Risk Mapping
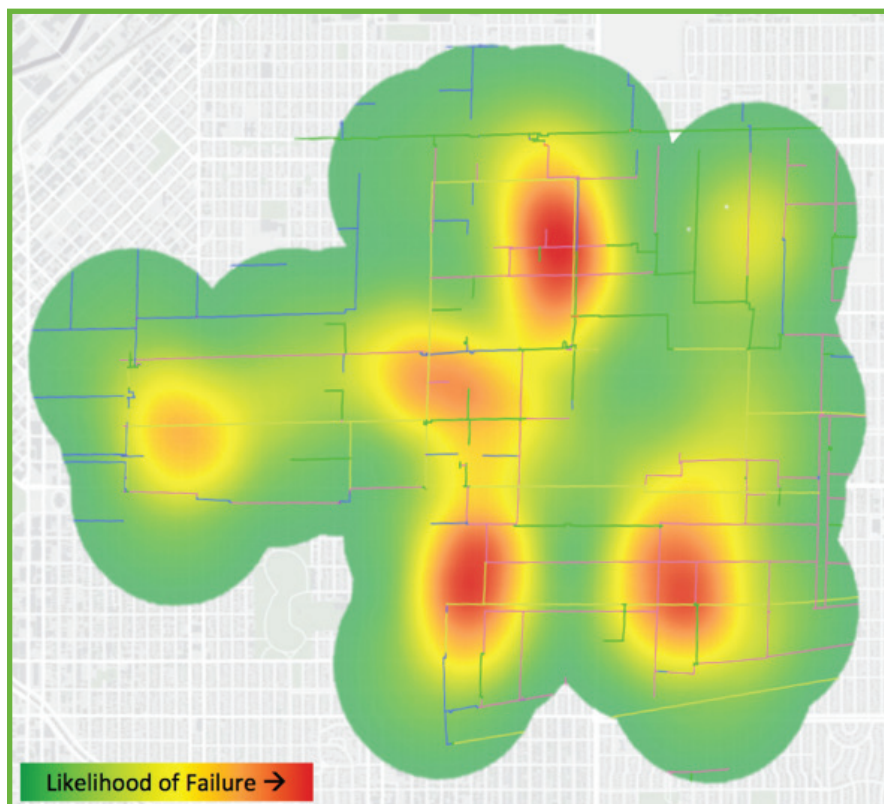
PICARRO

The use of Picarro methane data and analytics, particularly when coupled with existing risk models developed for DIMP/TIMP, enable a deeper understanding of system risk to better inform risk management decisions.

Traditional risk models rely upon datasets that are frequently dated (or are calculated only annually) and often lack up-to-date information on the actual state of the infrastructure. Further, these models can lack spatial granularity making it difficult to hone in on specific risk hotspots that might require attention.

Picarro's Risk Mapping capabilities combine Picarro's real-time methane data with powerful analytical tools that enable an unprecedented level of detail of the risk within a gas network. This level of granularity in both time and space delivers the best understanding available of system risk and gives immediately actionable insight for faster risk reduction.

Likelihood of Failure →

Figure 1. A Picarro Risk Map of a distribution infrastructure. Risk can be calculated over large areas or down to any desired level of spatial granularity.

Some examples of Picarro's Risk Mapping for analyzing system risk include:

- Identifying high-risk areas from an in-depth visual representation of risk across different spatial scales.
- Leveraging emissions data to quickly identify root causes of failure or gas loss such as joints/couplings or along leak-prone pipe.
- Understanding and predicting potentially hazardous leak migration through use of methane flow rate data.
- Reducing odor call expense by using predictive Risk Mapping to identify high-emitting leaks before customers report them.
- Streamlining budgeting and risk planning via predictive leak creation rate modeling.
- Visualization of system risk that helps support risk management, asset management, and capital prioritization decisions.
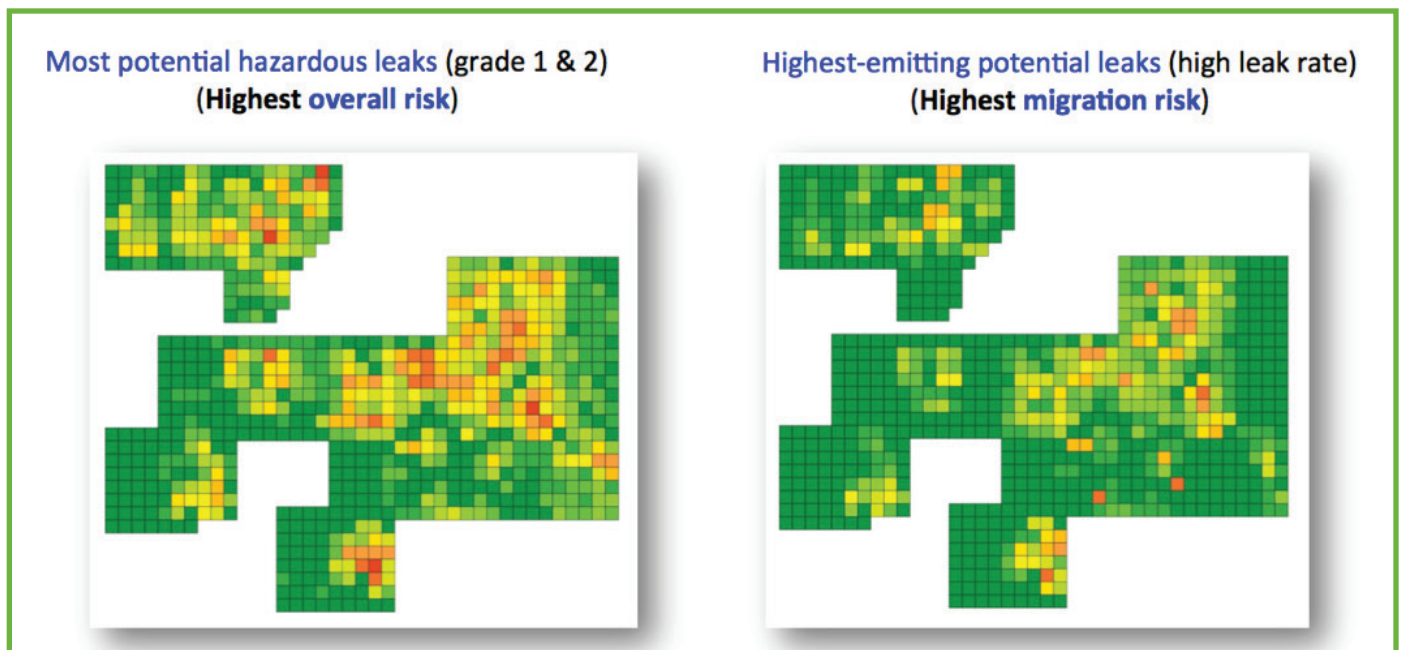
Figure 2. Risk Mapping allows mapping of, for example, areas with highest likelihood of hazardous leaks (left) and areas most likely to have high-emitting below-ground leaks that could migrate especially in winter months (right).