



TMPAA DEMYSTIFYING PREDICTIVE ANALYTICS

May 8, 2013



AGENDA

The Basics of Predictive Analytics

What it is

How it can be used

What it does

Misconceptions of Predictive Analytics

Predictive Analytics Applied to Program Administrators

Why approach it as an MGA/PA

How to get started + general process

A Case Study – Distinguished Programs

Alternative Options



THE BASICS OF PREDICTIVE ANALYTICS

WHAT IS PREDICTIVE ANALYTICS?

Predictive analytics encompasses a variety of techniques that analyze current and historical facts to make predictions about future events.

Optimization

Analyses

Data Mining

Pattern Combinations

Statistics

Foresight

Modeling

Machine Learning

Insight

WHAT IS PREDICTIVE ANALYTICS USED FOR?

Find Prospects

- Prospect models
- Marketing channel models
- Profitable/good agents
- Good potential agents/areas

Onboard Clients

- Pricing
- Underwriting decisions
- Customer lifetime value/retention
- Cost avoidance
- Elasticity

Manage Clients

- Renewal pricing
- Customer lifetime value/retention
- Cost avoidance
- Elasticity
- Soft fraud detection
- Predict operations activity that generates expense
- Ceding/Depopulation Decisions

Manage Claims

- Severity modeling
- Claims triage
- Settlement optimization
- Fraud detection

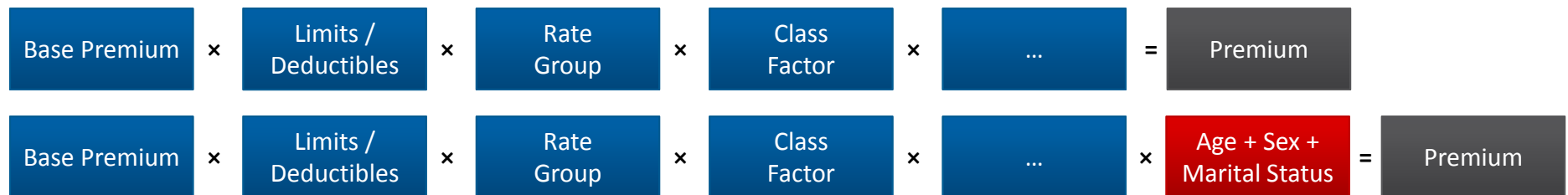
VARIABLE INTERACTIONS: FINDING PATTERNS USING THE LATEST TECHNIQUE

Purpose: Leveraging all the value of your data

- Abundance of data: policies, claims, call center, census, 3rd party, credit, telematics, ...
- Pressure to grow profitably and answer key business questions utilizing available resources

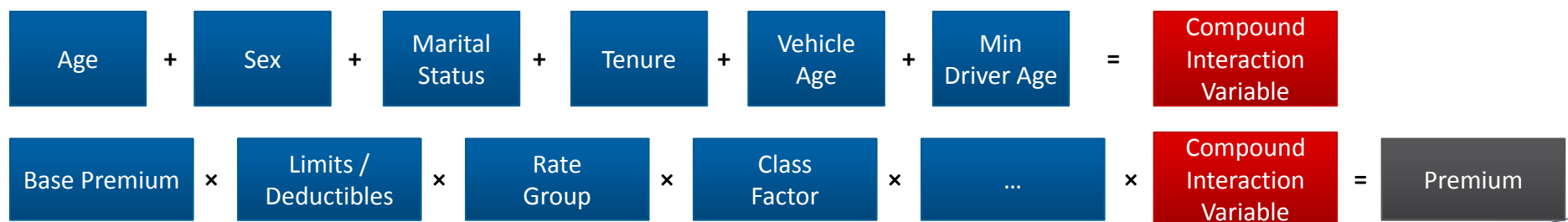
Need proper people, process, and technology in place to leverage value of data

Method A: Traditional Rating Algorithm Paradigm



- Primarily used for ratemaking

Method B: Automated Pattern Recognition



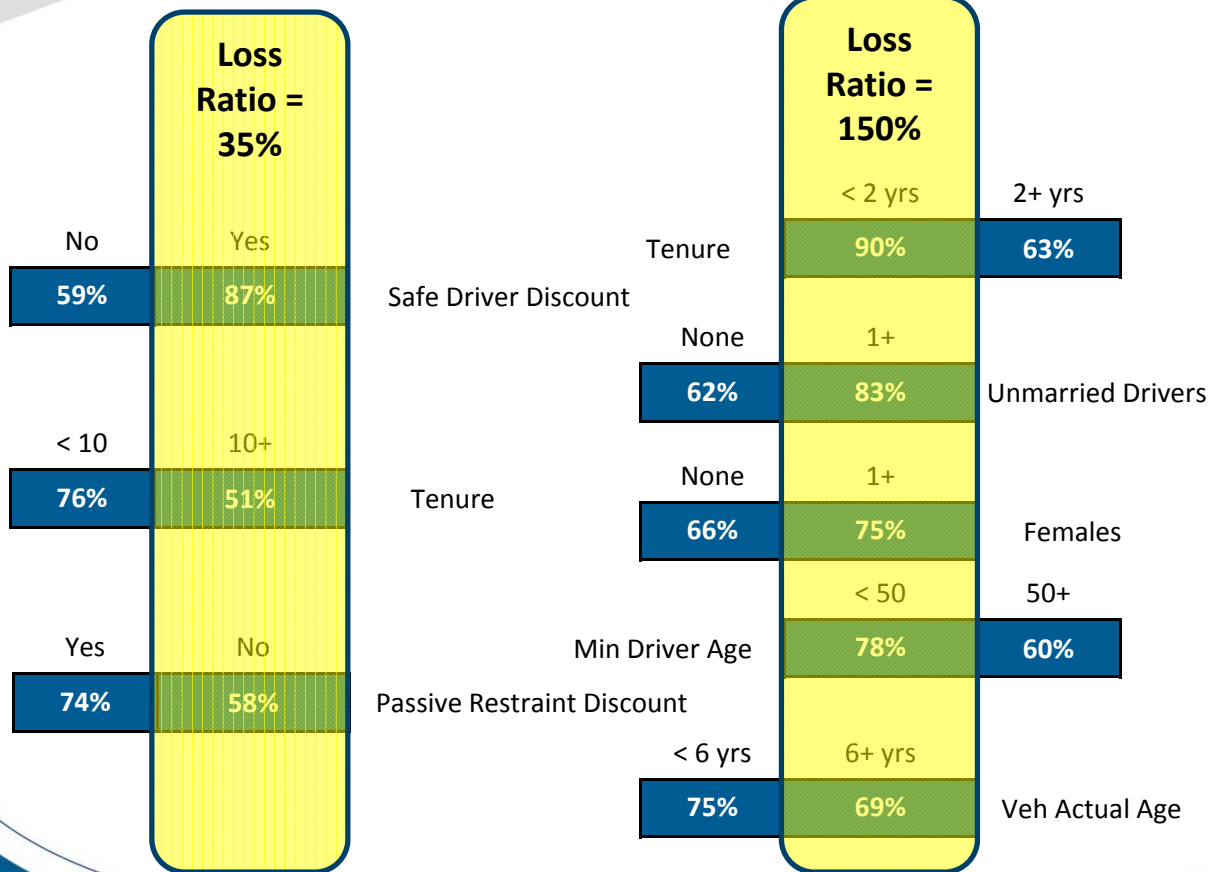
- Used for more accurate ratemaking
- Risk predictors also used for underwriting, marketing, sales, distribution and agency management, operations management, ...

Advanced Pattern Recognition

Private Passenger Auto
(Total Portfolio Loss Ratio = 71%)

Best Customers

Worst Customers



Identify New Patterns in the Data

SOME OF THE BEST CUSTOMERS ARE OVERPRICED

Unique Pattern: Combining

- Safe Driver Discount
- 10 year old policy, or older
- No Passive Restraints

produces lowest loss ratio of 35%, 36 points lower than carrier average.

SOME OF THE WORST CUSTOMERS ARE UNDERPRICED

Unique Pattern : Combining 5 unique variables, including customer tenure, marital status and vehicle age, identifies unprofitable business with loss ratios at 2x carrier average.



MISCONCEPTIONS OF PREDICTIVE ANALYTICS

ARE THESE MISCONCEPTIONS HOLDING YOU BACK?

“...requires clean data, and lots of it.”

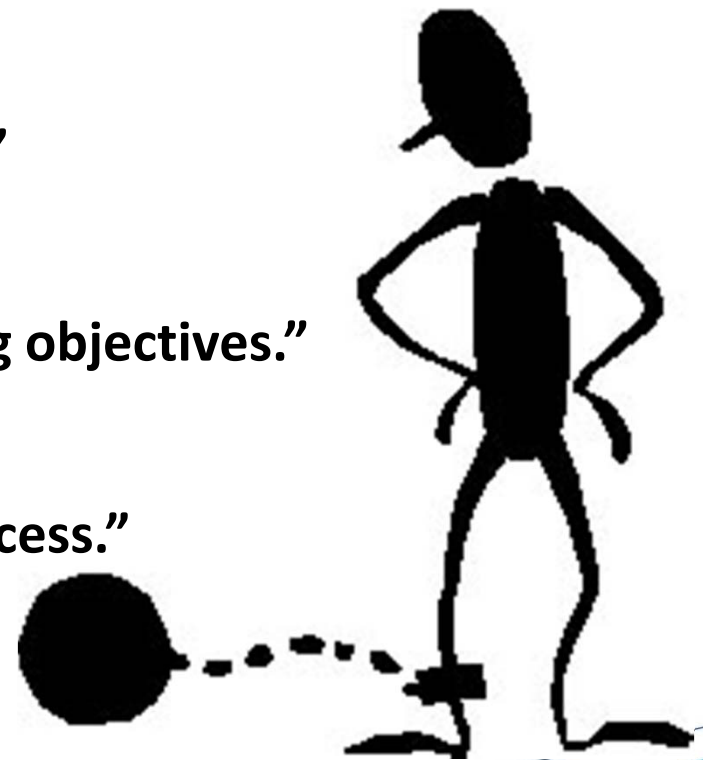
“...best for personal lines.”

“...mainly leveraged by sophisticated shops.”

“...only relevant for pricing and underwriting objectives.”

“...a lengthy, expensive, labor intensive process.”

“...isn't necessary to remain competitive.”



DEMYSTIFYING COMMON MISCONCEPTIONS

1. Data

- Significant insight uncovered on data of varying sizes
 - Specialty commercial insurance provider
 - 6 years of commercial auto data, around 5,000 claims
 - Identified significant mispricing; loss ratio variation of 151% to 26%; defined combination of characteristics driving losses
- No need to wait until your data is clean, sophisticated analytic methodologies can generally use the available data and find enough predictive signal to complete an analysis.

2. Line of Business

- Commercial line providers are realizing that better science can help underwriters do their jobs more effectively and help portfolios grow profitably

DEMYSTIFYING COMMON MISCONCEPTIONS

3. Level of Analytics Sophistication

- Good results can be achieved with less manpower
- Utilize professional services firms to do most or all of the heavy lifting for the analytical process

4. Relevance to a Range of Business Objectives

Use the power of analytics across the enterprise

- Customer acquisition—how and where to prospect for good business
- Target marketing—where to find the right customers, how to identify good customers
- Broker management—to help your company understand how your agency or broker force is performing, and how much of their “good business” is being submitted to your company
- Cost reduction—to reduce costs, for example, by making decisions on when to use outside data and when not to
- Retention management—to understand which of your company’s clients are most likely to leave and, in addition, which are likely to be profitable and unprofitable
- Claims process management—to understand which claims are likely to be fraudulent, which are likely to develop into large claims, and other factors

DEMYSTIFYING COMMON MISCONCEPTIONS

5. Time and Money

- Today's technology works much faster than traditional methods and implementation can occur in real time without an extensive IT project
- Consider the costs of predictive analytics against the cost of *not* putting to work the best available technology—and thereby face adverse selection from the sophisticated modeling of competitors

6. Necessity

- Adverse selection is real – don't get left behind
- Machine-learning-based predictive analytics provides superior results

The background is a solid blue color with several white, wavy, curved lines that create a sense of movement and depth. The lines are layered, with some appearing in front of others, and they curve across the top and bottom of the slide.

PREDICTIVE ANALYTICS APPLIED TO PROGRAM ADMINISTRATORS/MGAs

WHY SHOULD PROGRAM ADMINISTRATORS/MGAs USE PREDICTIVE ANALYTICS?

- A. Better products/programs
- B. Inclusivity: information sharing from Program Administrators/MGA to Program Managers at company partners
- C. Adverse selection
- D. You don't know what you don't know: changing markets, changing risks mean there is significant new knowledge to uncover
- E. Personal accountability as well as responsibility to provide the best product/program to your partners/clients/carriers
- F. Cost of not doing anything is greater than the cost of investing in a solution/expertise

GETTING STARTED: WHAT DOES THE PROCESS ENTAIL?

1. Determine objective
2. Find complimentary approach/methodology
3. Set up data
4. Run analyses + finalize models
5. Review results
6. Implement
7. Monitor
8. Repeat for any relevant objective

Three Main Components

- Have some ability to get to your data
- Choose a modeling methodology
- Results need to be implementable



A CASE STUDY
DISTINGUISHED PROGRAMS



**DISTINGUISHED
PROGRAMS**
We'll Be There.

PREDICTIVE ANALYTICS

OUR STORY

at Distinguished Programs Group

(17)

TARGET MARKETS MAY 2013

DP PROGRAMS ARE BROAD BASKETS OF REAL ESTATE

- PROPERTY, GENERAL LIABILITY AND UMBRELLA PROGRAMS
- UNDERWRITING – YES
- SEGMENTING – NO

Set the stage: The end of a long soft market, its early in 2002...

REMEMBERING EARLY 2000s:

Program results were challenged

- Lots of sudden unexpected loss development appearing
- Program markets begin to exit
- Shrinking capacity for programs
- Harder market suddenly upon us

WHAT DO WE DO FIRST?

TRADITIONAL IDEAS

- LOSS ANALYSIS – SPREAD SHEET MEETINGS!
- ARE THERE SHOCK LOSSES (groan but you know it was said) – HOW CAN WE AVOID THE REALLY UGLY STUFF...
- TPA REVIEW
 - CLAIMS LEAKAGE
 - RESERVING PRACTICES
- DATA REVIEW

ACTIONS TO TAKE:

- REVAMP APPLICATIONS
 - ASK THE RIGHT QUESTIONS
- WRITE BEST PRACTICES FOR TPAS
- **BUILD DATA BASE** - CAPTURE MORE DATA! WE NEED DATA, WE NEED DATA, WE NEED DATA...
- RETAIN ACTUARIES

HARD MARKET HITS...

- Capacity shrinks
- Markets change appetites
- Rates rise
- Program survival is tested
- Programs still standing return to profitability

But as the cycle works, it is short lived.

WE HAVE COLLECTED DATA! NOW WE HAVE TO USE IT. SOMETIME IN 2007...

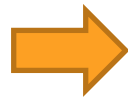
- SEE THE PROBLEMS SOONER
 - LOSS RATIOS UP
 - HIT RATIOS DOWN
 - RETENTION RATES DOWN
 - MARKET PRICING IS FURTHER AND FURTHER AWAY FROM TECHNICAL RATE
- RESULTS
 - PROFITABILITY MEDIOCRE
 - LOSING MARKET SHARE



ACTIONS INFORMED WITH A WEALTH OF DATA

**STUDY ALL
AVAILABLE DATA**

**DATA BASE FULLY
LOADED**



- **EXPOSURES FROM INSPECTIONS**
- **APPLICATION DATA**
- **THRID PARTY SOURCES:**
 - **ONLINE PROPERTY STATS**
 - **RISK EVALUATION TOOLS**
 - **RISK METER**
 - **REAL ESTATE DATA BASES**
 - **WEATHER DATA BASES**



ACTIONS ALL ABOUT USING THE DATA

- BEGIN BUILDING AN ANALYTICS PRACTICE
- TAKE REEMS OF DATA TO CASE WESTERN FOR REGRESSION ANALYSIS
- CONTRACT WITH LARGE DATA PROVIDERS TO GET MORE DATA
- BEGIN WORKING WITH PREDICTIVE ANALYTIC FIRM



DECISIONS BASED ON
ANALYTICS

BUILDING BUSINESS STRATEGY
AROUND DEEPER ANALYSIS



MANY DP STRATEGIES DEVELOPED FROM PREDICTIVE MODELING

PRICING AND
UNDERWRITING
STRATEGY

CREDITS / DEBITS

SEGMENTATION
STRATEGY

DEVELOPED NICHE
BUSINESS

DISTRIBUTION
STRATEGY

WHERE TO SELL AND
TO WHOM



**DISTINGUISHED
PROGRAMS**
We'll Be There.


Solutions in a softening market

AN ANALYSIS OF OUR PROPERTY OWNERS PROGRAM “POP”




MONOLINE GENERAL LIABILITY

New Business Submission Statistics


Calendar Year	Submitted	Bound	Hit Ratio
2005	4544	711	16%
2006	6621	739	11%
2007	7263	530	7%
2008	7361	453	6% 

Renewal Submission Statistics


Calendar Year	Renewals	Bound	Retention
2005	887	740	83%
2006	1356	1035	76%
2007	1580	1158	73%
2008	1526	1038	68% 

MONOLINE PROPERTY

New Business Submission Statistics

Calendar Year	Submitted	Bound	Hit Ratio
2005	4499	583	13%
2006	6570	525	8%
2007	7171	263	4%
2008	7054	174	2% 

Renewal Submission Statistics

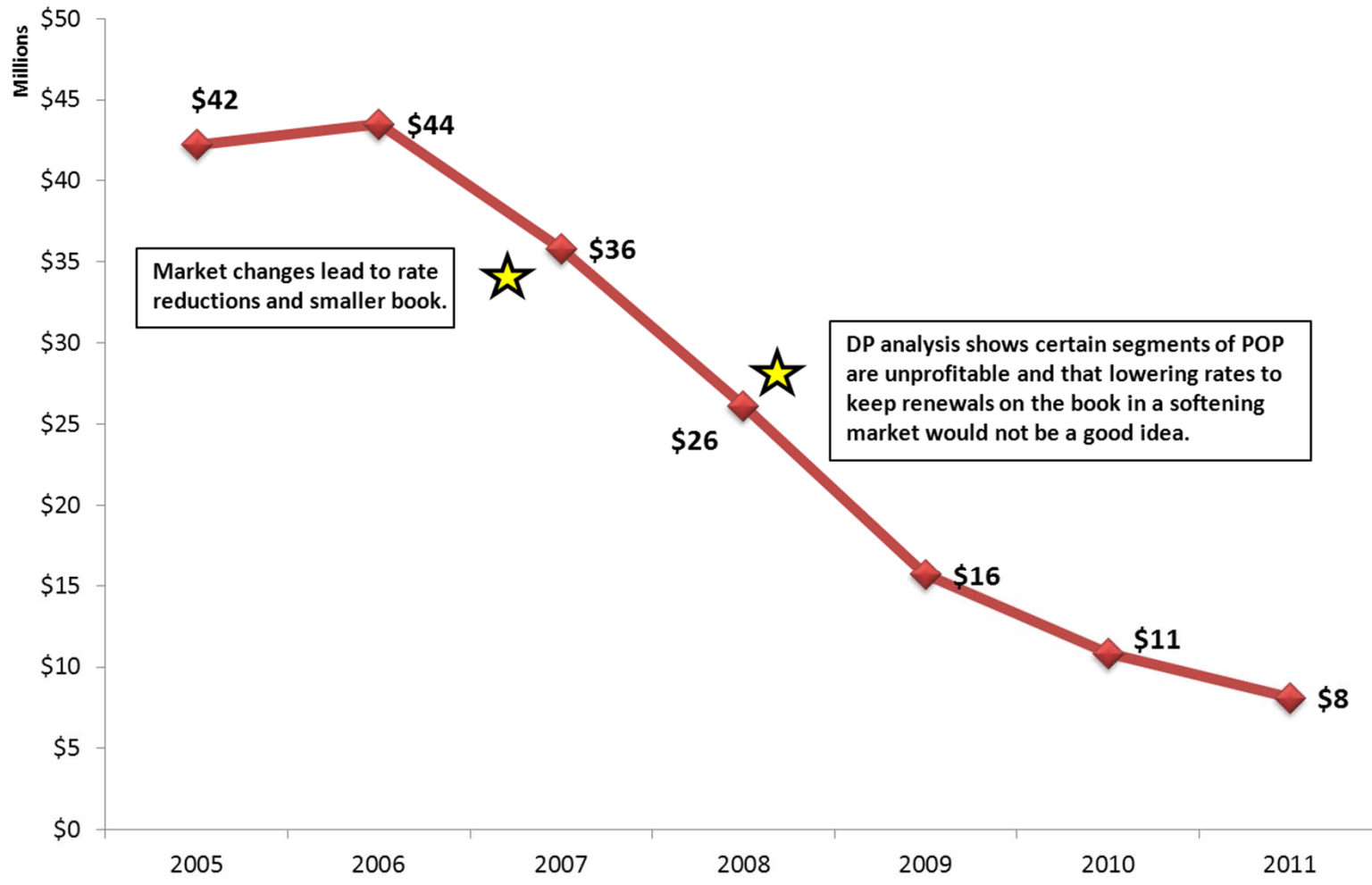
Calendar Year	Renewals	Bound	Retention
2005	815	677	83%
2006	1183	893	75%
2007	1258	926	74%
2008	1027	740	72% 

Segment	TIV Exposure	GWP @ Current Rate Levels	Losses	Pure Loss Ratio
Whole Book	94,120,307	\$159,840,012	\$92,992,439	58%





POP GWP by Calendar Year



Putting out the fires!



- Decreasing hit ratios



- Reduced retentions



- Average U/W results

PREDICTIVE MODELING LEADS TO SEGMENTATION STRATEGY

Segment 1: Loss Ratio of 55% **Rank: 4th**
 Floors: Unknown; 1 through 3
 Key Variable 1: A, B

Segment 2: Loss Ratio of 84% **Rank: 6th**
 Number of Buildings: Multiple
 Key Variable 1: C, D, E
 Key Variable 2: 1, 2, 3

Segment 3: Loss Ratio of 31% **Rank: 2nd**
 Floors: 4 or more
 Key Variable 1: A, B

Segment 4: Loss Ratio of 20% **Rank: 1st**
 Number of Buildings: Unknown; 1
 Parking Type: None
 Key Variable 1: C, D, E

Segment 5: Loss Ratio of 216% **Rank: 8th**
 Number of Buildings: Multiple
 Key Variable 1: C, D, E
 Key Variable 2: 4, 5

Segment 6: Loss Ratio of 56% **Rank: 5th**
 Central Station Alarm: Yes
 Total Units: 1 through 101
 Number of Buildings: Unknown; 1
 Parking Type: Indoor, Outdoor; Both; Not Rated; Unknown
 Key Variable 1: C, D, E

Segment 7: Loss Ratio of 39% **Rank: 3rd**
 Central Station Alarm: No
 Number of Buildings: Unknown; 1
 Parking Type: Indoor, Outdoor; Both; Not Rated; Unknown
 Key Variable 1: C, D, E

Segment 8: Loss Ratio of 109% **Rank: 7th**
 Central Station Alarm: Yes
 Total Units: Unknown; 101 or more
 Number of Buildings: Unknown; 1
 Parking Type: Indoor; Outdoor: Both: Not Rated: Unknown
 Key Variable 1: C, D, E



WHAT DO THE SEGMENTS MEAN?

Conclusions connecting segments to real estate:

Bad:

Garden apartments
Pre 1980

Marginal:

High Rise
Post 1970
Single Building

Good:

Mid Rise
JMS or better
Any Year

High Rise
Pre-War
Single Building



Segment	TIV Exposure	GWP @ Current Rate Levels	Losses	Pure Loss Ratio
Whole Book	94,120,307	\$159,840,012	\$92,992,439	58%
CHIP	7,112,373	\$17,891,891	\$5,600,960	31%
POP	87,007,934	\$141,948,121	\$87,391,479	62%
Older, Garden Apts	<i>8,960,008</i>	<i>\$25,934,335</i>	<i>\$31,264,188</i>	121%
Shopping Centers	<i>2,215,598</i>	<i>\$3,583,087</i>	<i>\$2,436,236</i>	68%
Southeast High Rises	<i>11,975,989</i>	<i>\$13,244,489</i>	<i>\$6,777,546</i>	51%
POP x Garden, Shopping & High Rises	63,856,339	99,186,210	46,913,509	47%





**DISTINGUISHED
PROGRAMS**
We'll Be There.

USING ANALYTICS TO SHAPE OUR STRATEGY

REFINING OUR APPROACH TO CHIP

CHIP PROPERTY 2005 - 2011

Metric	% of Exposure	Loss Ratio	Claims per Location	Claims per 100 Units	Claims per \$Mil TIV
1	1%	11%	0.013	0.186	0.007
2	0%	-	0.000	0.000	0.000
3	0%	0%	0.000	0.000	0.000
4	4%	9%	0.035	0.409	0.021
5	4%	64%	0.068	0.968	0.053
6	0%	0%	0.000	0.000	0.000
7	9%	26%	0.066	0.690	0.041
8	12%	19%	0.048	0.637	0.040
9	0%	0%	0.000	0.000	0.000
10	17%	80%	0.043	0.390	0.025
11	8%	31%	0.039	0.621	0.041
12	21%	22%	0.051	0.461	0.032
13	6%	121%	0.055	1.089	0.075
14	14%	132%	0.083	0.727	0.051
15	3%	94%	0.037	0.697	0.047
	100%	55%	0.052	0.602	0.039
<=12	77%	37%	0.049	0.539	0.034
13-15	23%	124%	0.062	0.815	0.057

SAMPLE GO-FORWARD RATING PLAN (Chip Prop)

New Business

Metric <= 12	-	Existing rating plan
Metric 13-15	-	Not Eligible

Renewals

Tier 1	-	Metric <= 12, absent of another key feature-	10% increase
Tier 2	-	Metric <= 12, presence of another key feature-	15% increase or non-renew
Tier 3	-	Metric 13-15, absent of another key feature-	20% increase
Tier 4	-	Metric 13-15, presence of another key feature-	Non-renew

AFFECT ON CURRENT BUSINESS

Metric	Exposure Distribution by Key Metric				New Business Only	
	Current Year -3	Current Year -2	Current Year -1	Current Year	Current Year	
1	0.98%	0.65%	0.63%	0.72%	1.06%	
2	0.00%	0.00%	0.00%	0.08%	0.35%	
3	0.00%	0.01%	0.01%	0.01%	0.00%	
4	4.29%	4.23%	3.92%	3.61%	3.22%	
5	5.53%	4.04%	4.17%	4.78%	5.65%	
6	0.12%	0.07%	0.06%	0.06%	0.00%	
7	9.01%	8.38%	9.26%	8.48%	9.45%	
8	13.51%	11.16%	10.24%	10.95%	9.34%	
9	0.00%	0.00%	0.00%	0.00%	0.00%	
10	16.42%	17.64%	18.37%	19.14%	21.35%	
11	7.44%	7.87%	7.41%	8.33%	9.01%	
12	21.45%	21.62%	21.22%	21.41%	22.89%	
13	4.83%	6.55%	6.25%	6.37%	5.44%	17.67%
14	12.95%	14.41%	15.07%	12.64%	9.01%	
15	3.48%	3.36%	3.39%	3.42%	3.22%	

Broker	Broker State	In-force Exposure	Metric Ranges (Exposure distribution)		
			<15	15-17	18-20
Broker A	IL	1,148	31%	25%	44%
Broker B	IL	952	52%	30%	19%
Broker C	IL	869	57%	32%	12%
Broker D	IL	677	53%	39%	8%
Broker E	IL	636	77%	19%	4%
Broker F	IL	555	62%	32%	6%
Broker G	IL	519	62%	32%	6%
Broker H	IL	459	49%	40%	11%
Broker I	IL	438	36%	50%	14%



ALTERNATIVE OPTIONS

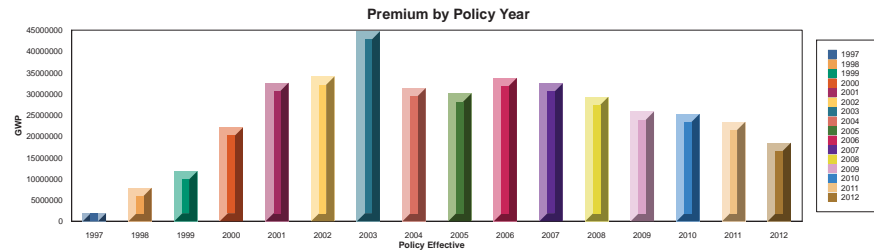
STATE REPORT CARD - CA



CA Production & Underwriting Report

12/31/2012

Policy Year	Subs	Qtd	Dec Ratio	Quo Prem	Bnd	Bnd Prem	Hit Ratio #	Hit Ratio \$
NEW	4410	3,061	30.59%	\$33,325,363	1,044	\$9,061,272	34.11%	27.19%
REN	1642	1,605		\$21,579,032	1,262	\$16,645,686	78.63%	77.14%
2010	6,052	4,666		\$54,904,395	2,306	\$25,706,958	49.42%	46.82%
NEW	3259	1,793	44.98%	\$22,568,844	565	\$5,846,988	31.51%	25.91%
REN	1849	1,762		\$21,752,307	1,348	\$17,505,517	76.50%	80.48%
2011	5,108	3,555		\$44,321,151	1,913	\$23,352,505	53.81%	52.69%
NEW	1868	1,013	45.77%	\$13,434,310	345	\$3,215,575	34.06%	23.94%
REN	1580	1,514		\$20,626,782	1,187	\$15,328,259	78.40%	74.31%
2012	3,448	2,527		\$34,061,092	1,532	\$18,543,834	60.63%	54.44%



Policy Year	Earned Premium	Unlimited Losses	Limited Losses	Unlimited L/R	Limited L/R
1997	\$1,926,686	\$1,419,488	\$1,196,196	73.68%	62.09%
1998	\$7,936,544	\$4,215,148	\$3,580,546	53.11%	45.11%
1999	\$11,821,830	\$7,429,758	\$5,199,097	62.85%	43.98%
2000	\$22,137,023	\$18,713,705	\$8,847,837	84.54%	39.97%
2001	\$32,652,660	\$25,999,998	\$10,833,578	79.63%	33.18%
2002	\$34,074,197	\$18,199,402	\$8,364,979	53.41%	24.55%
2003	\$44,728,707	\$26,403,193	\$12,453,957	59.03%	27.84%
2004	\$31,385,893	\$10,622,491	\$7,260,515	33.84%	23.13%
2005	\$30,090,991	\$10,426,195	\$6,914,450	34.65%	22.98%
2006	\$33,800,921	\$17,293,873	\$8,065,167	51.16%	23.86%
2007	\$32,477,008	\$17,330,257	\$8,341,785	53.36%	25.69%
2008	\$29,306,345	\$10,470,992	\$7,184,838	35.73%	24.52%
2009	\$25,875,212	\$18,675,252	\$8,223,162	72.17%	31.78%
2010	\$25,304,577	\$12,574,298	\$8,134,787	49.69%	32.15%
2011	\$23,475,139	\$14,731,652	\$8,443,103	62.75%	35.97%
2012	\$9,781,398	\$5,536,344	\$3,706,289	56.60%	37.89%
	\$396,775,131	\$220,042,046	\$116,750,286	55.46%	29.42%



AVERAGE AL INCURRED LOSS BY YEAR

**Average Incurred Losses - Auto Liability
Indemnity and LAE Combined
Minimum of \$100 Incurred with \$100,000 Maximum on Limited Basis**

Row Labels	Bodily Injury	Property Damage	Average	% PD Only Events
2006				
Average of Unlimited	\$ 81,006	\$ 4,363	\$ 20,163	
Average of Limited	\$ 27,036	\$ 4,363	\$ 9,037	
# of Events	181	697	878	79%
Events >\$100,000	25	-	25	
2007				
Average of Unlimited	\$ 95,431	\$ 5,020	\$ 24,367	
Average of Limited	\$ 31,799	\$ 4,875	\$ 10,636	
# of Events	156	573	729	79%
Events >\$100,000	29	1	30	
2008				
Average of Unlimited	\$ 58,833	\$ 5,397	\$ 14,821	
Average of Limited	\$ 26,021	\$ 5,397	\$ 9,035	
# of Events	97	453	550	82%
Events >\$100,000	9	-	9	
2009				
Average of Unlimited	\$ 107,108	\$ 5,944	\$ 27,161	
Average of Limited	\$ 34,753	\$ 5,833	\$ 11,898	
# of Events	125	471	596	79%
Events >\$100,000	23	2	25	
2010				
Average of Unlimited	\$ 72,581	\$ 7,190	\$ 19,474	
Average of Limited	\$ 31,031	\$ 5,395	\$ 10,211	
# of Events	130	562	692	81%
Events >\$100,000	17	2	19	
2011				
Average of Unlimited	\$ 65,440	\$ 7,287	\$ 19,108	
Average of Limited	\$ 31,546	\$ 5,941	\$ 11,146	
# of Events	137	537	674	80%
Events >\$100,000	12	2	14	
2012				
Average of Unlimited	\$ 58,807	\$ 8,345	\$ 20,493	
Average of Limited	\$ 26,542	\$ 7,904	\$ 12,391	
# of Events	78	246	324	76%
Events >\$100,000	8	3	11	
Total Average of Unlimited	\$ 79,239	\$ 5,982	\$ 20,887	
Total Average of Limited	\$ 30,032	\$ 5,423	\$ 10,430	
Total # of Events	904	3,539	4,443	80%
Total Events >\$100,000	123	10	133	

AVERAGE PAID PHYSICAL DAMAGE BY LINE BY YEAR

Average Paid Physical Damage on Closed Claims Claims in Which Total Incurred Greater than Zero

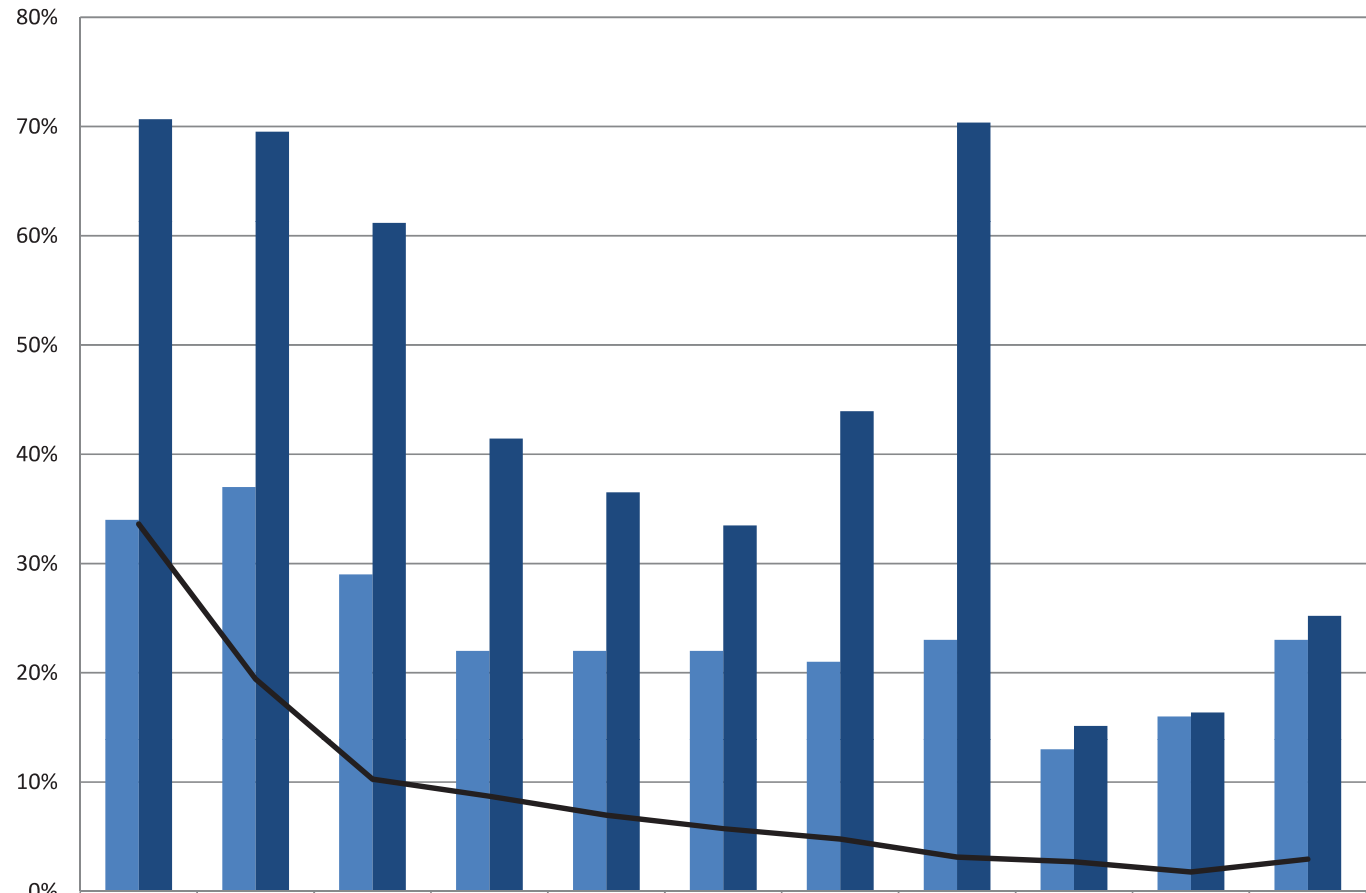
	Collision	OTC - Fire	OTC - Theft	OTC - Vandalism	OTC - Weather	OTC - All Other	Average
2006							
Average Net Paid*	\$ 9,681	\$ 14,273	\$ 23,344	\$ 6,787	\$ 20,950	\$ 5,020	\$ 10,566
Average of ALAE*	\$ 465	\$ 394	\$ 1,949	\$ 1,924	\$ 731	\$ 95	\$ 591
# of Claims	203	5	14	6	1	1	230
Average Net Paid**	\$ 7,199	\$ 14,273	\$ 20,426	\$ 5,818	\$ 20,950	\$ 2,510	\$ 7,944
Average of ALAE**	\$ 453	\$ 394	\$ 1,734	\$ 1,761	\$ 731	\$ 172	\$ 548
# of Claims	273	5	16	7	1	2	304
2007							
Average Net Paid**	\$ 11,149	\$ 21,974	\$ 15,189	\$ 4,244	\$ 5,209	\$ 8,095	\$ 11,628
Average of ALAE**	\$ 506	\$ 524	\$ 958	\$ 521	\$ 597	\$ 638	\$ 537
# of Claims	192	11	14	7	2	2	228
Average Net Paid**	\$ 8,170	\$ 21,974	\$ 11,813	\$ 4,244	\$ 5,209	\$ 8,095	\$ 8,779
Average of ALAE**	\$ 464	\$ 524	\$ 886	\$ 521	\$ 597	\$ 638	\$ 495
# of Claims	262	11	18	7	2	2	302
2008							
Average Net Paid*	\$ 9,429	\$ 17,426	\$ 13,781	\$ 2,981	\$ 16,156	\$ 13,220	\$ 10,619
Average of ALAE*	\$ 598	\$ 668	\$ 865	\$ 421	\$ 1,765	\$ 523	\$ 663
# of Claims	195	18	23	2	8	3	249
Average Net Paid**	\$ 7,726	\$ 16,509	\$ 13,206	\$ 2,981	\$ 16,156	\$ 9,915	\$ 5,963
Average of ALAE**	\$ 572	\$ 654	\$ 845	\$ 421	\$ 1,765	\$ 565	\$ 639
# of Claims	238	19	24	2	8	4	295
2009							
Average Net Paid*	\$ 12,364	\$ 16,072	\$ 19,461	\$ 2,957	\$ 3,137	\$ 14,189	\$ 13,265
Average of ALAE*	\$ 532	\$ 509	\$ 1,247	\$ 438	\$ 361	\$ 547	\$ 621
# of Claims	182	16	32	5	3	3	241
Average Net Paid**	\$ 9,495	\$ 16,072	\$ 16,831	\$ 2,112	\$ 2,353	\$ 10,642	\$ 10,482
Average of ALAE**	\$ 528	\$ 509	\$ 1,225	\$ 779	\$ 346	\$ 656	\$ 617
# of Claims	237	16	37	7	4	4	305
2010							
Average Net Paid*	\$ 10,057	\$ 12,416	\$ 9,536	\$ 3,877	\$ 10,288	\$ 5,656	\$ 9,964
Average of ALAE*	\$ 514	\$ 698	\$ 975	\$ 876	\$ 630	\$ 319	\$ 568
# of Claims	241	15	24	6	2	3	291
Average Net Paid**	\$ 8,160	\$ 12,416	\$ 8,477	\$ 3,877	\$ 10,288	\$ 3,393	\$ 8,237
Average of ALAE**	\$ 509	\$ 698	\$ 986	\$ 876	\$ 630	\$ 410	\$ 559
# of Claims	297	15	27	6	2	5	352
2011							
Average Net Paid*	\$ 12,068	\$ 21,433	\$ 11,570	\$ 1,479	\$ 6,196	\$ 3,147	\$ 11,536
Average of ALAE*	\$ 612	\$ 855	\$ 766	\$ 615	\$ 455	\$ 251	\$ 609
# of Claims	185	8	19	4	7	12	235
Average Net Paid**	\$ 9,457	\$ 19,051	\$ 10,991	\$ 1,479	\$ 6,196	\$ 3,147	\$ 9,410
Average of ALAE**	\$ 617	\$ 791	\$ 730	\$ 615	\$ 455	\$ 251	\$ 611
# of Claims	236	9	20	4	7	12	288
2012							
Average Net Paid*	\$ 10,636	\$ 15,581	\$ 6,790	\$ -	\$ 1,599	\$ 1,256	\$ 9,606
Average of ALAE*	\$ 457	\$ 756	\$ 419	\$ -	\$ 430	\$ 104	\$ 433
# of Claims	87	4	5	-	2	10	108
Average Net Paid**	\$ 9,347	\$ 15,581	\$ 4,850	\$ -	\$ 1,599	\$ 1,142	\$ 8,434
Average of ALAE**	\$ 651	\$ 756	\$ 478	\$ -	\$ 430	\$ 145	\$ 596
# of Claims	99	4	7	-	2	11	123

*On Claims with Net Paid >\$0

**On All Closed Claims

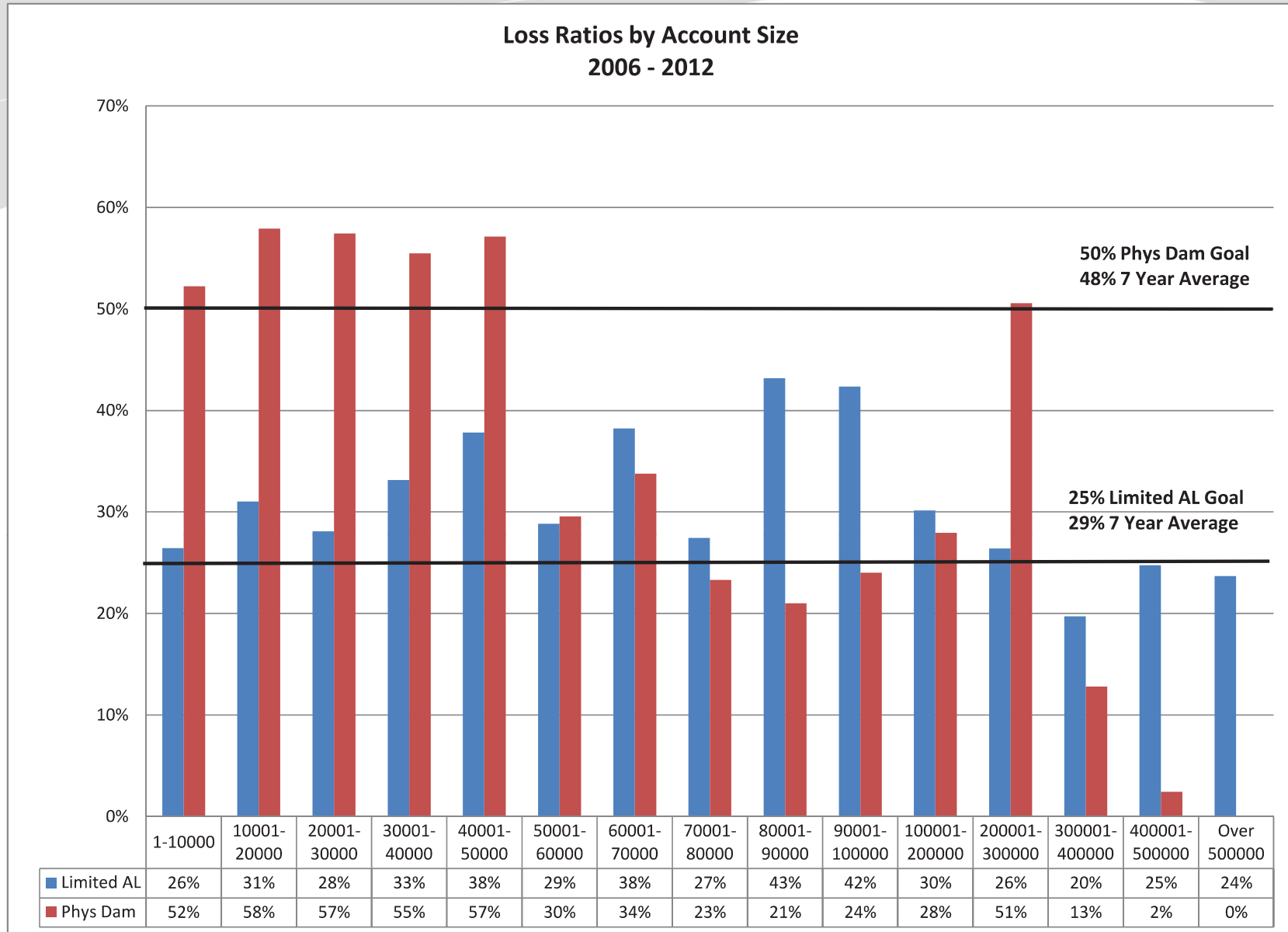
AUTO LIABILITY LOSS RATIO BY TERM

Bellingham Owned Truck Filing - Auto Liability Loss Ratio by Term
2006 - 2012



	New	1st Renew	2nd Renew	3rd Renew	4th Renew	5th Renew	6th Renew	7th Renew	8th Renew	9th Renew	10th or More
Limited AL Loss Ratio	34%	37%	29%	22%	22%	22%	21%	23%	13%	16%	23%
Unlimited AL Loss Ratio	71%	70%	61%	41%	37%	33%	44%	70%	15%	16%	25%
% of Book	34%	19%	10%	9%	7%	6%	5%	3%	3%	2%	3%

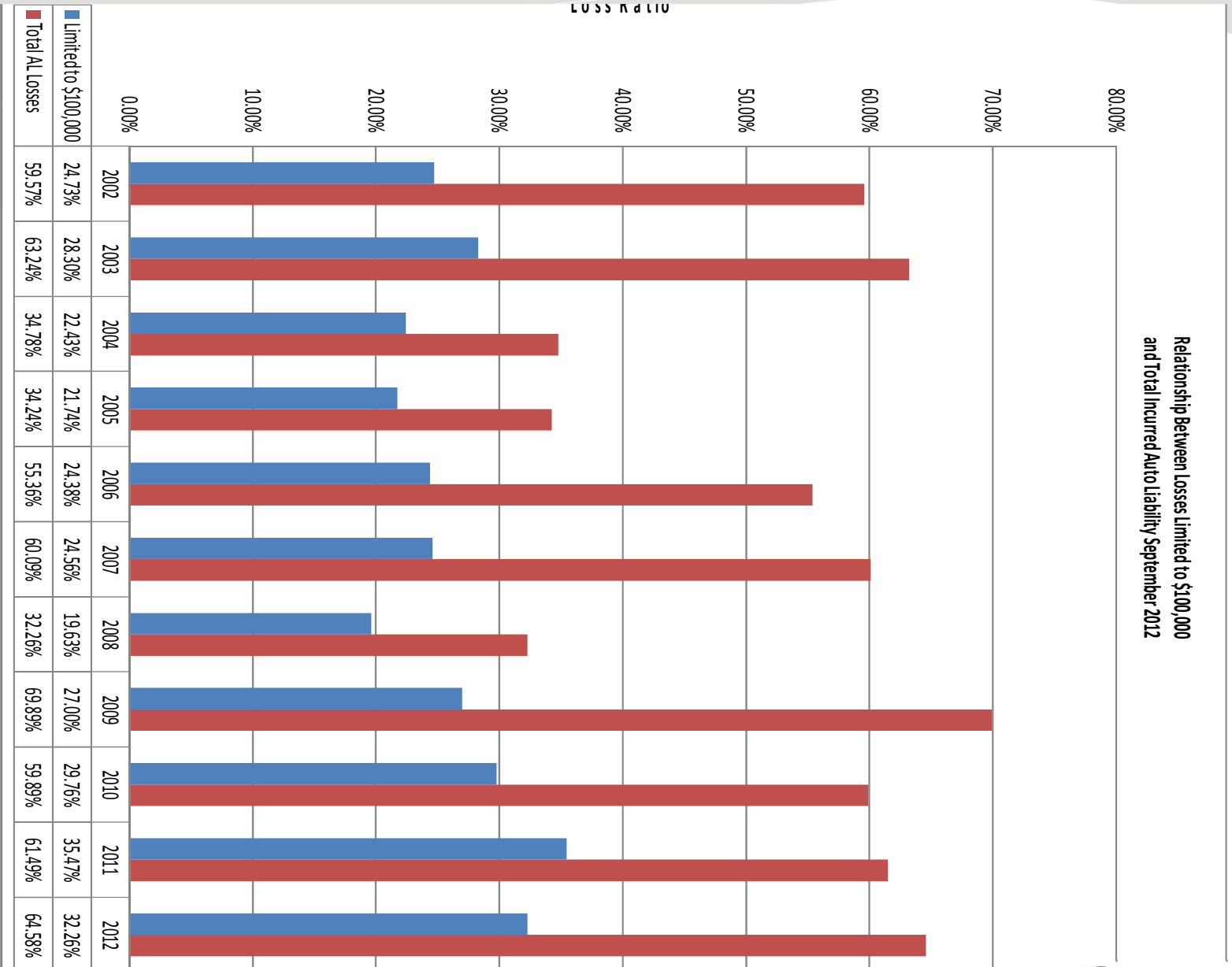
LOSS RATIO BY ACCOUNT SIZE



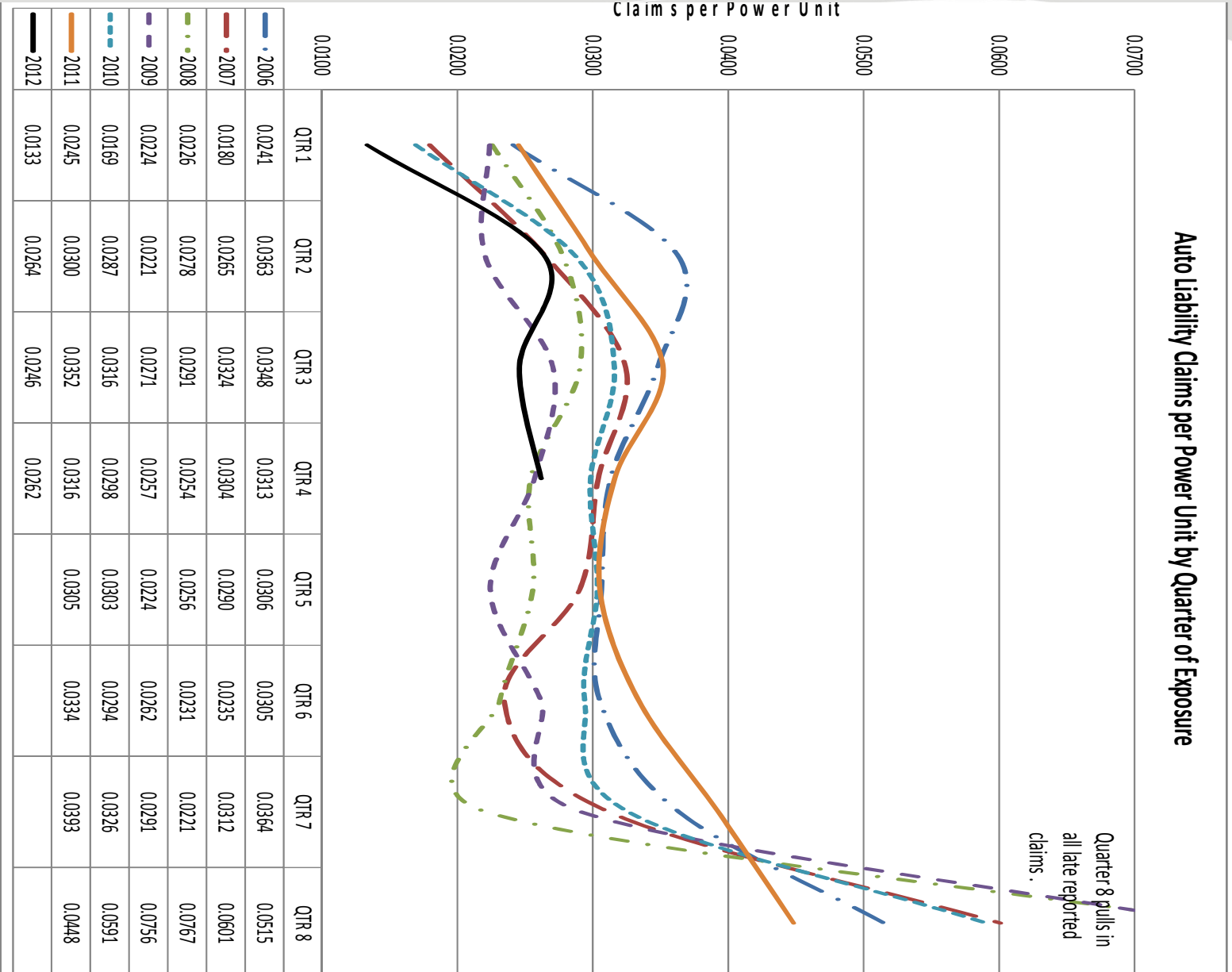
LOSSES BY EVENT

Single Vehicle Accident	\$	2,998,894	\$	5,918,857	\$	1,494,101	\$	2,484,373	\$	151,911	\$	305,000	\$	13,313,136
Other Loss Cause	\$	2,309,928	\$	2,921,304	\$	117,841	\$	117,841	\$	117,841	\$	3,669,170	\$	5,349,074
Flying Objects off IV	\$	2,309,928	\$	1,241,401										3,669,170
Loading/Unloading Event			\$	558,116										558,116
Parked Car			\$	1,121,788										1,121,788
Road Departure			\$	252,433										1,706,506
Blowover					\$	1,119,018								335,056
Mechanical Breakdown			\$	252,433										135,056
Rollover					\$	1,119,018								252,433
Struck Object/Person	\$	688,966	\$	2,745,120										6,257,556
Pedestrian			\$	688,966										3,730,605
Stationary Object					\$	1,099,768								305,000
Struck Bicyclist/Motorcyclist			\$	803,248										1,020,490
Struck Bridge/Overpass					\$	217,242								1,201,461
Multiple Vehicle Accident	\$	8,265,606	\$	5,890,404	\$	2,424,274	\$	8,965,628	\$	5,609,336	\$	5,738,429	\$	2,139,112
Head-On Collision	\$	1,014,467			\$	1,965,837			\$	1,073,447	\$	4,053,751		
IV Out of Lane														1,073,447
OV Out of Lane			\$	1,014,467										1,014,467
Intersection Collision	\$	3,172,196	\$	751,153										9,462,810
IV Failure to Yield/Stop			\$	1,746,292										5,638,020
IV Squeezed OV			\$	321,776										619,776
OV Failure to Yield/Stop			\$	1,104,128										3,205,014
Other MV Loss Cause	\$	147,873			\$	1,916,859	\$	3,638,389	\$	1,439,060	\$	320,010	\$	7,462,190
Other Crash Type					\$	1,916,859								7,314,318
Parked Car			\$	147,873										147,873
Rear-End Collision	\$	3,336,156	\$	4,473,603	\$	507,415	\$	2,320,269	\$	1,265,615	\$	1,557,057	\$	105,000
IV Struck OV			\$	3,109,715										10,514,494
Multi-Vehicle Pile Up			\$	159,982										1,061,947
OV Struck IV			\$	226,441										1,988,674
Sideswipe	\$	594,915	\$	665,649										4,488,923
Same Direction Fault Disputed					\$	939,817								217,893
Same Direction IV Error			\$	392,171										3,216,107
Same Direction OV Error			\$	202,744										1,054,923
Off Highway Incident														105,000
Eisewhere														105,000
CV Hit IV - IV Parked														105,000
Vehicle Other Than Collision	\$	938,219			\$	215,000			\$	771,051			\$	1,924,270
Crime														771,051
Vandalism														771,051
Other OTC Loss Cause	\$	938,219			\$	215,000			\$	771,051			\$	1,153,219
Explosion/Implosion			\$	938,219										938,219
Other Loss Cause					\$	215,000								215,000

COMPARISON LIMITED TO UNLIMITED



CLAIMS PER POWER UNIT



LOSS RATIO BY RISK CHARACTERISTIC

Historical Loss Ratio - Excluding Refrigerated & Dry Vans

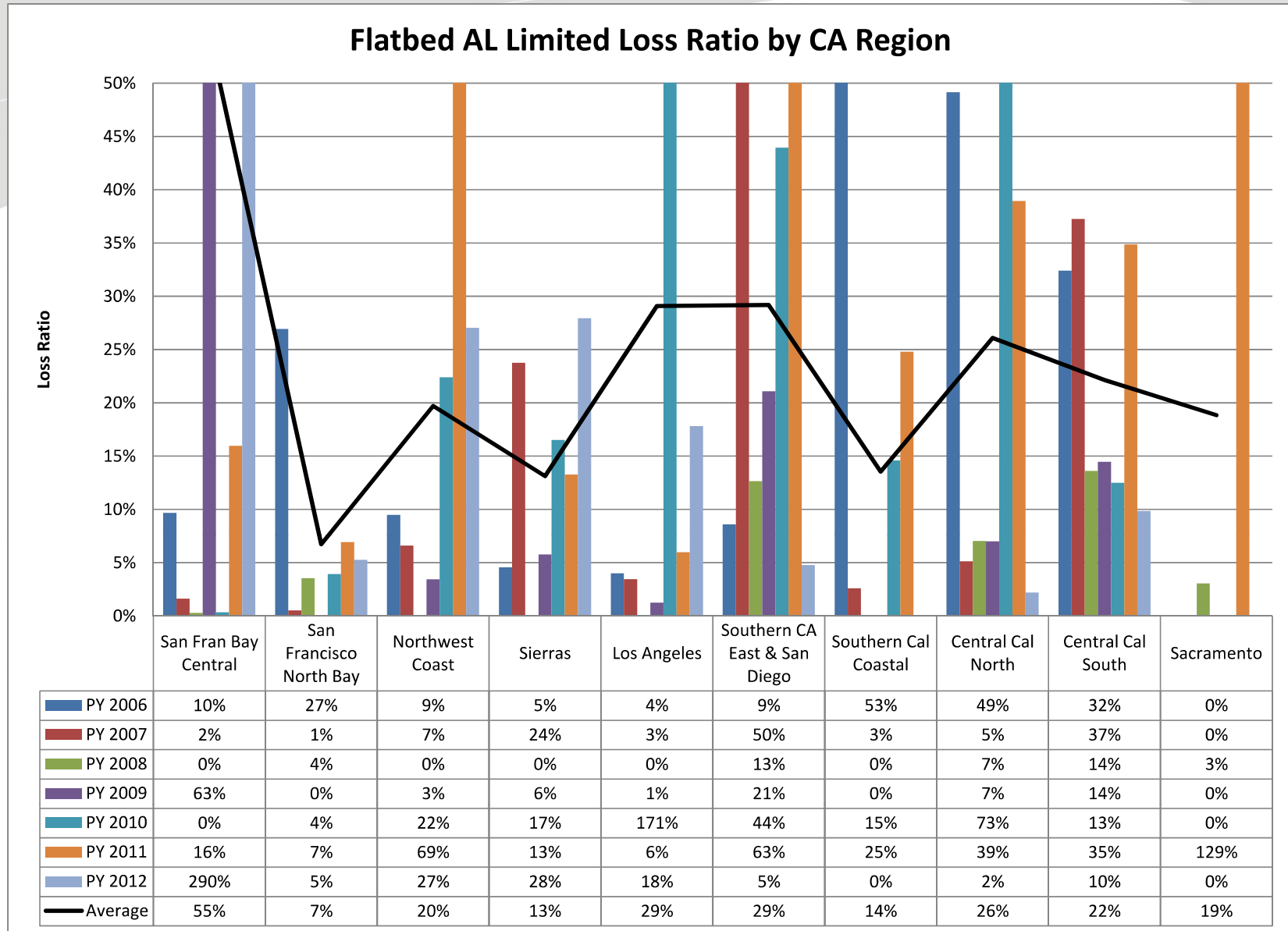
	Auto Liability					Physical Damage		
	Earned	Limited	L/R	Unlimited	L/R	Earned	Unlimited	L/R
Vehicle Type								
Light/Medium Truck	\$ 7,647,128	\$ 1,194,097	16%	\$ 1,269,235	17%	\$ 1,509,597	\$ 414,792	27%
Heavy/X-Heavy Truck	\$ 14,373,756	\$ 3,120,169	22%	\$ 5,417,445	38%	\$ 3,394,773	\$ 1,011,210	30%
Truck Tractor	\$ 73,928,887	\$ 21,457,474	29%	\$ 40,783,011	55%	\$ 14,670,344	\$ 6,029,431	41%
All Trailers	\$ 8,747,216	\$ 349,839	4%	\$ 2,592,171	30%	\$ 6,112,665	\$ 1,940,521	32%
Road Type								
Freeway Rural	\$ 14,236,453	\$ 4,094,681	29%	\$ 9,450,141	66%	\$ 2,955,401	\$ 1,741,436	59%
State Highway	\$ 39,800,034	\$ 8,716,561	22%	\$ 17,589,614	44%	\$ 10,881,904	\$ 3,866,918	36%
Surface Rural	\$ 4,432,867	\$ 897,434	20%	\$ 2,193,711	49%	\$ 1,363,079	\$ 556,315	41%
Surface Suburban	\$ 27,772,133	\$ 7,420,138	27%	\$ 14,018,646	50%	\$ 6,383,488	\$ 2,121,386	33%
Freeway Urban	\$ 3,213,842	\$ 872,705	27%	\$ 1,512,705	47%	\$ 663,163	\$ 173,810	26%
Urban	\$ 13,508,996	\$ 3,654,125	27%	\$ 6,084,153	45%	\$ 1,988,220	\$ 714,288	36%
Off Road/Restricted	\$ 1,732,662	\$ 457,230	26%	\$ 473,912	27%	\$ 421,989	\$ 87,374	21%
Spare/Replacement	\$ -	\$ 8,706	0%	\$ 8,706	0%	\$ 1,305,064	\$ 134,429	10%
Annual Mileage								
0 - 2,500 Miles	\$ 3,161,077	\$ 639,237	20%	\$ 2,327,695	74%	\$ 1,036,222	\$ 384,813	37%
2,501 - 7,500 Miles	\$ 3,813,762	\$ 316,159	8%	\$ 316,158	8%	\$ 1,438,239	\$ 246,451	17%
7,501 - 12,500 Miles	\$ 4,462,840	\$ 1,203,619	27%	\$ 2,326,580	52%	\$ 1,147,553	\$ 304,805	27%
12,501 - 20,000 Miles	\$ 8,252,088	\$ 1,459,121	18%	\$ 2,088,878	25%	\$ 1,954,475	\$ 521,837	27%
20,001 - 30,000 Miles	\$ 16,367,583	\$ 4,424,627	27%	\$ 6,964,074	43%	\$ 3,515,116	\$ 1,238,940	35%
30,001 - 45,000 Miles	\$ 23,633,499	\$ 5,656,100	24%	\$ 9,879,813	42%	\$ 5,427,039	\$ 1,891,125	35%
45,001 - 60,000 Miles	\$ 18,595,873	\$ 4,988,282	27%	\$ 12,551,201	67%	\$ 4,788,857	\$ 1,586,939	33%
60,001 - 80,000 Miles	\$ 16,285,847	\$ 4,273,100	26%	\$ 8,324,814	51%	\$ 3,769,033	\$ 1,729,489	46%
80,001 - 100,000 Miles	\$ 7,738,109	\$ 1,844,687	24%	\$ 4,507,350	58%	\$ 1,979,482	\$ 1,136,484	57%
100,001 - 120,000 Miles	\$ 1,865,840	\$ 734,654	39%	\$ 1,658,027	89%	\$ 552,976	\$ 288,475	52%
Over 120,000 Miles	\$ 244,768	\$ 12,858	5%	\$ 12,858	5%	\$ 67,895	\$ 2,623	4%
Non-Operating	\$ 275,702	\$ 292,084	106%	\$ 292,084	106%	\$ 285,422	\$ 63,978	22%
Driver Age								
Under 21	\$ 134,099	\$ 3,894	3%	\$ 3,894	3%	\$ 100,838	\$ 1,165	1%
21 - 24	\$ 1,147,892	\$ 386,788	34%	\$ 386,788	34%	\$ 295,606	\$ 58,575	20%
25 - 29	\$ 3,585,279	\$ 974,645	27%	\$ 1,361,103	38%	\$ 1,019,410	\$ 471,582	46%
30 - 39	\$ 18,672,999	\$ 5,330,564	29%	\$ 9,851,568	53%	\$ 4,901,743	\$ 2,161,635	44%
40 - 49	\$ 44,924,772	\$ 11,551,261	26%	\$ 23,396,002	52%	\$ 10,310,342	\$ 3,870,453	38%
50 - 65	\$ 29,754,033	\$ 6,634,470	22%	\$ 12,903,737	43%	\$ 7,938,164	\$ 2,583,470	33%
66 - 72	\$ 2,575,606	\$ 383,163	15%	\$ 423,173	16%	\$ 484,794	\$ 112,662	23%
Over 72	\$ 731,703	\$ 292,051	40%	\$ 702,148	96%	\$ 173,070	\$ 11,193	6%
Not Assigned	\$ 3,170,603	\$ 564,738	18%	\$ 2,303,170	73%	\$ 648,780	\$ 125,221	19%

LOSS RATIO BY RISK CHARACTERISTIC, CONT.

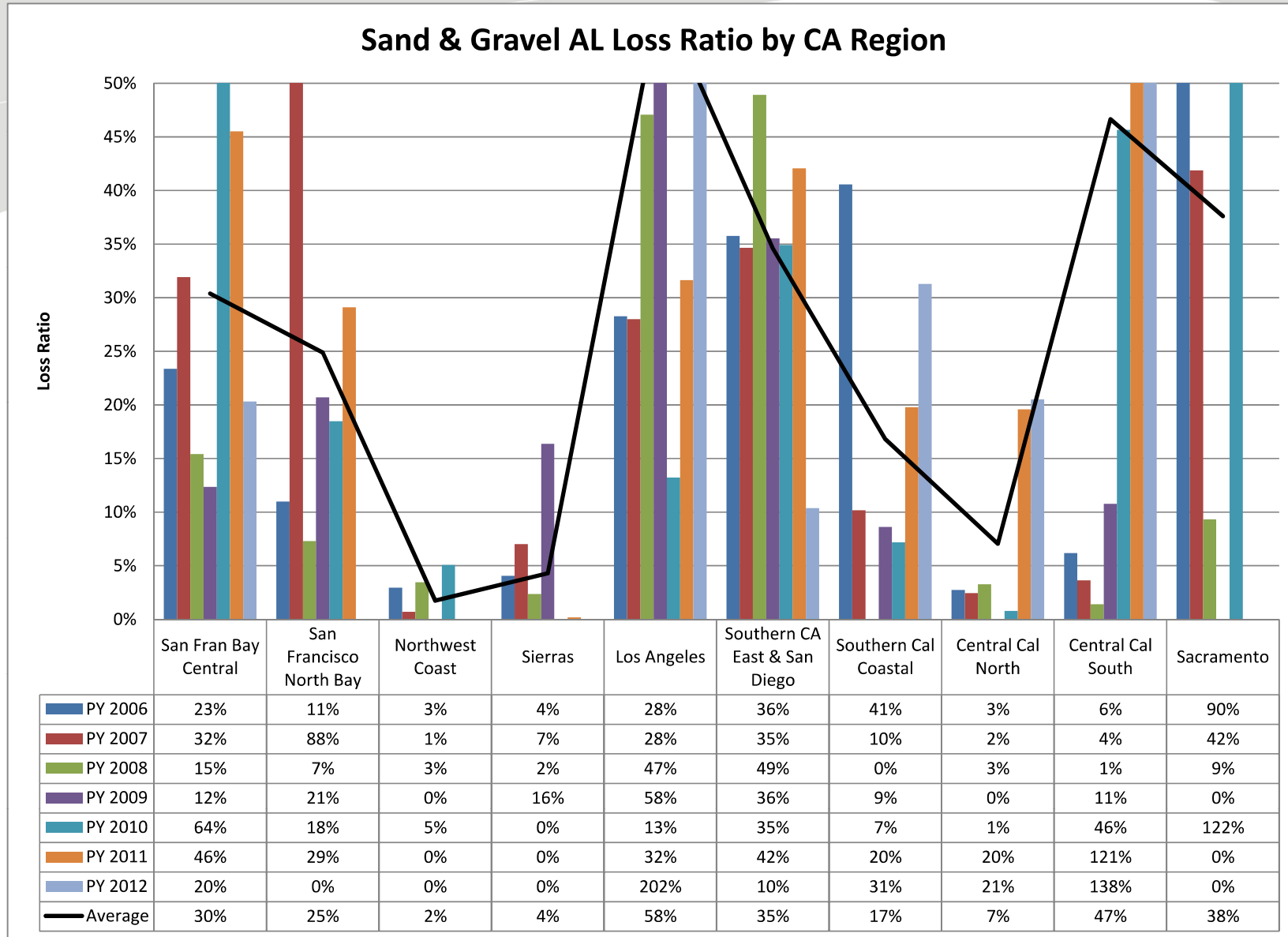
	Auto Liability					Physical Damage		
	Earned	Limited	Limited L/R	Unlimited	Unlimited L/R	Earned	Unlimited	Unlimited L/R
Driver Points								
0 - 1 Points	\$ 73,636,029	\$ 18,056,990	25%	\$ 37,393,381	51%	\$ 19,063,725	\$ 6,947,398	36%
2 Points	\$ 7,498,025	\$ 2,532,220	34%	\$ 4,416,634	59%	\$ 1,911,171	\$ 972,865	51%
3 Points	\$ 2,838,292	\$ 565,159	20%	\$ 565,159	20%	\$ 691,257	\$ 354,870	51%
4+ Points	\$ 995,675	\$ 152,819	15%	\$ 152,819	15%	\$ 251,926	\$ 161,579	64%
Not Assigned	\$ 19,728,965	\$ 4,814,391	24%	\$ 8,803,595	45%	\$ 4,044,230	\$ 959,244	24%
Vehicle Configuration								
Auto or Car Carrier	\$ 3,892,124	\$ 570,784	15%	\$ 680,911	17%	\$ 938,114	\$ 733,455	78%
Bulk Cement	\$ 541,592	\$ 6,070	1%	\$ 6,070	1%	\$ 334,361	\$ 69,377	21%
Bulk Chemical	\$ 570,153	\$ 3,144	1%	\$ 3,144	1%	\$ 203,935	\$ 25,337	12%
Bulk Petroleum - Liquid	\$ 941,840	\$ 128,677	14%	\$ 128,677	14%	\$ 583,437	\$ 71,027	12%
Bulk Tanker - Non Hazardous	\$ 3,777,814	\$ 1,148,203	30%	\$ 2,692,497	71%	\$ 1,160,992	\$ 373,144	32%
Containers	\$ 8,179,008	\$ 3,035,941	37%	\$ 5,491,245	67%	\$ 1,124,263	\$ 525,977	47%
Dirt/Rock/Sand/Gravel	\$ 24,781,548	\$ 6,670,184	27%	\$ 13,482,838	54%	\$ 6,644,677	\$ 1,923,935	29%
Dirty Dirt	\$ 2,504,247	\$ 488,306	19%	\$ 488,306	19%	\$ 833,078	\$ 412,136	49%
Equipment - Oversize or Weight	\$ 4,298,567	\$ 1,357,090	32%	\$ 3,859,637	90%	\$ 1,213,877	\$ 269,714	22%
Flatbed - Building Materials	\$ 13,918,008	\$ 3,613,888	26%	\$ 8,656,701	62%	\$ 3,426,301	\$ 1,105,052	32%
Flatbed or Drop Deck - Hay	\$ 2,801,726	\$ 799,382	29%	\$ 2,504,976	89%	\$ 779,135	\$ 360,417	46%
Grain/Produce in Hoppers	\$ 11,047,289	\$ 3,018,755	27%	\$ 6,151,385	56%	\$ 2,275,771	\$ 762,979	34%
Hazardous Materials - Dry	\$ 249,850	\$ -	0%	\$ -	0%	\$ 54,759	\$ 3,224	6%
Household Goods - Moving	\$ 1,916,718	\$ 378,144	20%	\$ 378,144	20%	\$ 461,048	\$ 188,834	41%
Less than Truckload Dry Van	\$ 2,320,551	\$ 387,386	17%	\$ 411,816	18%	\$ 296,603	\$ 92,764	31%
Livestock	\$ 1,858,179	\$ 399,673	22%	\$ 480,034	26%	\$ 627,142	\$ 298,550	48%
Logs and Poles	\$ 5,573,269	\$ 1,075,534	19%	\$ 1,457,216	26%	\$ 1,409,160	\$ 682,046	48%
Mix-in-Transit	\$ 429,889	\$ 93,252	22%	\$ 93,252	22%	\$ 174,588	\$ 106,672	61%
Mobile Home Transit	\$ 1,530,527	\$ 358,771	23%	\$ 371,832	24%	\$ 234,883	\$ 61,275	26%
Pressurized Gas	\$ 320,033	\$ 64,742	20%	\$ 64,742	20%	\$ 4,646	\$ -	0%
Refuse/Recyclables/Scrap	\$ 3,806,520	\$ 779,773	20%	\$ 1,551,862	41%	\$ 722,839	\$ 418,922	58%
Water in Bulk	\$ 1,085,867	\$ 84,299	8%	\$ 84,299	8%	\$ 365,422	\$ 213,711	58%
Wood Chips or Residues	\$ 1,079,034	\$ 399,820	37%	\$ 476,530	44%	\$ 326,537	\$ 95,690	29%
Other	\$ 7,272,633	\$ 1,259,757	17%	\$ 1,815,469	25%	\$ 1,766,743	\$ 601,724	34%
Total 2006 - 2012	\$ 104,696,987	\$ 26,121,574	25%	\$ 51,331,582	49%	\$ 25,962,309	\$ 9,395,962	36%

Premium in 2009 may be overstated by as much as 3% because the premium included higher limits up to \$5 million. Likewise, a loss from 2009 with incurred of \$1.5M has been limited to \$1M.

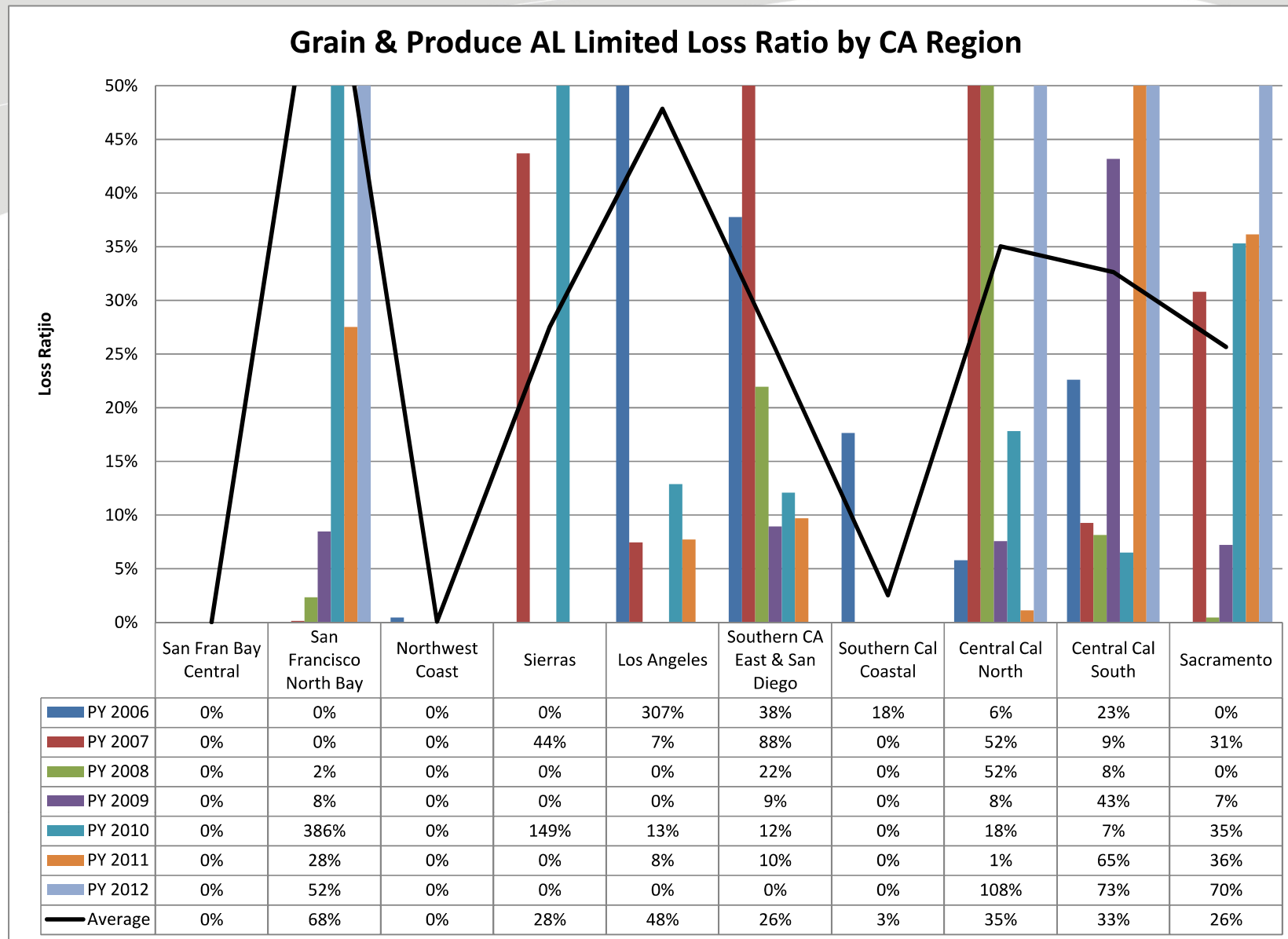
S&G LOSS RATIO BY CA REGION



S&G LOSS RATIO BY CA REGION, CONT.



S&G LOSS RATIO BY CA REGION, CONT.



BUI SEMI ANNUAL REPORT SUMMARY

Bellingham Underwriters Semi-Annual Review Standard Report Groups

General Information on Program

- Distribution of the Premium and Loss by coverage by year
- Distribution of Premium and Loss By State by year
- Auto Liab loss ratios by CA region – limited
- Distribution of premium by Truck mileage bands
- Distribution of premium by Account Size in Premium and Power units
- Distribution of Policy Premium and Power units by account size

Premium and Loss Overview

- Rate Monitor report
- Average Mods by coverage by year
- Loss Ratio limited and unlimited by year
- Loss Ratio by line by year
- Loss layering report – Loss ratio by liability limits layer
- Loss triangles for Paid, reserved and Incurred by year by line (GL, AL, phy dam, MTC)

Claim Trends

- Average Paid Phy Damage on closed claims
- Average Incurred Liability loss on closed claims
- Ratio of AL and Phy Damage claims per power unit by year by state
- Claim files by quarter
- Days until last indemnity payment on closed claims
- AL and Phy damage loss by event cause

Loss Ratios by exposure characteristic

- Loss ratio by vehicle type by year for AL and phy damage
- Loss ratio by primary operating road type by year for AL and phy damage
- Loss ratio by driver age by year for AL and phy damage
- Loss ratio by number of MVR points for driver by year for AL and phy damage
- Loss ratio by vehicle mileage bands by year for AL and phy damage
- Loss ratio by vehicle configuration/commodity by year for AL and phy damage
- Loss ratio for ISO coverages including UM/UIM, Med Pay, PIP, Non-owned and Hired auto

SAMPLE RATE FILING AND DATA COLLECTION

Base Rate for Commercial Auto Liability at \$100,000 Limits Loss Cost

Light and Medium Vehicles - Basic Limits Loss Cost

Table 1.A.

Class Code 1st-2nd digit	Type of Road	Non-op	Range of Estimated Annual Mileage										
			0-2,500	2,501-7,500	7,501-12,500	12,501-20,000	20,001-30,000	30,001-45,000	45,001-60,000	60,001-80,000	80,001-100,000	100,001-120,000	Over 120,000
11	Freeway Rural												
12	State Highway												
13	Surface Rural												
14	Surface Suburban												
15	Surface Urban												
16	Off Road - Restricted Access												
18	Freeway Urban												
Class Code 3rd - 4th Digit		10	11	12	13	14	15	16	17	18	19	20	21

Heavy and Extra-Heavy Trucks - Basic Limits Loss Cost

Table 1.B.

Class Code 1st-2nd digit	Type of Road	Non-op	Range of Estimated Annual Mileage										
			0-2,500	2,501-7,500	7,501-12,500	12,501-20,000	20,001-30,000	30,001-45,000	45,001-60,000	60,001-80,000	80,001-100,000	100,001-120,000	Over 120,000
21	Freeway Rural												
22	State Highway												
23	Surface Rural												
24	Surface Suburban												
25	Surface Urban												
26	Off Road - Restricted Access												
28	Freeway Urban												
Class Code 3rd - 4th Digit		10	11	12	13	14	15	16	17	18	19	20	21

SAMPLE RATE FILING AND DATA COLLECTION, CONT.

Truck-Tractors - Basic Limits Loss Cost

Table 1.C.

Class Code 1st-2nd digit	Type of Road	Range of Estimated Annual Mileage											
		Non-op	0-2,500	2,501- 7,500	7,501- 12,500	12,501- 20,000	20,001- 30,000	30,001- 45,000	45,001- 60,000	60,001- 80,000	80,001- 100,000	100,001- 120,000	Over 120,000
31	Freeway Rural												
32	State Highway												
33	Surface Rural												
34	Surface Suburban												
35	Surface Urban												
36	Off Road - Restricted Access												
38	Freeway Urban												
Class Code 3rd - 4th Digit		10	11	12	13	14	15	16	17	18	19	20	21

All Trailers - Basic Limits Loss Cost

Table 1.D.

Class Code 1st-2nd digit	Type of Road	Range of Estimated Annual Mileage											
		Non-op	0-2,500	2,501- 7,500	7,501- 12,500	12,501- 20,000	20,001- 30,000	30,001- 45,000	45,001- 60,000	60,001- 80,000	80,001- 100,000	100,001- 120,000	Over 120,000
41	Freeway Rural												
42	State Highway												
43	Surface Rural												
44	Surface Suburban												
45	Surface Urban												
46	Off Road - Restricted Access												
47	Spare Trailers												
48	Freeway Urban												
Class Code 3rd - 4th Digit		10	11	12	13	14	15	16	17	18	19	20	21

SAMPLE RATE FILING AND DATA COLLECTION, CONT.

Driver Modification Factors Auto Liability and Physical Damage Rating

Table 2.

		Non-Fleet and Fleet where Point Counts assigned to Specific Drivers					Fleet - Non Assigned Drivers
		MVR Record - Combination of Accidents and moving citations. (Each event constitutes one driving point.)					MVR Record
Class Code 5th Digit	Driver Age	0 - 1	2	3	4	More than four	
0	Less than 21				Not Acceptable	Not Acceptable	0 - 2 Points
1	21-24				Not Acceptable	Not Acceptable	Not Acceptable
2	25-29					Not Acceptable	Not Acceptable
3	30-39						
4	40-49						
5	50-65						
6	66-72						
7	Over 72					Not Acceptable	
8	No Assigned Driver	1.00					
Class Code 6th Digit		0	1	2	3	4	5

* The above assumes the driver has a minimum of two years prior experience with like equipment
 For drivers with only 1 year prior experience apply a factor of 1.15
 For drivers with less than 1 year prior experience apply a factor of 1.25

SAMPLE RATE FILING AND DATA COLLECTION, CONT.

Vehicle Configuration Groups and Factors Auto Liability

Table 3.

Class Code 7th & 8th Digit	Equipment Type - Class	Liability Multiplier
01	Auto or Car Carriers	
02	Flatbed - Building Materials	
03	Bulk Cement	
04	Bulk Chemical	
05	Bulk Petroleum - Liquid	
06	Bulk Tanker - Non Hazardous	
07	Wood Chips or Wood Residues	
08	Containers	
09	"Dirty Dirt"	
10	Dry Van - General Commodity	
11	Equipment - Oversize or Overweight	
12	Grain/Produce in Hoppers	
13	Flatbed or Drop Deck - Hay	
14	Hazardous Materials - Dry	
15	Household Goods - Moving and Transfer	
16	Livestock	
17	Log and Poles	
18	LTL - Less Than Truckload Dry Van	
19	Mix-in-Transit	
20	Mobile or Modular Home Transport	
21	Pressurized Gas	
22	Refuse/Recyclables/Scrap Metal	
23	Refrigerated	
24	Dirt, Rock, Sand and Gravel	
25	Water in Bulk	
26	Other	
31	Street Sweeper or Vacuum	
32	Driver Training Programs w/ Assist	

BUSINESS AUTO RATE FILING & DATA COLLECTION MODEL, CONT.

Vehicle Type – Classification Plan Only
Auto Liability and Physical Damage Rating

Table 1.

Classification 1 st /2 nd Digit	Vehicle Type	
1 – Cars, Pickups or Vans	A	Full-size MPV
	B	Full-size Pickup
	C	Full-size Van
	D	Large Car
	E	Mid-size Car
	F	Mid-size MPV
	G	Mini Pickup
	H	Mini Van
	J	Small Car
	K	Small MPV
	L	Utility Van
	Z	Other Light Vehicle
	2 – Trucks or Truck Tractors	A
B		Boom/Lift Truck
C		Bulk Agriculture
D		Catering/Lunch Truck
E		Delivery/Step Van
F		Dump Truck
G		Flatbed/Platform
H		Forklift (Licensed)
J		Ice Cream Truck
K		Livestock Rack
L		Motorized Home
M		Pickup Truck
N		Roll off Truck
P		Refrigerated Van
Q		Stake or Rack
R		Straight/Box Truck
S		Tank Truck
T		Truck Tractor
U	Vacuum or Sweeper	
V	Van/Cargo Van	
Z	Other	
3 - Trailers	A	Dump Trailer
	B	Flatbed Trailer
	C	Concession Trailer
	D	Livestock Trailer
	E	Dry Van Trailer
	F	Refrigerated Trailer
	G	Tank Trailer
	H	Travel Trailer
	J	Utility Trailer
	Z	Other Trailer Type

Vehicle Size by Gross Vehicle Weight – Classification Plan Only
Auto Liability and Physical Damage Rating

Table 2.

Classification 3 rd Digit	Vehicle Weight
1	Cars & Trucks Up to 10,000 lbs
2	Trucks 10,001 to 20,000 lbs
3	Trucks Over 20,000 to 45,000 lbs
4	Trucks over 45,000 lbs

BUSINESS AUTO RATE FILING & DATA COLLECTION MODEL, CONT.

5	Truck Tractors 0 to 45,000 lbs
6	Truck Tractors over 45,000 lbs
7	Semi Trailer
8	Trailers
9	Utility Trailers

Vehicle Radius Class – Classification Plan Only
Auto Liability and Physical Damage Rating

Table 3.

Classification 4 th Digit	Vehicle primary operating Radius
1	0 to 50 miles
2	51 to 100 miles
3	101 to 200 miles

Vehicle Usage Categories
Auto Liability and Physical Damage Rating
Determination of Business Use Class in Primary Factor

Class Breakdown

Table 4. A.

Code 5 th /6 th	Industry Group	Code	Trade	Usage Group
				Class Code 7 th /8 th Digits

Agriculture, Forestry and Fishing				
01	Farm & Ranch			
		0110	Commercial	01,02,04,05,06,07,08,12,16,17
		0120	Private	01,02,04,05,07,12,16,17
07	Agriculture Services			
		0750	Animal Services Including Veterinary	01,02,04,05,06,07,08,12,16,17
		0780	Landscaping and Horticultural Services	01,04,05,07,08,09,10,12,16,17
08	Forest Service			
		0810	Logging and lumbering	04,07,08,10,11,12,16,17
		0850	Forestry Service Including Reforestation, Cruising, Scaling	04,07,08,10,11,12,16,17
09	Fishing, Hunting & Trapping			07,08,12,15
Mining				
10	Rocks, Minerals and Ores			01,07,08,09,10,11,12,16,17
13	Oil and Gas Extraction			01,07,08,09,10,11,12,16,17
Construction				
15	General Contractors			
		1510	Residential Construction	01,07,08,09,10,12,16,17
		1515	Commercial Construction	01,07,08,09,10,11,12,16,17
16	Heavy Construction			01,07,08,09,10,11,12,16,17
17	Special Trade Contractors			
		1710	Plumbing, Heating and Air-Conditioning	01,07,08,09,10,12,16,17
		1715	Painting and Paper Hanging	01,07,08,09,10,12,16,17
		1720	Electrical Work	01,07,08,09,10,12,16,17
		1725	Masonry, Stone Setting, other Stone Work	01,07,08,09,10,12,16,17
		1730	Plastering, Drywall and Acoustical	01,07,08,09,10,12,16,17
		1735	Terrazzo, Tile, Marble or Mosaic Work	01,07,08,09,10,12,16,17
		1740	Carpentry Work	01,07,08,09,10,12,16,17
		1745	Floor Laying and Other Floor Work	01,07,08,09,10,12,16,17
		1750	Roofing, Siding, and Sheet Metal Work	01,07,08,09,10,12,16,17
		1755	Concrete Work	01,07,08,09,10,11,12,16,17
		1760	Water Well Drilling	01,07,08,09,10,11,12,16,17
		1765	Structural Steel Erection	01,07,08,09,10,12,16,17
		1770	Glass and Glazing Work	01,07,08,09,10,12,16,17

BUSINESS AUTO RATE FILING & DATA COLLECTION MODEL, CONT.

		1775	Excavation Work	01,07,08,09,10,11,12,16,17
		1780	Wrecking and Demolition Work	01,07,08,09,10,11,12,16,17
		1785	Installation or Erection of Building Equipment	01,07,08,09,10,12,16,17
		1790	Surveyor	07,08,10,12,16,17
		1799	Other	01,07,08,09,10,12,13,16,17

Manufacturing				
20	Consumables			
		2010	Food/Beverage	01,07,08,12,13,14,15,16,17
		2020	Clothing/Textiles	01,07,08,12,13,14,15,16,17
		2090	Other	01,07,08,12,13,14,15,16,17
30	Primary Industries			
		3010	Wood Products (Including Lumber Mills of All Types) Manufacturing	01,07,08,11,12,13,14,16,17
		3020	Chemicals/Petroleum	01,07,08,11,12,13,14,16,17
		3030	Rubber, Plastic, Leather Products	
		3035	Stone, Clay and Glass Products	
		3040	Metal Industries Including Fabricated Metal Products	01,07,08,11,12,13,14,16,17
		3045	Machinery/Equipment Including Auto and Boat Manufacturing	01,07,08,11,12,13,14,16,17
		3050	Electronics/Instruments	01,07,08,12,13,14,16,17
		3099	Other Primary Industry Manufacturing	01,07,08,11,12,13,14,16,17

Transportation				
42	Warehousing			01,07,08,12,13,14,16,17
49	Other Transportation			01,07,08,12,13,14,16,17

Retail/Wholesale				
50	Wholesale			
		5010	Wholesale – Durable Goods	01,07,08,12,13,14,15,16,17
		5020	Wholesale – Non-Durable Goods	01,07,08,12,13,14,15,16,17
60	Retail			
		6030	Grocery/Food Stores	01,07,08,12,14,15,16,17
		6035	Building Materials	01,07,08,12,14,15,16,17
		6040	Rental Equipment	01,07,08,12,14,15,16,17
		6045	Nurseries/Yard/Garden supply	01,04,05,07,08,12,14,15,16,17
		6050	Auto/Boat/Equipment sales	01,07,08,12,14,15,16,17
		6055	Clothing/Apparel	01,07,08,12,14,15,16,17
		6060	Home Furnishings	01,07,08,12,14,15,16,17
		6065	Florist	01,07,08,12,14,15,16,17
		6070	Farm Supply	01,04,05,07,08,12,14,15,16,17
		6075	Laundry	01,07,08,12,14,15,16,17
		6099	Other Retail	01,07,08,12,14,15,16,17

Services				
70	Food & Lodging			
		7010	Take Out or Delivery	07,08,12,14,15
		7020	Foods/Drinks Consumed on Site	07,08,12,15
		7070	Hotels and Motels	07,08,12,15
80	Professional Services			
		8050	Banks or Financial Institutions	07,08,12,14
		8055	Professional Services (legal, accounting, real estate, insurance)	07,08,12,14
		8060	Personal Services (barbers, beauty shops, tanning, etc)	07,08,12,14,15
		8065	Business Services (printers, computer services, etc)	07,08,12,14,15
		8070	Auto or Equipment Repair	07,08,12,14,15
		8075	Recreation Facilities	07,08,12,15

BUSINESS AUTO RATE FILING & DATA COLLECTION MODEL, CONT.

Usage Group Definitions and Business Use Class Assignment Table 4. B.

Usage Group digits	Definition of Vehicle Usage	Business use Class Assignment
01	Operations exclusively on owned premises	S
02	Transport of farm, orchard or ranch products, other than live animals, on public roads	C
03	Transport of livestock on public roads	R
04	Transport of fertilizers or chemicals – all dry or liquids less than 200 gallons	C
05	Transport of fertilizers or chemicals – liquids greater than 200 gallons	C
06	Vehicles used to transport farm laborers	C
07	Company owned private passenger type vehicles with personal use - vehicle taken home at night	S
08	Salesman vehicle	C
09	Transport of building materials or equipment to or from job sites/yard	C
10	Delivery of tools (not heavy equipment) and employees to workplace	S
11	Vehicle used for water storage on site	S
12	General service vehicles	S
13	Vehicles used to transport goods to and from manufacturing or warehouse locations	C
14	Delivery of product to customers	R
15	Vehicles used to transport goods to retail locations	C
16	Vehicles used to transport integrated equipment (man lift, booms, etc)	S
17	Non – operating vehicles	S
18	Other usage fitting ISO definition of Service not declared above	S
19	Other usage fitting ISO definition of Retail not declared above	R
20	Other usage fitting ISO definition of Commercial not declared above	C

The following vehicle types are not eligible for rating in this program		
	Vehicle used for storage or transport of fuel	I
	Vehicle used to transport a commodity for hire	I
	Vehicles used in any form of public livery	I
	Tow trucks	I

*Business Use Class Assignments S,R,C and I have the following meanings: S – Service Use R – Retail use C – Commercial Use I – Ineligible for program/referral to company		
---	--	--

Mileage Modification Factors
Auto liability and Physical Damage Rating

Table . 5

Class Code 9 th Digit	Mileage Range	Liability Factors		Physical Damage Factors	
		Local	Intermediate	Local	Intermediate
0	Non-op				
1	0 – 2,500				
2	2,501 – 7,500				
3	7,501 – 12,500				
4	12,501 – 20,000				
5	20,001 – 30,000				
6	30,001 – 40,000				
7	Over 40,000				

Driver Modification Factors
Auto Liability and Physical Damage Rating

BUSINESS AUTO RATE FILING & DATA COLLECTION MODEL, CONT.

Business Auto Program

Table 6.

Owner Operators				MVR Points			
Code	Trade Group	Code	Operating Class	Usage Group			
Class Code 10 th	Driver Category		0 or 1	2	3	More than 3	
0	Drivers < 19			Ineligible	Ineligible	Ineligible	
1	Driver 19 - 20				Ineligible	Ineligible	
2	Driver 21-24					Ineligible	
3	Driver 25-29						
4	Driver 30-39						
5	Driver 40-49						
6	Driver 50-65						
7	Driver 66-72						
8	Driver over 72						
9	No Assigned Driver*		Weighted Average	NA	NA	NA	
	Class code 11 th digit		1	2	3	4	

- See rules for calculation formula.

CONTACT INFORMATION

Wade Bontrager

EagleEye Analytics

wbontrager@eeanalytics.com

Helen English

Distinguished Programs

henglish@distinguished.com

Ken Robinette

Bellingham Underwriters

ken.robinette@bell-uw.com