

8. FINAL COMMENTS AND RECOMMENDATIONS

8.1 Limitations

Major difficulties encountered in the preparation of this study included (1) a lack of a long history of major avalanches, (2) limited weather and climate data from the elevations and areas of major interest, and (3) a lack of aerial photographs and base maps of a suitable scale within hazard areas. As additional data about weather and avalanches become available, the recommendations and hazard-zone delineations of this study can and should be adjusted to accommodate the new information. To facilitate the collection of this information, we recommend the following steps be taken.

8.2 Specific Recommendations

(1) An avalanche cadaster (AC) is a record of large avalanches that have occurred. All major avalanches within and adjacent to the Municipality should be accurately delineated on the best available topographic maps. Additional information collected should include (1) date of occurrence, (2) weather and snow conditions, (3) type of snow in the avalanche, (4) avalanche debris thickness, and (5) details of damage. These records should be collected and organized by a person with this specific responsibility.

(2) Weather and climate data collection should be expanded to the high elevations and remote areas representative of avalanche starting zones. This was discussed in section 4.6.

(3) High-altitude (scale about 1" = 3000') stereo aerial photographs should be obtained for all avalanche areas in the Municipality. Photos should include the entire avalanche paths, from ridges to valleys.

(4) Topographic maps should be made for all avalanche areas within the Municipality. Map scale should be 1" = 1000' (1:12000) with 50-foot contour intervals on slopes exceeding 20° and 10-foot contours on slopes less than 20°. Maps should include avalanche starting zones.

(5) Eventually the avalanche cadaster information should be placed on the new topographic map.

Finally, we must all recognize that this avalanche zoning analysis, although utilizing the best available data and methods, is seriously limited by the short period of record. If our above recommendations are followed, new information will eventually affirm, modify, or negate some of our conclusions. This is a normal process in science and engineering, and if we allow the process to operate here it will lead to improved conclusions and safer occupancy of the mountains surrounding Anchorage.