

Presentation by Mr. Robert P. Mayo,
President, Federal Reserve Bank of Chicago
to the American Statistical Association
March 26, 1975

The Planning Imperative in Today's World

It is a pleasure for me to be here today to open your meeting on planning. An ambitious program has been arranged on "Statistics for Planning in a Time of Change." It is hearty fare with the objectives apparently even broader than the title might indicate. Before the day is over, you will have gone from discussions of some of the critical planning issues for any organization, public or private, to the problems of using effectively planning process inputs in decision making. In between, you will have discussions which focus on critical areas in statistics and information systems. All together, this builds a very nourishing hero sandwich.

This ample nourishment is obviously the result of some very hard work by a group of effective planners. I'm pleased to be a participant in a program where the organizers as good planners have done so well in turning interesting wishful thinking into reality.

My role at this conference is to serve as the keynote speaker. I take this to mean setting the stage for what is to follow, whipping up enthusiasm for the discussions and providing some background--some perspective--on the importance of planning.

I doubt that enthusiasm for planning needs to be stimulated in this group. But as a planner, I must make provision for surprises--for the unexpected. So you will not be spared my efforts to stimulate your enthusiasm for planning. I could do no less, in any event, because I am personally committed to formal planning and am, therefore,

an enthusiastic supporter.

To me, planning is the means by which we bend the future to our will. Planning is the borderline activity which separates culture and civilization from savagery. Planning is the very essence of management. Planning is a necessity!

We are all aware that planning is an old discovery. But were you aware that planning was clearly the invention of women? The historian, Will Durant, traces the origins of civilization back to its roots in the development of agriculture. It was primitive woman who was the first agriculturalist. What a great step forward to arrive at the concept of saving some of the seed grain from the harvest to plant the next year, insuring a continuing supply of staple food! All of the elements of modern planning are contained in that discovery. It was the creative application of experience, information, foresight, and intelligent deduction to decision making. Experience of steady recurrences of the seasons; information on the equivalence of grain and seeds and on yields that could be expected; the foresight to know that the food supply would need replenishing; the deduction that the whole process could be self-sustaining. Combining these elements led to the decision to set aside some of the harvest to insure the existence of the next harvest.

Planning is not only ancient, it is ubiquitous. All of us engage in some form or another of planning throughout our waking hours. It may be simple and intuitive, or complex and formally structured. The point is that we all naturally behave as if we not only expect a future, but that we can control what it will be like.

To some then, it may seem paradoxical that such an old discovery, and a process so deeply ingrained in our behavior, should still be the subject of a conference such as this. To me there is no paradox. Conferences of this type simply demonstrate that planning is now an explicit rather than an implicit activity. And having made it explicit, we are able to work more efficiently to improve the process. In earlier periods, simple, intuitive planning approaches may have served us well. But today we need not only a planning attitude but a more formal approach as well-- a "planning technology", if you will--to support that attitude.

It is, I think, significant that the rapid spread of quantitative methods has helped to foster the interest and use of planning. The development of the computer, for example, made the detailed computations involved in model building and similar extensive mathematical tasks practical.

But even more subtle and pervasive have been the spread of the concept of analytical approaches to very subjective planning questions, the spread of the concept of strategic planning, as opposed to traditionally simple annual budgeting, and the recognition of formal planning as a standard activity in the business world. Both the spread of the formal planning concept and the rapid development of operations research, PERT, statistical decision theory, and the host of other supporting tools arose from the gradual dispersal of people from the Rand Corporation, where much of the early work was done in connection with our national defense program. These people went to other research organizations, universities, management consulting firms, the Federal government, and to industry, spreading the gospel and stimulating the thinking of countless managers. By the late 1950s and early 1960s, a major corporation whose management had not set up a long-range planning organization in some form faced serious questioning from its directors and stockholders. Today, formal planning is a necessity

for the military and strongly project-oriented agencies like NASA, or water resources, but for the whole structure of government itself.

The recognition that planning is essential has come about over the past 20 years or so as a result of three major factors--changes in consumer demands as real purchasing power has grown, the explosion in technology, and the growth of our international economic interdependence.

Concern with changes in the demands for our final output must clearly be paramount in the planning process. Real per capita personal income in the mid-1970s is 70 percent higher than it was in the mid-1950s, and to a large extent, this increase has been spent on increasing creature comforts--more and fancier cars per family, color TV instead of black and white, air conditioning. All these changes that have crept up on us as individuals, and which have spread fairly rapidly down the family income scale, are now the accepted order of basic living standards.

But this increased purchasing power has done something else, with consequences we are just beginning to realize. We have very significantly expanded our educational programs, particularly secondary and higher education. In 1955 about one out of every six young people in the 18-24 age group was in school. Today it is about one in three. In the mid-1950s about one out of every eight people, 25 or older, had had some college education. Today it is one in four, and about one in eight is a college graduate. Similar gains in size of the segment of the population with high school education have occurred, with even sharper gains among the minority groups in the nation. I am convinced that the civil rights movement, the concern for environmental problems, women's liberation, and the whole host of other social changes which began in the 1960s and are only now beginning to make their full impact evident, could not have arisen without the diversion

of vast sums of purchasing power into education. And we have not yet really felt the full impact of this trend. We are living in the midst of a social and economic revolution, with the outcome to be dictated by a new brand of well-educated consumer. He has new tastes and demands which the business world has yet to fathom. But one thing comes through loud and clear. Once a certain level of creature comfort is reached, demand moves powerfully in other directions. Neither business nor government can ignore this fundamental shift.

The same gradualness with which the benefits of higher incomes have been absorbed into our personal lives has also been evident with many of the changes in technology. It doesn't really matter to me, for example, when I look at my watch that it may be radically different inside from the one my father relied on. I'm satisfied just to know the correct time. Yet the watch industry has experienced four major technological innovations in the past twenty years or so, after nearly a century in which no significant design changes were made. But the computer chip which runs the newest digital watch as well as the other latest rage, the pocket calculator--both useful but hardly essential devices to most of us--may also be the key element in a medical device that provides a full life to patients who would not have survived ten years ago. Again, the technical changes which have been easily assimilated into daily personal life, have had a far-reaching impact on industry.

The third fact which has contributed to the progressively increasing need for planning is our growing involvement in international markets. I need only mention the sensational impacts of the grain sales to Russia and the arab oil embargo to demonstrate the importance of both imports and

exports to our economy. During the period in which formal planning has developed since the mid-1950s, this foreign involvement has grown enormously in absolute terms, and has doubled relative to the size of the overall U. S. economy. We now export about 13 percent of our total U. S. production of goods, and the total level of exports and imports of goods and services are each about 10 percent of GNP. The implications of these changes on the need for planning for the large international companies has been obvious for some time. But the pressures on other companies, while perhaps more subtle, are becoming more acute almost daily. There is almost no area of business today that does not have to deal with competition from imports. Ten percent of the steel market, 15 percent of the auto market, 100 percent of the small radio market all belong to overseas producers. At the same time we are the largest food exporters in the world and agriculture is the largest single exporting industry of our economy. More than 20 percent of our total farm production was exported last year.

So these three major factors--rapidly growing income, expanding technology, growing international involvement--have come together in time to make business planning imperative. The business that does not do its planning today in an effective way is going to be out of business tomorrow. But let me stress, that the planning process must include making and implementing the decisions, not just setting down a list of desirable steps. The day is past when the corporate plan can be a neatly conceived set of books, filled, no doubt, with the results of excellent staff work, but doing little more for the company's progress than to decorate the shelves of the board chairman's office or to be pulled out to impress visiting VIP's with the company's progressive approach to management.

Not only is real business planning becoming increasingly necessary, it is also becoming increasingly difficult. Henry Ford could plan his

operation on the basis that his customers could have the Model-"T" in any color they wanted as long as it was black, and still turn around and change to the Model A and then to the V-8 when his competition made auto styling a marketing virtue. The modern business world has great need for even more flexibility, and with even greater concern with the moves of immediate competition.

A superficial look at the way the typical American lives today would not reveal a great deal of obvious change since the mid-1950s. Change itself has become an accepted fact of life and we accept it almost automatically. But we must also recognize that in large measure much of the change has occurred behind the scenes, rarely intruding into our daily lives. But viewed from the standpoint of business and industry, the changes have been obvious, vast, and at times, painful.

Today's world is a world of change. The planner is faced with the nearly irreconcilable needs of trying to establish steady progress in this world of change, while allowing for the occurrence of unpredictable events. To an ever-increasing degree it is what happens in the world outside the company--not its internal behavior--which is the controlling factor. To work hard and to make an excellent product are not enough. It's a little like trying to walk on the deck of a ship toward the stern in a heavy sea. The goal is clear. The path toward it is in plain view. But negotiating that path takes a great deal of skill and a certain amount of luck. And it always takes longer to complete the trip from fore to aft than any prudent appraisal of the distance would suggest is a reasonable time.

The technical complexities, the consumer's demands, the environmental outlook of today's society, the complexity of legal, tax, regulatory, and financing problems have come together to press farther and farther

into the future the horizon for which planning must be done. The early literature, even some of the current literature views five to ten year plans as long range plans. But today that is the time horizon for relatively simple projects. Power companies now regularly expect ten years to elapse from the time a decision is made to build a nuclear plant until it is in commercial operation. And building an urban transit system can be even tougher. In 1937 the San Francisco electorate voted and turned down a proposal for a subway system. Planning continued, nevertheless, and though interrupted by World War II, Bay Area Rapid Transit Commission was established in 1951 to formulate detailed plans. This in turn led to the vote which initiated BART in 1957. From 1957 until 1964 not one shovelful of earth was moved, while law suits, financing problems, land acquisition, and technology occupied all efforts. Initial operation on one short segment was inaugurated in 1972, and the system, with luck, will be fully operational late this year, 38 years after initial conception, 24 years after planning began, 18 years after the formal decision to proceed. One of the solutions proposed to eliminate our over-dependence on the automobile and oil imports is improved mass transit. With BART as an example, and it is by no means the only one, 1985 looks as close as next week.

Those of you who know me are aware that I could not accept an invitation to speak on planning without saying something about government planning, even though your program is primarily aimed at the business planner. I am constantly amazed that this country, which has led the world in business planning, and, in fact, is still the school for planners from virtually every country in the world, has developed its planning process rather slowly at the Government level. Naturally

military planning has become a fine art, and project-oriented agencies like NASA and the Bureau of Reclamation have done extensive planning at the project level. My first job in Washington was to help plan the War Loan drives which financed the Government in World War II. But overall planning in terms of setting national goals and priorities, the establishment of programs to implement them and, most important of all, setting up fiscal plans which place funding of programs on a reasonable basis and limit them to tax resources available is still done essentially on a year-to-year basis.

There has always been a strong prejudice among Americans against Government planning. And for good reason, for we are all soundly convinced that the essence of our industrial strength, our agricultural superiority, and our high standard of living are all the product of essentially a free enterprise economy. We resist Government interference, and well we should. We have no interest in a rigidly planned state.

At the same time, we must be careful to distinguish between planning as it applies to a smothering of our basic freedoms and planning as it applies to the orderly and efficient management of those functions which Government has already decided to undertake. It is in that latter context that we have tended to stick our heads in the sand.

Unlike the situation in private industry where the executive arm establishes, approves, and controls expenditures directly, the Federal budget is a financial plan which cannot be implemented without the operation of the legislative process. The Congress, which thus has the ultimate authority in deciding national priorities, has operated for 200 years without any means of looking at the budget as a whole other than to wail about raising the public debt limit after the money they had authorized was spent. Instead, new program initiation has

traditionally been handled piecemeal--much of it outside the established appropriations committees--so that final total expenditures are the sum total of a group of independent decisions, not an ordered set of priorities. To make matters worse, major permanent programs were initiated without more than a cursory examination of the long-term costs. The first year's cost of a 40-year housing program is almost infinitesimal, but a legal commitment has been made. And still another practice which tended to defeat any real relationship between the budget and rational planning is the political game which grew up of Congressional authorization of larger sums than were really intended to be spent on the assumption that some of the money would be impounded by the President rather than being expended. Or to put the shoe on the other foot, Presidents have always asked for more foreign aid than they wanted in order to play ball with a Congress wishing to show fiscal prudence in cutting the budget.

Two things have occurred recently which promise to greatly improve the Federal government's approach to planning national priorities. The first was the passage of the Congressional Budget and Impoundment Control Act of 1974. It provides that Congress shall look at the budget as a whole and make deliberate decisions on national priorities, on the surplus or deficit, and on the long-term impact and financing of continuing programs. It also sets up the necessary committees and staffs to insure that the job can be done and provides that the Congress must act on impoundments of funds, eliminating that escape hatch. The second event is the accumulation of court decisions which have also attacked the legality of certain forms of impoundment. Congressional action must coincide with their real intent rather than passing "show-piece" legislation in the expectations of being rescued by an understanding administration. On paper, this appears to be a major step forward in planning at the Federal level.

It remains to be seen how effectively it will be implemented. The professional staff which has been appointed thus far is both able and knowledgeable, and I am optimistic about the outlook for a major improvement in the outcome.

I should also comment on progress in the Federal government to improve its planning within the Administration itself. After the initial wave of enthusiasm and disenchantment with the original concept of PPBS (Program Planning Budget System), the Office of Management and Budget turned to the MBO (Management by Objective) concept. It is making significant strides toward better planning, measurement, and evaluation--albeit in an environment where some of the entrenched bureaucracy still looks on it as a "gimmick." The Federal budget itself and the President's Economic Report are much more informative in the '70s than they were in earlier years. They now contain carefully prepared 5 year projections on the costs of government programs, the revenues likely to be available to meet those costs, the size of likely future deficits, or surpluses--available for either debt retirement or new critical initiatives--and an assumed environment in which the nation is likely to find itself over the years ahead. Although considerable progress was made during the 1960s in forming such projections, they were incomplete and strictly for internal purposes until some of us were able to convince the President in 1969 that good planning dictated their publication.

I want to close by turning around the title of my talk a little bit and looking at the imperatives for planning in today's world. The first imperative is self-evident. Businesses must plan if they are to survive and grow. Second, planning must be increasingly related to the external forces operating on the firm rather than just on internal action. Third, planning must include provision for surprises. While it is true that trends tend to run over long periods, it is also true that the unexpected

interrupts. Fourth, the planning horizon must be pushed even farther into the future. Paradoxically, the more rapidly change occurs, the longer its impact. Finally, the planner must always remember that his function is to mold the future. In doing so he must be careful to insure that he is not so intent on following the established route that turn-offs to better roads are bypassed. Enlightened planning is the highway to a better America. Let's make the most of it.