I thought I would talk mostly about the research process and very little about the findings.

In 1959 the initial Ford Foundation grant was made to finance a pilot study and exploratory research design study, and we got some work under way in 1960. Jim Henderson came here early in the year as Research Director. A total of $1,500,000 was raised, of which about $1,200,000 went into research.

The arrangement made in 1960 was to have the economic study under the joint sponsorship of the Upper Midwest Council and the University of Minnesota. In 1961 the urban study was added. Almost all of the research work has now been completed. The Research Director's final report is in the publication process.

The goals of research were first to provide information and analysis which would aid programs to stimulate regional growth. The second goal, in which the Ford Foundation was particularly interested, was the advancement of methods for regional economic analysis. I think some of the methodology that was developed as a result of the study will be useful in additional regional studies.

The concept of research was that it was to be independent and objective research performed by competent scholars. Research topics were assigned to professional economists, geographers, and political scientists. Their reports were to cover past developments and prospects for the future, and they were to lay out
possible alternatives for action. They were designed to aid policy makers, but they were not supposed to express recommendations for just one particular course of action. The opinions expressed in the research reports were those of the authors. This was independent and objective research and it fit in quite well with the concept that CED has worked with.

The research designs were worked out by the director of research and subsequently the director of urban research. They were approved by the Research Committee. Specific research projects were assigned to scholars, some of whom were recruited to work full-time for a period either at the University of Minnesota where Jim Henderson was based, or the Twin City Metropolitan Planning Commission where John Borchert was based, or research was contracted out to scholars in the major educational institutions throughout the Ninth Federal Reserve District.

Studies were reviewed by the Research Director and then submitted to the Research Committee. The Research Committee divided itself into four sub-committees dealing with general economics, urban reports, agriculture, and special reports. The sub-committees were responsible for the initial review of studies, and reported to the full committee. The full committee in turn took the sub-committee's findings into consideration and approved publication.

The Research Committee's responsibility was to judge the competence of the research, its quality and its presentation. It did not in its approval necessarily indicate agreement with the
conclusions or the alternatives for policy. Since the committee was composed for the most part of experienced professionals, its members felt free to offer criticism about the conclusions and about the findings of the studies. And since the author of the research report attended committee meetings each time the report was being discussed, there was a certain amount of give and take and I think that both the committee and the author were influenced by this exchange of ideas. The reports went through some modifications before they actually got published. This was not a rubber stamp Research Committee by any means. It did its homework and I think it did a first-rate job. The committee by its approval indicated that the report was of a quality suitable for publication.

We have published 28 reports which are listed on an accompanying page. Reports were of three different types. The first type we called study papers. These were for general readership. The second category of studies we called technical papers and they are technical only in the sense that they are less general. The third category of research studies was the urban reports. Finally, the report of the Research Director, which is in process of publication, represents two very fat volumes. I think the results of the research study over a four-year period are quite impressive, and representative of work done by a lot of competent scholars and reviewed by a lot of competent scholars.

I don't propose to talk about findings to any great extent, but I think that these points might be noted. The study was devoted to an analysis of past, current and future growth rates of the Upper Midwestern region, and it was broken down into studies
of states and parts of states, regions and sub-regions. The Upper Midwest had about 6.3 million people in 1960. Roughly half the people in the district live in Minnesota, and roughly half the people who live in Minnesota live in the Twin Cities metropolitan area.

The region grew initially through the exploitation of agriculture, minerals and timber and these provided a basis for processing. Today there are economic development opportunities in these industries. The demands for their output continues to grow but it is growing more slowly than productivity. Consequently they don't provide as much employment opportunity as they did in the past.

For example, in agriculture it is expected that output will increase between 1960 and 1975 — this is a projection of the study — at the rate of about 1 per cent a year, but that productivity will increase at the rate of 3½ per cent a year. This means you face a decline in agricultural employment in the neighborhood of 2½ per cent a year. This is not a declining industry, but it is an industry with a declining employment opportunity. In mining you have about the same kind of a picture. In manufacturing, where output is projected to increase at the rate of 3.5 per cent a year and productivity not quite that much, you will get an increase in employment as well as an increase in productivity.

One of the central points in the study is that we must find industries that will be growth industries in terms of employment in the Upper Midwest if we want to continue to grow.
A lot of the facts that were uncovered as a result of this study people knew in a highly generalized way but didn't really know in quite such pointed fashion. For example, we knew something about costs and comparative advantages up here, but the study that Ron Wonnacott did with respect to these various factors was an eye-opener and produced a great deal of interesting information.

The research is now almost done. The question is now how to use it profitably.