

Department of Applied Mathematics and Statistics
The Johns Hopkins University

THE ELEVENTH ANNUAL ALAN J. GOLDMAN LECTURE

Richard L. Francis
Dept. of Industrial & Systems Engineering
University of Florida

September 24, 2009
111 Mergenthaler Hall
Lecture: **4:00 p.m.**
followed by a reception
in 304 Whitehead Hall

**AGGREGATION ERROR FOR LOCATION MODELS:
SURVEY AND ANALYSIS**

ABSTRACT

Location problems occurring in urban or regional settings may involve many tens of thousands of “demand points”, individual private residences. In modeling such problems it is common to aggregate demand points to obtain tractable models. We survey aggregation approaches to a large class of location models, consider and compare various aggregation error measures, identify some effective (and ineffective) aggregation error measures, and discuss some open research areas.

Please see the next page for a biography of the speaker.

Richard L. Francis

Richard L. Francis is Professor Emeritus of Industrial and Systems Engineering at the University of Florida. After earning his B.S.I.E. from Virginia Tech in 1960 and his M.S.I.E. from Georgia Tech in 1962, he received his Ph.D. from Northwestern University in 1967. Before coming to the University of Florida in 1971, he was an Associate Professor in the Department of Industrial and Systems Engineering at Ohio State University.

In 1975 he was co-recipient of the H. B. Maynard–American Institute of Engineers Book-of-the-Year Award. His award-winning book, co-authored with John A. White and in its second edition, has had a substantial impact on the profession. Professor Francis was the recipient of the American Institute of Industrial Engineers David F. Baker Distinguished Research Award in 1977 and the Institute of Industrial Engineers Annual Operations Research Award in 1982. In 1996 Professor Francis received the first Lifetime Achievement Award in Location Analysis for his work in location theory. In 1998 he received a Professional Excellence Program Award from the University of Florida and an Outstanding Alumnus Award from the School of Industrial and Systems Engineering at Georgia Tech. In 1999 he was named a member of the Academy of Distinguished Alumni in the Department of Industrial and Systems Engineering at Virginia Tech.

Professor Francis was also a Systems Engineer for The Western Electric Company in Princeton, New Jersey in 1962–1963, and was a Visiting Mathematical Scientist, Operations Research Division, for the National Bureau of Standards in Gaithersburg, Maryland in 1977–1978. Among his achievements, Professor Francis has graduated 14 Ph.D. students.