

**State:** Arkansas **Filing Company:** Encompass Insurance Company of America  
**TOI/Sub-TOI:** 04.0 Homeowners/04.0000 Homeowners Sub-TOI Combinations  
**Product Name:** EICA HO  
**Project Name/Number:** OTA PSRM Rate Factor Only/1519862

## Filing at a Glance

Company: Encompass Insurance Company of America  
Product Name: EICA HO  
State: Arkansas  
TOI: 04.0 Homeowners  
Sub-TOI: 04.0000 Homeowners Sub-TOI Combinations  
Filing Type: Rate/Rule  
Date Submitted: 12/24/2013  
SERFF Tr Num: ALSE-129351017  
SERFF Status: Closed-Filed  
State Tr Num:  
State Status:  
Co Tr Num: ER-2418

Effective Date  
Requested (New):  
Effective Date 06/14/2014  
Requested (Renewal):  
Author(s): Kelly Urban, Andi Colosi  
Reviewer(s): Becky Harrington (primary)  
Disposition Date: 01/10/2014  
Disposition Status: Filed  
Effective Date (New):  
Effective Date (Renewal): 06/14/2014

State Filing Description:

State: Arkansas Filing Company: Encompass Insurance Company of America  
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**General Information**

Project Name: OTA PSRM Rate Factor Only  
 Project Number: 1519862  
 Reference Organization: N/A  
 Reference Title:  
 Filing Status Changed: 01/10/2014  
 State Status Changed:  
 Created By: Claire Hunter  
 Corresponding Filing Tracking Number: N/A

Status of Filing in Domicile:  
 Domicile Status Comments:  
 Reference Number:  
 Advisory Org. Circular:  
 Deemer Date:  
 Submitted By: Kelly Urban

Filing Description:

We are filing to revise the Home Base Rates, Dwelling Maximum Premium Credits, Dwelling Fire Occupancy Factors, and Excess Liability Rates.

These revisions propose an overall rate change of 4.8%. Further details of our filing are enclosed in Attachments/Exhibits.

**Company and Contact**

**Filing Contact Information**

Andi Colosi, State Filings Project Manager andi.colosi@allstate.com  
 2775 Sanders Road 847-402-5000 [Phone] 21839 [Ext]  
 Suite A2-W 847-402-9757 [FAX]  
 Northbrook, IL 60062

**Filing Company Information**

Encompass Insurance Company of America CoCode: 10071 State of Domicile: Illinois  
 2775 Sanders Road Group Code: 8 Company Type: Property and  
 Suite A2-W Group Name: Allstate Casualty  
 Northbrook, IL 60062 FEIN Number: 36-3976913 State ID Number:  
 (847) 402-5000 ext. [Phone]

**Filing Fees**

Fee Required? Yes  
 Fee Amount: \$100.00  
 Retaliatory? No  
 Fee Explanation: Rate/loss cost—changes to loss cost multiplier or independent rate filing \$100  
 Per Company: No

Company	Amount	Date Processed	Transaction #
Encompass Insurance Company of America	\$100.00	12/24/2013	77782121

**SERFF Tracking #:**

ALSE-129351017

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## Correspondence Summary

### Dispositions

Status	Created By	Created On	Date Submitted
Filed	Becky Harrington	01/10/2014	01/10/2014

### Objection Letters and Response Letters

#### Objection Letters

Status	Created By	Created On	Date Submitted
Pending Industry Response	Becky Harrington	12/31/2013	12/31/2013

#### Response Letters

Responded By	Created On	Date Submitted
Andi Colosi	01/09/2014	01/09/2014

### Filing Notes

Subject	Note Type	Created By	Created On	Date Submitted
Clarification response	Note To Filer	Becky Harrington	01/03/2014	01/03/2014
Clarification on objection	Note To Reviewer	Andi Colosi	01/02/2014	01/02/2014

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## Disposition

Disposition Date: 01/10/2014

Effective Date (New):

Effective Date (Renewal): 06/14/2014

Status: Filed

Comment:

Company Name:	Overall % Indicated Change:	Overall % Rate Impact:	Written Premium Change for this Program:	Number of Policy Holders Affected for this Program:	Written Premium for this Program:	Maximum % Change (where req'd):	Minimum % Change (where req'd):
Encompass Insurance Company of America	13.600%	4.800%	\$25,125	182	\$523,442	5.300%	0.000%

Schedule	Schedule Item	Schedule Item Status	Public Access
Supporting Document	Form RF-2 Loss Costs Only (not for workers' compensation)		Yes
Supporting Document	H-1 Homeowners Abstract	Filed	Yes
Supporting Document	HPCS-Homeowners Premium Comparison Survey	Filed	Yes
Supporting Document	NAIC loss cost data entry document	Filed	Yes
Supporting Document	Indication Memo and Exhibits	Filed	Yes
Supporting Document	Contingency Support	Filed	Yes
Supporting Document	Determination of Underwriting Profit Provision Exhibits	Filed	Yes
Supporting Document	Impacts by Proposed Changes - 1/9/14 Response	Filed	Yes
Rate	Home Rate Pages	Filed	Yes
Rate	Home Rules Manual	Filed	Yes
Rate	Dwelling Fire Rules Manual	Filed	Yes
Rate	Excess Liability Rules	Filed	Yes

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## Objection Letter

Objection Letter Status	Pending Industry Response
Objection Letter Date	12/31/2013
Submitted Date	12/31/2013
Respond By Date	

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Dear Andi Colosi,

**Introduction:**

*This will acknowledge receipt of the captioned filing.*

**Objection 1**

*- Indication Memo and Exhibits (Supporting Document)*

*Comments: Please provide the percentage change for each of the revisions.*

**Conclusion:**

*NOTICE regarding, corrections to filings and scrivener's Errors:*

*Arkansas does not allow the re-opening of closed filings for corrections, changes in effective dates, scrivener's errors, amendments or substantive changes. Please see the General Instructions for how these events will be handled after the effective date of the change."*

*In accordance with Regulation 23, Section 7.A., this filing may not be implemented until 20 days after the requested amendment(s) and/or information is received.*

*Sincerely,*

*Becky Harrington*

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## Response Letter

Response Letter Status	Submitted to State
Response Letter Date	01/09/2014
Submitted Date	01/09/2014

Dear Becky Harrington,

### Introduction:

Hi Becky: Thank you for your help with and the additional clarification on this filing. Please see our response below and let us know if you have any additional questions or concerns.

Take care,  
Andi

### Response 1

#### Comments:

Please see the attached document for the percentage changes

### Related Objection 1

Applies To:

- Indication Memo and Exhibits (Supporting Document)

Comments: Please provide the percentage change for each of the revisions.

### Changed Items:

Supporting Document Schedule Item Changes	
<b>Satisfied - Item:</b>	Impacts by Proposed Changes - 1/9/14 Response
<b>Comments:</b>	
<b>Attachment(s):</b>	Attachment I.pdf

No Form Schedule items changed.

No Rate/Rule Schedule items changed.

### Conclusion:

Sincerely,

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*Andi Colosi*

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## Note To Filer

**Created By:**

Becky Harrington on 01/03/2014 11:55 AM

**Last Edited By:**

Becky Harrington

**Submitted On:**

01/10/2014 09:30 AM

**Subject:**

Clarification response

**Comments:**

Home Base Rates  
Dwelling Maximum Premium Credits  
Home and Dwelling Fire Personal Liability Rates  
Dwelling Fire Occupancy Factors

Each of the above was revised. I'm looking for the percentage change of each. The overall change in the filing is 5%, but no information on whether each of the above was increased 5% or whether some were reduced, while others were increased to create the overall 5%.

Sorry I wasn't more detailed to begin with.

Becky

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## Note To Reviewer

**Created By:**

Andi Colosi on 01/02/2014 02:16 PM

**Last Edited By:**

Becky Harrington

**Submitted On:**

01/10/2014 09:30 AM

**Subject:**

Clarification on objection

**Comments:**

Hi Becky: Happy New Year! I hope your holidays were good.

We were hoping you could provide some clarification on the 12/31 objection. Are you looking for the percentage change for each individual rating plan we revised?

I appreciate your help!

Andi

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### Rate Information

Rate data applies to filing.

Filing Method:

File and Use

Rate Change Type:

Increase

Overall Percentage of Last Rate Revision:

5.000%

Effective Date of Last Rate Revision:

06/14/2013

Filing Method of Last Filing:

File and Use

### Company Rate Information

Company Name:	Overall % Indicated Change:	Overall % Rate Impact:	Written Premium Change for this Program:	Number of Policy Holders Affected for this Program:	Written Premium for this Program:	Maximum % Change (where req'd):	Minimum % Change (where req'd):
Encompass Insurance Company of America	13.600%	4.800%	\$25,125	182	\$523,442	5.300%	0.000%

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## Rate/Rule Schedule

Item No.	Schedule Item Status	Exhibit Name	Rule # or Page #	Rate Action	Previous State Filing Number	Attachments
1	Filed 01/10/2014	Home Rate Pages		Replacement	ALSE-128821399	10._ER-2418_Home_Rate_Pages.pdf
2	Filed 01/10/2014	Home Rules Manual		Replacement	ALSE-128821399	11._ER-2418_Home_Rules_Manual.pdf
3	Filed 01/10/2014	Dwelling Fire Rules Manual		Replacement	ALSE-128821399	12._ER-2418_Dwelling_Fire_Rules_Manual.pdf
4	Filed 01/10/2014	Excess Liability Rules		Replacement	ALSE-128821399	13._ER-2418_Excess_Liability_Rules.pdf

ARKANSAS USP PACKAGE PREMISES RATE PAGES

**BASE RATES**

Territory	Homes	Condos
30	<u>1515</u>	447
31	<u>1688</u>	447
32	<u>1804</u>	447
36	<u>1433</u>	447
39	<u>1677</u>	447
40	<u>1167</u>	447
41	<u>1467</u>	447
44	<u>1227</u>	447
60	<u>1515</u>	447
61	<u>1281</u>	447
62	<u>1834</u>	447
63	<u>1817</u>	447
64	<u>1743</u>	447
65	<u>1577</u>	447
66	<u>1215</u>	447
67	<u>1482</u>	447
68	<u>1493</u>	447
71	<u>1632</u>	447
72	<u>1268</u>	447
100	<u>1293</u>	447
101	<u>1703</u>	447

## **USP PORTFOLIO ARKANSAS: HOME RULES**

## 12. DEDUCTIBLES

All Policies are subject to a deductible applicable to loss from all perils covered under the policy on an accident basis. Only one deductible amount may be chosen for all real and tangible personal property covered, per each primary or secondary residence. However, the deductible on the secondary residence does not have to be the same as the primary. Also, for SPP optional deductible amounts are available.

The deductible amount must be entered on the Coverage Summary of the policy.

Apply the following factors to the residence premium portion of Universal Security:

<b>Deductible Amount</b>	<b>Factors</b>		<b>Maximum Premium Credit</b>	
	<b><u>Dwelling</u></b>	<b><u>Condo/Renter</u></b>	<b><u>Dwelling</u></b>	<b><u>Condo/Renter</u></b>
\$ 250	1.00	1.00	-	-
500	.90	.85	<u>\$ 143</u>	\$ 134
1,000	.75	.70	<u>427</u>	403
2,500	.65	.50	<u>1,284</u>	1,211
5,000	.55	.35	<u>2,709</u>	2,559

## **U.S.P. PORTFOLIO: DWELLING FIRE RULES**

B. Condominiums and Cooperative Apartments

- (1) Determine the contents coverage amount.
- (2) Determine the base premium using the corresponding condominium rate found on the State Rate Pages.
- (3) Reserved for Future Use.
- (4) Adjust the base premium by the occupancy factor determined in Rule 7.B, of this section.
- (5) For liability limits other than \$300,000 (\$5,000 Medical Expenses), refer to Rule 2.G in the Home Section of this manual.
- (6) For Reinsurance Charge, refer to Rule 2.I in the Home Section of this manual.

**6. SEASONAL DWELLING DEFINITION**

A seasonal residence is a residence with continuous un-occupancy of three or more consecutive months during any one-year period.

**7. OCCUPANCY FACTORS**

A. Dwellings

(1) Dwelling Factors

The factors below include dwelling coverage and a contents limit equal to 10% of the scheduled dwelling value.

	<u>Territories 62-65</u>		<u>All Other Territories</u>	
	<u>Frame</u>	<u>Masonry</u>	<u>Frame</u>	<u>Masonry</u>
Secondary Seasonal	<u>0.709</u>	<u>0.749</u>	<u>0.759</u>	<u>0.759</u>
Secondary Non-Seasonal	<u>0.749</u>	<u>0.759</u>	<u>0.759</u>	<u>0.749</u>
Primary	<u>0.749</u>	<u>0.759</u>	<u>0.759</u>	<u>0.749</u>

(2) Additional Contents Factor

The factors shown below are over and above the scheduled dwelling value.

<u>Terr.</u>	<u>% of Dwelling Value for Contents Coverage</u>				
	<u>10%</u>	<u>20%</u>	<u>30%</u>	<u>40%</u>	<u>50%</u>
62-65	INC	0.08	0.15	0.21	0.24
All Others	INC	0.09	0.16	0.21	0.25

To obtain the occupancy factor for dwellings owned and occupied by the insured, sum the factors obtained in (1) and (2) above.

(3) Rental Factor

For dwellings owned by the insured and rented to others, add 0.108 to the total obtained in (1) and (2) above.

**SECTION: UNIVERSAL SECURITY POLICY PORTFOLIO:  
DWELLING FIRE RULES**

**EFFECTIVE: June 14, 2014  
PAGE NO: 3-Arkansas**

B. Condominiums and Cooperatives

For condominiums and Cooperatives that are both Owned by the Insured and Rented to Others, apply the appropriate factor below.

<u>Territory</u>	<u>Contents Coverage Amount</u>			
	<u>\$10,000 or Less</u>		<u>Over \$10,000</u>	
	<u>Seasonal</u>	<u>Non-Seasonal</u>	<u>Seasonal</u>	<u>Non-Seasonal</u>
All	<u>0.635</u>	<u>0.528</u>	<u>1.163</u>	<u>1.055</u>

**8. FAIR RENTAL VALUE**

The Dwelling Fire Segment includes coverage for Fair Rental Value at the following limits:

- Dwellings - Up to 20% of the dwelling amount of insurance
- Condominiums - Up to 100% of the contents coverage amount

Increased limits for Fair Rental Value are available at the following premium charge:

\$4 per \$1,000

**◆ 9. LOSS SETTLEMENT OPTIONS-DWELLINGS**

A. Real Property Basic Replacement Cost Coverage

Dwellings which are insured at 100% of their replacement value will receive guaranteed full replacement cost if a total loss occurs. Dwellings insured for less than 100% of their replacement value will be written with the Real Property Basic Replacement Cost Coverage Endorsement which will not provide the full replacement cost guarantee.

B. Actual Cash Value

The policy may be endorsed to revise the loss settlement option on the dwelling to an actual cash value basis for a premium credit as follows:

Apply a factor of 0.87 to the dwelling premium.

**Note:** "Insurance To Value" is not applicable if the actual cash value settlement option is elected for the dwelling.

**10. DEDUCTIBLES**

All policies are subject to a deductible that applies to loss from all perils covered under the policy on an accident basis, which is subject to a separate deductible provision. The deductible on the dwelling fire exposure does not have to be the same as the deductible on the primary residence.

Refer to Rule 12 in the Home Section of this manual for deductibles, deductible factors and maximum premium credits.

**11. PROTECTIVE DEVICES**

Refer to Rule 11 in the Home Section of this manual.

**12. RESERVED FOR FUTURE USE**

## **USP PORTFOLIO ARKANSAS: EXCESS LIABILITY RULES**

**5. ANNUAL RATES—BASIC LIMITS AND \$100/300 OR \$300,000 MINIMUM  
UNDERLYING LIMITS FLAT CHARGE**

A. Motor Vehicle Liability (rates apply per vehicle)

(1) Autos, pickups, vans and registered dune buggies

<u>Classification</u>	<u>Class Code</u>	<u>Basic Limit Rates All Territories</u>	<u>\$100/300 or \$300,000 Underlying Limit Flat Charge</u>
All Operators	7010XX	\$113.12	\$7.72
Youthful Surcharge:			
Operators Under Age 21	7710XX	\$33.43	\$2.58
Operators Age 21 to 24	7510XX	\$33.43	\$2.58
Silver Select Surcharge	N/A	\$47.57	\$2.58
Senior Discount:			
Operators Age 50 and Above	7310XX	\$28.28	\$1.29

If two or more vehicles above are insured under the same policy, apply a factor of 0.80 to the above rates. (Class Code: Single Car XXXX01, Multi Car XXXX02)

(2) Other Miscellaneous Type Vehicles

<u>Vehicle</u>	<u>Class Code</u>	<u>Basic Limit Rates All Territories</u>	<u>\$100/300 or \$300,000 Underlying Limit Flat Charge</u>
Motor Homes	703000	\$30.97	\$2.29
Snowmobiles	704000	\$26.38	\$2.29
All-Terrain Vehicles	705000	\$26.38	\$2.29
Non-Registered Dune Buggies	706000	\$30.97	\$2.29
Golf Carts	707000	\$30.97	\$2.29
Antique Autos	708000	\$30.97	\$2.29

**Note:** The youthful surcharge should be added for each youthful operator for which coverage is to apply. The senior discount is then applied to any remaining vehicles. The number of youthful surcharges and senior discounts should not exceed the number of motor vehicles on the policy.

B. Home and Dwelling Fire Personal Liability

<u>Type</u>	<u>Class Code</u>	<u>Basic Limit Rates All Territories</u>	<u>\$300,000 Underlying Limit Flat Charge</u>
(1) Primary Residence	001	<u>\$32</u>	\$9
(2) Other Residence Premises and Residences Rented to Others	002	<u>\$6</u>	N/A
(3) Extended Liability Exposures: Permitted Business Exposures and Incidental Farming	N/A	<u>\$11</u> (one charge per residence)	N/A
(4) HomeWork Supplement	N/A	<u>\$39</u>	N/A

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## Supporting Document Schedules

<b>Satisfied - Item:</b>	H-1 Homeowners Abstract
<b>Comments:</b>	
<b>Attachment(s):</b>	08._ER-2418_StateFilingForm_H-1.pdf 09._ER-2418_StateFilingForm_H-1_Response_To_Question_5.pdf
<b>Item Status:</b>	Filed
<b>Status Date:</b>	01/10/2014
<b>Satisfied - Item:</b>	HPCS-Homeowners Premium Comparison Survey
<b>Comments:</b>	
<b>Attachment(s):</b>	07._ER-2418_StateFilingForm_HO_Survey_FORM_HPCS.pdf 07._StateFilingForm_HO_Survey_FORM_HPCS_ER2418.xls
<b>Item Status:</b>	Filed
<b>Status Date:</b>	01/10/2014
<b>Satisfied - Item:</b>	NAIC loss cost data entry document
<b>Comments:</b>	
<b>Attachment(s):</b>	06._ER-2418_StateFilingForm_FORM_RF-1_Rate_Filing_Abstract.pdf
<b>Item Status:</b>	Filed
<b>Status Date:</b>	01/10/2014
<b>Satisfied - Item:</b>	Indication Memo and Exhibits
<b>Comments:</b>	
<b>Attachment(s):</b>	02._ER-2418_Indication_Memo.pdf 03._ER-2418_OTA_Indication_Exhibits.pdf
<b>Item Status:</b>	Filed
<b>Status Date:</b>	01/10/2014
<b>Satisfied - Item:</b>	Contingency Support
<b>Comments:</b>	
<b>Attachment(s):</b>	04._ER-2418_Attachment_A_Contingency_Memo.pdf
<b>Item Status:</b>	Filed
<b>Status Date:</b>	01/10/2014
<b>Satisfied - Item:</b>	Determination of Underwriting Profit Provision Exhibits
<b>Comments:</b>	

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<b>Attachment(s):</b>	05._ER-2418_DUPP_Exhibits.pdf
<b>Item Status:</b>	Filed
<b>Status Date:</b>	01/10/2014

<b>Satisfied - Item:</b>	Impacts by Proposed Changes - 1/9/14 Response
<b>Comments:</b>	
<b>Attachment(s):</b>	Attachment I.pdf
<b>Item Status:</b>	Filed
<b>Status Date:</b>	01/10/2014

ARKANSAS INSURANCE DEPARTMENT

FORM H-1 HOMEOWNERS ABSTRACT

INSTRUCTIONS: All questions must be answered. If the answer is "none" or "not applicable", so state. If all questions are not answered, the filing will not be accepted for review by the Department. Use a separate abstract for each company if filing for a group. Subsequent homeowners rate/rule submissions that do not alter the information contained herein need not include this form.

Company Name Encompass Insurance Company of America

NAIC # (including group #) 10071 (008)

- 1. If you have had an insurance to value campaign during the experience filing period, describe the campaign and estimate its impact.

N/A

- 2. If you use a cost estimator (or some similar method) in order to make sure that dwellings (or contents) are insured at their value, state when this program was started in Arkansas and estimate its impact.

Agents can use any of the most current automated residential cost estimators available from Marshall & Swift or BOECKH. The majority of agents use BOECKH and its impact generally understates the costs by approximately 10% on average.

- 3. If you require a minimum relationship between the amount of insurance to be written and the replacement value of the dwelling (contents) in order to purchase insurance, describe the procedures that are used.

100% insurance to value (ITV) is required. Agents submit acceptable documentation estimating the replacement value of the home. If the agent is unable to provide an estimate, then an inspection is ordered to determine the accurate replacement value.

- 4. If you use an Inflation Guard form or similar type of coverage, describe the coverage(s) and estimate the impact.

Historically, Encompass has utilized the Marshall & Swift Inflation Guard Factors which are published every 6 months. The percent increase will range from 2% to 4%.

- 5. Specify the percentage given for credit or discounts for the following:

- |   |              |
|---|--------------|
| a. Fire Extinguisher                                  | <u>0-5</u> % |
| b. Burglar Alarm                                      | <u>2-5</u> % |
| c. Smoke Alarm  | <u>2-5</u> % |
| d. Insured who has both homeowners and auto with your | <u>29</u> %  |

company

- |                         |                 |
|-------------------------|-----------------|
| e. Deadbolt Locks       | <u>0-5</u> %    |
| f. Window or Door Locks | <u>0</u> %      |
| g. Other (specify)      | <u>8-13</u> %   |
|                         | <u>      </u> % |
|                         | <u>      </u> % |

6. Are there any areas in the State of Arkansas In which your company will not write homeowners insurance? If so, state the areas and explain reason for not writing.

N/A

7. Specify the form(s) utilized in writing homeowners insurance. Indicate the Arkansas premium volume for each form.

Form	Premium Volume
Homeowners	\$470,368
Condo/Renter	\$18,944
Dwelling Fire	\$34,130

8. Do you write homeowner risks which have aluminum, steel or vinyl siding?  Yes  No

9. Is there a surcharge on risks with wood heat?

No

If yes, state the surcharge

N/A

Does the surcharge apply to conventional fire places?

No

If yes, state the surcharge

N/A

THE INFORMATION PROVIDED IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



Signature

Richard Yates

Printed Name

Technician Analyst

Title

847-402-9329

Telephone Number

ryatf@allstate.com

Email address

AID PC H-1 (1/06)

**Encompass Insurance Company of America  
Other Than Automobile  
Arkansas**

**Form H-1 Homeowners Abstract Response**

- 5. Specify the percentage given for credit or discounts for the following:**  
**f. Other (Specify)**

As indicated on Form H-1 Homeowners Abstract, Encompass Insurance Company of America provides an 8-13% discount on eligible homes that have an *Automatic Sprinkler System*.

NAIC Number: 008-10071  
 Company Name: Encompass Insurance Company of America  
 Contact Person: Rich Yates  
 Telephone No.: 847-402-9329  
 Email Address: ryatf@allstate.com  
 Effective Date: 6/14/2014

**Homeowners Premium Comparison Survey Form  
 FORM HP3S - last modified August, 2005**

Submit to: Arkansas Insurance Department  
 1200 West Third Street  
 Little Rock, AR 72201-1904  
 Telephone: 501-371-2800  
 Email as an attachment to: insurance.pnc@arkansas.gov  
 You may also attach to a SERFF filing or submit on a cdr disk

**USE THE APPROPRIATE FORM BELOW - IF NOT APPLICABLE, LEAVE  
 BLANK**

**Survey Form for HO3 (Homeowners) - Use \$500 Flat Deductible (Covers risk of direct physical loss for dwelling and other structures; named perils for personal property, replacement cost on dwelling, actual cash value on personal property)**

Public Protection Class	Dwelling Value	Washington		Baxter		Craighead		St. Francis		Desha		Union		Miller		Sebastian		Pulaski	
		Brick	Frame	Brick	Frame	Brick	Frame	Brick	Frame	Brick	Frame	Brick	Frame	Brick	Frame	Brick	Frame	Brick	Frame
3	\$80,000	\$611.00	\$680.00	\$794.00	\$882.00	\$879.00	\$976.00	\$961.00	\$1,076.00	\$826.00	\$919.00	\$892.00	\$992.00	\$678.00	\$753.00	\$768.00	\$855.00	\$884.00	\$983.00
	\$120,000	\$838.00	\$932.00	\$1,100.00	\$1,234.00	\$1,228.00	\$1,378.00	\$1,354.00	\$1,516.00	\$1,148.00	\$1,288.00	\$1,250.00	\$1,401.00	\$929.00	\$1,036.00	\$1,060.00	\$1,191.00	\$1,237.00	\$1,387.00
	\$160,000	\$1,027.00	\$1,153.00	\$1,367.00	\$1,531.00	\$1,524.00	\$1,706.00	\$1,678.00	\$1,876.00	\$1,427.00	\$1,598.00	\$1,550.00	\$1,734.00	\$1,150.00	\$1,290.00	\$1,319.00	\$1,478.00	\$1,535.00	\$1,718.00
6	\$80,000	\$796.00	\$892.00	\$1,038.00	\$1,177.00	\$1,160.00	\$1,314.00	\$1,280.00	\$1,448.00	\$1,085.00	\$1,230.00	\$1,180.00	\$1,337.00	\$882.00	\$989.00	\$1,002.00	\$1,136.00	\$1,169.00	\$1,324.00
	\$120,000	\$1,103.00	\$1,103.00	\$1,463.00	\$1,463.00	\$1,632.00	\$1,632.00	\$1,795.00	\$1,795.00	\$1,528.00	\$1,528.00	\$1,659.00	\$1,659.00	\$1,233.00	\$1,233.00	\$1,414.00	\$1,414.00	\$1,643.00	\$1,643.00
	\$160,000	\$1,370.00	\$1,548.00	\$1,811.00	\$2,044.00	\$2,017.00	\$2,275.00	\$2,216.00	\$2,497.00	\$1,890.00	\$2,132.00	\$2,049.00	\$2,311.00	\$1,529.00	\$1,729.00	\$1,750.00	\$1,976.00	\$2,030.00	\$2,289.00
9	\$80,000	\$2,155.00	\$2,533.00	\$2,831.00	\$3,321.00	\$3,145.00	\$3,688.00	\$3,450.00	\$4,043.00	\$2,951.00	\$3,461.00	\$3,196.00	\$3,747.00	\$2,400.00	\$2,818.00	\$2,737.00	\$3,212.00	\$3,166.00	\$3,712.00
	\$120,000	\$2,995.00	\$3,513.00	\$3,921.00	\$4,593.00	\$4,352.00	\$5,096.00	\$4,769.00	\$5,583.00	\$4,086.00	\$4,786.00	\$4,421.00	\$5,177.00	\$3,330.00	\$3,904.00	\$3,793.00	\$4,444.00	\$4,381.00	\$5,130.00
	\$160,000	\$3,681.00	\$4,314.00	\$4,812.00	\$5,633.00	\$5,338.00	\$6,246.00	\$5,847.00	\$6,841.00	\$5,013.00	\$5,867.00	\$5,422.00	\$6,345.00	\$4,090.00	\$4,791.00	\$4,655.00	\$5,450.00	\$5,374.00	\$6,287.00

**Survey Form for HO4 (Renters) - Use \$500 Flat Deductible (Named perils for personal property, actual cash value for loss, liability and medical payments for others included)**

Public Protection Class	Property Value	Washington		Baxter		Craighead		St. Francis		Arkansas		Union		Miller		Sebastian		Pulaski	
		Brick	Frame	Brick	Frame	Brick	Frame	Brick	Frame	Brick	Frame	Brick	Frame	Brick	Frame	Brick	Frame	Brick	Frame
3	\$5,000																		
	\$15,000																		
	\$25,000	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00
6	\$5,000																		
	\$15,000																		
	\$25,000	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00
9	\$5,000																		
	\$15,000																		
	\$25,000	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00	\$274.00

**Survey Form for DP-2 (Dwelling/Fire) - Use \$500 Flat Deductible (Named perils for dwelling and personal property; replacement cost for dwelling, actual cash value for personal property, no liability coverage)**

Public Protection Class	Dwelling Value	Washington		Baxter		Craighead		St. Francis		Arkansas		Union		Miller		Sebastian		Pulaski	
		Brick	Frame	Brick	Frame	Brick	Frame	Brick	Frame	Brick	Frame	Brick	Frame	Brick	Frame	Brick	Frame	Brick	Frame
3	\$80,000	\$518.00	\$583.00	\$671.00	\$756.00	\$744.00	\$837.00	\$824.00	\$904.00	\$708.00	\$777.00	\$756.00	\$851.00	\$574.00	\$646.00	\$651.00	\$733.00	\$749.00	\$842.00
	\$120,000	\$709.00	\$798.00	\$922.00	\$1,037.00	\$1,020.00	\$1,148.00	\$1,130.00	\$1,238.00	\$971.00	\$1,065.00	\$1,036.00	\$1,166.00	\$786.00	\$885.00	\$891.00	\$1,004.00	\$1,027.00	\$1,155.00
	\$160,000	\$866.00	\$976.00	\$1,125.00	\$1,266.00	\$1,244.00	\$1,414.00	\$1,390.00	\$1,538.00	\$1,186.00	\$1,302.00	\$1,265.00	\$1,439.00	\$960.00	\$1,081.00	\$1,088.00	\$1,226.00	\$1,253.00	\$1,425.00
6	\$80,000	\$674.00	\$765.00	\$875.00	\$993.00	\$968.00	\$1,099.00	\$1,073.00	\$1,186.00	\$923.00	\$1,021.00	\$983.00	\$1,117.00	\$746.00	\$848.00	\$847.00	\$961.00	\$974.00	\$1,106.00
	\$120,000	\$924.00	\$1,049.00	\$1,198.00	\$1,370.00	\$1,331.00	\$1,532.00	\$1,491.00	\$1,665.00	\$1,264.00	\$1,411.00	\$1,353.00	\$1,557.00	\$1,022.00	\$1,163.00	\$1,160.00	\$1,321.00	\$1,340.00	\$1,542.00
	\$160,000	\$1,128.00	\$1,280.00	\$1,483.00	\$1,704.00	\$1,657.00	\$1,902.00	\$1,852.00	\$2,063.00	\$1,572.00	\$1,754.00	\$1,684.00	\$1,933.00	\$1,249.00	\$1,433.00	\$1,432.00	\$1,646.00	\$1,668.00	\$1,915.00
9	\$80,000	\$1,774.00	\$2,124.00	\$2,345.00	\$2,799.00	\$2,612.00	\$3,114.00	\$2,910.00	\$3,372.00	\$2,482.00	\$2,879.00	\$2,654.00	\$3,165.00	\$1,982.00	\$2,368.00	\$2,267.00	\$2,706.00	\$2,630.00	\$3,135.00
	\$120,000	\$2,484.00	\$2,964.00	\$3,268.00	\$3,890.00	\$3,633.00	\$4,322.00	\$4,042.00	\$4,674.00	\$3,455.00	\$4,000.00	\$3,692.00	\$4,391.00	\$2,769.00	\$3,300.00	\$3,160.00	\$3,762.00	\$3,658.00	\$4,351.00
	\$160,000	\$3,065.00	\$3,650.00	\$4,023.00	\$4,782.00	\$4,467.00	\$5,308.00	\$4,966.00	\$5,739.00	\$4,251.00	\$4,915.00	\$4,539.00	\$5,393.00	\$3,412.00	\$4,060.00	\$3,890.00	\$4,625.00	\$4,498.00	\$5,343.00

**SPECIFY THE PERCENTAGE GIVEN FOR CREDITS OR DISCOUNTS FOR THE FOLLOWING:**

**HO3 and HO4 only**

Fire Extinguisher	<input type="text"/>	%	Deadbolt Lock	<input type="text"/>	%
Burglar Alarm	2 to 5	%	Window Locks	<input type="text"/>	%
Smoke Alarm	2 to 5	%	\$1,000 Deductible	17	%
	Other (specify)				%
	Maximum Credit Allowed				%

**EARTHQUAKE INSURANCE**

**IMPORTANT, homeowners insurance does NOT automatically cover losses from earthquakes. Ask your agent about this cover**

ARE YOU CURRENTLY WRITING EARTHQUAKE COVERAGE IN ARKANSAS?	<input type="text"/>	NO (yes or no)	
WHAT IS YOUR PERCENTAGE DEDUCTIBLE?	<input type="text"/>	%	
WHAT IS YOUR PRICE PER \$1,000 OF COVERAGE?	Zone	Brick	Frame
	Highest Risk	\$ <input type="text"/>	\$ <input type="text"/>
	Lowest Risk	\$ <input type="text"/>	\$ <input type="text"/>

### NAIC LOSS COST DATA ENTRY DOCUMENT

<b>1.</b>	This filing transmittal is part of Company Tracking #	<b>ER-2179</b>
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<b>2.</b>	If filing is an adoption of an advisory organization loss cost filing, give name of Advisory Organization and Reference/ Item Filing Number	
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Company Name		Company NAIC Number		
<b>3.</b>	<b>A.</b>	<b>Encompass Insurance Company of America</b>	<b>B.</b>	<b>008-10071</b>

Product Coding Matrix Line of Business (i.e., Type of Insurance)		Product Coding Matrix Line of Insurance (i.e., Sub-type of Insurance)		
<b>4.</b>	<b>A.</b>	<b>Homeowners 4.0</b>	<b>B.</b>	<b>N/A</b>

<b>5.</b>			<b>FOR LOSS COSTS ONLY</b>				
(A) COVERAGE (See Instructions)	(B) Indicated % Rate Level Change	(C) Requested % Rate Level Change	(D) Expected Loss Ratio	(E) Loss Cost Modification Factor	(F) Selected Loss Cost Multiplier	(G) Expense Constant (If Applicable)	(H) Co. Current Loss Cost Multiplier
<b>Homeowners</b>	<b>13.9%</b>	<b>5.0%</b>					
<b>Dwelling Fire</b>	<b>23.5%</b>	<b>5.0%</b>					
<b>Condo/Renters</b>	<b>N/A</b>	<b>0.0%</b>					
<b>TOTAL OVERALL EFFECT</b>	<b>13.6%</b>	<b>4.8%</b>					

<b>6.</b>		5 Year History	Rate Change History					
Year	Policy Count	% of Change	Effective Date	State Earned Premium (000)	Incurred Losses (000)	State Loss Ratio	Countrywide Loss Ratio	
<b>2008</b>	<b>607</b>	<b>-0.6%</b>	<b>6/5/08</b>	<b>635</b>	<b>1384</b>	<b>218.1%</b>	<b>52.1%</b>	
<b>2009</b>	<b>468</b>	<b>N/A</b>	<b>N/A</b>	<b>1846</b>	<b>369</b>	<b>20.0%</b>	<b>49.4%</b>	
<b>2010</b>	<b>374</b>	<b>8.6%</b>	<b>4/23/10</b>	<b>829</b>	<b>199</b>	<b>24.1%</b>	<b>47.6%</b>	
<b>2011</b>	<b>238</b>	<b>N/A</b>	<b>N/A</b>	<b>724</b>	<b>558</b>	<b>77.1%</b>	<b>60.7%</b>	
<b>2012</b>	<b>308</b>	<b>5.0%</b>	<b>6/14/12</b>	<b>561</b>	<b>162</b>	<b>28.9%</b>	<b>45.1%</b>	

<b>7.</b>	
Expense Constants	Selected Provisions
A. Total Production Expense	<b>16.6%</b>
B. General Expense	<b>9.2%</b>
C. Taxes, License & Fees	<b>3.1%</b>
D. Underwriting Profit & Contingencies	<b>8.9%</b>
E. Other (Debt Provision)	<b>1.4%</b>
<b>F. TOTAL</b>	<b>39.2%</b>

- 8.**   N   Apply Lost Cost Factors to Future filings? (Y or N)
- 9.**   5.3%   Estimated Maximum Rate Increase for any Insured (%). Territory (if applicable):   40
- 10.**            Estimated Maximum Rate Decrease for any Insured (%) Territory (if applicable):

Encompass Insurance Company of America  
Other Than Automobile  
Arkansas

**TABLE OF CONTENTS**

**I. Summary of Changes and Summary Exhibits**

**II. Homeowners Statewide Rate Level Indications**

Overview of Homeowners Indication Methodology  
Adjustments to Premiums  
Adjustments to Non-Catastrophe Losses  
Catastrophe Adjustments in Detail  
Expense and Profit Provisions

**SUMMARY OF CHANGES AND SUMMARY EXHIBITS**

The chart below summarizes the indicated and proposed rate level changes included in this filing.

<b><u>Coverage*</u></b>	<b>Encompass Insurance Group Written Premium @ CRL</b>	<b>Encompass Insurance Group Indicated Rate Level Change</b>	<b>Encompass Insurance Company of America Written Premium @ CRL</b>	<b>Encompass Insurance Company of America Proposed Rate Level Change</b>
Home	\$2,415,560	13.9%	\$470,368	5.0%
Dwelling Fire	\$138,217	23.5%	\$34,130	5.0%
Condo/Renters	\$54,904	N/A	\$18,944	0.0%
<b>Overall</b>	<b>\$2,608,681</b>	<b>13.6%</b>	<b>\$523,442</b>	<b>4.8%</b>

\*Beginning with indications evaluated as of 12/31/2012, premium & loss information for Other Than Automobile Personal Umbrella is included with the premium & loss information for the Homeowners Line of Business in order to calculate the total indicated rate level need for Arkansas.

Please note that although Encompass believes our methodologies are appropriate and justified, in this filing we have calculated the indicated rate level change with several adjustments as requested by the Arkansas Department of Insurance with past filings. The contingency provision was capped at 1.0%, and the indication was calculated without the Retained Risk Provision. The Hurricane Provision for Loss and LAE was also removed, and actual historical hurricane losses were included in the development of the Non-Modeled CAT provision (referred to in the CAT adjustments section of this memo).

The filing contains the following revisions:

***Home Base Rates***

In order to achieve the proposed rate level change, the Home Base Rates have been revised. Please refer to the Home Rate Pages for the revised rates.

***Dwelling Maximum Premium Credits***

In order to achieve the proposed rate level change, the Dwelling Maximum Premium Credits have been revised. Please refer to Rule 12 of the Home Rules Manual for the revised credits.

***Home and Dwelling Fire Personal Liability Rates***

In order to achieve the proposed rate level change, the Home and Dwelling Fire Personal Liability Basic Limit Rates have been revised. Please refer to Rule 5.B of the Excess Liability Rules Manual for the revised rates.

***Dwelling Fire Occupancy Factors***

In order to achieve the proposed rate level change, the Dwelling Fire Occupancy Factors have been revised. Please refer to Rule 7 of the Dwelling Fire Rules Manual for the revised factors.

### **OVERVIEW OF HOMEOWNERS INDICATION METHODOLOGY**

**Exhibits 1 - 11** of this section show the determination of statewide rate level indications for Arkansas. The objective of this process is to determine the indicated rate level need. This is done by evaluating the adequacy of the present rates to pay for Encompass' best estimate of losses and expenses, including a reasonable profit margin, that will be incurred from annual policies written in the year after the proposed effective date.

Encompass is utilizing a combined company indication methodology for its Other Than Automobile indication, which represents the rate need for the state of Arkansas as a whole. The statewide rate level indication has been developed using combined data elements from Encompass Indemnity Company and Encompass Insurance Company of America (both combined constitute "Encompass Insurance Group" data for Arkansas). The aggregation of underlying data should provide a more stable, responsive and credible basis for evaluation; as such, a complement of credibility will not be used for the Home indication.

With this filing, Encompass is calculating the Non-Cat Indicated Provision for Loss and LAE for the Dwelling Fire indication using a relativity based on the Non-Cat Indicated Provision for Loss and LAE for the Home indication. Encompass believes that by applying a relativity to the Home Non-Cat Indicated Provision for Loss and LAE, Encompass can still reflect differences in the Dwelling Fire Pure Premium (i.e. trends) while having the advantage of applying this to a more stable base being the Home data. Ten years of Dwelling Fire Unlimited Pure Premiums to Home Unlimited Pure Premiums have been reviewed and a relativity has been selected based off of this. The data to support the relativity selection is shown in **Exhibit 2.B**. The selected relativity is then applied to the Home Non-Cat Indicated Provision for Loss and LAE to develop a Dwelling Fire Non-Cat Indicated Provision for Loss and LAE. Please refer to **Exhibit 2.A** for the final complement of credibility for Dwelling Fire.

The statewide rate level indication is based on data from five rolling accident years for Home and Dwelling Fire with losses ending June 30, 2013, evaluated as of September 30, 2013.

#### Experience Year Weights

In order to develop a credible measure of the indicated rate level, it is sometimes necessary to use more than one year of historical loss experience. Data for up to five experience years is combined to determine the indicated provision for loss and loss adjustment expense by line. The number of years needed to determine the rate level indication for each coverage is derived from a credibility procedure based upon the number of paid claims and the distribution of claims by line. This method also allows us to determine the weight to apply to each year of experience. The credibility procedure that was used is more fully described in the paper "On the Credibility of the Pure Premium" (Proceedings of the Casualty Actuarial Society, Vol. LV, 1968) by Mayerson, Jones and Bowers. The analysis for each coverage was completed using a  $k$  value of 10.0% and a  $P$  value of 90.0%; these parameters reflect the desire that the observed pure premium should be within  $k$  of the expected pure premium with probability  $P$ .

The weights applied to the loss experience for the experience years are determined for each coverage by the distribution of earned exposures over those years. The weights are based on the exposure distribution rather than the claim distribution in order to lessen the impact of volatility that can occur in the claim distribution. The initial calculated weight for a given year is limited to the weight for the subsequent year and the final weights are calculated proportionate to the limited weights to total 100%. Please refer to **Exhibit 4** for the experience year weights shown by line.

## ADJUSTMENTS TO PREMIUMS

### Current Rate Level Factors

Encompass uses a methodology that assumes that exposures are written uniformly by quarter, using a procedure described in a discussion by Frank Karlinski of the paper entitled "A Refined Model for Premium Adjustment", by David Miller and George Davis. (Mr. Karlinski's discussion appeared in the Proceedings of the Casualty Actuarial Society (PCAS), Vol. LXIV, 1977, and the paper by Miller and Davis appeared in the PCAS, Vol LXIII, 1976). This method (which is referred to as "Miller-Davis-Karlinski"), more accurately calculates factors to current rate level in instances when exposures are changing throughout the year, whether through growth, shrinkage or seasonality. (When exposures are, in fact, written uniformly throughout the year, this method produces approximately the same answers as the parallelogram method.)

### Premium Trend Factors

In addition to bringing premiums to current rate level, changes in the average written premium at the current rate level were reviewed. Unlike losses, premium is relatively stable. As the statewide rate level indication is developed using a Pure Premium methodology, only the latest year of premium is used as a basis for determining the indicated rate level change, which eliminates the need for historical annual premium trends. Prospective annual premium trends are still selected to account for expected shifts in the distribution of various rating characteristics such as increasing amounts of insurance and deductible drift. Since the effects on losses caused by these shifts are reflected in the loss projections, it is important that Encompass also account for the anticipated future changes in premiums. These selections are used to project the data from the average earned date of the experience period to the average earned date of the future policy period. Selected annual premium trends and overall premium trend factors for each line are shown in **Exhibit 5.A**. Encompass Insurance Group trend data is included as **Exhibit 5.B** to this attachment.

### **ADJUSTMENTS TO NON-CATASTROPHE LOSSES**

Historical losses are adjusted to prospective cost levels. Losses are shown including allocated loss adjustment expenses (ALAE) and excluding catastrophes. The development of Adjusted Non-Catastrophe Losses and LAE calculation is outlined in **Exhibit 4**.

#### **Loss Development**

The losses for a given accident year may not have been fully determined at the evaluation date of this review. As such, the losses must be adjusted to an ultimate settlement basis. This is accomplished by analyzing historical patterns of incurred loss development and selecting loss development factors. Encompass Insurance Group data has been considered in the selection of the loss development factors. Losses used in the analysis include ALAE but exclude catastrophes in order to minimize distortions. Age-to-age factors are selected for each coverage using total limits losses. Additional analysis of losses limited to \$100,000 per claim is performed to develop limited losses to ultimate for Home. The selected loss development factors that have been used in this filing are shown in **Exhibit 6**.

#### **Excess Loss Provision**

An excess loss provision is included to account for the expected exposure to large, fortuitous losses. Total ultimate losses are estimated by multiplying losses capped at \$100,000 per claim by a limited loss development factor and then by an excess loss factor. Encompass Insurance Group data has been considered in the selection of the excess loss provision. The excess loss factor is the selected ratio of ultimate unlimited losses to ultimate limited losses. The selected excess loss factor for each line is shown in **Exhibit 7**.

#### **Loss Trend**

The historical losses from the experience period are adjusted to account for expected differences in historical and future cost levels. While loss development factors adjust losses and allocated loss adjustment expenses to an ultimate settlement basis, they do not reflect the prospective rate of change in the occurrence of (frequency) or in the cost of (severity) incidents that may result in the payment of claims. To properly adjust historical costs to future cost levels, a loss trend adjustment is applied.

Frequency and severity amounts are calculated using the methodology in “The Effect of Changing Exposure Levels on Calendar Year Loss Trends” (Casualty Actuarial Society Forum, Winter 2005) by Chris Styrsky. This methodology helps to more consistently match losses and claims paid with the exposures that produced the claims.

The annual selections are used to project the data from the average occurrence date of the experience period to the average occurrence date of the future policy period. These selected trends are displayed in **Exhibit 8.A**. The calculations of loss trend factors are also shown in **Exhibit 8.A**. Encompass Insurance Group trend data is included in **Exhibit 8.B**. Please note that Encompass has selected both trend and projection factors.

#### **Loss Adjustment Expenses**

Losses in the experience period for each coverage have been adjusted to account for unallocated loss adjustment expenses (ULAE). A provision is developed using countrywide Encompass Insurance Group data in combined-lines form.

A three-year average of the ratios of countrywide, combined-lines, calendar year ULAE to countrywide, combined-lines, calendar year incurred losses is used to determine the ULAE provision. The average ratio is then applied to the losses for each coverage for each year used in the formula calculation. The ULAE ratio that has been used in this filing is shown in **Exhibit 4**.

### **CATASTROPHE ADJUSTMENTS IN DETAIL**

Encompass separately identifies and accounts for its exposure to loss due to the occurrence of catastrophic events within a state. In order to estimate its catastrophe exposure, Encompass develops a long-term relativity of each state to the countrywide catastrophe factor based upon 25 accident years of data evaluated as of March 31, 2013. Encompass then applies this relativity to a countrywide catastrophe factor based on more recent data. By using this approach, Encompass is able to balance the stability of a long-term estimate of catastrophe potential in Arkansas (needed because of the infrequent occurrence of catastrophes) and the responsiveness of more recent data (needed because of changing demographic conditions).

Encompass applies credibility to the resulting relativities for each state to stabilize the results. The credibility is based on the standard (Buhlmann/Bayesian) credibility method as described in Loss Models, by Klugman, Panjer and Willmot, chapter 5, pages 436 to 441. The credibility reflects the confidence Encompass has in the state's average relativity. In order to develop the credibility, Encompass considers the number of years used to determine the relativity as well as the variance of all states' relativities to countrywide.\* The complement of credibility is applied to a relativity of 1.000. The final relativity is applied to the countrywide catastrophe factor to develop the Arkansas catastrophe factor.

Encompass typically uses this methodology to account for Non-Modeled Catastrophes and then accounts for Modeled Catastrophes through a separate provision. Given previous concerns of the Arkansas Department of Insurance, Encompass has removed the Hurricane Provision for Loss and LAE and included actual historical hurricane loss experience with the development of the catastrophe factor.

**Exhibit 9.A** displays the development of the total Homeowners catastrophe factor of 34.8% for Arkansas.

\* Note: The number of years is used rather than exposures (as recommended in the standard model) because increased exposures does not necessarily lead to more stable estimates for catastrophes, particularly when the exposures are geographically concentrated

### **EXPENSE AND PROFIT PROVISIONS**

**Exhibit 10.A** shows the expense provisions used in developing the current fixed and variable expense provisions.

#### General and Other Acquisition Expense

The provisions for general expense and other acquisition expense are based on countrywide data. Since the methods and procedures that incur these expenses are uniform within each state, it is a reasonable assumption that these expense provisions are uniform across all states. To develop the provision for other acquisition and general expenses, a three-year average of countrywide, combined-lines, calendar year incurred expense divided by countrywide calendar year direct earned premium was calculated. Because premiums charged for the net cost of reinsurance (NCOR) do not include provisions for general and other acquisition expenses, the earned premium used in the development of the general and other acquisition expenses is countrywide direct earned premium less countrywide NCOR premium. Line specific adjustments to other acquisition expenses are made, such as the reduction by the amount of installment fees collected and the adjustment for premiums written off.

#### Licenses and Fees

A provision for licenses and fees that do not vary by premium size is determined by taking the arithmetic average ratio of these licenses and fees from the latest three calendar years in Arkansas. The provision for licenses and fees is considered, along with the general and other acquisition expense provisions, to be a fixed expense.

#### Fixed Expense Trend (Inflation)

The fixed expense trend utilized in the calculation of the indicated fixed expense provision consists of two components – a trend for General & Other Acquisition expenses and a trend for Licenses & Fees.

The method used to calculate the fixed expense trend for General & Other Acquisition expenses is similar to the method used by the Insurance Services Office (I.S.O.) and other competitors to determine a fixed expense trend. The method utilizes the CPI (Consumer Price Index) and the ECI (Employment Cost Index – Insurance Carriers, Agents, Brokers, & Service) and is discussed by Geoffrey Todd Werner, FCAS, MAAA in his paper Incorporation of Fixed Expenses, which was published in the CAS Forum (Winter 2004). Based on a review of the historical indices, an annual percentage change is selected for each index. These selected annual percent changes are then weighted together using the distribution of the Allstate expenditures in the latest calendar year for the two broad expense categories that these indices represent. This method is expected to produce stable and reasonable estimates of the true trend in General & Other Acquisition expenses and is consistent with the Current Practices and Alternatives detailed in Section 4 of Actuarial Standard of Practice No. 13, Trending Procedures in Property/Casualty Insurance Ratemaking.

In addition to the General & Other Acquisition expenses, Licenses & Fees are also considered as fixed expenses. Licenses & fees are generally constant in the absence of state action; therefore, the fixed expense trend should only be applied to the General & Other Acquisition portions of the fixed expenses. To accomplish this, Encompass calculates a weighted average of two trends: the fixed expense trend for general and other acquisition (as calculated using the method described in the paragraph above) and a

0.0% trend for licenses and fees. This weighted-average trend can then be applied to the entire fixed expense provision.

**Exhibit 10.B** shows the derivation of the Factor to Adjust for Subsequent Change in Fixed Expense.

#### Commission and Brokerage Expense and Taxes

The proposed commission and brokerage expense provision has been developed from the actual calendar year 2012 commission and brokerage incurred expense ratio in Arkansas. The provision for taxes reflects the actual state premium tax and, where applicable, other premium-related taxes such as Fire Marshall taxes and Municipal taxes. A provision for guaranty fund assessments is included if applicable.

#### Contingency Provision

Encompass selected a 1% Contingency Provision. Please reference **Attachment A** for further information.

#### Underwriting Profit/Operating Profit

Encompass performs two separate cost of capital analyses in the estimation of its cost of equity. The first uses the Fama-French Three-factor Model (FF3F), which reflects developments in the field of financial economics as published in the Casualty Actuarial Society Forum, Winter, 2004 and in Journal of Risk and Insurance, Vol. 72, No. 3, September 2005 (“Estimating the Cost of Equity Capital For Property-Liability Insurers” by J. David Cummins and Richard D. Phillips). The second is a Discounted Cash Flow (DCF) analysis, which estimates the expected future cash flows to investors in order to gauge the proper cost of equity. Once both the DCF and FF3F estimates had been calculated, Encompass selected a cost of equity of 9.5%, which reflected the outcomes of both analyses.

An analysis of premium, loss and expense cash flows is used to calculate the investment income on policyholder supplied funds (PHSF). This methodology is one of the two examples given in Actuarial Standard of Practice, No. 30 as appropriate methods for recognizing investment income from insurance operations (page 4).

The calculations detailing this investment income analysis are found in **Exhibit 11**. The rate (applied as a force of interest) used to discount losses and expenses includes anticipated net investment income and anticipated capital gains, both realized and unrealized. Operating cash flows are discounted to the average time of earnings of premium and profit for the policy year, rather than to the start of the policy year.

Please refer to the attached documented titled “The Development of the Underwriting Profit Provision” for more information.

Encompass Insurance Group  
Other Than Automobile  
Arkansas

Table of Contents

Exhibit 1 -	Summary of Changes
Exhibit 2 -	Rate Level Indication 2.A - Development of Statewide Rate Level Indication 2.B - Pure Premium Relativities
Exhibit 3 -	Development of Projected Average Earned Premium at Current Rates
Exhibit 4 -	Development of Non-Cat Provision for Loss and LAE

**Adjustments to Earned Premiums**

Exhibit 5 -	Premium Trends 5.A - Calculation of Premium Trend Factors 5.B - Premium Trend Data 5.C - AIY Trend Data
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**Adjustments to Incurred Losses**

Exhibit 6 -	Incurred Loss + ALAE Development Factors
Exhibit 7 -	Excess Loss Provision
Exhibit 8 -	Pure Premium Trends 8.A - Calculation of Pure Premium Trend Factors 8.B - Pure Premium Trend Data
Exhibit 9 -	Determination of Catastrophe Load 9.A - Catastrophe Factor

**Expenses, Profit & Debt**

Exhibit 10 -	Expenses 10.A - Summary of Expense Provisions 10.B - Factor to Adjust for Subsequent Change in Fixed Expense
Exhibit 11 -	Summary of Profit and Debt Provisions

Encompass Insurance Group  
Other Than Automobile  
Arkansas

Exhibit 1

Summary of Changes

<u>Coverage</u>	<u>Encompass Insurance Group Written Premium At CRL</u>	<u>Encompass Insurance Company of America Written Premium At CRL</u>	<u>Encompass Insurance Group Indicated Rate Level Change</u>	<u>Encompass Insurance Company of America Selected Rate Level Change</u>
Home	\$2,415,560	\$470,368	13.9%	5.0%
Dwelling Fire	138,217	34,130	23.5%	5.0%
Condo/Renters	54,904	18,944	N/A	0.0%
<b>Total Other Than Automobile</b>	<b>2,608,681</b>	<b>523,442</b>	<b>13.6%</b>	<b>4.8%</b>

Encompass Insurance Group  
Other Than Automobile  
Arkansas

Exhibit 2.A.1

Development of Statewide Rate Level Indication - Home

1)	Current Fixed Expense Ratio ( Exhibit 10.A )	10.8 %
2)	Three Year Average Earned Premium	\$1,664.26
3)	Current Dollar Provision for Fixed Expense = [ (1) x (2) ]	\$179.74
4)	Factor to Adjust for Subsequent Change in Fixed Expense ( Exhibit 10.B )	1.081
5)	Indicated Provision for Fixed Expense = [ (3) x (4) ]	\$194.30
6)	Variable Expense and Profit Ratio ( Exhibit 10.A )	28.4 %
7)	Home Non-Cat Indicated Provision for Loss and LAE ( Exhibit 4.1 )	\$932.00
8)	Average Catastrophe Factor ( Exhibit 9.A )	0.348
9)	Indicated Provision for Loss and LAE = [ (7) x [1 + (8)] ]	\$1,256.34
10)	Indicated Average Premium = [ (9) + (5) ] / [ 1 - (6) ]	\$2,026.03
11)	Projected Average Earned Premium at Current Rates ( Exhibit 3.1 )	\$1,778.20
12)	Indicated Rate Level Change = [ (10) / (11) - 1 ]	13.9 %

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Other Than Automobile  
Arkansas

Exhibit 2.A.2

Development of Statewide Rate Level Indication - Dwelling Fire

1)	Current Fixed Expense Ratio ( Exhibit 10.A )	10.8 %
2)	Three Year Average Earned Premium	\$1,032.44
3)	Current Dollar Provision for Fixed Expense = [ (1) x (2) ]	\$111.50
4)	Factor to Adjust for Subsequent Change in Fixed Expense ( Exhibit 10.B )	1.081
5)	Indicated Provision for Fixed Expense = [ (3) x (4) ]	\$120.53
6)	Variable Expense and Profit Ratio ( Exhibit 10.A )	28.4 %
7)	Dwelling Fire Non-Cat Indicated Provision for Loss and LAE = { [ Exhibit 2.A.1 (7) ] x [ Exhibit 2.B ] }	\$745.60
8)	Average Catastrophe Factor ( Exhibit 9.A )	0.348
9)	Indicated Provision for Loss and LAE = [ (7) x [1 + (8)] ]	\$1,005.07
10)	Indicated Average Premium = [ (9) + (5) ] / [ 1 - (6) ]	\$1,572.07
11)	Projected Average Earned Premium at Current Rates ( Exhibit 3.2 )	\$1,272.99
12)	Indicated Rate Level Change = [ (10) / (11) - 1 ]	23.5 %

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Other Than Automobile  
Arkansas

Dwelling Fire vs. Home Non-Cat Loss + ALAE Pure Premium Relativities

Fiscal Year Ending	Home Pure Premium	Dwelling Fire Pure Premium	Relativity
6/30/2004	336.69	120.05	0.357
6/30/2005	268.67	784.31	2.919
6/30/2006	361.00	955.62	2.647
6/30/2007	948.44	49.96	0.053
6/30/2008	609.08	810.97	1.331
6/30/2009	970.30	640.57	0.660
6/30/2010	702.02	317.87	0.453
6/30/2011	867.34	201.46	0.232
6/30/2012	584.72	153.32	0.262
6/30/2013	623.55	418.26	0.671
		Straight Average	0.959
		Weighted Average	0.804
		<b>Selected Ratio</b>	<b>0.800</b>

Encompass Insurance Group  
Other Than Automobile  
Arkansas

Exhibit 3.1

Development of Projected Average Earned Premium at Current Rates - Home

	(1)	(2)	(3) (Exhibit 5.A)	(4) = (2) x (3)	(5) = (4) / (1)	(6)
Fiscal Year <u>Ending</u>	<u>Earned Exposures</u>	<u>Earned Premium at Current Rates</u>	<u>Factor to Adjust to Projected Premium Level</u>	<u>Projected Earned Premium at Current Rates</u>	<u>Projected Average Earned Premium at Current Rates</u>	<u>Experience Year Weights</u>
6/30/2013	1,230	\$2,356,882	0.928	\$2,187,186	\$1,778.20	100 %
					(7) Projected Average Earned Premium At Current Rates \$1,778.20	

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Other Than Automobile  
Arkansas

Exhibit 3.2

Development of Projected Average Earned Premium at Current Rates - Dwelling Fire

	(1)	(2)	(3) (Exhibit 5.A)	(4) = (2) x (3)	(5) = (4) / (1)	(6)
Fiscal Year <u>Ending</u>	<u>Earned Exposures</u>	<u>Earned Premium at Current Rates</u>	<u>Factor to Adjust to Projected Premium Level</u>	<u>Projected Earned Premium at Current Rates</u>	<u>Projected Average Earned Premium at Current Rates</u>	<u>Experience Year Weights</u>
6/30/2013	104	\$123,154	1.075	\$132,391	\$1,272.99	100 %
					(7) Projected Average Earned Premium At Current Rates \$1,272.99	

Encompass Insurance Group  
Other Than Automobile  
Arkansas

Exhibit 4.1

Development of Non-Cat Provision for Loss and LAE - Home

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
				= (2) x (1 + (3))	( Exhibit 7)	( Exhibit 8.A )	= (4) x (5) x (6)	= (7) / (1)	
Fiscal Year Ending	Earned Exposures	Developed Limited Non-Cat Losses and ALAE	ULAE Provision	Developed Limited Non-Cat Losses and LAE	Excess Loss Provision	Factor to Adjust Losses for Pure Premium Trend	Projected Ultimate Non-Cat Losses and LAE	Projected Average Non-Cat Loss and LAE	Experience Year Weights
6/30/2009	2,028	\$1,414,475	0.146	\$1,620,988	1.25	0.849	\$1,720,274	\$848.26	20 %
6/30/2010	1,715	1,275,216	0.146	1,461,398	1.25	0.885	\$1,616,672	\$942.67	20
6/30/2011	1,382	1,183,185	0.146	1,355,930	1.25	0.922	\$1,562,709	\$1,130.76	20
6/30/2012	1,215	728,598	0.146	834,973	1.25	0.960	\$1,001,968	\$824.67	20
6/30/2013	1,230	784,485	0.146	899,020	1.25	1.000	\$1,123,775	\$913.64	20
								\$932.00	

(10) Non-Cat Indicated Provision for Loss and LAE

Encompass Insurance Group  
Other Than Automobile  
Arkansas

Exhibit 5.A

Calculation of Premium Trend Factors

<u>Coverage</u>	<u>Selected Annual Premium Impacts</u>
	<u>Projected</u>
Home	-3.0%
Dwelling Fire	3.0%
	<u>Calculation of Premium Trend Period</u>
	<u>Current Year</u>
1) Average Earned Date of Proposed Policy Period	6/14/2015
2) Mid-Point of Current Year's Experience Period	12/31/2012
3) Experience Period Ended	6/30/2013
4) Midpoint of Experience Period	12/31/2012
5) Historical: Number of Years from (4) to (2)	0.000
6) Projected: Number of Years from (2) to (1)	2.452
	<u>Factor to Adjust to Projected Premium Level</u>
	<u>Current Year</u>
Home	0.928
Dwelling Fire	1.075

(a) Projected Premium and AIY Factors are the Annual Projected Impacts plus unity compounded for the number of years in (6)

Encompass Insurance Group  
Other Than Automobile  
Arkansas

Exhibit 5.B.1

Premium Trend - Home

Year Ending	Average Written Premium @ CRL	Annual % Change	Exponential Curve of Best Fit (\$)		
			20 pt.	12 pt.	6 pt.
12/08	\$1,944.27	-1.9 %	1,988.69		
03/09	1,941.12	0.0	1,984.11		
06/09	1,951.62	-1.5	1,979.54		
09/09	1,960.85	0.3	1,974.99		
12/09	1,978.19	1.7	1,970.44		
03/10	1,969.55	1.5	1,965.90		
06/10	1,962.57	0.6	1,961.38		
09/10	1,968.35	0.4	1,956.86		
12/10	1,992.44	0.7	1,952.36	2,016.32	
03/11	1,993.49	1.2	1,947.86	2,001.55	
06/11	1,982.45	1.0	1,943.38	1,986.88	
09/11	1,968.91	0.0	1,938.90	1,972.33	
12/11	1,934.80	-2.9	1,934.44	1,957.88	
03/12	1,947.59	-2.3	1,929.98	1,943.53	
06/12	1,978.28	-0.2	1,925.54	1,929.29	1,995.52
09/12	1,948.60	-1.0	1,921.11	1,915.16	1,958.21
12/12	1,932.87	-0.1	1,916.68	1,901.12	1,921.59
03/13	1,926.81	-1.1	1,912.27	1,887.20	1,885.66
06/13	1,854.73	-6.3	1,907.87	1,873.37	1,850.40
09/13	1,786.66	-8.3	1,903.48	1,859.64	1,815.80
<b>Regression</b>			<b>20 pt.</b>	<b>12 pt.</b>	<b>6 pt.</b>
Avg Annual Percent Change Based on Best Fit:			-0.9 %	-2.9 %	-7.3 %

Encompass Insurance Group  
Other Than Automobile  
Arkansas

Exhibit 5.B.2

Premium Trend - Dwelling Fire

Year Ending	Average Written Premium @ CRL	Annual % Change	Exponential Curve of Best Fit (\$)		
			20 pt.	12 pt.	6 pt.
12/08	1,327.99	3.9 %	1281.92		
03/09	1,287.23	2.0	1277.25		
06/09	1,273.26	-5.2	1272.58		
09/09	1,297.46	4.7	1267.94		
12/09	1,278.34	-3.7	1263.31		
03/10	1,324.95	2.9	1258.70		
06/10	1,307.46	2.7	1254.11		
09/10	1,249.78	-3.7	1249.54		
12/10	1,155.34	-9.6	1244.98	1150.34	
03/11	1,181.51	-10.8	1240.43	1159.72	
06/11	1,198.07	-8.4	1235.91	1169.17	
09/11	1,217.05	-2.6	1231.40	1178.70	
12/11	1,192.54	3.2	1226.90	1188.31	
03/12	1,148.59	-2.8	1222.43	1198.00	
06/12	1,100.35	-8.2	1217.97	1207.76	1136.21
09/12	1,184.10	-2.7	1213.52	1217.61	1170.61
12/12	1,245.41	4.4	1209.09	1227.53	1206.05
03/13	1,230.56	7.1	1204.68	1237.54	1242.56
06/13	1,329.15	20.8	1200.29	1247.63	1280.18
09/13	1,268.05	7.1	1195.91	1257.80	1318.94
<b>Regression</b>			<b>20 pt.</b>	<b>12 pt.</b>	<b>6 pt.</b>
Avg Annual Percent Change Based on Best Fit:			-1.5 %	3.3 %	12.7 %

Encompass Insurance Group  
Other Than Automobile  
Arkansas

Exhibit 6.1.a

Incurring Loss + ALAE Development Factors - Home Limited

Fiscal Accident <u>Year Ending</u>	<u>15 Months</u>	<u>27 Months</u>	<u>39 Months</u>	<u>51 Months</u>	<u>63 Months</u>	<u>75 Months</u>	<u>87 Months</u>	<u>99 Months</u>	<u>111 Months</u>	<u>123 Months</u>
6/30/2000									1,809,983	1,809,983
6/30/2001								2,327,497	2,327,497	2,327,497
6/30/2002							2,085,399	2,085,399	2,085,399	2,085,399
6/30/2003						1,725,487	1,725,487	1,725,487	1,725,487	1,725,487
6/30/2004					1,148,311	1,148,311	1,148,311	1,148,311	1,148,311	1,148,311
6/30/2005				943,727	943,727	943,727	943,727	943,727	943,727	943,727
6/30/2006			908,060	903,608	904,315	904,502	904,502	904,502		
6/30/2007		1,446,292	1,438,730	1,438,727	1,448,504	1,448,504	1,448,504			
6/30/2008	1,313,140	1,378,171	1,357,220	1,361,364	1,361,364	1,361,364				
6/30/2009	1,333,850	1,409,131	1,410,242	1,410,242	1,410,242					
6/30/2010	1,198,006	1,237,779	1,242,859	1,265,095						
6/30/2011	1,084,751	1,157,679	1,163,407							
6/30/2012	650,367	704,639								
6/30/2013	709,940									
				Link Ratios						
<u>Development</u>	<u>15 to 27</u>	<u>27 to 39</u>	<u>39 to 51</u>	<u>51 to 63</u>	<u>63 to 75</u>	<u>75 to 87</u>	<u>87 to 99</u>	<u>99 to 111</u>	<u>111 to 123</u>	
4th Prior	1.050	0.995	0.995	1.000	1.000	1.000	1.000	1.000	1.000	1.000
3rd Prior	1.056	0.985	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000
2nd Prior	1.033	1.001	1.003	1.007	1.000	1.000	1.000	1.000	1.000	1.000
1st Prior	1.067	1.004	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Latest	1.083	1.005	1.018	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Volume Weighted 3 Yr Mean	1.057	1.003	1.007	1.002	1.000	1.000	1.000	1.000	1.000	1.000
Selected Countrywide:	1.068	1.017	1.009	1.005	1.003	1.000	1.000	1.000	1.000	1.000
Loss Development Period ( months ):	<u>15 - 123</u>	<u>27 - 123</u>	<u>39 - 123</u>	<u>51 - 123</u>	<u>63 - 123</u>	<u>75 - 123</u>	<u>87 - 123</u>	<u>99 - 123</u>	<u>111 - 123</u>	
Loss Development Factor:	1.105	1.034	1.017	1.008	1.003	1.000	1.000	1.000	1.000	

Encompass Insurance Group  
Other Than Automobile  
Arkansas

Exhibit 6.1.b

Incurred Loss + ALAE Development Factors - Home Unlimited

Fiscal Accident <u>Year Ending</u>	<u>15 Months</u>	<u>27 Months</u>	<u>39 Months</u>	<u>51 Months</u>	<u>63 Months</u>	<u>75 Months</u>	<u>87 Months</u>	<u>99 Months</u>	<u>111 Months</u>	<u>123 Months</u>
6/30/2000									1,856,014	1,856,014
6/30/2001								2,327,497	2,327,497	2,327,497
6/30/2002							2,263,048	2,263,048	2,263,048	2,263,048
6/30/2003						1,767,316	1,767,316	1,767,316	1,767,316	1,767,316
6/30/2004					1,989,243	1,989,243	1,989,243	1,989,243	1,989,243	1,989,243
6/30/2005				1,242,880	1,242,880	1,242,880	1,242,880	1,242,880	1,242,880	1,242,880
6/30/2006			939,333	934,881	935,588	935,775	935,775	935,775		
6/30/2007		2,388,793	2,423,641	2,423,638	2,433,415	2,433,415	2,433,415			
6/30/2008	1,370,640	1,452,171	1,414,720	1,418,864	1,418,864	1,418,864				
6/30/2009	1,825,994	1,979,406	2,018,909	2,018,909	2,018,909					
6/30/2010	1,224,773	1,264,546	1,269,626	1,291,862						
6/30/2011	1,151,682	1,224,610	1,230,338							
6/30/2012	653,668	707,940								
6/30/2013	709,940									
				Link Ratios						
<u>Development</u>	<u>15 to 27</u>	<u>27 to 39</u>	<u>39 to 51</u>	<u>51 to 63</u>	<u>63 to 75</u>	<u>75 to 87</u>	<u>87 to 99</u>	<u>99 to 111</u>	<u>111 to 123</u>	
4th Prior	1.059	1.015	0.995	1.000	1.000	1.000	1.000	1.000	1.000	1.000
3rd Prior	1.084	0.974	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000
2nd Prior	1.032	1.020	1.003	1.004	1.000	1.000	1.000	1.000	1.000	1.000
1st Prior	1.063	1.004	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Latest	1.083	1.005	1.018	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Volume Weighted 3 Yr Mean	1.055	1.011	1.006	1.002	1.000	1.000	1.000	1.000	1.000	1.000
Selected Countrywide:	1.068	1.020	1.012	1.006	1.005	1.003	1.001	1.000	1.000	1.000
Loss Development Period ( months ):	<u>15 - 123</u>	<u>27 - 123</u>	<u>39 - 123</u>	<u>51 - 123</u>	<u>63 - 123</u>	<u>75 - 123</u>	<u>87 - 123</u>	<u>99 - 123</u>	<u>111 - 123</u>	
Loss Development Factor:	1.119	1.048	1.027	1.015	1.009	1.004	1.001	1.000	1.000	

Encompass Insurance Group  
Other Than Automobile  
Arkansas

Exhibit 7

Excess Loss Provision

<b>HOME</b>			
Fiscal Accident Year Ending	Ultimate Total Ex-Cat Losses + ALAE	Ultimate Limited Ex-Cat Losses + ALAE	Total/Limited
6/30/2004	1,989,243	1,148,311	1.73
6/30/2005	1,242,881	943,728	1.32
6/30/2006	935,777	904,504	1.03
6/30/2007	2,435,849	1,448,505	1.68
6/30/2008	1,424,539	1,361,364	1.05
6/30/2009	2,037,080	1,414,475	1.44
6/30/2010	1,311,241	1,275,217	1.03
6/30/2011	1,263,558	1,183,185	1.07
6/30/2012	741,922	728,598	1.02
6/30/2013	794,424	784,485	1.01
			Weighted Average 1.27
			Straight Average 1.24
			Selected 1.25

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Arkansas

Exhibit 8.A

Calculation of Pure Premium Trend Factor

<u>Coverage</u>	<u>Selected Annual Pure Premium Impacts</u>	
	<u>Historical</u>	<u>Projected</u>
Home	-4.0%	0.0%

	<u>Calculation of Trend Period</u>				
	<u>4th Prior Year</u>	<u>3rd Prior Year</u>	<u>2nd Prior Year</u>	<u>1st Prior Year</u>	<u>Current Year</u>
1) Loss Trend Projection Date	6/14/2015	6/14/2015	6/14/2015	6/14/2015	6/14/2015
2) Mid-Point of Current Year's Experience Period	12/31/2012	12/31/2012	12/31/2012	12/31/2012	12/31/2012
3) Experience Period Ended	6/30/2009	6/30/2010	6/30/2011	6/30/2012	6/30/2013
4) Midpoint of Experience Period	12/31/2008	12/31/2009	12/31/2010	12/31/2011	12/31/2012
5) Historical: Number of Years from (4) to (2)	4.000	3.000	2.000	1.000	0.000
6) Projected: Number of Years from (2) to (1)	2.452	2.452	2.452	2.452	2.452

	<u>Factor to Adjust Losses for Pure Premium Trend</u>				
<u>Coverage</u>	<u>4th Prior Year</u>	<u>3rd Prior Year</u>	<u>2nd Prior Year</u>	<u>1st Prior Year</u>	<u>Current Year</u>
Home	0.849	0.885	0.922	0.960	1.000

(a) Historical Pure Premium Factors are the Annual Historical Impacts plus unity compounded for the number of years in (5)

(b) Projected Pure Premium Factors are the Annual Projected Impacts plus unity compounded for the number of years in (6)

(c) Factor to Adjust Losses for Pure Premium Trend = (a) x (b)

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Arkansas

Exhibit 8.B.1

Pure Premium Trend - Home

Year Ending	Actual Paid Pure Premium	Annual % Change	Exponential Curve of Best Fit (\$)		
			20 pt.	12 pt.	6 pt.
12/07	\$529.18	10.9 %			
03/08	526.66	12.5			
06/08	690.43	26.3			
09/08	727.22	68.7			
12/08	802.57	51.7	887.15		
03/09	895.42	70.0	868.13		
06/09	721.96	4.6	849.51		
09/09	827.80	13.8	831.30		
12/09	858.76	7.0	813.48		
03/10	820.44	-8.4	796.04		
06/10	900.35	24.7	778.97		
09/10	756.92	-8.6	762.27		
12/10	635.78	-26.0	745.92	778.15	
03/11	753.27	-8.2	729.93	755.80	
06/11	811.77	-9.8	714.28	734.08	
09/11	770.21	1.8	698.97	712.99	
12/11	841.16	32.3	683.98	692.51	
03/12	746.77	-0.9	669.32	672.61	
06/12	543.72	-33.0	654.97	653.28	574.99
09/12	644.73	-16.3	640.92	634.52	577.19
12/12	540.72	-35.7	627.18	616.28	579.40
03/13	572.49	-23.3	613.74	598.58	581.61
06/13	629.84	15.8	600.58	581.38	583.83
09/13	559.89	-13.2	587.70	564.68	586.07
<b>Regression</b>			<b>20 pt.</b>	<b>12 pt.</b>	<b>6 pt.</b>
Avg Annual Percent Change Based on Best Fit:			-8.3 %	-11.0 %	1.5 %

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Arkansas

Exhibit 9.A

Development of Catastrophe Factor

(1)	(2)	(3)	(4)	(5)	(6)
Accident Year	Ex-Cat Incurred <u>Loss+ALAE</u>	Catastrophe Incurred <u>Loss+ALAE</u>	State Catastrophe <u>Factor</u>	Countrywide Catastrophe <u>Factor</u>	<u>Relativities</u>
1988	1,579,834	37,017	0.023	0.062	0.371
1989	1,849,550	1,388,113	0.751	0.187	4.016
1990	1,008,317	351,471	0.349	0.173	2.017
1991	1,454,400	205,277	0.141	0.230	0.613
1992	903,216	26,211	0.029	0.156	0.186
1993	1,189,006	23,921	0.020	0.244	0.082
1994	802,038	63,772	0.080	0.339	0.236
1995	1,538,192	129,161	0.084	0.164	0.512
1996	1,616,672	1,115,444	0.690	0.483	1.429
1997	2,006,585	1,070,468	0.533	0.115	4.635
1998	1,309,287	284,965	0.218	0.423	0.515
1999	1,615,209	2,583,898	1.600	0.202	7.921
2000	2,353,497	1,040,216	0.442	0.155	2.852
2001	2,474,959	46,576	0.019	0.097	0.196
2002	1,920,755	191,548	0.100	0.169	0.592
2003	1,337,002	422,683	0.316	0.218	1.450
2004	2,092,108	77,354	0.037	0.134	0.276
2005	872,261	20,617	0.024	0.133	0.180
2006	1,162,738	426,593	0.367	0.205	1.790
2007	2,414,756	48,328	0.020	0.178	0.112
2008	2,162,287	1,429,890	0.661	0.246	2.687
2009	1,775,948	903,687	0.509	0.223	2.283
2010	893,740	492,408	0.551	0.381	1.446
2011	1,140,187	1,624,562	1.425	0.442	3.224
2012	774,741	73,004	0.094	0.190	0.495
(7) Average Relativity					1.605
(8) Standard Deviation					1.852
(9) Credibility					0.797
(10) Credibility Weighted Relativity					1.482
(11) Countrywide Selected Catastrophe Factor					0.235
(12) Arkansas Catastrophe Factor					0.348

Encompass Insurance Group  
Other Than Automobile  
Arkansas

Exhibit 10.A

Summary of Expense Provisions

	<u>Percent Fixed</u>	<u>Expense Provision</u>
General Expense	100 %	9.2 %
Other Acquisition	100	1.4
Licenses and Fees	100	0.2
Commissions	0	15.2
Taxes †	0	2.9
Contingency Provision	0	1.0
Profit Provision	0	7.9
Debt Provision	0	1.4

† State Taxes - Does not include Federal Income Tax

Encompass Insurance Group  
Other Than Automobile  
Arkansas

Exhibit 10.B

Factor to Adjust for Subsequent Change in Fixed Expense\*

1) Average Earned Date of Experience Period	6/30/2011
2) Average Earned Date of Proposed Policy Period	6/14/2015
3) Number of Years from (1) to (2)	3.956
4) Selected Annual Impact	2.00%
5) Factor to Adjust for Subsequent Change in Fixed Expense = [ 1 + (4) ] ^ (3)	1.081

\* For Calendar Years 2010-2012

Encompass Insurance Group  
Other Than Automobile  
Arkansas

Exhibit 11

**Investment Income**

Calculation of Present Value, as of the Average Earning Date  
of a Policy year, of all Income and Outgo @ 1.4% \*  
force of interest, given an Operating Profit of 5.9%  
and twelve-month Policy Terms

Years From Start of Policy Year	Cumulative Percent of Losses Paid	Yearly Percent of Losses Paid	Time from Start of Policy Year	Discounted ** to avg time of profit @ 1.4%	Discounted Payments
1	27.8%	27.8%	0.70	1.004	27.9%
2	82.3%	54.5%	1.40	0.994	54.2%
3	92.0%	9.7%	2.30	0.982	9.5%
4	95.1%	3.1%	3.40	0.967	3.0%
5	96.8%	1.7%	4.50	0.952	1.6%
Subsequent	100.0%	3.2%	6.90	0.921	2.9%
Total		100.0%			99.1%
Expected Losses and Loss Expense Ratio					60.8%
Present Value of Loss and Loss Expense Payments					60.3%
General Expense		9.2%	0.75	1.004	9.2%
Other Acquisition		1.4%	0.63	1.005	1.4%
Taxes		2.9%	0.77	1.003	2.9%
Commissions		15.2%	0.58	1.006	15.3%
Debt Provision		1.4%	1.00	1.000	1.4%
Profit Provision		7.9%	1.00	1.000	7.9%
Contingency Provision		1.0%	1.00	1.000	1.0%
Licenses and Fees		0.2%	0.77	1.003	0.2%
Total Present Value of Outgo					99.6%
Premiums		100.0%	0.78	1.003	100.3%
Difference, Present Value of Income Less Present Value of Outgo					0.7%

\*Discount rate from Investments Department forecast

\*\*exp (1.4% x (timing of profit being earned - timing of cash flow))

**Attachment A**

**Contingency Support**

**Encompass Insurance Group  
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Arkansas**

**Contingency Factor Support  
Explanatory Memorandum**

This memo provides explanation regarding Encompass's methodology for calculating a contingency provision to be used in its Homeowner rate level.

**Background**

Actuarial Standard of Practice No. 30, *Treatment of Profit and Contingency Provisions and the Cost of Capital in Property/Casualty Insurance Ratemaking*, defines the contingency provision for ratemaking purposes as follows: A provision for the expected differences, if any, between the estimated costs and the average actual costs, that cannot be eliminated by changes in other components of the ratemaking process. ASOP No. 30 goes on to state that:

- The actuary should include a contingency provision in the rates if assumptions used in ratemaking produce cost estimates that are not expected to equal average actual costs, and if the difference cannot be eliminated by changes in other components of the ratemaking process.
- While estimated costs are intended to equal average actual costs over time, differences between estimated and actual risk transfer costs may be expected in any given year. If a difference persists, the difference should be reflected in the ratemaking calculations as a contingency provision. The contingency provision is not intended to measure the variability of results and is not expected to contribute to profit.

Thus, even if the actuary has available relevant, credible data and uses the best, state-of-the-art actuarial techniques, there may still be instances where estimated future costs differ from actual future costs. The factors causing this situation to occur are outside the actuary's ability to predict and the insurer's ability to control. Examples would include (but not be limited to) court decisions, legislative action, and media influence on the public's behavior.

In spite of the inability to foresee specific events, an insurer may look back at recent history and identify past events that triggered unexpected payments. Given the highly regulated nature of the property and casualty insurance industry and the large amounts of money that flow through an insurance organization, it is reasonable to assume that adverse court decisions and similar unexpected events will occur again in the future. Courts and regulatory bodies are likely to continue to respond to lawsuits and other attempts at unexpected application of an insurance policy's coverage. As outlined in the Actuarial Standard of Practice referenced above, these events should be accounted for in ratemaking in the form of a contingency provision.

**Encompass Homeowners Contingency Provision calculation**

With this filing, Encompass is using a method of calculating a contingency provision that allows more specificity around the type of events that are included. We have reviewed experience over approximately a twenty five year period and have identified a number of representative events

**Encompass Insurance Group  
Other Than Automobile  
Arkansas**

that are appropriate to a contingency provision, due to their unanticipated nature. Considered events include the following: court decisions redefining the cause of loss for earth movement- and landslide-related loss, sinkholes, failure to disclose (in connection with sale of a home), oil tank leakage, foundation slab losses, mold, methamphetamine lab damage, legislated exceptions to policy language, flooding, lead paint poisoning, imminent collapse, terrorism, radiant floor heating systems, dog bites, and drug cartel wars. Identifying these events through Encompass claim file narratives allows us to exclude claims that are not appropriate to a contingency provision, such as normal catastrophes and regulatory delay situations. The effect of inflation is also excluded.

Some of these losses are too old to obtain reliable loss data at the claim level of detail. Some of these losses are too new to have worked into our data yet. Some events are excluded because, even with sophisticated computer programs, losses are not specifically tracked and so can't be separated from other loss data for inclusion in Encompass's computations. Some events simply did not produce a frequency of loss to materially impact our calculations. However, each event mentioned above illustrates that unforeseen loss does occur. This can be the case when a legislative or court decision expands the scope of Encompass's policy coverage, or when the media unexpectedly focuses attention on a health issue or other item of public concern. Other as-yet-unknown influences that Encompass cannot predict or price for will also likely affect claims payments in the future.

In order to estimate an appropriate contingency provision, we have selected a group of events from the above list of considered events (including oil tanks, slab losses, mold and flooding) for which we can obtain more reliable loss data. It is not our intention to price these specifically named events, but to use these events as a proxy for unforeseen events occurring in the future. Issues which triggered payments over several years cannot be considered "unexpected" for an indefinite period of time. In these cases, we have judgmentally included losses from the first three years following the initial event. After three years we assume that these losses are present in our indications data and that we have priced sufficiently for the event's exposure in our rates. Some events are of shorter duration and so fewer than three years of losses are included in the calculations. Note also that data includes some catastrophe losses. Catastrophe losses are more appropriately accounted for in a catastrophe provision rather than in a contingency provision, and Encompass does calculate an adequate catastrophe load (theoretically sound and calculated over a sufficiently long period of time). However, the legislative, media and other influences that generate unexpected losses can also affect catastrophe losses. Therefore, catastrophe losses are included in our analysis when they stem from one of the issues in question. Losses are included for Encompass's Owners, Renters and Condo forms.

Page 3 of this attachment shows the sum of all claims divided by countrywide homeowners accident year losses from 1996 – 2003 (adjusted for expected catastrophe levels) and adjusted for expense provisions. This time period was chosen to match the time period of losses readily available to us (our claim files older than 1996 cannot be effectively reviewed to extract specific losses). Our analysis was completed in 2004 and due to systems modifications since then, retrieving data at this level of detail would require extensive effort. Losses for some events have been adjusted downward to reflect the fact that, despite the sophistication of our analysis, some claims unrelated to the issue in question can be unintentionally included in the loss totals.

**Encompass Insurance Group  
Other Than Automobile  
Arkansas**

Total estimated loss from unexpected events:	\$388,265,584
Total countrywide ex-cat accident year losses:	\$14,082,669,021
Indicated contingency provision as percentage of ex-cat loss:	2.8%
Indicated contingency provision as percentage of total loss:	2.1%
Indicated contingency provision adjusted for expenses:	1.9%
Selected contingency provision:	<b>1.0%</b>

**Note:** the information presented above represents Allstate Insurance Company data from accident years 1996-2003



**DETERMINATION OF THE  
UNDERWRITING PROFIT PROVISION**

**ALLSTATE GROUP**

**October, 2012**

## Table of Contents

Section 1: The Fair and Reasonable Return	Pg 2
<i>Standards For Fair Returns</i>	Pg 2
<i>Cost of Equity Capital</i>	Pg 3
<i>Estimating the Cost of Equity Capital with the Fama-French Model</i>	Pg 4
<i>Full Information Betas</i>	Pg 8
<i>Allstate's Cost of Equity Capital Using Fama-French</i>	Pg 9
<i>Estimating the Cost of Equity Capital with the Discounted Cash Flow Model</i>	Pg 11
<i>Allstate's Cost of Equity Capital Selection</i>	Pg 14
Section 2: Development the Underwriting Profit Provision	
From a Given Cost of Equity	Pg 15
<i>Step (1): Average Market Value of Equity</i>	Pg 16
<i>Step (2): Cost of Equity (%)</i>	Pg 16
<i>Step (3): Cost of Equity (\$)</i>	Pg 17
<i>Step (4): Dividend Payout Ratio</i>	Pg 17
<i>Step (5): Average Market-to-book Ratio</i>	Pg 17
<i>Step (6): Income Due Shareholders</i>	Pg 17
<i>Step (7): Income Needed by Allstate</i>	Pg 17
<i>Step (8): Investment Income on Equity</i>	Pg 18
<i>Step (9): Operating Income Needed</i>	Pg 19
<i>Step (10): Earned Premium</i>	Pg 19
<i>Step (11): Operating Ratio</i>	Pg 19
<i>Step (12): Investment Income on Policyholder-supplied Funds</i>	Pg 19
<i>Step (13): After-tax Underwriting Profit Provision</i>	Pg 20
<i>Step (14): Tax Rate</i>	Pg 20
<i>Step (15): Pre-tax Underwriting Profit Provision</i>	Pg 21

## **Section 1: The Fair and Reasonable Return**

### **Standards for Fair Returns**

In pricing its insurance products, Allstate seeks to produce a fair and reasonable return from its insurance operations. Generally, what constitutes a fair and reasonable return involves many factors. In the context of ratemaking, the Supreme Court of the United States examined the level of return that constitutes a fair return for a regulated business in two landmark cases; *Federal Power Commission, et al. v. Hope Natural Gas Co.*, 320 U.S. 591 (1944) and *Bluefield Waterworks & Improvement Co. v. Public Service Commission of West Virginia, et al.*, 262 U.S. 679 (1923).

In *Hope Natural Gas*, the court adopted the capital attraction standard, under which the following questions are asked: Is the current rate of return excessive? Is the industry attracting capital and holding it? How risky is the business in comparison with others? Is the industry over-capitalized? Would the industry make better use of its capital if rates were more adequate? The Court concisely summarized the essential components of what we believe to be a fair and reasonable return:

"From the investor or company point of view it is important that there be enough revenue not only for operating expenses, but also for the capital costs of the business. These include service on the debt and dividends on the stock ... By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital."<sup>1</sup>

In the *Bluefield Waterworks* case, the Court discussed in greater detail the requirement that a regulated enterprise must be permitted to charge such rates as will produce a return comparable to other businesses having corresponding risks. The Court explained:

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<sup>1</sup> *Hope Natural Gas*, 320 U.S. at 603 (citations omitted).

"A public utility is entitled to such rates as will permit it to earn a return upon the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties, but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures. The return . . . should be reasonably sufficient to assure confidence in the financial soundness of the utility, and should be adequate, under efficient and economical management, to maintain and support its credit, and enable it to raise the money necessary for the proper discharge of its public duties."<sup>2</sup>

Accordingly, for a return to be a fair return, it must meet the following minimum standards that have been recognized by the United States Supreme Court:

1. The return to the firm should be sufficient to attract capital.
2. The return to the shareholder should be commensurate with returns on alternative investments of comparable risk.
3. The return to the firm should be commensurate with returns to other unregulated firms of comparable risk.

This paper will now examine how the components of Allstate's underwriting profit provision are designed to meet each of these standards.

### **Cost of Equity Capital**

Insurance companies incur multiple expenses when writing insurance policies – for example, agent commissions, premium taxes, and personnel salaries, among other things. Another expense that is

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<sup>2</sup> Bluefield Waterworks, 262 U.S. at 692.

incurred is the cost of raising and holding the capital that is required to support the business being written. This expense, known as the cost of equity capital, is included in the rate as what is typically called the “profit provision.”

A firm’s cost of equity capital is the rate of return that investors expect to earn on the market value of the investment. Allstate’s cost of equity capital was estimated, and a corresponding profit provision was derived, using the methodologies described in the remainder of this paper.

Allstate utilized two major cost of capital estimation techniques to determine its result – the Fama-French Three-factor Method, and the Discounted Cash Flow Method. Each method is described in detail below.

#### *Estimating the Cost of Equity Capital with the Fama-French Three-factor Model*

Modern financial theory teaches that investors demand higher returns from risky investments. The higher return is necessary to induce investors to assume the risk. Therefore, for our purposes, it is necessary to estimate the financial risk of property/casualty insurance so that we can calculate the appropriate return to investors.

According to traditional capital market theory, the return on any given stock is partly driven by the return on the overall market and partly driven by idiosyncratic factors that are not correlated with the overall market. The relationship or co-variability between a given stock’s return and the return on the market is measured by a statistic called “beta”. Equilibrium returns, according to theory, are linearly related to risk as measured by beta. Intuitively, beta is a measure of the tendency of the return on a stock to move with the market portfolio and provides an indication of the volatility of a security’s return relative to the market as a whole. A security with a beta of one is a security with average market risk. A beta of 1.5 indicates that when the return on the market portfolio exceeds the risk-free return by 10%, then the return on the security tends to exceed the risk-free return by 15%; and when the return on the market is 10% less than the risk-free return, the return on the security tends to be 15% less than the risk-free return. Thus, a beta value that is greater than 1.00 indicates a greater than average risk. A beta of 0.5, on the other hand, indicates that when the return on the market portfolio exceeds the risk-free return by 10%, then the return on the security

tends to exceed the risk-free return by 5%; and when the return on the market portfolio is 10% less than the risk-free return, the return on the security tends to be 5% less than the risk-free return. Thus, a beta less than one indicates less than average risk.

Historically, the capital asset pricing model (CAPM) has been widely used to estimate the cost of equity capital. CAPM is simple in its logic and directly reflects the beta risk measure outlined above. CAPM holds that the return on a stock should reflect the co-variability of the stock with the market portfolio, because this component of risk cannot be diversified away by investors. According to CAPM the return on a stock should not reflect the idiosyncratic component of the return, which can be diversified away by holding an appropriately structured portfolio. The CAPM cost of equity capital estimate requires only three values: an estimate of the firm's beta, a risk-free rate of return, and the expected return on the total market portfolio. The CAPM cost of capital is then simply determined as the sum of the risk-free rate plus a risk premium equal to the product of the stock's beta coefficient and the expected return on the market portfolio in excess of the risk-free rate. Expressed mathematically, the CAPM formula is:

$$r = r_f + \beta(r_m - r_f),$$

where  $r_f$  is the risk-free rate of return,  $r_m$  the expected equity-market rate of return, and  $r$  the stock's expected rate of return.  $\beta$  measures the riskiness of the stock's return relative to that of the equity market.

Since the late 1980's, researchers have observed that CAPM's ability to explain and predict the average returns of many investment opportunities can be improved by incorporating additional factors into the analysis. The most widely recognized multi-factor model is the "Fama-French three-factor model."<sup>3</sup> Fama and French have shown that from the 1960's both small stocks and value stocks have returned more than what the traditional CAPM has predicted. In addition to the

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<sup>3</sup> Fama, Eugene F., and Kenneth R. French, 1992, "The Cross-Section of Expected Stock Returns," *Journal of Finance* 47: 427-465.

Fama, Eugene F., and Kenneth R. French, 1993, "Common Risk Factors In the Returns on Stocks and Bonds," *Journal of Financial Economics* 39: 3-56.

Fama, Eugene F., and Kenneth R. French, 1996, "Size and Book-to-Market Factors in Earnings and Returns," *Journal of Finance* 50: 131-155.

usual market-risk premium ( $r_m - r_f$ ), they utilize two other variables: size premium ( $\pi_s$ ) and value premium ( $\pi_h$ ).<sup>4</sup> The size premium is the excess of the return of a portfolio of small-cap stocks over that of a portfolio of large-cap stocks. The value premium is the excess of the return of a portfolio of high book-value-to-market-value stocks over that of a portfolio of low book-value-to-market-value stocks.<sup>5</sup> Shown in Appendix 1, Exhibit 1 are the long-term averages of the market-risk, small-stock, and value-stock premia from the Fama-French database, which derives from the database of the Center for Research in Security Prices. The Fama-French model regresses a stock's monthly return against monthly returns from the three factors, or in equation form:

$$r - r_f = \alpha + \beta_m (r_m - r_f) + \beta_s \pi_s + \beta_h \pi_h + \varepsilon$$

As before,  $r_f$  is the risk-free rate of return for the month observed. But  $r$  is now the observed return of the stock for that month. To predict returns we use expected values, but the regression equation explains actual, random observations (hence the error term  $\varepsilon$ ). Similarly,  $r_m$  is the actual return of the equity market. The variables  $\pi_s$  and  $\pi_h$  measure by how much small-cap stocks outperformed large-cap stocks, and by how much high book-to-market stocks outperformed low ones. Negative values indicate underperformance. Though an intercept term  $\alpha$  is estimated, economic theory states that in the long run it should be zero. Hence, in predicting stock returns it is ignored.

Thus, three betas are estimated, which measure the stock's sensitivity to the three factors. Note that the  $\pi$ -variables are not related to the risk-free return  $r_f$ , since they are differences of the returns on one equity portfolio from the returns on another equity portfolio.

The Fama-French model is a multi-factor model that reduces to the CAPM if  $\beta_s$  and  $\beta_h$  are constrained to zero. Therefore, it must explain more stock-return variance than does the CAPM. In a subsequent paper<sup>6</sup>, Fama and French argued that the R-squared of their model is markedly

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<sup>4</sup> The notation is from a paper of J. David Cummins and Richard D. Phillips, "Estimating the Cost of Equity Capital for Property-Liability Insurers."

<sup>5</sup> The details of how Fama and French define these portfolios, how they periodically rebalance them, and their historic performance are freely available at <http://mba.tuck.dartmouth.edu/pages/faculty/ken.french>.

<sup>6</sup> Fama, Eugene F. and Kenneth R. French, 1993, "Common Risk Factors in the Returns on Stocks and Bonds," *Journal of Financial Economics* 39: 3-56.

better than that for CAPM, and that  $\beta_s$  and  $\beta_h$  are significantly different from zero, even after controlling for the overall market.<sup>7</sup> Extensive research since 1992 has shown that factors other than the CAPM market systematic risk factor play an important role in explaining the cross-section of expected stock returns. As Fama and French note:

“...the available evidence suggests that the three-factor model...is a parsimonious description of returns and average returns. The model captures much of the variation in the cross-section of average stock returns, and it absorbs most of the anomalies that have plagued the CAPM.”<sup>8</sup>

The Fama-French model has been subject to the most extensive testing and validation of any multiple factor model.

In addition, we have used a technique for measuring the beta that has been shown to improve accuracy. In estimating the beta coefficients of asset pricing models such as the CAPM and Fama-French models, this technique is known as the sum-beta adjustment (Ibbotson, *SBI Valuation Edition 2004*, 109-114). The sum-beta method is used to obtain unbiased estimates of the beta coefficients of the risk factors of asset pricing models, when either the individual stock and/or some of the stocks that comprise the risk factors are infrequently traded. Research shows that there is a downward bias in the estimate of the risk factors for shares that trade infrequently.<sup>9</sup> Although Allstate’s stock is frequently traded, we cannot directly compare Allstate’s estimated risk factors to those of other companies without first adjusting for the amount of trading in each firm’s stock. The adjustment is quite simple – unbiased estimates of the beta coefficients are obtained – in the case of the Fama-French model, by regressing the excess return of the stock on the

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<sup>7</sup> R-squared is a widely accepted measure of the goodness-of-fit of a regression model. It measures the proportion of the variability in the dependent variable of the model (in this case, the excess return of a stock) that is explained by the model.

<sup>8</sup> Fama, Eugene F. and Kenneth R. French, 1996, “Multifactor Explanations of Asset Pricing Anomalies,” *The Journal of Finance* 51: 56.

<sup>9</sup> Dimson, Elroy, 1979, “Risk Measurement When Shares are Subject to Infrequent Trading,” *Journal of Financial Economics* 7: 197-226.

contemporaneous risk factors and the previous month's factors.<sup>10</sup> In symbols, the sum-beta version of the Fama-French model is:

$$r - r_f = \alpha + \beta_{m0}(r_{m0} - r_{f0}) + \beta_{m1}(r_{m1} - r_{f1}) + \beta_{s0}\pi_{s0} + \beta_{s1}\pi_{s1} + \beta_{h0}\pi_{h0} + \beta_{h1}\pi_{h1} + \varepsilon$$

In this version there are six beta terms, and their subscripts are augmented with 0 and 1. The stock's excess return is thereby related to the market, size, and value returns of the current period (period 0), as well as to those of the previous period (period 1). Otherwise, all the variables are defined as they were in the three-factor Fama-French model previously discussed.

After estimating the long-term relationships between the stock's excess return and the factors, the unbiased beta coefficient for each factor is obtained by adding the current and lagged beta — hence the term “sum-beta.” With unbiased estimates of the beta coefficients, the cost of equity capital is then determined by multiplying the long-term average risk premium for each factor by the appropriate sum-beta and then summing across the three factors.

#### *Full-Information Betas*

Allstate follows the lead of Cummins and Phillips in their application of the full-information adjustment to the Fama-French model.<sup>11</sup> From the CRSP data, betas are estimated for rolling sixty-month periods for the thousands of companies in the CRSP database. For more than five thousand of these companies, the S&P/Compustat database provides sales figures by North American Industry Classification System (NAICS) segment. This allows us to define 26 high-level, homogenous business segments, one of which is property/casualty insurance. Each firm can then be treated as a unique mixture of these business segments. In other words, we can decompose the Fama-French betas of the companies in the sample into Fama-French betas of idealized business segments, in particular, those of the property/casualty segment. The details

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<sup>10</sup> In applying the sum-beta method, it is important for reasons of consistency to apply the model to stocks that trade frequently as well as to infrequently traded stocks. In the former case, the sum-beta adjustment does not significantly affect the cost of capital estimates.

<sup>11</sup> J. David Cummins and Richard D. Phillips, “Estimating the Cost of Equity Capital for Property-Liability Insurers.”

of this procedure are given in the earlier cited working paper of Cummins and Phillips, but in brief, we estimate the industry-segment betas of the following seemingly-unrelated-regression (SUR)<sup>12</sup> model:

$$\begin{aligned}\beta_{mi} &= \sum_j \beta_{mj} \omega_{ij} + \varepsilon_{mi} \\ \beta_{si} &= \sum_j \beta_{sj} \omega_{ij} + \gamma_s \ln(MV_i) + \varepsilon_{si} \\ \beta_{hi} &= \sum_j \beta_{hj} \omega_{ij} + \gamma_h \ln(BV_i / MV_i) + \varepsilon_{hi}\end{aligned}$$

Subscript  $i$  indexes the actual companies, subscript  $j$  the industry segments. The independent variable  $\omega_{ij}$  is the participation of the  $i^{\text{th}}$  firm in the  $j^{\text{th}}$  segment, and summing it over all  $j$  values with  $i$  constant equals one. For example, Allstate's exposure is about 18% in the life-insurance segment and 82% in the property/casualty segment. From the firm Fama-French betas (the betas with the  $i$  subscript), the model estimates the industry-segment betas (the full-information betas, those with the  $j$  subscript). The gamma terms level the size ( $s$ ) and value ( $h$ ) attributes of companies in order to make their industry-group betas independent of size and value. The SUR feature estimates and incorporates the covariance between the triad of error terms. Allstate decomposed sum-betas and weighted the error terms of the regression according to the market value of the companies, as did Cummins and Phillips.

#### *Allstate's Cost of Equity Capital Estimate Using Fama-French*

Investors expect higher returns from equity investments because equity investments are riskier than risk-free investments, such as Treasury Bills. This additional return over and above a risk-free return is commonly referred to as a risk premium.

The attached Appendix 1, Exhibit 1 presents the three risk premia necessary to apply the Fama-French model. The three risk premia are long-term averages beginning with July 1926 data and ending in June of the year shown in the exhibit. Data before July 1926 are not readily available.

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<sup>12</sup> Seemingly unrelated regression is an advanced modeling technique discussed in most econometric textbooks. For a standard treatment see Judge, George G., R.C. Hill, W.E. Griffiths, H. Lütkepohl, and T.-C. Lee, *Introduction to the Theory and Practice of Econometrics*, Second Edition, New York, John Wiley & Sons, 1988, chapter 11.

The CRSP data go back only that far, and Ibbotson Associates takes it as the starting point for all its series.

The market risk premium reflects the degree to which the return on a broad base of stocks has exceeded the risk-free return. Since this risk premium compensates investors for systematic portfolio risk, it is based on a weighted portfolio of all the stocks (currently more than 7,000) in the CRSP database, a portfolio that encompasses the New York and American stock exchanges, the NASDAQ, and the over-the-counter market.

The small-stock premium reflects the degree to which the returns for small companies have exceeded the returns for large companies and adjusts the estimated cost of equity capital for the risk factor associated with firm size.

The value-stock premium reflects the degree to which the returns for companies whose book values are large relative to their market values have exceeded the returns for companies whose book values are correspondingly small. It adjusts the estimated cost of equity capital for the risk factor associated with a firm's ratio of book value to market value. Fama and French form, and quarterly rebalance, the small and large portfolios of CRSP stocks according to the median size. For every month since July 1926, they calculate the difference of the return of the large-stock portfolio from that of the small-stock portfolio. The process is similar for the value-stock premium, except that they use only the upper thirty percent and lower thirty percent of stocks, ranked by their book-to-market ratios.

Appendix 1, Exhibit 2 presents the property/casualty insurance industry betas and coefficients necessary to apply the Fama-French model. As previously described, these values are based on CRSP data for thousands of firms, subdivided into twenty-six business segments.

Appendix 1, Exhibit 3 summarizes the market value and book value from Allstate's reported financial statements. Only the two "Log" columns will carry forward into the cost-of-capital calculation. These "Log" values will multiply with the model-estimated gammas, so that the size

and value components of the cost of capital will be tailored to Allstate within the property/casualty insurance segment.

Appendix 1, Exhibit 4, Page 1 summarizes the Fama-French model estimates of the market-risk, size-risk, and value-risk betas. Calculations are shown for the most recent five-year period. Note that nothing unique to Allstate flows into the market-risk beta, but the size-risk and value-risk components are specific to Allstate.

Allstate's methodology utilizes an averaging of the betas in an attempt to increase stability, as the beta values can fluctuate from year to year. A 3-year average is currently used, which also lends a degree of responsiveness to the beta value. However, both the 3- and 5-year averages will be monitored and considered prospectively in order to prevent large fluctuations from year to year.

The return on 28-day Treasury Bills is used to represent the risk-free return. This value, obtained from the Federal Reserve, is the annualized return. Since such Bills mature at the end of the period, they are as free from market-price fluctuation as they are from default.

Appendix 1, Exhibit 4, Page 2 summarizes the final calculation of the Fama-French cost of equity. The cost of equity is equal to the sum of the P/C industry market risk premium, the Allstate size risk premium, the Allstate value risk premium, and the risk-free return.

#### *Estimating the Cost of Equity Capital with the Discounted Cash Flow Model*

The Discounted Cash Flow (DCF) model, as the name implies, is based on the concept of discounting future cash flows. The underlying assumption of the model is that the cost of an investment, typically the price of a stock, must equal the present value of the cash flows from the investment. The logic is as follows: investors are willing to pay the current price for a share of stock only if the present value of the expected cash flows arising from the investment is equal to that price. If the present value of the cash flows were greater (less) than the current price, investors would bid the price up (down).

The cash flows arising from the purchase of a share of stock are the dividend payments the investor expects to receive in the future. If the security is expected to be held in perpetuity, then the stock price can be expressed as the sum of the discounted future dividend yields:

$$P_0 = [D_1/(1+k)] + [D_2/(1+k)^2] + [D_3/(1+k)^3] + \dots \quad (1)$$

where  $P_0$  is the price of the stock,  $D_i$  is the dividend yield in period  $i$ , and  $k$  is the investor's implicit discount rate, or cost of capital. If dividends are expected to grow at a constant annual rate,  $g$ , in the future, then the dividend in time period  $i$  is simply the current dividend,  $D_0$ , times the growth factor  $(1+g)^i$ . It can be shown, by suitable mathematical manipulation, that this formulation of the DCF model is equivalent to the equation below:

$$k = (D_1 / P_0) + g \quad (2)$$

where  $D_1/P_0$  is the dividend yield expected in the first year and  $g$  is the expected growth rate of the dividends. It can also be shown that even if the investor expects to sell the security at some later date, the price at that time will be equal to the present value of the then future dividend flows. Therefore any expected future capital gain will be impounded in the current estimates of future cash flows.

As shown in equation (2) above, calculating cost of capital entails collecting data and developing computational procedures to estimate the two components on the right hand side of the equal sign – the expected first year dividend yield and the expected growth rate in dividends. The first component of the DCF equation,  $D_1 / P_0$ , is the anticipated dividend yield in the coming year. It is the estimated total cash dividends to be declared over the next 12 months divided by the current price of the stock. This value is reported directly in the data source<sup>13</sup> upon which we rely, and hence requires no specific calculation.

The second component of equation (2) is the growth rate,  $g$ . We calculate this value as the average of several different estimates, including historical and forecasted dividend growth rates.

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<sup>13</sup> Value Line Investment Survey

The dividend growth rates are calculated as the average of five-year and ten-year historical growth rates and analysts forecasts of such growth rates in the future. In recent quarters, Value Line's dividend growth rate projection formula, which uses a three-year average for the "current" dividend, has been abnormally impacted by Allstate's dividend cut in March, 2009. Because of this, a dividend growth rate that reflects Value Line's actual expected growth from today's dividend rate is more reflective of the true projection. This is especially true given that the current dividend rate is used in the determination of the dividend yield in the DCF calculations. In addition, calculation of historical dividend growth rates will be misleading if the dividend cut is not accounted for. Therefore, in the calculation of the dividend growth rate, the dividends prior to the dividend cut have been adjusted to post-cut levels to make the calculations more appropriate. Additional details of these calculations can be found on Appendix 2, Exhibit 3. The average of the historical and projected dividend growth rates<sup>14</sup> and is called the "Growth Forecast."

The dividend growth rate (g), can then be estimated as the growth forecast. Once the dividend growth rate has been calculated, the cost of equity can be calculated using equation (2) above – the sum of the dividend growth rate and the expected first-year dividend yield. Details regarding the calculation of the cost of equity can be found on Appendix 2, Exhibit 1.

### **Allstate's Cost of Equity Capital Selection**

Allstate utilizes both the Fama-French model and the Discounted Cash Flow model to leverage the strengths of each model. A strength of the Fama-French model is its responsiveness to current market conditions; a strength of the Discounted Cash Flow model is its degree of stability in its results. By incorporating the results of both analyses, Allstate can produce an estimated cost of capital that strikes a balance between the more responsive model and the more stable one.

After considering the results from both the Fama-French and Discounted Cash Flow analyses, Allstate selected a cost of capital, as shown on Appendix 3, Exhibit 1, Page 1.

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<sup>14</sup> Appendix 2, Exhibit 3: Column (5)

## Section 2: Development of the Underwriting Profit Provision

### From a Given Cost of Equity

Underwriting profit is defined in *Actuarial Standards of Practice, No. 30* as “Premiums less losses, loss adjustment expenses, underwriting expenses, and policyholder dividends.”<sup>15</sup> Thus, a provision for underwriting profit is a portion of the actuarially developed rate, and is often expressed as a percentage of the rate.<sup>16</sup> The underwriting profit provision is an estimate of future profits; because actual losses and expenses can differ from those expected, the actual realized underwriting profit may not equal the target profit provision.

In the past, development of the underwriting profit provision for insurance companies was a task that involved no underlying theory, but rather constituted the simple task of selecting a round number. From 1921 until the 1960’s, a 5% underwriting profit provision was used for most lines.<sup>17</sup> This approach, however, was not based on financial theory and neglected investment income and income taxes. As pricing techniques have become more sophisticated through the incorporation of financial theory, the development of the underwriting profit provision has become more rigorous and the need for financial soundness more important. Allstate’s method of determining the appropriate underwriting profit provision, which is described in detail in this paper, involves determining the *total* profit needed to meet the demand of investors and then subtracting out the profit received from investment income to arrive at the underwriting profit needed from insurance operations and, ultimately, from the premium collected.

Section 1: *The Fair and Reasonable Return* describes the step-by-step process by which Allstate’s cost of equity was calculated. In order to obtain the needed cost of equity, Allstate must include an appropriate underwriting profit provision in its ratemaking methodology. The development of the appropriate underwriting profit provision is shown below.

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<sup>15</sup> *Actuarial Standards of Practice, No. 30*; page 2

<sup>16</sup> *Ibid*; page 2

<sup>17</sup> The notable exception is Workers Compensation, which used a 2.5% profit load (Robbin, 1992)

Appendix 3, Exhibit 1, Page 2 displays the flow of calculations from a given cost of equity to the underwriting profit provision; below is a detailed discussion of each step in the process of calculating an underwriting profit provision based on a given cost of equity. Please see the exhibits attached in Appendix 3 for supporting data used in the calculation of the underwriting profit provision, as catalogued in Appendix 3, Exhibit 1, Page 2.

## **Detail Supporting the Underwriting Profit Calculations**

### **Step (1): Average Market Value of Equity**

As mentioned in Section 1: *The Fair and Reasonable Return*, the cost of equity is a rate of return on the market value of the firm. Therefore, once we have calculated the cost of equity (as described in *The Fair and Reasonable Return*), we must determine the appropriate market value to which this return should be applied.

The market value of a firm, which can be calculated as the sum of a firm's shares of stock multiplied by the price for that stock, is a constantly changing value. Therefore, in order to establish a measure of stability within the pricing calculations, Allstate applies a long-term average of the company's market-to-book ratio to the year-end book value to determine the average market value. In addition, a "market value" for two of Allstate's separate entities – Allstate New Jersey and Allstate Floridian – is imputed using each company's proportion of total corporate book value. Details for these calculations can be found on Appendix 3, Exhibit 2.

### **Step (2): Cost of Equity (%)**

Details of the derivation of the cost of equity can be found in Section 1: *The Fair and Reasonable Return*. A summary of the cost of capital analysis results can be found in Appendix 3, Exhibit 1, Page 1.

### **Step (3): Cost of Equity (\$)**

Given the market value of the firm (Step 1) and the percentage cost of equity (Step 2), we can calculate the dollar value of the cost of equity as the product of Step 1 and Step 2.

#### **Step (4): Dividend Payout Ratio**

Appendix 3, Exhibit 3 details the derivation of the dividend payout ratio. In this calculation, stock repurchases are considered with dividends in the total payout. The result of a stock repurchase is to increase the value of each remaining share. Since the market value is unchanged, and the number of shares outstanding has decreased, the value per share increases. Thus, similar to a dividend, the shareholder receives income, despite the fact that total market value and the present value of growth opportunities for the company remain unchanged. The dividend payout ratio is obtained by summing the Total Payout, column (5), and the GAAP Net Income, column (2), and calculating the ratio of these two sums. Because the amount of dividends paid and stock repurchases made in a given year are based on the income earned in the previous year, the GAAP Net Income is lagged by one year in determining the dividend payout ratio. Data starting in 1996 is used to calculate the average, as that is the data available since Allstate became a publicly traded firm in 1995.

#### **Step (5): Average Market-to-book Ratio**

Appendix 3, Exhibit 4 details the derivation of the average market-to-book ratio. Due to the amount of fluctuation in market-to-book ratios, Allstate uses a long-term average estimate of this ratio.

#### **Step (6): Income Due Shareholders**

Recall that the cost of equity is the return on the market value of the firm, which is the return due to the shareholders. Therefore, the dollar value of the cost of equity, shown in Step 3, is the income due to shareholders.

#### **Step (7): Income Needed by Allstate**

The amount of income that Allstate must earn in order to pay shareholders is not necessarily equal to the amount of income due to the shareholders. Given Allstate's dividend payout ratio and market-to-book ratio, we can calculate the amount of income that Allstate must earn in order to provide the cost of capital to shareholders.

If a company's market-to-book ratio is greater than one, and its dividend payout ratio is less than 100%, then the amount of income that the firm needs to make is less than the amount due to the shareholders. For example, if the income due to shareholders was \$100, and the company had a market-to-book ratio of 1.50 and a dividend payout ratio of 0.60, then we know that  $\$100 = 60\%*X + 40\%*1.50*X$ , where X is the income needed by the company. We can rearrange the equation to make it easier to solve for X:  $X = \$100/(60\%+40\%*1.50) = \$83.33$ . Therefore, in this scenario, the company would need to earn \$83.33 in order to provide \$100 to its shareholders.

Similar to this example, because Allstate's market-to-book ratio is greater than one and its dividend payout ratio is less than 100%, the amount of income that Allstate must earn is less than the amount due to the shareholders. In general terms, the equation can be described as follows:  $\text{Income Needed by the Company} = \text{Income Due Shareholders}/[\text{Dividend Payout Ratio} - (1 - \text{Dividend Payout Ratio}) * \text{Market-to-book Ratio}]$ . This is the formula used to calculate the income needed by Allstate in Step 7.

#### **Step (8): Investment Income on Equity**

Allstate earns investment income on its equity capital, which contributes to the income needed by Allstate. The value listed in Step 8 is derived from an investment income forecast produced by Allstate's Investments department. Allstate uses projected values of investment income, rather than historical averages of actual investment income, because it allows for swifter adaptation to changes in Allstate's investment portfolio, as well as evolving market conditions.

The investment income estimate includes investment income and capital gains, both realized and unrealized. In addition, net income from Allstate Financial is included.

#### **Step (9): Operating Income Needed:**

"Operating income" is the term that is used to describe the amount of income made by a company through its insurance operations, that is, through its underwriting profits and investment income from policyholder-supplied funds. Operating income does not include investment income on capital.

To derive Allstate's target operating income, one must simply start with the total target income for Allstate (Step 7) and subtract the investment income on equity capital (Step 8). The remaining target income is the operating income.

### **Step (10): Earned Premium**

This value represents the latest calendar year of earned premium from all lines of business. Similar to the estimate of the average market value of equity in Step 1, the earned premium is subdivided for Allstate New Jersey Insurance Group, Castle Key Insurance Group, and the remainder of Allstate Group. Details on this subdivision can be found on Appendix 3, Exhibit 2.

### **Step (11): Operating Ratio**

Operating income can be expressed as a ratio to premium by dividing the operating income (Step 9) by the earned premium (Step 10).

### **Step (12): Investment Income for Policyholder-supplied Funds**

As mentioned above, operating income is equal to the sum of the underwriting profit and the investment income from policyholder-supplied funds (PHSF). Therefore, in order to determine the appropriate target underwriting profit, we must estimate the expected investment income from PHSF.

PHSF are equal to loss and unearned premium reserves, and Allstate estimates the investment income produced by them using an analysis of premium, expense, and loss cash flows. Premiums are collected, expenses are incurred, and losses are paid in different time frames. In most cases, premiums are collected over a short period of time, while expenses and, more notably, losses are paid out over a longer period of time. This difference in cash inflow and outflow allows the insurer to earn investment income on the premium supplied by the policyholder.

A cash-flow analysis is one of the two examples given in Actuarial Standards of Practice, No. 30 as appropriate methods for recognizing investment income from insurance operations (page 4).

This methodology also allows us to differentiate the amount of expected investment income by line of business and by state. Therefore, lines of business and states with longer-tailed losses are estimated to have higher than average investment income, and vice versa.

The discount rate used in the cash flow calculations is based on the investment income rate of return for Allstate's investment portfolio. It is the same rate of return that is used in Step 8: investment income on equity capital.

Details of the investment income on PHSF calculations can be found on Appendix 3, Exhibit 5.

### **Step (13): After-tax Underwriting Profit Provision**

As mentioned in Step 12 above, the amount of underwriting income required from insurance operations can be reduced for the investment gains resulting from the timing of policy cash flows. Thus, the investment gains from PHSF are subtracted from the operating ratio to get the after-tax underwriting profit provision.

### **Step (14): Tax Rate**

Allstate's federal income tax rate on underwriting income is 35%. This step in the calculations is only for the taxation of underwriting income. Taxes paid on investment income were accounted for separately in Steps 8 and 12.

### **Step (15): Pre-tax Underwriting Profit Provision**

In order to receive the appropriate after-tax underwriting income, a pre-tax underwriting profit provision must be targeted. To calculate this, the after-tax underwriting profit provision is divided by one minus the income tax rate. This is the underwriting profit provision used in the development of the rate level indication.

# Appendix 1

The Fama-French Three-factor Model

FAMA-FRENCH RISK PREMIA

Annual Avg until December	Market-Risk Premium - ST*	Market-Risk Premium - IT**	Market-Risk Premium - LT***	Small-Stock Premium	Value-Stock Premium
2008	7.67%	6.74%	6.16%	3.55%	5.14%
2009	7.92%	6.97%	6.37%	3.61%	5.01%
2010	8.03%	7.08%	6.46%	3.73%	4.91%
2011	7.94%	6.99%	6.36%	3.61%	4.77%
2012	8.04%	7.09%	6.44%	3.58%	4.81%

All time series commence from 1926.

\*Relative to a short-term (28-day) government bond

\*\*Relative to an intermediate-term (5-year) government bond

\*\*\*Relative to a long-term (20-year) government bond

Source: <http://mba.tuck.dartmouth.edu/pages/faculty/ken.french>

PROPERTY/CASUALTY INDUSTRY SEGMENT  
Betas

Risk-free Rate Basis	60 Months Ending December	Market-Risk Beta	Prop/Cas Small-Stock Beta	Prop/Cas Value-Stock Beta	Market-Value Coefficient	Book-to-Market Coefficient
Short-term Bond (28-day)	2008	0.717	1.531	0.215	-0.176	0.246
	2009	0.522	1.582	0.698	-0.209	0.340
	2010	0.650	1.679	0.956	-0.224	0.259
	2011	0.602	1.795	1.184	-0.235	0.166
	2012	0.585	1.380	1.225	-0.193	0.207
Intermediate-term Bond (5-year)	2008	0.721	1.525	0.211	-0.175	0.246
	2009	0.522	1.581	0.696	-0.210	0.340
	2010	0.646	1.677	0.959	-0.224	0.259
	2011	0.600	1.793	1.184	-0.235	0.166
	2012	0.582	1.378	1.227	-0.192	0.206
Long-term Bond (20-year)	2008	0.723	1.523	0.211	-0.175	0.246
	2009	0.523	1.581	0.697	-0.210	0.340
	2010	0.642	1.677	0.963	-0.224	0.259
	2011	0.598	1.793	1.186	-0.236	0.166
	2012	0.580	1.380	1.229	-0.192	0.206

ALLSTATE CORPORATION

NAICS Code 524126

Allstate Compustat Data

*(\$ Million)*

Estimation Year	Market Value	Book Value	Log Market Value	Log Book-to-Market
2008	17,558	12,641	9.7733	-0.3286
2009	16,116	16,692	9.6876	0.0351
2010	17,157	19,016	9.7502	0.1029
2011	13,852	18,674	9.5362	0.2987
2012	19,353	20,580	9.8706	0.0615

**Source:** Standard & Poor's/Compustat

ALLSTATE CORPORATION  
Betas - Short Term Risk-Free Rate

**Market Risk Component:**

(1) Period	(2) Prop/Cas Market Beta
2008	<b>0.717</b>
2009	<b>0.522</b>
2010	<b>0.650</b>
2011	<b>0.602</b>
2012	<b>0.585</b>
3-yr Avg	<b>0.612</b>
5-yr Avg	<b>0.615</b>
<b>Selected</b>	<b>0.612</b>

**Size Risk Component:**

(3) Period	(4) Prop/Cas Size Beta	(5) Market Value Coefficient	(6) Log Market Value	(7)=(4) + (5)*(6) Size Risk Beta
2008	1.531	-0.176	9.7733	<b>-0.189</b>
2009	1.582	-0.209	9.6876	<b>-0.443</b>
2010	1.679	-0.224	9.7502	<b>-0.505</b>
2011	1.795	-0.235	9.5362	<b>-0.446</b>
2012	1.380	-0.193	9.8706	<b>-0.525</b>
			3-yr Avg	<b>-0.492</b>
			5-yr Avg	<b>-0.422</b>
			<b>Selected</b>	<b>-0.492</b>

**Value Risk Component:**

(8) Period	(9) Prop/Cas Value Beta	(10) Book-to-Mkt Coefficient	(11) Log Book- to-Market	(12)=(9)+(10)*(11) Value Risk Beta
2008	0.215	0.246	-0.3286	<b>0.134</b>
2009	0.698	0.340	0.0351	<b>0.710</b>
2010	0.956	0.259	0.1029	<b>0.983</b>
2011	1.184	0.166	0.2987	<b>1.234</b>
2012	1.225	0.207	0.0615	<b>1.238</b>
			3-yr Avg	<b>1.152</b>
			5-yr Avg	<b>0.860</b>
			<b>Selected</b>	<b>1.152</b>

Note: Each time period is a 60-month period ending December in the year shown.

ALLSTATE CORPORATION  
Betas - Intermediate Term Risk-free Rate

**Market Risk Component:**

(1) Period	(2) Prop/Cas Market Beta
2008	<b>0.721</b>
2009	<b>0.522</b>
2010	<b>0.646</b>
2011	<b>0.600</b>
2012	<b>0.582</b>
3-yr Avg	<b>0.609</b>
5-yr Avg	<b>0.614</b>
<b>Selected</b>	<b>0.609</b>

**Size Risk Component:**

(3) Period	(4) Prop/Cas Size Beta	(5) Market Value Coefficient	(6) Log Market Value	(7)=(4) + (5)*(6) Size Risk Beta
2008	1.525	-0.175	9.7733	<b>-0.185</b>
2009	1.581	-0.210	9.6876	<b>-0.453</b>
2010	1.677	-0.224	9.7502	<b>-0.507</b>
2011	1.793	-0.235	9.5362	<b>-0.448</b>
2012	1.378	-0.192	9.8706	<b>-0.517</b>
			3-yr Avg	<b>-0.491</b>
			5-yr Avg	<b>-0.422</b>
			<b>Selected</b>	<b>-0.491</b>

**Value Risk Component:**

(8) Period	(9) Prop/Cas Value Beta	(10) Book-to-Mkt Coefficient	(11) Log Book- to-Market	(12)=(9)+(10)*(11) Value Risk Beta
2008	0.211	0.246	-0.3286	<b>0.130</b>
2009	0.696	0.340	0.0351	<b>0.708</b>
2010	0.959	0.259	0.1029	<b>0.986</b>
2011	1.184	0.166	0.2987	<b>1.234</b>
2012	1.227	0.206	0.0615	<b>1.240</b>
			3-yr Avg	<b>1.153</b>
			5-yr Avg	<b>0.860</b>
			<b>Selected</b>	<b>1.153</b>

Note: Each time period is a 60-month period ending December in the year shown.

ALLSTATE CORPORATION  
Betas - Long-term Risk-free Rate

**Market Risk Component:**

(1) Period	(2) Prop/Cas Market Beta
2008	<b>0.723</b>
2009	<b>0.523</b>
2010	<b>0.642</b>
2011	<b>0.598</b>
2012	<b>0.580</b>
3-yr Avg	<b>0.607</b>
5-yr Avg	<b>0.613</b>
<b>Selected</b>	<b>0.607</b>

**Size Risk Component:**

(3) Period	(4) Prop/Cas Size Beta	(5) Market Value Coefficient	(6) Log Market Value	(7)=(4) + (5)*(6) Size Risk Beta
2008	1.523	-0.175	9.7733	<b>-0.187</b>
2009	1.581	-0.21	9.6876	<b>-0.453</b>
2010	1.677	-0.224	9.7502	<b>-0.507</b>
2011	1.793	-0.236	9.5362	<b>-0.458</b>
2012	1.380	-0.192	9.8706	<b>-0.515</b>
3-yr Avg				<b>-0.493</b>
5-yr Avg				<b>-0.424</b>
<b>Selected</b>				<b>-0.493</b>

**Value Risk Component:**

(8) Period	(9) Prop/Cas Value Beta	(10) Book-to-Mkt Coefficient	(11) Log Book- to-Market	(12)=(9)+(10)*(11) Value Risk Beta
2008	0.211	0.246	-0.3286	<b>0.130</b>
2009	0.697	0.340	0.0351	<b>0.709</b>
2010	0.963	0.259	0.1029	<b>0.990</b>
2011	1.186	0.166	0.2987	<b>1.236</b>
2012	1.229	0.206	0.0615	<b>1.242</b>
3-yr Avg				<b>1.156</b>
5-yr Avg				<b>0.861</b>
<b>Selected</b>				<b>1.156</b>

Note: Each time period is a 60-month period ending December in the year shown.

ALLSTATE CORPORATION  
 Estimated Cost of Equity Capital

**Cost of Equity Capital:**

	Value (ST)*	Value (IT)**	Value (LT)***	Source
(1) Average Market Risk Premium:	8.04%	7.09%	6.44%	App. 1, Exh. 1
(2) Selected Beta:	0.612	0.609	0.607	App. 1, Exh. 4, Pg. 1-3
(3) P/C Industry Market Risk Premium:	4.92%	4.32%	3.91%	=(1) * (2)
(4) Size Risk Premium:	3.58%	3.58%	3.58%	App. 1, Exh. 1
(5) Selected Size Beta:	-0.492	-0.491	-0.493	App. 1, Exh. 4, Pg. 1-3
(6) Allstate Size Risk Premium:	-1.76%	-1.76%	-1.76%	=(4) * (5)
(7) Value Risk Premium:	4.81%	4.81%	4.81%	App. 1, Exh. 1
(8) Selected Value Beta:	1.152	1.153	1.156	App. 1, Exh. 4, Pg. 1-3
(9) Allstate Value Risk Premium:	5.54%	5.55%	5.56%	=(7) * (8)
(10) Total Risk Premium:	8.70%	8.11%	7.71%	=(3) + (6) + (9)
(11) Risk-free Return:	0.05%	1.05%	2.95%	US Treasury
(12) Fama-French Cost of Equity Capital:	8.75%	9.16%	10.66%	=(10) + (11)

\*Relative to a short-term (28-day) government bond, as of June 5, 2013

\*\*Relative to an intermediate-term (5-year) government bond, as of June 5, 2013

\*\*\*Relative to a long-term (20-year) government bond, as of June 5, 2013

<http://www.treasury.gov/resource-center/data-chart-center/interest-rates/Pages/TextView.aspx?data=billrates>

# Appendix 2

The Discounted Cash Flow Model

ALLSTATE CORPORATION  
Discounted Cash Flow Analysis  
Summary

(1)	(2)	(3)	(4)
Time Period	Estimated Dividend Yield	Growth Forecast	Cost of Equity
2nd Quarter 2013	2.1	7.0	9.1
2nd Quarter 2012	2.7	7.0	9.7
2nd Quarter 2011	2.8	8.5	11.3
2nd Quarter 2010	2.7	8.5	11.2
2nd Quarter 2009	3.1	9.5	12.6
2nd Quarter 2008	3.4	10.8	14.2
2nd Quarter 2007	2.6	11.7	14.3
2nd Quarter 2006	2.6	11.7	14.3
2nd Quarter 2005	2.4	15.2	17.6

Sources (within Appendix 2):

(2): Exhibit 2, Column (2)

(3): Exhibit 3, average of Columns (2)-(4)

(4): Sum of column (2) and column (3)

ALLSTATE CORPORATION  
Discounted Cash Flow Analysis  
Estimated Dividend Yield

(1)	(2)
Time Period	Estimated Dividend Yield
2nd Quarter 2013	2.1
2nd Quarter 2012	2.7
2nd Quarter 2011	2.8
2nd Quarter 2010	2.7
2nd Quarter 2009	3.1
2nd Quarter 2008	3.4
2nd Quarter 2006	2.6
2nd Quarter 2005	2.4

Sources:

Value Line Investment Surveys, Part 3, The Ratings & Reports

ALLSTATE CORPORATION  
Discounted Cash Flow Analysis  
Dividends Per Share Experience

(1)	(2)	(3)	(4)	(5)
Time Period	<i>Annual Rate of Change</i>			Average
	Past 10 Years	Past 5 Years	Forecast	
2nd Quarter 2013*	8.5	5.0	7.5	7.0
2nd Quarter 2012*	9.5	6.5	5.0	7.0
2nd Quarter 2011*	10.5	9.5	5.5	8.5
2nd Quarter 2010*	11.5	11.5	2.5	8.5
2nd Quarter 2009*	12.0	13.0	3.5	9.5
2nd Quarter 2008	12.0	12.5	8.0	10.8
2nd Quarter 2007	13.5	12.5	9.0	11.7

Sources:

Value Line Investment Surveys, Part 3, The Ratings & Reports

\*Note: the Value-Line numbers for 2009 - 2013 have been adjusted to account for the dividend cut in 2009.

# Appendix 3

Development of the Underwriting Profit Provision  
From a Given Cost of Equity

ALLSTATE CORPORATION  
Estimated Cost of Equity Capital

Allstate Corporation Cost of Equity Capital Estimates:

	Value	Source
(1) Fama-French Three-factor Model	9.5%	App. 1, Exh. 4, Pg. 2-4*
(2) Discounted Cash Flow Model	9.1%	App. 2, Exh. 1
(3) <b>Selected Cost of Equity Capital</b>	<b>9.5%</b>	Selection

Industry Data - Cost of Equity Capital - SIC Code 633 - Fire, Marine, and Casualty Insurance (41 companies)\*\*

**MEDIAN**

	2008	2009	2010	2011	2012	Avg
CAPM	10.25	9.44	10.15	9.15	7.71	9.34
CAPM + Size Prem	12.05	11.72	12.82	11.36	10.03	11.60
FF3F	11.72	11.63	9.83	8.74	7.69	9.92
1-Stage DCF	12.29	14.35	11.06	12.06	10.54	12.06
3-Stage DCF	12.00	17.75	17.50	19.48	NMF	16.68

**SIC COMPOSITE**

	2008	2009	2010	2011	2012	Avg
CAPM	10.70	11.99	11.22	9.86	8.40	10.43
CAPM + Size Prem	11.62	11.99	12.30	9.86	8.40	10.83
FF3F	12.01	11.68	11.02	9.48	8.14	10.47
1-Stage DCF	9.78	10.37	11.27	7.03	8.55	9.40
3-Stage DCF	20.00	3.90	13.58	8.36	NMF	11.46

**LARGE COMPOSITE**

	2008	2009	2010	2011	2012	Avg
CAPM	10.87	10.48	11.61	9.55	8.01	10.10
CAPM + Size Prem	10.87	10.48	11.61	9.55	8.01	10.10
FF3F	12.33	10.35	11.11	9.03	7.66	10.10
1-Stage DCF	10.00	10.50	9.74	5.49	7.97	8.74
3-Stage DCF	22.50	24.90	11.81	NMF	NMF	19.74

\*Average of the short-term, intermediate-term, and long-term results

\*\*Source: Ibbotson Cost of Capital Yearbooks, 2008-2012

ALLSTATE INSURANCE GROUP

Countrywide  
Homeowners

Development of the Underwriting Profit

	Total	Source
(1) Average Market Value of Equity:	\$ 24,752	App. 3, Exh. 2
(2) Cost of Equity (%):	9.5%	App. 3, Exh. 1, Pg. 1
(3) Cost of Equity (\$):	\$ 2,351	=(1)*(2)
(4) Dividend Payout Ratio:	0.70	App. 3, Exh. 3
(5) Average Market-to-book Ratio:	1.30	App. 3, Exh. 4
(6) Income Due Shareholders:	\$ 2,351	=(3)
(7) Income Needed by Allstate:	\$ 2,157	=(6)/[(4)+(1-(4))*(5)]
(8) Investment Income on Equity:	\$ 647	IDF*
(9) Operating Income Needed:	\$ 1,510	=(7)-(8)
(10) Earned Premium:	\$ 25,386	App. 3, Exh. 2
(11) Operating Ratio:	5.9%	=(9)/(10)
(12) Investment Income from PHSF**:	0.7%	App. 3, Exh. 5, Pg. 1
(13) After-tax U/W Profit Provision:	5.2%	=(11)-(12)
(14) Tax Rate:	35%	FIT***
(15) Pre-tax U/W Income Needed by Allstate:	7.9%	=(13)/(1-(14))

\*Investments Department forecast

\*\*Policyholder-supplied Funds (PHSF) are unearned premium and loss reserves

\*\*\*This is the federal income tax rate on underwriting profit for Allstate

*Dollar values are in millions*

ALLSTATE INSURANCE GROUP

Enterprise Valuation

(\$ In Millions)

Entity	GAAP Book Value*	Earned Premium*	Imputed Market Value**
Total Group	20,580	27,794	26,754
Allstate New Jersey Group	727	1,151	945
Castle Key Insurance Group	151	258	196
Canada	663	999	861
Group Less ANJ/CK/Canada	19,040	25,386	24,752

\*As of 12/31/12

\*\*Equals GAAP Book Value multiplied by the average market-to-book ratio

ALLSTATE CORPORATION

Dividend Payout Ratio

(1)	(2)	(3)	(4)	(5) = (3)+(4)	(6) = (5)/(2)	
Year	Prior Year GAAP Net Income*	Dividends	Stock Repurchases (Net)	Total Payout	Total Payout Ratio	
1997	\$2,075	417	1,277	1,694	0.82	
1998	\$3,105	450	1,400	1,850	0.60	
1999	3,294	482	864	1,346	0.41	
2000	2,720	506	1385	1,891	0.70	
2001	2,211	547	612	1,159	0.52	
2002	1,158	594	383	977	0.84	
2003	1,134	648	-48	600	0.53	
2004	2,705	779	1111	1,890	0.70	
2005	3,181	846	2,203	3,049	0.96	
2006	1,765	885	1,516	1,765	**	1.00
2007	4,993	901	3,483	4,384		0.88
2008	4,636	897	1,281	2,178		0.47
2009	-1,542	432	-27	405	***	-0.26
2010	888	433	82	515		0.58
2011	911	436	885	911	**	1.00
2012	787	432	713	787	**	1.00
<b>Total</b>	<b>35,563</b>	<b>9,253</b>	<b>17,147</b>	<b>24,996</b>		<b>0.70</b>

Source: Allstate Annual Reports

\*Dividends and Stock Repurchases for a given year are determined based on the previous year's income. Therefore, GAAP Net Income is lagged by one year so that the appropriate ratio is calculated.

\*\*While additional payout was provided from equity funds, the dividend payout ratio is concerned with percentage of income paid towards dividends and stock repurchases. Therefore, the payout ratio is capped at 1.00.

\*\*\*2009 was not included in the total due to the irregularity of the results.

ALLSTATE CORPORATION

Historical Market-to-book Ratios

Years	Allstate
Dec-03	1.47
Dec-04	1.62
Dec-05	1.73
Dec-06	1.85
Dec-07	1.35
Dec-08	1.39
Dec-09	0.97
Dec-10	0.89
Dec-11	0.76
Dec-12	0.93
10-yr Avg:	1.30
<b>Selected:</b>	<b>1.30</b>

Source: MSN Online Reports

<http://investing.money.msn.com/investments/key-ratios?symbol=ALL&page=TenYearSummary>

ENCOMPASS INSURANCE GROUP  
HOMEOWNERS

**Countrywide**

Calculation of Present Value, as of the Average Earning Date  
of a Policy year, of all Income and Outgo @ 1.4%\*  
force of interest, given an Operating Profit of 5.9%  
and twelve-month Policy Terms

<u>Years From Start of Policy Year</u>	<u>Countrywide Cumulative Percent of Losses Paid</u>	<u>Countrywide Yearly Percent of Losses Paid</u>	<u>Time from Start of Policy Year</u>	<u>Discounted ** to avg time of profit @ 1.4%</u>	<u>Discounted Payments</u>
1	27.8%	27.8%	0.70	1.004	27.9%
2	82.3%	54.5%	1.40	0.994	54.2%
3	92.0%	9.7%	2.30	0.982	9.5%
4	95.1%	3.1%	3.40	0.967	3.0%
5	96.8%	1.7%	4.50	0.952	1.6%
Subsequent	100.0%	3.2%	6.90	0.921	2.9%
Total		100.0%			99.1%
Expected Losses and Loss Expense Ratio					60.8%
Present Value of Loss and Loss Expense Payments					60.3%
General Expense		9.2%	0.75	1.004	9.2%
Other Acquisition		1.4%	0.63	1.005	1.4%
Taxes		2.9%	0.77	1.003	2.9%
Licenses and Fees		0.2%	0.77	1.003	0.2%
Commissions		15.2%	0.58	1.006	15.3%
Debt Provision		1.4%	1.00	1.000	1.4%
Profit Provision		7.9%	1.00	1.000	7.9%
Contingency Provision		1.0%	1.00	1.000	1.0%
Total Present Value of Outgo					99.6%
Premiums		100.0%	0.78	1.003	100.3%
Difference, Present Value of Income Less Present Value of Outgo					0.7%

\*Discount rate from Investments Department forecast

\*\*exp (0.014 x (timing of profit being earned - timing of cash flow))

**Encompass Insurance Company of America  
Other Than Automobile  
Arkansas**

**Impacts by Proposed Changes**

<b>Change</b>	<b>HO</b>	<b>DF</b>
<b>Home Base Rates</b>	5.5%	5.1%
<b>Dwelling Maximum Premium Credits</b>	-0.6%	0.0%
<b>Excess Liability Rates</b>	0.1%	0.0%
<b>Occupancy Factors</b>	0.0%	-0.1%
<b>Total</b>	<b>5.0%</b>	<b>5.0%</b>