

About the Author



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Key points

- **Regionality and Long-Term Averages**
- **Differences between the winters of 2001-2002 and 2002-2003**
- **Historic Insurance Results**



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Effects of Winter Weather on Personal Automobile Insurance

-A Regional Perspective

By LeRoy Boison

Now that a new winter season is upon us, we thought it would be enlightening to discuss the effects of winter weather on personal automobile insurance. This analysis shows that the impact of winter varies significantly by region and state, with New England clearly leading the nation as the region most affected by winter. (This is measured by comparing the first-quarter pure premium to the total year's pure premium.) New England truly deserves this title with three of its states occupying the top three spots; all six states make the top eight (Minnesota and Alaska snuck in at numbers four and five respectively). In addition, we will put the past two winters into perspective against the long-term average, as they were markedly different from others previously recorded, and impacted certain regions in unique ways.

Last year we distributed an analysis of the effects of the mild winter of 2001-2002 as pure premiums were favorably impacted in those areas that experienced abnormally mild temperatures combined with less-than-normal precipitation. For the winter of 2002-2003, we can see that the majority of the areas that experienced



the most favorable effects last year have returned to a more normal basis. However, the Western and Upper Midwest regions, along with several New England states and Alaska, experienced better-than-average pure premiums. This corresponds directly with the meteorological data which indicates that these areas had below-average precipitation and – specifically with respect to the Western states – record warmth.

Regionality and Long-Term Averages

Exhibits 1 and 2 set forth the historic relationship of first-quarter pure premiums relative to the comparable year-ending pure premium for the past 28 years.

TEMPERATURE

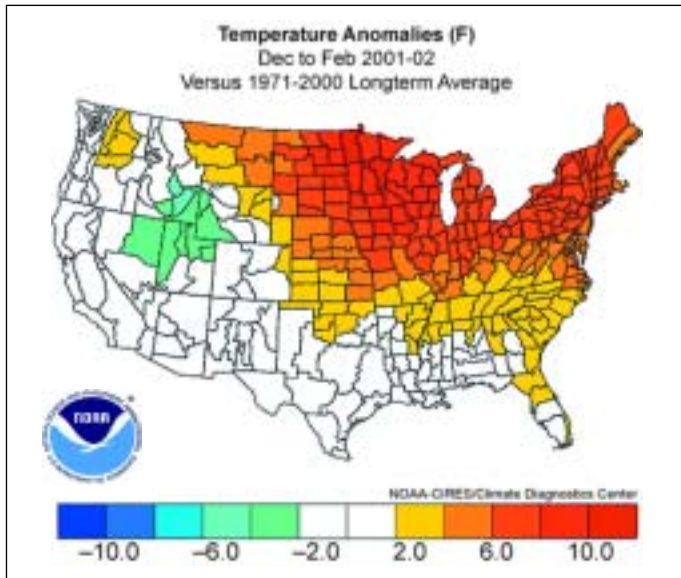


Exhibit 3

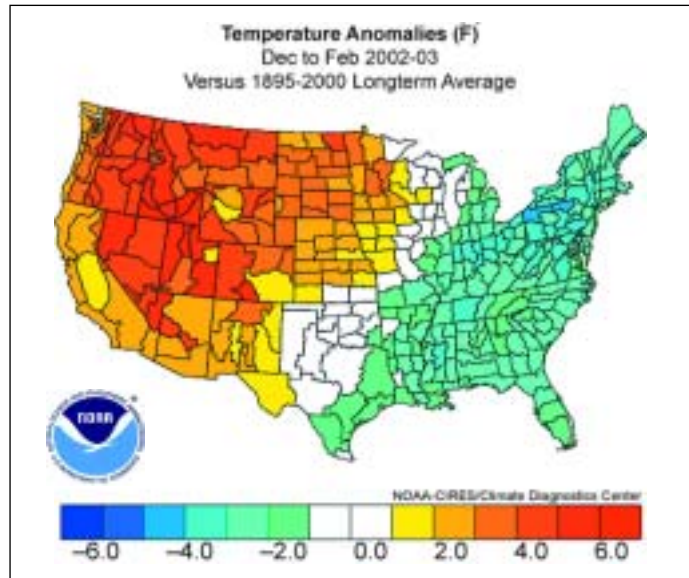


Exhibit 4

PRECIPITATION

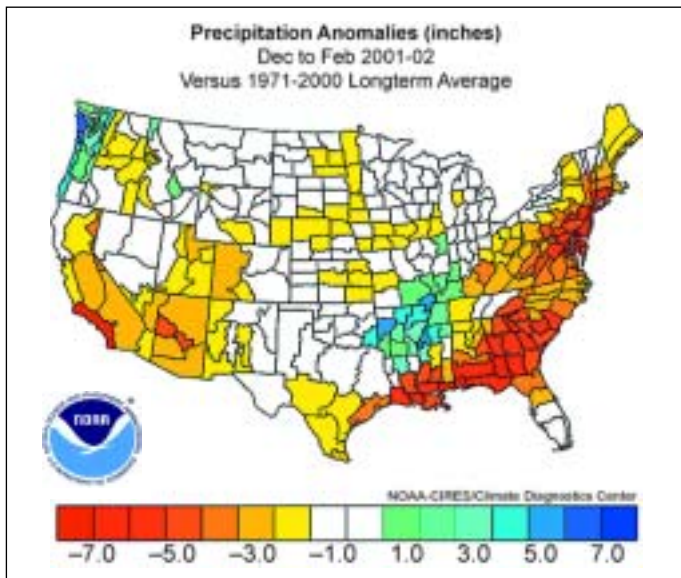


Exhibit 5

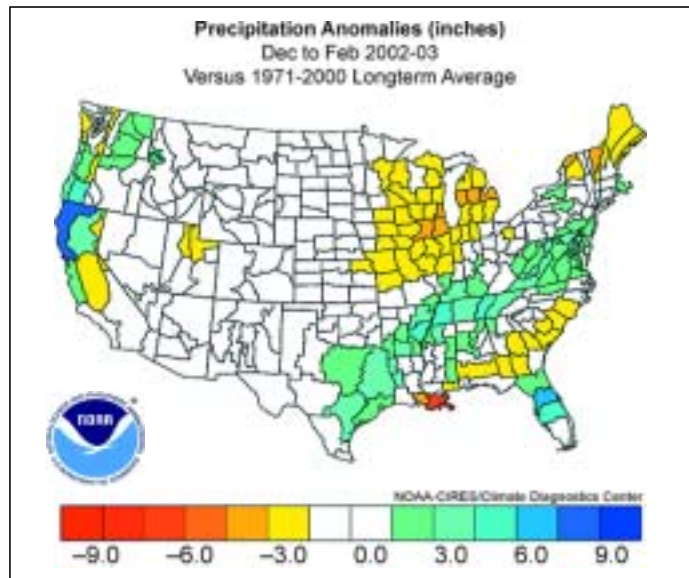


Exhibit 6

Differences between the winters of 2001-2002 and 2002-2003

The past two winters were dramatically different, as cited above. Exhibits 3 and 4 show the temperature departure from average by state over the past two winters, as compared to climatological data for the time period 1971 - 2000; Exhibits 5 and 6 display comparable data for precipitation levels.

As these charts reveal, the most recent winter was colder and wetter in the Middle Atlantic and Eastern states. However, the West and Central U.S. enjoyed above-normal temperatures with about normal precipitation. Also, Maine, Vermont and New Hampshire were returning to more normal temperatures, although still enjoying significantly less precipitation than normal.

Historic Insurance Results

Exhibits 7 and 8 set forth the historic relationship of first-quarter pure premiums for the last two winters relative to the comparable year-ending pure premium for the past 27 and 28 years. For reasons noted earlier, data is again displayed for the Collision coverages.

Last year, in comparing the first quarter 2002 pure premiums to the historic first-quarter averages, it is clear that the mild winter produced very favorable results for insurers. For Collision coverage, which is the most indicative of the immediate effects, the Midwestern, New England and Middle Atlantic states had pure premiums significantly below their average. This can be seen graphically on the next page in Exhibit 7.

