000)	[3] Year	[4] Period Code	[5] Number of Policies with TNC Coverage	[6] Earned Car Years with TNC Insurance
BI	50/100	2014	1	2,500	2,035
BI	50/100	2014	2	2,500	2,035
BI	50/100	2014	3	2,500	2,035
BI	50/100	2015	1	6,542	4,872
BI	50/100	2015	2	6,542	4,872
BI	50/100	2015	3	6,542	4,872
BI	50/100	2016	1	8,682	6,784
BI	50/100	2016	2	8,682	6,784
BI	50/100	2016	3	8,682	6,784
BI	100/300	2014	1	3,057	2,687
BI	100/300	2014	2	3,057	2,687
BI	100/300	2014	3	3,057	2,687
BI	100/300	2015	1	5,078	3,872
BI	100/300	2015	2	5,078	3,872
BI	100/300	2015	3	5,078	3,872
BI	100/300	2016	1	2,505	1,489
BI	100/300	2016	2	2,505	1,489
BI	100/300	2016	3	2,505	1,489
PD	30	2014	1	2,500	2,035
PD	30	2014	2	2,500	2,035
PD	30	2014	3	2,500	2,035
PD	30	2015	1	6,542	4,872
PD	30	2015	2	6,542	4,872
PD	30	2015	3	6,542	4,872
PD	30	2016	1	8,682	6,784
PD	30	2016	2	8,682	6,784
PD	30	2016	3	8,682	6,784
PD	40	2014	1	3,057	2,687
PD	40	2014	2	3,057	2,687
PD	40	2014	3	3,057	2,687

TNC INSURANCE POLICY INFORMATION EXHIBIT

Reporting Period: January 1, 2014 to December 31, 2016

CALIFORNIA BUSINESS ONLY

Scenario 1 Worksheet

ABC Insurance Company writes Personal Automobile Insurance for TNC drivers. It provides two different BI coverage limits, 50/100 and 100/300, and two different PD coverage limits, 30 and 40 for all periods 1, 2 and 3 for the three years. Please note that number of policies are the in-force policies at the end of each calendar year.

Company Name:

ABC Insurance Company

NAIC Code:

12345

Effective Date of TNC Program:

04/01/14

[1]	[2]	[3]	[4]	[5]	[6]
Coverage Code	Coverage Limit (000)	Year	Period Code	Number of Policies with TNC Coverage	Earned Car Years with TNC Insurance
PD	40	2015	1	5,078	3,872
PD	40	2015	2	5,078	3,872
PD	40	2015	3	5,078	3,872
PD	40	2016	1	2,505	1,489
PD	40	2016	2	2,505	1,489
PD	40	2016	3	2,505	1,489

TNC INSURANCE POLICY INFORMATION EXHIBIT

Reporting Period: January 1, 2014 to December 31, 2016

CALIFORNIA BUSINESS ONLY

Scenario 2 Worksheet

XYZ Insurance Company, a commercial automobile Insurer or a surplus line company, wrote TNC insurance in California. It issued one Master Policy to Uber for BI and PD during 2014, 2015, and 2016. When the number of policies is listed as 2 or 3 for CSL and UM/UIM, it could mean one Master policy for Uber, one for Lyft, and another one for Executive Ride. For a coverage that applies to multiple periods, it should be listed out in separate records. For instance, CSL with \$1000K coverage limit for periods 2 and 3, instead of putting "2,3" under Period Code column, it needs to be reported as two records. It should show one record for period 2 and another one for period 3 with the same data.

Company Name:

XYZ Insurance Company

NAIC Code:

56789

Effective Date of TNC Program:

07/01/14

[1] Coverage Code	[2] Coverage Limit (000)	[3] Year	[4] Period Code	[5] Number of Policies with TNC Coverage	[6] Earned Car Years with TNC Insurance
BI	50/100	2014	1	1	2,360
BI	50/100	2014	2	1	2,360
BI	50/100	2014	3	1	2,360
BI	50/100	2015	1	1	4,872
BI	50/100	2015	2	1	4,872
BI	50/100	2015	3	1	4,872
BI	50/100	2016	1	1	6,784
BI	50/100	2016	2	1	6,784
BI	50/100	2016	3	1	6,784
BI	100/300	2014	1	1	1,265
BI	100/300	2014	2	1	1,265
BI	100/300	2014	3	1	1,265
BI	100/300	2015	1	1	3,872
BI	100/300	2015	2	1	3,872
BI	100/300	2015	3	1	3,872
BI	100/300	2016	1	1	1,489
BI	100/300	2016	2	1	1,489
BI	100/300	2016	3	1	1,489
PD	30	2014	1	1	2,360
PD	30	2014	2	1	2,360
PD	30	2014	3	1	2,360
PD	30	2015	1	1	3,871
PD	30	2015	2	1	3,871
PD	30	2015	3	1	3,871
PD	30	2016	1	1	6,784
PD	30	2016	2	1	6,784
PD	30	2016	3	1	6,784

TNC INSURANCE POLICY INFORMATION EXHIBIT

Reporting Period: January 1, 2014 to December 31, 2016

CALIFORNIA BUSINESS ONLY

Scenario 2 Worksheet

XYZ Insurance Company, a commercial automobile Insurer or a surplus line company, wrote TNC insurance in California. It issued one Master Policy to Uber for BI and PD during 2014, 2015, and 2016. When the number of policies is listed as 2 or 3 for CSL and UM/UIM, it could mean one Master policy for Uber, one for Lyft, and another one for Executive Ride. For a coverage that applies to multiple periods, it should be listed out in separate records. For instance, CSL with \$1000K coverage limit for periods 2 and 3, instead of putting "2,3" under Period Code column, it needs to be reported as two records. It should show one record for period 2 and another one for period 3 with the same data.

Company Name:

XYZ Insurance Company

NAIC Code:

56789

Effective Date of TNC Program:

07/01/14

[1] Coverage Code	[2] Coverage Limit (000)	[3] Year	[4] Period Code	[5] Number of Policies with TNC Coverage	[6] Earned Car Years with TNC Insurance
PD	40	2014	1	1	1,265
PD	40	2014	2	1	1,265
PD	40	2014	3	1	1,265
PD	40	2015	1	1	1,757
PD	40	2015	2	1	1,757
PD	40	2015	3	1	1,757
PD	40	2016	1	1	4,872
PD	40	2016	2	1	4,872
PD	40	2016	3	1	4,872
EC	200	2014	1	2	1,874
EC	200	2014	2	2	1,874
EC	200	2014	3	2	1,874
CSL	1000	2014	2	2	2,278
CSL	1000	2014	3	2	2,278
UM/UIM	1000	2014	3	2	1,168
EC	200	2015	1	3	2,518
EC	200	2015	2	3	2,518
EC	200	2015	3	3	2,518
CSL	1000	2015	2	3	2,852
CSL	1000	2015	3	3	2,852
UM/UIM	1000	2015	3	3	2,452
EC	200	2016	1	4	4,872
EC	200	2016	2	4	4,872
EC	200	2016	3	4	4,872
CSL	1000	2016	2	4	2,893
CSL	1000	2016	3	4	2,893
UM/UIM	1000	2016	3	4	1,985

TNC INSURANCE INDIVIDUAL CLAIM WORKSHEET

INSTRUCTIONS

Reporting Period: January 1, 2014 to December 31, 2016

Do not report claims that were closed without payment.

Data Field Descriptions:

Column [1]: Policy Number

Column [2]: Vehicle Identification Number (V.I.N.)

Column [3]: Coverage Code

CSL: Combined Single Limit for death, personal injury and property damage.

BI: Bodily Injury (per claimant each record). For example: An accident with two claimants A and B should be reported as two separate records.

PD: Property Damage.

UM/UIM: Uninsured / Underinsured Motorist Coverage (per accident for each record). For example: One accident with both bodily injury and property damage should be reported as one record for all losses.

EC: Excess Coverage.

Column [4]: Insurance Coverage Limit (in thousands of dollars)
Example: 50/100

Column [5]: Period Code

- 1: The TNC driver has logged onto the App, but has not yet accepted a ride request.
- 2: The TNC driver has accepted a ride request and is driving to the pick-up location.
- 3: The passenger enters the TNC driver's vehicle until the passenger exits the vehicle.

Column [6]: Date of Incident/Accident (mm/dd/yy)

Column [7]: Dollar Amount of Losses Incurred (Paid Losses + Reserves) by Driver's Insurance Company.*

Column [8]: Dollar Amount of Losses Incurred (Paid Losses + Reserves) by TNC's Insurance Company.*

Column [9]: Total Dollar Amount Claimed, if policy limit was paid.*

* If the company has this information, please enter amount. If unknown or not available, enter "N/A".

An Example worksheet is included for reference.

TNC INSURANCE INDIVIDUAL CLAIM WORKSHEET

TNC Insurance Insurers, Doing Business in California
Reporting Period: January 1, 2014 to December 31, 2016

Apply To: California automobile insurance companies writing policies for TNC Companies and/or their participating drivers.

EXAMPLE

Company Name: _____

NAIC #: _____

[1]	[2]	[3]	[4]	[5]	[6]	[7] Losses Incurred (Paid Losses + Reserves)		[9]
Policy Number	Vehicle Identification Number (V.I.N.)	Coverage Code	Insurance Coverage Limit [in thousands of Dollars]	Period Code	Date of Incident or Accident	Dollar Amount by Driver's Insurance Company *	Dollar Amount by TNC's Insurance Company *	Total Dollar Amount Claimed, if policy limit was paid *

Example 1

Example Profile: One claimant, bodily injury, total claim amount \$300,000, period 1, Date of Accident 7/1/2016

Coverage Limit: Bodily Injury \$50,000/100,000 (policy under Driver's Insurance Company)

Coverage Limit: Excess \$200,000 (policy under TNC's Insurance Company)

To Report Bodily Injury Claim:

12345678	12345678901234500	BI	50/100	1	07/01/16	50,000	NA	300,000
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* If your company has Column [8] and [9] information, please enter amount. If unknown or not available, enter "N/A".

To Report Excess Coverage Claim:

12345678	12345678901234500	EC	200	1	07/01/16	50,000	200,000	300,000
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* If your company has Column [7] and [9] information, please enter amount. If unknown or not available, enter "N/A".

