Conning Insurance Research

Publications and Services

Experience/Resources
- 17 professionals, including marketing
- Dedicated property–casualty and life/health-annuity groups
- Backgrounds include actuarial, strategic planning, equity research, underwriting, investment banking
- Average experience of over 20 years

In-depth insurance expertise supports asset management business and is key differentiator for Conning

Conning Library
- Over 200 publications annually, 2,000+ in archive
- Subscription service—Clients include insurers, professional services firms, investor community

Also provide proprietary research: strategic planning, business development, peer analyses
THE HARTFORD AT A GLANCE

COMPANY

Founded: 1810
Employees: Approximately 17,500
Headquarters: Hartford, Conn
2013 Revenues: $26.2B
Shareholder equity: $18.9B

MARKET RANKINGS

No. 4 commercial multi-peril carrier, based on direct written premiums
No. 2 workers' compensation insurer, based on direct written premiums
No. 7 in P&C commercial insurance
No. 11 in total personal lines (4th largest direct player)
No. 3 in fully insured disability in force

NOTABLE:

The Hartford serves more than one million small businesses.
The Hartford is a founding partner of U.S. Paralympics.
The Hartford’s trademark logo echoes the majestic stag depicted in Sir Edwin Landseer’s 1851 painting Monarch of the Glen. A hart fording a stream is a natural symbol for a company named The Hartford.
The Hartford provided insurance for the only home Abraham Lincoln ever owned

Source: www.Hartford.com, IR Section
Why Do Demographics Matter?

The Changing Consumer: Long-Term and Short-Term

- Population Growth
- Geographic Shifts
- Changing Age Profile
- Increasing Racial/Ethnic Diversity
- Socioeconomic Changes

Current Market Trends: Consumer Behavior

- Ownership
- Migration
- Driving

New Approaches for Market Segments

- HNW, NSA, Senior, Hispanic

New Approaches for Customer Contact
THE CHANGING CONSUMER
Five Critical Trends Reshaping Consumer Markets

- Slow population growth
- Geographic shift
- Changing household structure
- Increasing diversity
- Age demographics
Tomorrow’s Consumer Market Will Not Look Like Today’s

U.S. Population Characteristics

<table>
<thead>
<tr>
<th></th>
<th>1970</th>
<th>2000</th>
<th>2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resident Population (in millions)</td>
<td>203</td>
<td>281</td>
<td>350</td>
</tr>
<tr>
<td>% over 65</td>
<td>10%</td>
<td>12%</td>
<td>20%</td>
</tr>
<tr>
<td>% White</td>
<td>79.9%</td>
<td>69.1%</td>
<td>55.4%</td>
</tr>
<tr>
<td>% households married w/children</td>
<td>40%</td>
<td>24%</td>
<td>??</td>
</tr>
<tr>
<td>Women in workforce %</td>
<td>41%</td>
<td>58%</td>
<td>??</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, Harvard University Joint Center for Housing Studies, Bureau of Labor Statistics
Population Growth Has Been an Important Growth Driver

U.S. Population by Decade

(in millions)

U.S. Population Growth by Decade

Source: U.S. Census Bureau
Population Growth Will Not Be Uniform Across the States

State Population Growth 2000-2013

- <0%-5%
- 5%-10%
- 10%-15%
- 15%-20%
- 20%-25%
- >25%

Source: U.S. Census Bureau
## Population Growth 2000-10

<table>
<thead>
<tr>
<th>Rank</th>
<th>State</th>
<th>Growth %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Nevada</td>
<td>35.1%</td>
</tr>
<tr>
<td>2</td>
<td>Arizona</td>
<td>24.6%</td>
</tr>
<tr>
<td>3</td>
<td>Utah</td>
<td>23.8%</td>
</tr>
<tr>
<td>4</td>
<td>Idaho</td>
<td>21.1%</td>
</tr>
<tr>
<td>5</td>
<td>Texas</td>
<td>20.6%</td>
</tr>
<tr>
<td>6</td>
<td>N. Carolina</td>
<td>18.5%</td>
</tr>
<tr>
<td>7</td>
<td>Georgia</td>
<td>18.3%</td>
</tr>
<tr>
<td>8</td>
<td>Florida</td>
<td>17.6%</td>
</tr>
<tr>
<td>9</td>
<td>Colorado</td>
<td>16.9%</td>
</tr>
<tr>
<td>10</td>
<td>S. Carolina</td>
<td>15.3%</td>
</tr>
<tr>
<td>11</td>
<td>Delaware</td>
<td>14.6%</td>
</tr>
<tr>
<td>12</td>
<td>Wyoming</td>
<td>14.1%</td>
</tr>
<tr>
<td>13</td>
<td>Washington</td>
<td>14.1%</td>
</tr>
<tr>
<td>14</td>
<td>Alaska</td>
<td>13.3%</td>
</tr>
<tr>
<td>15</td>
<td>New Mexico</td>
<td>13.2%</td>
</tr>
</tbody>
</table>

## Growth in Housing Units 2000-10

<table>
<thead>
<tr>
<th>Rank</th>
<th>State</th>
<th>Growth %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Nevada</td>
<td>41%</td>
</tr>
<tr>
<td>2</td>
<td>Arizona</td>
<td>29%</td>
</tr>
<tr>
<td>3</td>
<td>Utah</td>
<td>27%</td>
</tr>
<tr>
<td>4</td>
<td>Idaho</td>
<td>26%</td>
</tr>
<tr>
<td>5</td>
<td>Georgia</td>
<td>24%</td>
</tr>
<tr>
<td>6</td>
<td>Florida</td>
<td>23%</td>
</tr>
<tr>
<td>7</td>
<td>N. Carolina</td>
<td>22%</td>
</tr>
<tr>
<td>8</td>
<td>Texas</td>
<td>22%</td>
</tr>
<tr>
<td>9</td>
<td>Colorado</td>
<td>22%</td>
</tr>
<tr>
<td>10</td>
<td>S. Carolina</td>
<td>22%</td>
</tr>
<tr>
<td>11</td>
<td>Delaware</td>
<td>18%</td>
</tr>
<tr>
<td>12</td>
<td>Alaska</td>
<td>18%</td>
</tr>
<tr>
<td>13</td>
<td>Washington</td>
<td>17%</td>
</tr>
<tr>
<td>14</td>
<td>Montana</td>
<td>17%</td>
</tr>
<tr>
<td>15</td>
<td>Wyoming</td>
<td>17%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau
### Largest Minority Population, 2009

<table>
<thead>
<tr>
<th>State</th>
<th>Non-Hispanic White Population as a % of Total State Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hawaii</td>
<td>25.1%</td>
</tr>
<tr>
<td>District of Columbia</td>
<td>33.5%</td>
</tr>
<tr>
<td>New Mexico</td>
<td>40.9%</td>
</tr>
<tr>
<td>California</td>
<td>41.7%</td>
</tr>
<tr>
<td>Texas</td>
<td>46.7%</td>
</tr>
</tbody>
</table>

### Smallest Minority Population, 2009

<table>
<thead>
<tr>
<th>State</th>
<th>Non-Hispanic White Population as a % of Total State Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iowa</td>
<td>89.8%</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>92.8%</td>
</tr>
<tr>
<td>West Virginia</td>
<td>93.3%</td>
</tr>
<tr>
<td>Vermont</td>
<td>94.9%</td>
</tr>
<tr>
<td>Maine</td>
<td>94.9%</td>
</tr>
</tbody>
</table>

### Median Age by Region

<table>
<thead>
<tr>
<th>Region</th>
<th>MEDIAN AGE</th>
<th>CHANGE 1990-2010 (in years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>2000</td>
<td>2010</td>
</tr>
<tr>
<td>U.S. Total</td>
<td>32.6</td>
<td>35.3</td>
</tr>
<tr>
<td>Northeast</td>
<td>34.0</td>
<td>36.8</td>
</tr>
<tr>
<td>Midwest</td>
<td>32.9</td>
<td>35.6</td>
</tr>
<tr>
<td>South</td>
<td>32.7</td>
<td>35.3</td>
</tr>
<tr>
<td>West</td>
<td>31.7</td>
<td>33.8</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau
Baby Boomers and Immigrants Are Reshaping the Age Profile


Source: U.S. Census Bureau
Aging Boomers Present Challenges As Well

Average Annual Expenditure on New Cars by Age Group, 2009

Motor Vehicle Crash Deaths per 100,000 People by Age, 2009

Source: U.S. Census Bureau
Ethnic Composition of the U.S. Is Changing Rapidly

Share of Population Growth, 2000-2010

- Hispanic or Latino, any race: 52.6%
- White: 12.8%
- Black: 16.4%
- American Indian and Alaska Native: 2.0%
- Asian: 17.8%
- Native Hawaiian and Other Pacific Islander: 0.9%
- Some Other Race: -2.6%

Source: U.S. Census Bureau
US. Population Estimates and Projections, 1990-2050
2012 Projections

Source: U.S. Census Bureau
Structure of the U.S. Household Undergoing Notable Change

Share of Households by Type, U.S.

Source: Brookings Institute
Multi-Generational Households Are Re-Emerging

Share of U.S. Population in Multi-Generational Family Households

1940-2010

Source: U.S. Census Bureau, Pew Research
MARKET TRENDS IN CONSUMER BEHAVIOR
Decrease in Homeownership Affecting Exposure Growth …

Home Ownership Rate

Case-Shiller Home Price Index

Source: U.S. Census Bureau, CoreLogic


Source: U.S. Census Bureau
Is the Decline Part of a Broader Trend?

The Sharing Economy

- zipcar
- Lyft
- RelayRides
- Airbnb
- Zilok
- Snapgoods
- Conning
Recent Migration Patterns Support Longer-Term Trends

Migration Magnets, 2011-2012

Source: U.S. Census Bureau
Vehicle Miles Traveled, Rolling 12-Month Total

Vehicle Miles Traveled, Rolling 12-Month Total
(in billions)

Source: Federal Highway Administration
This May Reflect Generational Changes in Attitude Toward Cars

Share of Potential Drivers 15-19 with Drivers’ License

Source U.S. Census Bureau, Federal Highway Administration
NEW APPROACHES FOR NEW MARKETS
Undifferentiated Personal Lines Market Dissolving

- Personal Lines Consumer
  - High Net Worth
  - Hispanic Market
  - Non-Standard Auto
  - Senior Segment
  - Young Adults
HNW Concerns Extend Beyond Typical Mass Market

Homeowners
Automobile
Excess liability
Valuables (jewelry, art, and other collectibles)
Watercraft (from small boats to large yachts)
Family protection (kidnap and ransom)
Workers’ compensation and personal liability
U.S. HNW Market Is Served by a Small Number of Insurers

Insurers Serving the U.S. HNW/UHNW Market

- Chubb
- AIG
- Fireman’s Fund
- ACE
- PURE
- Newer Entrants
U.S. HNW Market Is Served by a Small Number of Insurers

Insurers Serving the U.S. HNW/UHNW Market

- Chubb
- AIG
- Fireman’s Fund
- ACE
- PURE
- Nationwide
- Newer Entrants
Interest in the Nonstandard Market Is Changing

Common Characteristics of a Nonstandard Risk

- Lack of prior insurance
- Failure to maintain continuous coverage
- Driver age (Both youthful drivers and elderly drivers tend to exhibit greater claim frequencies)
- Prior accidents
- Driving violations
- Type of vehicle driven (Expensive or high-performance vehicles cost more to repair or replace and may create an appealing target for vandals or thieves)
- A demonstrated history of financial difficulties or carelessness (linked to poor credit scores)
- Need for flexible payment plans and installment billing options
- Occupation (Certain occupations are statistically correlated with higher loss frequencies)
Specialization Common Among Market Leaders

Personal Lines Growth and Profit Leaders: Line-of-Business Distribution

Data source: ©A.M. Best Company—used by permission, Conning analysis
5 of the Leaders Are NSA Specialists

Line-of-Business Distribution

<table>
<thead>
<tr>
<th>Company</th>
<th>Personal Auto</th>
<th>Homeowners</th>
<th>Commercial</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCC Insurance Co.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACUITY</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agency Insurance Co. of Maryland</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Access Casualty Co.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ameriprise</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASI Companies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEICO</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germania Mutual</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goodville Mutual Casualty Co.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infinity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kingstone Insurance Co.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Milo Trust Group</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>National Unity Insurance Co.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North Star Cos.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preferred Mutual Insurance Co.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Producers National</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United Heritage</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>USAA</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Data source: ©A.M. Best Company—used by permission, Conning analysis
Senior Segment Is the Fastest-Growing Age Cohort

U.S. Population Growth by Age Cohort

Source: U.S. Census Bureau
Only a Few Companies Identify Seniors as a Target

Source: The Hartford
Senior Segment Presents Challenging Risk Characteristics

Motor Vehicle Crash Deaths per 100,000 People by Age, 2009

Source: Insurance Institute for Highway Safety
Hispanic Market Is of Growing Importance for Insurers

**Annual Population Growth Rate, Total U.S. vs. Hispanic Population**

Source: U.S. Census Bureau

**Annual Increase in Driving Age Population**
Insurers Devoting More Resources to This Segment
Select Brokers/Agencies Are Also Finding Opportunity

Protector Holdings, LLC
Primer en Seguros

Cost U Less
insurance center

CONNING
Generational Differences Create Different Markets

**First**: Foreign-born or immigrant.

**Second**: U.S. native (born in the United States or territories), with at least one first-generation parent.

**Third-and-higher**: U.S. native (born in the United States or territories), with both parents native-born.

**Share of U.S. Hispanic Population 2000-2020**

- **1st Generation**
- **2nd Generation**
- **3rd Generation**

<table>
<thead>
<tr>
<th>Year</th>
<th>1st Generation</th>
<th>2nd Generation</th>
<th>3rd Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**First Term Latino Youths Use to Describe Themselves**

- **Country of Origin**: Third 32%, Second 41%, First 72%
- **Hispanic or Latino**: Third 15%, Second 21%, First 22%
- **American**: Third 50%, Second 33%, First 3%

Micro-Segmentation from Access to Personalized Data

Auto Rating Data Sophistication Transforming with “Real Time” Access

Traditional application-based information

Predictive analytics

Dynamic, updatable data

Telematics

Social Media

Internet of Things (IoT)

50 2000 750,000

Annual Monthly Daily Instant

Telematics … vehicles … trucks … what about appliances? Factories?

Source: Consumer Trends in Personal Lines Insurance, Conning, 2012
NEW APPROACHES FOR NEW MARKETS
Buying Behavior Is Shifting Too

What Is Driving Channel Evolution?

Gathering information online is the most popular auto insurance shopping method.

Increasing sophistication of pricing models reduces the need for front-line underwriting (McKinsey).

Trust in online financial transactions is high (88% of customers bank online).

Insurance customer satisfaction is highest among those who interact with their insurer through the agent and emerging channels (JDPower).

Customer expectations of insurance is influenced by interactions with other retailers.

Shopping and buying habits vary by demographic group.
Spending More to Establish an Unstable Relationship

Advertising Expense, Five Largest Spenders
($ in millions)

Data source: ©A.M. Best Company—used by permission, Conning analysis
The example assumes that underwriting and policy issuance expenses are similar for each insurer.
Increasing Competition: Rise of Aggregators
Other Insurers Are Pursuing Multichannel

- Independent Agency
- Online Agency/Aggregator
- Exclusive Agency
- Direct Response

Dimensions:
- Local Advice
- Self-Service
- Brand Neutral
- Brand Sensitive
Other Insurers Are Pursuing Multichannel

- **Brand Neutral**
  - Online Agency/Aggregator

- **Local Advice**
  - Farmers Insurance

- **Self-Service**
  - Brand Sensitive

- **Other Insurers**

- **Farmers Insurance**
Other Insurers Are Pursuing Multichannel
Other Insurers Are Pursuing Multichannel
Direct Response Still More Prominent in Auto

**Personal Auto Premium Distribution by Channel**

- Ind. Agent: 22%
- Direct Resp.: 27%
- Exclusive Agent: 47%
- Other: 4%

**Homeowners Premium Distribution by Channel**

- Ind. Agent: 28%
- Direct Resp.: 10%
- Exclusive Agent: 58%
- Other: 4%

Data source: ©A.M. Best Company—used by permission; Company GAAP filings; Investor presentations; Company news releases; Conning analysis
Auto Frequency Improvements … Challenge to the Auto Market?

Contributors to Frequency Trends

- Graduated driver laws
- DUI enforcement
- Safer roads
- Anti-lock brakes
- Reduced miles traveled
- Driver monitoring
- Event recorders
- Location tracking
- Back-up cameras

Paid Claim Frequency: Personal Auto Bodily Injury

Source: ISO Fast Track; Conning analysis
The homeowners line followed a path similar to personal auto until catastrophe events in 2004-2005 led many large national insurers to de-risk the homeowners portfolio. Is that ending?

Data source: ©A.M. Best Company—used by permission, Conning analysis
Insurers Continue to Advance Service with Mobile Technology Apps

Keeping Mobile Fresh and Active
To Drive Customer Retention
About Conning

Conning is a leading investment management company for the global insurance industry. Conning is focused on the future, supporting the insurance industry with innovative financial solutions, investment experience and proprietary research. Conning’s unique combination of asset management, risk and capital management software and advisory solutions, as well as insurance research, helps clients achieve their financial goals through customized business and investment strategies. Founded in 1912, Conning is headquartered in Hartford, Connecticut and serves its global client base from additional offices in New York, London, Cologne and Hong Kong.

Insurance Research

Conning publishes a number of insurance industry research services, including its Insurance Segment Reports semiannual line-of-business reviews; its Forecast & Analysis service, which offers a forward look at the industry; and its well-known Strategic Study series of executive reports on key products and trends and issues of critical industry importance. All are available in print and online through our web-based research portal Conning Library (www.conninglibrary.com).

For more information on our insurance research services, please call 888-707-1177 or visit www.conningresearch.com.

This presentation has been prepared for and distributed exclusively to specific clients of Conning. Further distribution, sale, or reproduction, in whole or in part, and by any means, is prohibited. Statements and information in this report were compiled from sources that we consider to be reliable or are expressions of our opinion. The presentation is not intended to be complete, and we do not guarantee its accuracy. It does not constitute and must not be considered investment advice. With offices in Hartford, New York, London, Cologne, and Hong Kong, Conning is a portfolio company of the funds managed by Aquiline Capital Partners LLC (“Aquiline”), a New York-based private equity firm.