- Analysis of clues reported and the reliability of the clues.
- Detailed terrain analysis of the search area:
  - → Complexity of the ground.
  - → Density of vegetation.
  - → Weather & conditions unique to some segments.
  - → Avenues of little or minimal resistance to the missing person.
  - → Natural or man-made barriers/obstacles.
- Access to search areas and available transportation.
- Predicted weather and environmental conditions.

Having looked at all of these factors and data, assignment of probability values is achieved by a consensus process among the management overhead team or a consortium of the most experienced searchers on site. *(See Proportion Based Consensus below.)*

> **Note:** The initial values of POA assigned to the segments are not fixed throughout the search. The values of POA will change as segments are searched, new segments are added or deleted, or clues found.

Regions of Probability

A region of probability is the first subdivision of a potential search area and it is scenario based. This subdividing process involves identifying locations of suspected activities, travel routes, hazards and/or incentives. Probabilities are assigned to these areas in a manner that prioritizes what is thought to be the more likely occurence.

The size, shape, boundaries and location of regions of probability may be consistent with or diverge completely from the logistical or management problems associated with searching a piece of terrain. Similarly, segment size, shape boundaries and location usually relate to regions of probability only in the sense that both segments and regions partition the same search area -- there is no requirment that they subdivide the search area in the same way since regions of probability and segments are solutions to different problems. Regions of Probability answer the question, "Where in the search area is the subject more likely and less likely to be?" Segments answer the questions, "How can the search area be subdivided into manageable pieces for searching by the available resources?" Regions of Probability and their associated POA values provide weight factors that help determine how the available resources should be allocated. Segments then provide a specific search assignment for each individual resource.