The final report, Extension of the General Sensitivity Analysis, consists of three volumes. Volume I, Methodology, discusses the methodology derived for civil defense sensitivity analyses and the results of demonstration runs employing the methodology on a statewide basis. Volume II, Technical Appendixes, gives details on derivations of the analytical expressions in the model and supplementary information on the analyses reported in Volume I. Volume III, The ANCET Computer Program, reports on the detailed structure of the FOTRAN computer model of the methodology described in Volume I.

In order to perform calculations necessary for sensitivity analyses, an analytical computer model, called ANCET, was designed. The model computes both promt effects and fallout casualties from a thermonuclear attack. The derivation of the analytical expressions for the promt effects component model is reported in this volume

Analytical procedures for adapting the WSEG-10 fallout model for use as the ANCET fallout component model are also presented. Sensitivity analyses of the effects of the choice of parameters of the prompt effects casualty function show that casualty estimates are sensitive both to the choice of casualty function and to the assumed yield of the Japanese detonations. A sensitivity analysis of the exposure of population located both in circular urban and in circumferential rings to blast overpressure levels from nuclear detonation is also given.