TITLE: Determining Sample Size

DATE: August 1988

AUTHOR(S): Mary K. Janke

**<u>REPORT NUMBER</u>**: Unnumbered (NRN101)

NTIS NUMBER: None

FUNDING SOURCE: Departmental Budget

## **PROJECT OBJECTIVE:**

This paper was meant to introduce people unfamiliar with sampling theory and practice to some basic information needed in order to make a valid inference from a sample to a population.

## SUMMARY:

The paper addresses at an elementary level the following questions: Why sample?

What is a random sample? What is wrong with having a small sample? What information is needed to calculate sample size? Specific steps are given for calculating sample size in estimating a proportion or a mean. Some graphical approximations are included.

## IMPLEMENTATION STATUS OF FINDINGS AND RECOMMENDATIONS:

The paper was reworked by Nik Dolmatoff into Volume 15 of the <u>Quality Toolbox</u> (July/August 1988), a publication of Quality Improvement and Planning (QIP), an office then existing within DMV. Dolmatoff's article contained more arithmetic detail and was written in an information-mapping format. This article, and the paper on which it was based, were subsequently used as guides to calculating sample size in projects undertaken by QIP.

SUPPLEMENTARY INFORMATION:

None.