Providing drivers with actionable intelligence can minimize accidents, reduce driver claims and increase your bottom line. Equip motorists with the ability to make informed decisions based on reliable, custom weather notifications with Baron’s Driver Safety Solution.

1.5 MILLION

THE NUMBER OF ACCIDENTS ON THE ROAD ATTRIBUTED TO ADVERSE WEATHER EACH YEAR
Adverse Weather Impacts Driver Safety

No one is immune to unexpected or potentially dangerous situations on the road. The CDC estimates that 3,500 people are killed each day in road traffic crashes, and the number is likely to double by 2030. When broken down even further, Consumer Automotive reports that 1.5 million of the annual accidents on the road are attributed to adverse weather. Additionally, inclement weather can lead to severe injuries and costly damage to vehicles. The average bodily injury insurance claim is estimated at $14,653 which amounts to $21,979,500,000 annually.

This problem can be mitigated by providing motorists with location-based alerts so they can be aware of surrounding and upcoming hazards, allowing them to navigate smoothly to a safer route.

Custom Alerts Enhance Driver Experience

Baron delivers value-added data and service through its patented Driver Safety Solution, helping reduce weather-related accidents by providing reliable, custom driver notifications. Baron weather data combines automated processes to create an advanced solution for companies’ weather telematics needs.

The Driver Safety Solution uses precision technology to improve a driver’s experience that can work with any connected device, including apps, dashboard navigation systems and more. Eyes-on-road alerts improve driver safety, enhance the overall driving experience and help motorists make intelligent decisions on the road.

• Avoid costly accidents and help motorists avoid dangerous icy or flooded roads by delivering location-based, personalized notifications.

• Alert drivers of approaching foggy roads so they can prepare accordingly.

• Save drivers time on commutes by alerting them to avoid areas where weather might be of concern.
Data is collected from numerical weather models, real-time observations, radar data, pavement models and land surface models to provide information that goes beyond commodity weather data. In order to make the technology available to a wider audience, the Driver Safety Solution is provided via an easy-to-implement API (a web-based method of accessing many of our data products in a format that is easy to use in 3rd party applications). The Driver Safety Solution provides hyperlocal road and weather conditions experienced by a particular driver to ensure the most accurate, time-specific data.

- The Driver Safety Solution incorporates pavement surface models to determine the state of the roads motorists will potentially encounter. By measuring road surface and subsurface conditions, moisture content and other relevant factors, complex algorithms are able to supply drivers with highly-personalized alerts on road conditions throughout their commute.

- Quality-controlled weather data incorporates precipitation (type and intensity), air temperature, lightning, winds, barometric pressure, cloud cover, visibility and temperature and moisture on the roadway.

- A hydrological model gives further detail on the fate of precipitation after it reaches the ground, including effects that terrain may play and the ability of the ground to absorb precipitation.

- All data is processed and analyzed by Baron along with internal verification of the Driver Safety Solution output data compared to actual conditions across the country.

- All alerts are customizable based on the unique needs of the partner. All partners are able to set a personalized threshold and trigger alerts for their drivers based on their individual needs.
Insurance providers can benefit from Baron’s advanced technology by providing customers with personalized alerts that better prepare the driver when the need for precision is critical. Usage-Based Insurance (UBI) analytics measure the driver’s characteristics and generate customized alerts based on their location and needs. UBI programs are increasing in popularity each year, with 5.5 million drivers enlisted as of April 2014. Drivers can adjust their route, speed and braking techniques thanks to precision data that promotes effective defensive driving.

- Drivers’ habits can be measured to determine if a driver is acting responsibly for current weather conditions. Baron’s data can provide insurance companies with the tools needed to evaluate a customer’s risk.

- The Driver Safety Solution makes it possible to combine weather data with historical claims data to help insurance providers correlate property damage due to weather and proactively underwrite the losses.

- Through targeted coaching, you can improve your customers’ driving behaviors and prevent expensive consequences.
An assortment of complex data sources delivers timely, accurate information that is both easy to interpret and beneficial to the driver. Alerts are presented in a format that aids the driver without distracting them. The Driver Safety Solution provides drivers with:

**FREQUENTLY UPDATED DATA**
Baron weather data updates minute-by-minute to look for potential threats and ensures that the information drivers receive is both location-specific and timely. With data from a variety of sources, drivers stay well informed of both current and future conditions.

**EYES-ON-ROAD ALERTS**
Information is delivered in a format that is easy to understand and does not distract the driver. Accompanied by verbal cues, eyes-on-road alerts allow drivers to keep their focus on traffic instead of interpreting complex data.
QUALITY ASSURANCE
All Baron data is supported by 24/7 technicians who monitor all Driver Safety Solution products visually to confirm that data is processed and uploaded correctly. Motorists are presented with information that is backed by quality assurance through automated processes and double-checked with manual interpretation by skilled meteorologists. Additionally, all partners are aided by a quick and easy onboarding process to ensure the service is up and running faster.

HIGHER SPATIAL RESOLUTION
The Driver Safety Solution data is processed in a gridded format. The number of grid cells covering the continental U.S. depends on the resolution of each product. Grids range from a resolution of 7 km to 14km. The ideal default viewing radius (viewable area of graphical weather data on the display) from the vehicle is 20 miles. Several grid cells can be displayed within the default viewing radius; although, it is recommended that alerts only be announced if enclosed within this specified radius.
The Baron Driver Safety Solution allows you to provide a customer-focused service that distinguishes your insurance offerings from other industry providers. Its technology has successfully launched partnerships with industry leaders to deliver critical weather intelligence when it’s needed most. Baron combines all of this value-added data to generate a highly accurate and comprehensive overview of road weather conditions to combat the 1.5 million accidents on the road each year attributed to weather. With access to the most up-to-date and advanced weather telematics technology, the Driver Safety Solution can help you make more informed business decisions, improve company efficiency and increase your bottom line.