

**SUPERIOR COURT OF THE STATE OF CALIFORNIA  
IN AND FOR THE COUNTY OF ORANGE**

CATHERINE DUFFY, MATTHEW EDLIN,  
LAWRENCE MULCAHY and PAULA HALL,  
individually and on behalf of all others similarly  
situated,

Plaintiffs,

v.

MAZDA MOTOR OF AMERICA, INC. d/b/a  
MAZDA NORTH AMERICAN OPERATIONS  
and MAZDA MOTOR CORPORATION,.

Defendants.

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Case No.: 3:24-cv-388-BJB

**DECLARATION OF LEE BOWRON,  
ACAS, MAAA**

I, Lee Bowron, ACAS, MAAA, hereby declare as follows:

1. I am a member of the American Academy of Actuaries (“MAAA”) and meet its qualification standards for statements of actuarial opinion regarding extended service contract liabilities. I am also an Associate of the Casualty Actuarial Society (“ACAS”). I have worked as a professional actuary for over thirty years.

2. I co-founded the Kerper Bowron, LLC (“Kerper Bowron”) actuarial consulting firm on July 1, 2003, and I am currently a Member/Manager of the firm, which is located in Jefferson County, Alabama. I have continued in my role as a Principal and Actuary at the Kerper Bowron firm since its founding. My practice has and does focus on automotive extended service contracts, GAP coverage, and captive market issues. Further details regarding my qualifications are set forth in my current curriculum vitae, which is attached hereto as **Exhibit I**.

3. Class Counsel engaged Kerper Bowron to calculate the fair market value of the Limited Warranty Extension as defined by the Settlement Agreement in this matter covering the infotainment system called Mazda Connect and related components in Mazda3 model years 2014-2018; Mazda6 model years 2016-2021; CX-3 model years 2016-2021; CX-5 model years 2016-2020; CX-9 model years 2016-2020; and MX-5 model years 2016-2021 equipped with the 6.5 generation Mazda Connect (the “Class Vehicles”) for an additional 24 months and unlimited miles, after expiration of the manufacturer’s basic warranty, which is 36 months or 36,000 miles, whichever occurs first.

4. As set forth in detail in my Report, attached hereto as **Exhibit II** and incorporated by reference, I calculated a range of fair market values for the 24-month Limited Warranty Extension for the Class Vehicles as defined in the Settlement Agreement. Based on the number of Class Vehicles, my analysis and computation resulted in a range of suggested fair market values for the Limited Warranty Extension for the Class Vehicles from \$32,426,000 to \$43,475,000, with a point estimate of \$37,950,000. These estimates do not include, and are in addition to, the value of the reimbursement program through which eligible Class Members can recover Out-of-Pocket Expenses under the Settlement. These estimates also do not include the value of any other Settlement benefits, such as the costs of notice and settlement administration. My estimates set forth in the Report are made within a reasonable degree of actuarial probability or certainty.

5. These estimated values were calculated in accordance with accepted actuarial standards and principles. My conclusions are based on my education, training, and experience, as well as the information I reviewed, which includes detailed warranty claims databases for infotainment related repairs to the Class Vehicles; confirmatory discovery responses provided by Mazda regarding the Class Vehicles; and other information provided by Class Counsel.

I declare under penalty of perjury under the laws of United States of America that the foregoing is true and correct, and I would competently testify as to any of the foregoing in a court of law if called upon to do so. Executed June 11, 2025.



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Lee Bowron, ACAS, MAAA

# **Exhibit I**

# Lee M. Bowron, ACAS, MAAA

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600 University Park Place, Ste 310

Birmingham, AL 35209

lee@kerper-bowron.com

205-870-0595

## Work Experience

### Kerper and Bowron LLC

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Birmingham, AL

Principal

March 2001 - Present

## Representative Expert Work

### Relevant Cases

MINERVA MARTINEZ, et al v. NISSAN NORTH AMERICA, INC.

SHARON CHENG, et al v. TOYOTA MOTOR CORPORATION

KIM SEGEBARTH, et al v. CERTAINTEED CORPORATION

TERI CALLEN, et al v. DAIMLER AG and MERCEDES BENZ USA, LLC

TERESA STRINGER, et al v. NISSAN OF NORTH AMERICA, INC, and NISSAN MOTOR CO., LTD

QUACKENBUSH, et al v. AMERICAN HONDA MOTOR CO.

LESLEY CONTI, et al v. AMERICAN HONDA MOTOR CO.

JIMMY BANH, et al v. AMERICAN HONDA MOTOR CO.

RAFAEL SUAREZ, et al v. NISSAN NORTH AMERICA, INC.

STEVE CHAMBERS, et al v. WHIRLPOOL CORPORATION

EMILY PINON, et al v. DAIMLER AG and MERCEDES BENZ USA, LLC

CHRISTOPHER GANN, et al v. NISSAN NORTH AMERICA, INC

CHEYNE NORMAN, et al v. NISSAN NORTH AMERICA, INC.

PATRICIA WECKWERTH, et al v. NISSAN NORTH AMERICA, INC.

KENAI BATISTA, et al v. NISSAN NORTH AMERICA, INC.

- Founded consulting firm in March 2001. Clients include insurance companies, state governments, reinsurance companies, managing general agencies and law firms.
- Practice focuses on extended service contract, GAP, and captive market. Representative projects include:
  - Statutory Loss Reserve Opinions for over 1.1 billion in gross loss and premium reserves in 2023
  - Product development for major auto service contract companies

- Evaluation of liabilities for a major risk retention group for auto service contract
- Auto service contract rate filings for a major auto service contract company
- Development of pro-forma and reinsurance captive accounting for a regional service contract company
- Acquisition due diligence for purchase of a service contract writer.
- General management and strategic planning for reinsurance accounting function

**The General Auto Insurance, Nashville, TN**

February 1999 – February 2001

**Vice President and Chief Actuary**

September 1993 – February 1999

**Actuary**

Broad responsibility for reserving and pricing for a book of private passenger, reinsurance, and captive operations. Managed the staff of both the product management and the actuarial department.

- Developed data warehouse.
- Reported to the CEO and participated in strategic planning, reinsurance strategies and information system implementations.
- Supervised the pricing and product development of a new non-standard program in several states.
- Responsible for all actuarial activities of the company, including ratemaking, reserving and statistical reporting.
- Assisted in acquisitions and negotiated loss portfolio transfer of reserve liabilities.

**Alfa Insurance Companies, Montgomery, AL**

July 1990 – August 1993

**Actuarial Analyst**

- Ratemaking for second largest insurer in the state of Alabama

**Professional Activities**

Associate, Casualty Actuarial Society Member, American Academy of Actuaries

Approved Actuary for Captive Feasibility Studies, Alabama, Oklahoma, Tennessee, South Carolina, and the District of Columbia

<b>Activity</b>	<b>Date</b>
Committee Member, CAS CASE Competition Committee	Current
Speaker - Actuarial Symposium	2013-2024
Credit Insurers Association (CIA) Annual Meeting	2019,2021,2022
Speaker, Southwest Actuarial Forum	Spring 2008
Speaker, Quebec Actuarial	Spring 2008
Speaker, Casualty Actuaries of the Southeast	Fall 1998, March 2001, Fall 2007
Speaker, CAS Annual Meeting	Fall 2007
Speaker, Midwest Actuarial Forum	Fall 2007
Panelist, Ratemaking Seminar	2001-2002
Former Chair, CAS Open-Source Software Committee	
Former Member, Casualty Actuarial Exam Committee	

## **Publications**

<b><u>Title</u></b>	<b><u>Publisher</u></b>	<b><u>Year</u></b>
Will ASC 606 Impact Me?	Providers and Administrators Magazine	2019
Considerations When Designing New Products: An Update July 18, 2018	Providers and Administrators Magazine	2018
What's Going on With GAP in 2017?	Providers and Administrators Magazine	2017
What's Going on With GAP?	Providers and Administrators Magazine	2016
VSCs in 2016: New Terms, New Costs	Providers and Administrators Magazine	2016
Does the IRS Notice 2016-66 Impact You?	Providers and Administrators Magazine	2016
GAP Insurance—Techniques and Challenges	Casualty Actuarial Society	2011
Month-to-Month Vehicle Service Contracts	Providers and Administrators Magazine	2011
An Exposure Based Approach to Automobile Service Contract Ratemaking and Reserving	Casualty Actuarial Society	2006
Zipf's Law	Contingencies	2004
Ratemaking for Maximum Profitability	Ratemaking Discussion Forum	2001
Staying in the Race	Best's Review	2001

## **Education**

### **BS,Mathematics, 1989**

University of the South    Sewanee, TN

# **Exhibit II**





**Mazda 24 Month Extended Warranty  
Analysis of Benefits**

**June 11, 2025**

**Submitted By:  
Kerper and Bowron, LLC  
600 University Park Place Suite 310  
Birmingham, AL 35209  
(205) 870-0595  
Prepared by: Lee Bowron, ACAS, MAAA**

**Mazda Infotainment 24 Month Warranty Extension  
Analysis of Benefits**

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## **Mazda Infotainment 24 Month Warranty Extension Analysis of Benefits**

### **Purpose of Report**

At the request of the Co-Lead Class Counsel, Kerper and Bowron LLC calculated a range of fair market values for an extended service contract covering the infotainment system and related components for 24 months after the expiration of the manufacturer's powertrain warranty.

The vehicles eligible for extended warranties are equipped with the 6.5 generation Mazda Connect (Infotainment) and include the following vehicles:

<b>Model</b>	<b>Model Years</b>
Mazda 3	2014-2018
Mazda 6	2016-2021
CX-3	2016-2021
CX-5	2016-2020
CX-9	2016-2020
MX-5	2016-2021

The fair market values were calculated for a 24-month extension to the infotainment portion of the warranty, which is 36 months or 36,000 miles, whichever occurs first.

The data and conclusions in this report are provided to support the proposed settlement and may not be appropriate for any other purpose.

Kerper and Bowron LLC is available to answer questions regarding this report or any other aspect of our review.

### **Executive Summary**

Our point estimate for the suggested fair market value for the extended warranty as described in the settlement is shown in the table below:

<b>Mazda 24 Month Extension</b>			
<b>Expected Retail Costs</b>			
	(1) Vehicles in Class	(2) Expected Total Benefit (000s)	(3) Cost Per Warranty
Class Vehicles	1,668,244	37,950	22.75

The fair market value of a service contract is typically made up of three components: a loss fund, administrator cost, and marketing fee. The loss fund is generally the expected amount of losses plus a margin for premium taxes and profit (insurance cost). The

## **Mazda Infotainment 24 Month Warranty Extension Analysis of Benefits**

administrator will receive a fee for administering the product, such as issuing the service contract, adjudicating claims and processing transfer and other transactions. The marketer will receive a fee for selling the product.

Adding the insurance, administrator, and marketer pieces to the expected losses, we get a range of suggested fair market values for this warranty.

We are expecting the proposed Settlement to become effective on February 17, 2025. Therefore, monthly estimated claims prior to March 1, 2025, will be considered reimbursement claims and thus not included in this report. Only monthly claims estimated on and after March 1, 2025, will be included in the fair market value.

The expected benefit in this report is an estimate of the value made available to Class Members by the Settlement. The Settlement makes the warranty available to all Class Members who fall within the applicable time limits. The expected benefit measures the value of this relief made available to Class Members.

### **Number of Vehicles Affected**

The number of Class Vehicles described above is summarized in the table below:

Table 1

Model Year	Class Vehicles
2014	108,670
2015	111,710
2016	320,127
2017	308,949
2018	320,731
2019	239,022
2020	225,233
2021	33,803
Total	1,668,244

The settlement documents indicate that the warranty extension will begin after the Settlement becomes effective. Our estimate is based on all claims which are projected to occur after the expiration of the original underlying manufacturer's warranty but within the 24-month extension.

## Mazda Infotainment 24 Month Warranty Extension Analysis of Benefits

### Data Analyzed

Co-Lead Class Counsel and Mazda provided the following data:

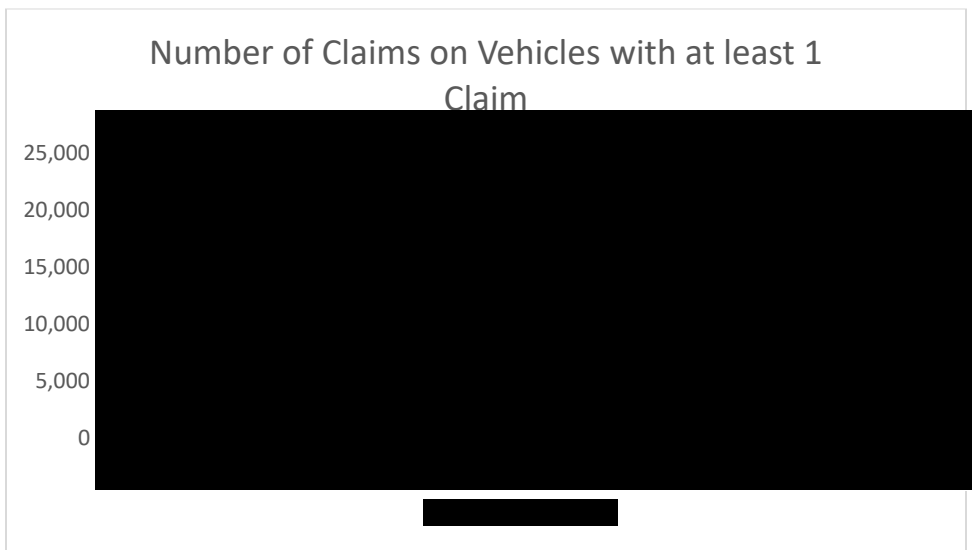
- Motion for Preliminary Approval and the Settlement Agreement Amended Consolidated Class Action Complaint
- Detailed listing of warranty claims for Mazda 3 and CX-5 models

The detailed warranty data was extensive, and most claims noted the mileage, claim date, paid amount, cause of loss and other factors. This warranty data consisted of Mazda 3 and CX-5 model Class Vehicles.

Table 2: Claim Counts and Paid Amounts

	Paid (000s)	Claim Count
Mazda 3 and CX-5		

Chart 1



A percentage of claims appeared to be paid outside of the Manufacturer's Warranty of 36 months and 36,000. The table below shows claims which are older than 61 months and 60,001 miles. The slightly additional time is to account for claims which might be paid to accommodate customers.

Table 3 – In Warranty Claims

	In Warranty Paid (000s)	Out of Warranty Paid (000s)
Mazda 3 and CX-5		

## Mazda Infotainment 24 Month Warranty Extension Analysis of Benefits

### Major and Minor Claims

There are several different types of claims related to the infotainment system. These included relatively minor inspections to full infotainment system replacements. The data included detailed information for each claim, the identifiers were consistent enough to accurately identify all the major and minor claims. We noticed claims identified as “CMU” and “2016-2020 Mazda CX-5 Display Kit and Display Claims CK” had significantly higher frequencies and severities, thus considered to be major claims. The table below shows the splits:

Table 4 – In Warranty Claims (Major vs Minor)

Class Vehicles	Major Claims		Minor Claims		Percent Major	
	Paid (000s)	Count	Paid (000s)	Count	Paid	Count
Mazda 3 and CX-5	█	█	█	█	█	█

The reason for separating these claims is that this allowed the focus of the analysis to be on modelling the future exposure of the Major claims. Minor claims might distort the model, and each minor claim category represents a relatively small percentage of the overall liability to Mazda.

The Minor claims were assumed to be in proportion to their historical average and added to the projected Major claims to form the ultimate estimated cost for Mazda.

### Development of Expected Losses

The estimate of expected losses is further discussed below. The general formula utilized is:

$$\begin{aligned} & (\text{Number of vehicles in extended warranty period ( or Exposures)}) \\ & \quad \times \text{Frequency of Major Claims (CMU) in extended warranty period} \\ & \quad \times \text{Severity of Major Claims (CMU) in extended warranty period} \\ & \quad + \text{Estimate of Minor Claims} \end{aligned}$$

### Development of Exposures

Mazda provided the total number of eligible vehicles, which was used in conjunction with publicly available sales by model year data from GoodCarBadCar to estimate the total number of eligible vehicles by model year. Also provided in the detailed data was the in-service date of each vehicle which had a claim. Using this data, we estimated the month and year that each vehicle was sold.

A number of vehicles will drive more than the 36,000 miles underlying the manufacturer’s warranty. For this reason, the number of eligible vehicles will decrease each month as more vehicles “mile out.” The claims data provided indicated mileage at the time of the claim as well as the in-service date of the vehicle. Using this information, we reduced exposures using the factors on Exhibit V. Exposures were further adjusted for vehicles no longer in service based on publicly available data from the NHTSA

## **Mazda Infotainment 24 Month Warranty Extension Analysis of Benefits**

Vehicle Survivability report adjusted for the average vehicle age of 12.5 years. These factors can be seen in Exhibit VI.

In a similar way, exposure estimates were formed for the 24 months/unlimited-mile extension starting on March 1, 2025.

### **Frequency of Problem**

Frequency of infotainment problems were calculated by aging out exposures and triangulating the claim counts. Since the provided warranty data included only Mazda 3 and CX-5 model Class Vehicles, a separate but identically derived exposure for this subset was used in frequency calculations. By dividing the claim counts by the exposures, we were able to get a good feeling for how the frequencies develop over time. The derivation of our frequency assumptions is based on Mazda Warranty data for the Class Vehicles; due to the confidentiality of this data, we have excluded the underlying trends from the report that informed our selection. Frequency selections are on Exhibit VIII.

### **Severity of Repair**

Severity selections are included in Exhibit VII. Because severity is subject to increase over time, we selected a current severity and an inflationary estimate and adjusted the expected cost over time. In general, severities were stable, and inflationary measures were not that divergent from recent inflation patterns. The derivation of our severity assumptions is based on Mazda Warranty data for Class Vehicles; due to the confidentiality of this data, we have excluded the underlying trends from the report that informed our selection.

### **Development of Expected Loss**

On Exhibit IV, the expected losses were developed using the selected frequency, severity, and exposures to calculate the expected loss for each month.

### **Minor Cost Provision**

As noted above, the analysis only considers claims identified as CMU and "2016-2020 Mazda CX-5 Display Kit and Display Claims CK" claims. The historical percentage of claims not identified as CMU or "2016-2020 Mazda CX-5 Display Kit and Display Claims CK" is examined, and this margin is added to the expected loss. This can be seen on Exhibit III.

### **Insurance Expenses**

Insurance expenses are relatively small and reflect premium tax and a profit margin for the cost of capital. The amount selected was 2.5% for premium taxes and 4% for profit, for a 6.5% margin.

## **Mazda Infotainment 24 Month Warranty Extension Analysis of Benefits**

### **Administrative Costs**

We estimated administrative costs to be \$3.10 on this program. This cost was calculated by dividing the expected costs by the vehicles in the Class and multiplying by 40%.

### **Marketing Fee**

Markups on these programs by auto dealers or service contract writers vary widely but are usually around 100% (with direct marketed programs having, in general, even higher markups). Often the markups are flat and since the service contract cost is low, the percentage markup would likely be higher in the marketplace, but we have selected a 100% markup on loss cost and administrator cost.

### **Range of Results**

As this is a point estimate and the actual results are subject to deviation, we formed a range of reasonable estimates. This does not mean that the actual results will be within this range, but rather that the expected value of the benefits of the program can be reasonably ascertained within this range.

For the expected loss estimate, we created a range of +/-20%. We did not form a range around the other elements, such as markup, insurance costs and administrative fees. However, since some of these elements are a function of the expected losses, lower expected losses will result in lower estimates for these items as well.

### **Scope and Limitations**

#### *Data Reliance*

In performing this analysis, we relied upon data and other information provided to us by Co-Lead Class Counsel and Mazda North America (Mazda), as well as industry sources of data. We did not audit or verify this data and information. If the underlying data or information is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete.

We performed a limited review of the data used directly in our analysis for reasonableness and consistency. We did not find material defects in the data.

If there are material defects in the data, it is possible that they would be uncovered by a detailed, systematic review and comparison of the data to search for data values that are questionable or relationships that are materially inconsistent. Such a review was beyond the scope of our assignment.

#### *Significant Digits*

Numbers in the exhibits are generally shown to more significant digits than their accuracy suggests. This has been done to simplify review of the calculations.



## **Mazda Infotainment 24 Month Warranty Extension Analysis of Benefits**

### *Interpretation of Conclusions*

Some of the assumptions, methods, and conclusions in this report are of a significantly technical nature. The recipient should understand the assumptions, methodology and possible variability in results that are inherent in our conclusions. We are available to discuss our assumptions, methodology and conclusions in greater detail.

### *Uncertainty*

Due to the uncertainties inherent in the estimation of future costs, it cannot be guaranteed that the estimates set forth in the report will not prove to be inadequate or excessive and actual costs may vary significantly from our estimates.

### *Unanticipated Changes*

Unanticipated changes in factors such as judicial decisions, legislation actions, claim consciousness, claim management, claim settlement practices, and economic conditions may significantly alter the conclusions.

### *Best Estimate*

These caveats and limitations notwithstanding, the conclusions represent our best estimate of the total expected Class Benefit and are made within a reasonable degree of actuarial probability or certainty.

**24 Month Extension**  
**Development of Total Expected Liability**

	(1)	(2)	(3)	(4)
	Vehicles in Class	Expected Total Benefit (000s)	Class Benefit Low End of Range (000s)	Class Benefit High End of Range (000s)
Class Vehicles				
(2)	(7) from Ex II - Extd Warranty			
(3)	(9) from Ex II - Extd Warranty			
(4)	(10) from Ex II - Extd Warranty			

### Development of Expected Extended Warranty

[illegible]

**24 Month Extension  
Minor Claims Provision (000s)**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Expected Major Costs	Historical Major Costs	Historical Minor Costs	Percentage Historical Minor	Selected Minor Percentage	Expected Minor Costs	Expected Total Costs
Model Year							
2014							
2015							
2016							
2017							
2018							
2019							
2020							
2021							

- (1)
- (2)
- (3)
- (4)
- (5)
- (6)
- (7)

## 24 Month Extension

### Development of Loss Estimate - Mazda Class Vehicles 2014

Frequency	████████
Severity	██
Trend	████

(1)

(2)

(3)

(4)

Mazda Class Vehicles 2014				
Calendar Year Month	Settlement Exposures	Expected Claims	Expected Severity	Expected Losses (000s)
2014 Jan	100	100	100	100
2014 Feb	100	100	100	100
2014 Mar	100	100	100	100
2014 Apr	100	100	100	100
2014 May	100	100	100	100
2014 Jun	100	100	100	100
2014 Jul	100	100	100	100
2014 Aug	100	100	100	100
2014 Sep	100	100	100	100
2014 Oct	100	100	100	100
2014 Nov	100	100	100	100
2014 Dec	100	100	100	100

## 24 Month Extension

### Development of Loss Estimate - Mazda Class Vehicles 2014

Frequency	████████
Severity	████
Trend	████

(1)

(2)

(3)

(4)

Mazda Class Vehicles 2014				
Calendar Year Month	Settlement Exposures	Expected Claims	Expected Severity	Expected Losses (000s)
2014 Jan	100	100	100	100
2014 Feb	100	100	100	100
2014 Mar	100	100	100	100
2014 Apr	100	100	100	100
2014 May	100	100	100	100
2014 Jun	100	100	100	100
2014 Jul	100	100	100	100
2014 Aug	100	100	100	100
2014 Sep	100	100	100	100
2014 Oct	100	100	100	100
2014 Nov	100	100	100	100
2014 Dec	100	100	100	100

## 24 Month Extension

### Development of Loss Estimate - Mazda Class Vehicles 2014

Frequency	████████
Severity	████
Trend	████

(1)

(2)

(3)

(4)

Mazda Class Vehicles 2014									
Calendar Year Month		Settlement Exposures		Expected Claims		Expected Severity		Expected Losses (000s)	

## 24 Month Extension

### Development of Loss Estimate - Mazda Class Vehicles 2014

Frequency	████████
Severity	████
Trend	████

(1)

(2)

(3)

(4)

Mazda Class Vehicles 2014				
Calendar Year	Settlement	Expected	Expected	Expected



## 24 Month Extension

### Development of Loss Estimate - Mazda Class Vehicles 2014

Frequency	██████████
Severity	████
Trend	████

(1)

(2)

(3)

(4)

Mazda Class Vehicles 2014				
Calendar Year Month	Settlement Exposures	Expected Claims	Expected Severity	Expected Losses (000s)
2014-01	10000	10000	10000	10000
2014-02	10000	10000	10000	10000
2014-03	10000	10000	10000	10000
2014-04	10000	10000	10000	10000
2014-05	10000	10000	10000	10000
2014-06	10000	10000	10000	10000
2014-07	10000	10000	10000	10000
2014-08	10000	10000	10000	10000
2014-09	10000	10000	10000	10000
2014-10	10000	10000	10000	10000
2014-11	10000	10000	10000	10000
2014-12	10000	10000	10000	10000




## 24 Month Extension

### Development of Loss Estimate - Mazda Class Vehicles 2014


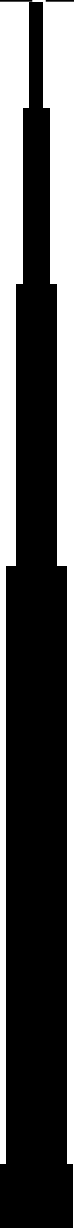



Frequency	████████
Severity	████
Trend	████

[illegible]




**24 Month Extension**  
**Development of Loss Estimate - Mazda Class Vehicles 2015**

Frequency	
Severity	
Trend	






(1) (2) (3) (4)

Mazda Class Vehicles 2015				
Calendar Year Month	Settlement Exposures	Expected Claims	Expected Severity	Expected Losses (000s)
				

**24 Month Extension**  
**Development of Loss Estimate - Mazda Class Vehicles 2015**

Frequency	
Severity	
Trend	

(1) (2) (3) (4)

Mazda Class Vehicles 2015				
Calendar Year Month	Settlement Exposures	Expected Claims	Expected Severity	Expected Losses (000s)
				

## 24 Month Extension

### Development of Loss Estimate - Mazda Class Vehicles 2015

Frequency	████████
Severity	████
Trend	████

(4)

[illegible]

## 24 Month Extension

### Development of Loss Estimate - Mazda Class Vehicles 2015

Frequency	██████████
Severity	████
Trend	██████████

(4)

Mazda Class Vehicles 2015									
Calendar Year Month		Settlement Exposures		Expected Claims		Expected Severity		Expected Losses (000s)	

## 24 Month Extension

### Development of Loss Estimate - Mazda Class Vehicles 2015

Frequency	██████████
Severity	████
Trend	██████████

(1)

(2)




(3)

(4)

[illegible]

## 24 Month Extension

### Development of Loss Estimate - Mazda Class Vehicles 2016

Frequency	
Severity	
Trend	




(4)

Mazda Class Vehicles 2016				
Calendar Year Month	Settlement Exposures	Expected Claims	Expected Severity	Expected Losses (000s)
2016-01	100	100	100	100
2016-02	100	100	100	100
2016-03	100	100	100	100
2016-04	100	100	100	100
2016-05	100	100	100	100
2016-06	100	100	100	100
2016-07	100	100	100	100
2016-08	100	100	100	100
2016-09	100	100	100	100
2016-10	100	100	100	100
2016-11	100	100	100	100
2016-12	100	100	100	100



## 24 Month Extension

### Development of Loss Estimate - Mazda Class Vehicles 2016




Frequency	
Severity	
Trend	

(4)

[illegible]

## 24 Month Extension

### Development of Loss Estimate - Mazda Class Vehicles 2016




Frequency	
Severity	
Trend	

(4)

[illegible]

## 24 Month Extension

### Development of Loss Estimate - Mazda Class Vehicles 2016

Frequency	
Severity	
Trend	

(4)

[illegible]

## 24 Month Extension




### Development of Loss Estimate - Mazda Class Vehicles 2016

Frequency	████████
Severity	████
Trend	████


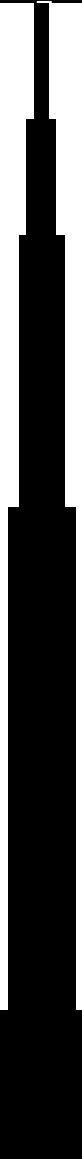



(4)

[illegible]




**24 Month Extension**  
**Development of Loss Estimate - Mazda Class Vehicles 2017**

Frequency	
Severity	
Trend	


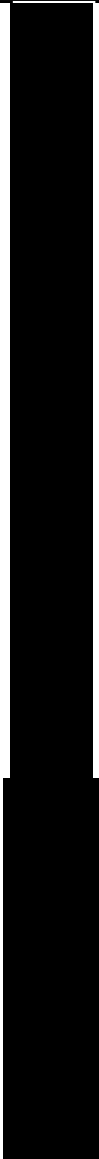



(1) (2) (3) (4)

Mazda Class Vehicles 2017				
Calendar Year Month	Settlement Exposures	Expected Claims	Expected Severity	Expected Losses (000s)
				

**24 Month Extension**  
**Development of Loss Estimate - Mazda Class Vehicles 2017**

Frequency	
Severity	
Trend	

(1) (2) (3) (4)

Mazda Class Vehicles 2017				
Calendar Year Month	Settlement Exposures	Expected Claims	Expected Severity	Expected Losses (000s)
				

## 24 Month Extension

### Development of Loss Estimate - Mazda Class Vehicles 2017

Frequency	████████
Severity	████
Trend	████

(1) (2) (3) (4)

[illegible]

## 24 Month Extension

### Development of Loss Estimate - Mazda Class Vehicles 2017

Frequency	████████
Severity	████
Trend	████

(1)                      (2)                      (3)                      (4)

Mazda Class Vehicles 2017					
Calendar Year Month	Settlement Exposures	Expected Claims	Expected Severity	Expected Losses (000s)	
		</			



## 24 Month Extension

### Development of Loss Estimate - Mazda Class Vehicles 2017

Frequency	████████
Severity	████
Trend	████

(1)                      (2)                      (3)                      (4)

Mazda Class Vehicles 2017				
Calendar Year Month	Settlement Exposures	Expected Claims	Expected Severity	Expected Losses (000s)
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
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24				
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26				
27				
28				
29				
30				
31				
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35				
36				
37				
38				
39				
40				
41				
42				
43				
44				
45				
46				
47				
48				
49				
50				
51				
52				
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66				
67				
68				
69				
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71				
72				
73				
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76				
77				
78				
79				
80				
81				
82				
83				
84				
85				
86				
87				
88				
89				
90				
91				
92				
93				
94				
95				
96				
97				
98				
99				
100				

## 24 Month Extension

### Development of Loss Estimate - Mazda Class Vehicles 2018

Frequency	████████
Severity	████
Trend	████

(1)

(2)

(3)

(4)

[illegible]

## 24 Month Extension

### Development of Loss Estimate - Mazda Class Vehicles 2018

Frequency	████████
Severity	████
Trend	████

(1)                      (2)                      (3)                      (4)

Mazda Class Vehicles 2018				
Calendar Year Month	Settlement Exposures	Expected Claims	Expected Severity	Expected Losses (000s)
		</		

## 24 Month Extension

### Development of Loss Estimate - Mazda Class Vehicles 2018

Frequency	████████
Severity	████
Trend	████

(1)                      (2)                      (3)                      (4)

[illegible]

## 24 Month Extension

### Development of Loss Estimate - Mazda Class Vehicles 2018

Frequency	████████
Severity	████
Trend	████

(1)                      (2)                      (3)                      (4)

[illegible]

## 24 Month Extension

### Development of Loss Estimate - Mazda Class Vehicles 2019

Frequency	████████
Severity	████
Trend	████

(1)

(2)

(3)

(4)

Mazda Class Vehicles 2019				
Calendar Year Month	Settlement Exposures	Expected Claims	Expected Severity	Expected Losses (000s)
2019-01	10000	10000	10000	10000
2019-02	10000	10000	10000	10000
2019-03	10000	10000	10000	10000
2019-04	10000	10000	10000	10000
2019-05	10000	10000	10000	10000
2019-06	10000	10000	10000	10000
2019-07	10000	10000	10000	10000
2019-08	10000	10000	10000	10000
2019-09	10000	10000	10000	10000
2019-10	10000	10000	10000	10000
2019-11	10000	10000	10000	10000
2019-12	10000	10000	10000	10000

## 24 Month Extension

### Development of Loss Estimate - Mazda Class Vehicles 2019

Frequency	████████
Severity	████
Trend	████

(1)

(2)

(3)

(4)

[illegible]

## 24 Month Extension

### Development of Loss Estimate - Mazda Class Vehicles 2019

Frequency	████████
Severity	████
Trend	████

(1)

(2)

(3)

(4)

[illegible]



## 24 Month Extension

### Development of Loss Estimate - Mazda Class Vehicles 2020

Frequency	████████
Severity	████
Trend	████████

(4)

[illegible]

## 24 Month Extension

### Development of Loss Estimate - Mazda Class Vehicles 2020

Frequency	████████
Severity	████
Trend	████

(4)

Mazda Class Vehicles 2020				
Calendar Year Month	Settlement Exposures	Expected Claims	Expected Severity	Expected Losses (000s)
2020-01	100	100	100	100
2020-02	100	100	100	100
2020-03	100	100	100	100
2020-04	100	100	100	100
2020-05	100	100	100	100
2020-06	100	100	100	100
2020-07	100	100	100	100
2020-08	100	100	100	100
2020-09	100	100	100	100
2020-10	100	100	100	100
2020-11	100	100	100	100
2020-12	100	100	100	100

## 24 Month Extension

### Development of Loss Estimate - Mazda Class Vehicles 2020

Frequency	████████
Severity	████
Trend	████████

(4)

[illegible]

## 24 Month Extension

### Development of Loss Estimate - Mazda Class Vehicles 2021

Frequency	████████
Severity	████
Trend	████

(1)                      (2)                      (3)                      (4)

[illegible]

## 24 Month Extension

### Development of Loss Estimate - Mazda Class Vehicles 2021

Frequency	████████
Severity	████
Trend	████

(1) (2) (3) (4)

[illegible]

## 24 Month Extension

### Development of Loss Estimate - Mazda Class Vehicles 2021

Frequency	████████
Severity	████
Trend	████

(1) (2) (3) (4)

[illegible]

### Exposure Factors

### Percent of Vehicles in Each Category at Each Month After Sale of Vehicle

[illegible]

### Percent of Vehicles in Each Category at Each Month After Sale of Vehicle

[illegible]

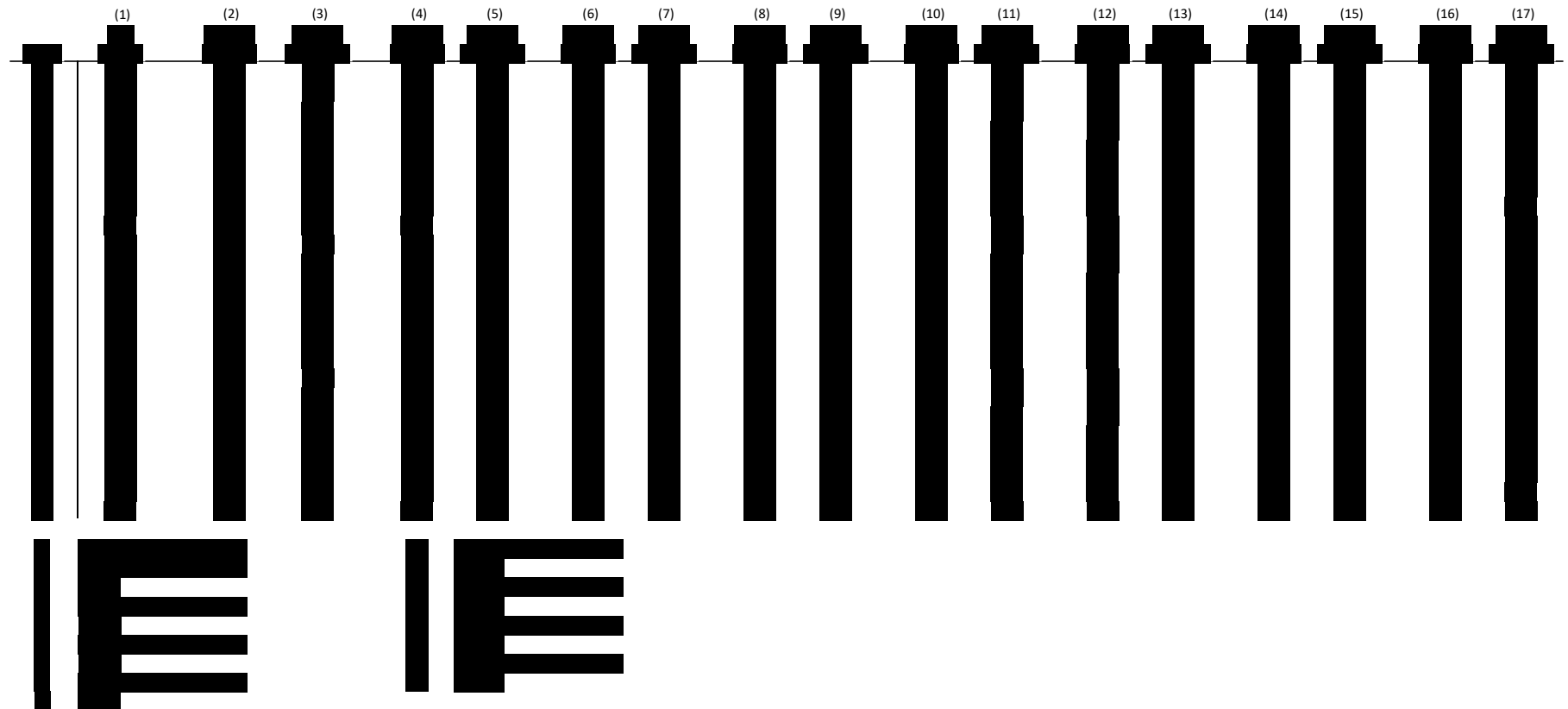


### Exposure Factors

### Percent of Vehicles in Each Category at Each Month After Sale of Vehicle

[illegible]

### Percent of Vehicles in Each Category at Each Month After Sale of Vehicle



### 24 Month Extension Development of Scrappage Rate Class Vehicles

Month	(1) Scrap Rate	(2) Vehicles
1	0.0000	0
2	0.0000	0
3	0.0000	0
4	0.0000	0
5	0.0000	0
6	0.0000	0
7	0.0000	0
8	0.0000	0
9	0.0000	0
10	0.0000	0
11	0.0000	0
12	0.0000	0
13	0.0000	0
14	0.0000	0
15	0.0000	0
16	0.0000	0
17	0.0000	0
18	0.0000	0
19	0.0000	0
20	0.0000	0
21	0.0000	0
22	0.0000	0
23	0.0000	0
24	0.0000	0
25	0.0000	0
26	0.0000	0
27	0.0000	0
28	0.0000	0
29	0.0000	0
30	0.0000	0
31	0.0000	0
32	0.0000	0
33	0.0000	0
34	0.0000	0
35	0.0000	0
36	0.0000	0
37	0.0000	0
38	0.0000	0
39	0.0000	0
40	0.0000	0
41	0.0000	0
42	0.0000	0
43	0.0000	0
44	0.0000	0
45	0.0000	0
46	0.0000	0
47	0.0000	0
48	0.0000	0
49	0.0000	0
50	0.0000	0
51	0.0000	0
52	0.0000	0
53	0.0000	0
54	0.0000	0
55	0.0000	0
56	0.0000	0
57	0.0000	0
58	0.0000	0
59	0.0000	0
60	0.0000	0
61	0.0000	0
62	0.0000	0
63	0.0000	0
64	0.0000	0
65	0.0000	0
66	0.0000	0
67	0.0000	0
68	0.0000	0
69	0.0000	0
70	0.0000	0
71	0.0000	0
72	0.0000	0
73	0.0000	0
74	0.0000	0
75	0.0000	0
76	0.0000	0
77	0.0000	0
78	0.0000	0
79	0.0000	0
80	0.0000	0
81	0.0000	0
82	0.0000	0
83	0.0000	0
84	0.0000	0
85	0.0000	0
86	0.0000	0
87	0.0000	0
88	0.0000	0
89	0.0000	0
90	0.0000	0
91	0.0000	0
92	0.0000	0
93	0.0000	0
94	0.0000	0
95	0.0000	0
96	0.0000	0
97	0.0000	0
98	0.0000	0
99	0.0000	0
100	0.0000	0

### 24 Month Extension Development of Scrappage Rate Class Vehicles

			(1)	(2)
Month			Scrap Rate	Vehicles

### 24 Month Extension Development of Scrappage Rate Class Vehicles

(1)	(2)
Month	Scrap Rate
	Vehicles

### 24 Month Extension Development of Scrappage Rate Class Vehicles

[illegible]

### 24 Month Extension Development of Scrappage Rate Class Vehicles

[illegible]

- (1) Scrap rate pattern used from NHTSA Vehicle Survivability report adjusted for average vehicle age of 12.5 years
- (2) Month 1: 1-(1) | Months 2+: [1 - (1)] x Previous Month (2)

## 24 Month Extension CMU Claim Severity

Mazda 3 and CX-5 Class Vehicles					
Calendar Year Month	(1) Paid Losses (000s)	(2) Claims	(3) Severity	(4) Fitted Severity	



## 24 Month Extension CMU Claim Severity

	(1)	(2)	(3)	(4)
	<b>Mazda 3 and CX-5 Class Vehicles</b>			
Calendar Year Month	Paid Losses (000s)	Claims	Severity	Fitted Severity
Trend				
Selected Trend				
Trended Current				
Selected Current				

## Mazda 3 and CX-5

Model	Year	Indicated Frequency	Selected Frequency

[illegible]

### Mazda 3 and CX-5

Model	Year	Indicated Frequency	Selected Frequency

[illegible]

## Mazda 3 and CX-5

Model	Year	Indicated Frequency	Selected Frequency

[illegible]

24 Month Extension  
CMU Claim Frequency  
By Model Year Purch Year/Qtr  
Mazda 3 and CX-5

Model Year	Indicated Frequency	Selected Frequency

MY	Purch Yr/Qtr	3	6	9	12	15	18	21	24	27	30	33	36

Weighted Average

2014													
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24 Month Extension  
CMU Claim Frequency  
By Model Year Purch Year/Qtr  
Mazda 3 and CX-5

Model Year	Indicated Frequency	Selected Frequency

MY	Purch Yr/Qtr	3	6	9	12	15	18	21	24	27	30	33	36

