

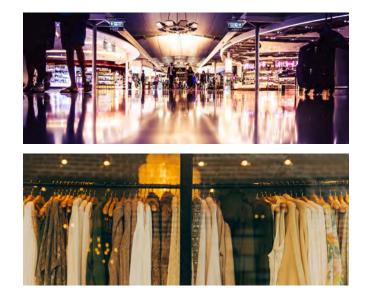
# At a Glance

- NOAA National Centers for Environmental Information (NCEI) offers relevant climate and weather data, products, and services from NOAA satellite, radar, and in-situ or surface observations, that support a range of activities in the retail trade sector.
- Unseasonal climate and weather events can impact the bottom line of this \$1.06 trillion sector.
- The retail trade sector relies on NCEI's data to optimize merchandise allocation, budget for expenses, and understand the overall influence of weather and climate on sales to inform decision-making.

# **Sector Overview**

The retail sector is a key driver of economic activity, employing millions of Americans and contributing \$1.06 trillion or 5.9% to the Gross Domestic Product (GDP). In fact, retail activity is so important that it's often used as a barometer to gauge the health of the U.S. economy. However, climate and weather events can dramatically influence the performance of the sector. Unseasonal weather can drive demand for insufficiently stocked products, and a strong storm may prevent consumers or goods from getting to market, driving on-line commerce.

The retail trade industry relies on NCEI's climate and weather data to understand how weather impacts performance in positive and negative ways to inform decision making.





We use the NCEI climate data reports when we're reviewing month-over-month and year-over-year results from our sales territories. If we lost the NCEI climate data, I'd have to go back to the old sales guy excuse of 'I didn't make my number because it rained.' I'm not really willing to go there.

- Robert Tiffin, Sales Manager, Silvercote

# Select Applications of NCEI's Data in Retail Trade

#### **Evaluating Weather-related Business Performance**

Silvercote, a manufacturer of high-quality metal building insulation products, uses NCEI's State of the Climate Summaries to create month-over-month and year-over-year analyses to understand how business is operating relative to prior years and months.

If a sales region is not meeting sales targets due to weather, and similar weather trends are projected to continue, Silvercote can adjust the size of the sales territory or prioritize sales in regions where weather conditions are anticipated to be more favorable for construction.

### **Optimizing Product Placement with the RSI**

When large snowstorms occur late in the winter, snow blower sales tend to increase the following fall. Honda Power Equipment, a snow blower manufacturer, uses NCEI's Regional Snowfall Index (RSI) to identify highly populated regions where snowstorms occurred late in the last season.

Based on the data, the company makes recommendations to retailers to stock merchandise in strategic locations where the memory of winter snowstorms remains vivid to boost sales and increase revenue.

# Planning for Energy Demand at Retail Stores

Foot Locker Inc., an athletic footwear and apparel retailer, relies on NCEI's data to understand weather-related drivers that cause utility costs at Foot Locker stores to fluctuate. Foot Locker correlates information from NCEI's monthly State of the Climate Summaries with utility costs from corresponding store locations to understand how utility bills correlate with temperatures.

More accurate budgeting at the start of the year translates to increased capital investment resources, maximizing company profitability.

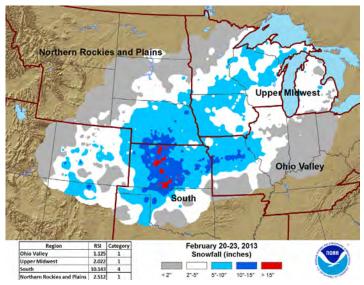


Image: The Regional Snowfall Index offers retailers insight into how snow conditions may disrupt or enhance business performance

Selected Significant Climate Anomalies and Events

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Image: State of the Climate monthly reports are used by the retail trade industry to understand how much a month's temperatures differed from the average.

NOAA National Centers for Environmental (NCEI), part of the U.S. Department of Commerce, provides access to one of the most signif icant archives of comprehensive oceanic, atmospheric, and geophysical data on Earth. From the depths of the ocean to the surface of the sun and from million-year-old ice cores to near-real-time satellite images, NCEI hosts over 37 petabytes of data. Public and private sectors rely on NCEI's authoritative and trusted information to create economic opportunity, mitigate climate- and weather-related losses, and preserve ecological resources.





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