During my period of work for Detroit, the International Visitors Bureau sent numerous visitors from abroad to talk with me, most of them quite influential in their own countries. There were visitors from the Middle East and Africa, Asia, and Europe. During this period Japanese industrialists were scouting the United States in advance of setting up their transplants. The Mayor's office often asked me to brief them about Detroit conditions relating to the auto industry. I was invited to speak at numerous conferences, in Detroit and elsewhere in North America. One of these was a conference in Detroit in December, 1981, sponsored by Harvard University's Center for European Studies, entitled "Economic Crisis and Political Response in the Auto City: Detroit and Turin (Italy)." I spoke about Detroit's economic history and the changes in transportation that affected that history. I also outlined some public policy issues, since the Detroit charter decreed that the Master Plan be a policy plan (a decree that most people in the city, including the City Council, did not accept or even seem to understand).

# Detroit's Economy, Then and Now

Until the auto industry began to take off in the early 20th century, Detroit had a diversified economy.

The opening of the Erie Canal and the application of steamboats to the Great Lakes meant that many people went west by boat and tended to disembark at strategic points, such as Detroit, in the natural path of the Great Lakes boatway. When railroads were built, they were designed as landbridges or fords reinforcing and supplementing the water-borne routes. Starting from Detroit, going across Michigan to Lake Michigan was such a landbridge. Consequently, Detroit was a shipbuilding location and an outfitting center for pioneers.

As the railroad tracks began to be extended past the Appalachians, Detroit entrepreneurs and managers played a significant role in new railroad enterprise. Detroit and Michigan also manufactured rails, railroad rolling stock and bridges. Iron and steel were major industries by 1880. Detroit had a number of foundries and machine shops.

For consumers in the region, Detroit packed meat and manufactured such items as carriages, stoves, men's clothing, tobacco and cigars, flour and beer. Wood from northern Michigan found its way into Detroit lumberyards. By this time Germans had migrated to the city in substantial numbers, contributing new artisan and business talents.

The presence of salt beds under the city, and proximity to water, encouraged growth of the chemical and pharmaceutical industries, and soap manufacturing. Lead deposits led to the establishment of a number of paint companies. Lumber from the north went into wagons and carriages. Proximity to iron and copper ores resulted in a number of metal working companies in the city.

Because the new national railroad network now permitted longer hauls, larger markets, and more specialization, by the 1880s small companies were merging into bigger ones and moving from small- and medium-sized cities into larger ones where rail lines focused.

Detroit was the 13th largest city in the United States in 1900, a city of homes and diversified small- or medium-sized businesses. Companies had been moving away from smaller Michigan communities into Detroit as Michigan's largest city. Convenient links to Canada also played a part in the city's growing prosperity.

A number of rail lines served Detroit by 1904: the Grand Trunk Railroad, a Canadian line; the Toledo, St. Louis and Western "Clover Leaf;" the Lake Shore and Michigan Southern Railroad; the Wabash Railroad; the Michigan Central; Pere Marquette and some short lines. In the early 20th century, the Detroit, Toledo, and Ironton Railroad was formed from a collection of short lines near Detroit. In 1920, Henry Ford bought it, selling it again late in the decade.

Cleveland; Springfield, Massachusetts; South Bend, Indiana; and a variety of other places were as much involved in the auto industry's beginnings as was Detroit. But Detroit had a number of special advantages that led to the industry's rapid concentration in that city: the inventive skills of its local people, typified by Thomas Edison, who commuted to Detroit from Port Huron for a number of years; the mechanical aptitudes associated with the making of carriages, internal combustion engines for lake boats, railroad rolling stock, and machinery; the entrepreneurial spirit of men like Henry Ford of Dearborn or Ransom Olds of Lansing, both of whom worked in Detroit at one point; a stable prosperous diversified economy; a reputation as The City Beautiful; low taxes; a reliable work force; a location on or near the New York—Chicago transport and finance axis; the Canadian ties, aided by several ferries crossing the river; a strategic waterside position for reception of coal and iron ore by barge; and good railroad links in all directions.

Early auto production was located in the city proper. Olds was the earliest. That factory burned down in 1901, but another was soon set up on the riverfront near the Belt Line Railroad and just west of the present Belle Isle Bridge. Olds became part of General Motors in 1908. Cadillac (1902) at Endicott and Cass was next to the trio of rail lines that crossed the city on a diagonal from southwest to northeast. Cadillac became part of General Motors in 1909. Packard (1903) was on the east side on the Belt Line Railroad, a block east of Mt. Elliott between Hendrie and Medbury. Packard much later (1954) merged with Studebaker, and then closed. Studebaker had a carriage plant on Piquette Avenue that began making cars in 1909. Later came Hudson (eventually a part of American Motors) and Maxwell (part of Chrysler in the 1920s). The first Fords were built at the Detroit Mack Avenue wagon factory, also on the Belt Line Railroad, founded in 1903. In 1905 production was shifted to Piquette and Beaubien. There were several other small auto companies in Detroit as early as 1904.

As the industry grew, new plants very early went to suburban locations. Ford's new plant, the largest auto plant in the world when it was completed in 1910, was located in Highland Park just north of Detroit's then city limits. Another new Ford plant, built in 1917, was located in Dearborn just west of the River Rouge, Detroit's western boundary. The new Dodge plant was built in Hamtramck, also immediately north of Detroit. At a time when Grand Boulevard circled most of Detroit's residential area, Packard's new 40-acre plant was

just outside the northeast corner of the loop; the new Cadillac plant was on Michigan Avenue on the west side of the loop; Chrysler was established along the Conner Corridor, on the southeast corner outside the loop. When Detroit expanded its city limits so that Highland Park and Hamtramck were positioned in the middle of Detroit territory, Ford and Dodge persuaded each of their turfs to incorporate as separate municipalities that have remained independent down to the present day.

A significant factor in all this peripheral location was the Detroit Terminal rail lines that made a great arc around the city beyond Detroit's then-boundaries. Chrysler came to be located on the southeastern end.

The presence of the auto industry acted as a market and a magnet for related suppliers. A 1904 industrial map of Detroit shows the following companies, among others: a number of foundries, some tool companies, some wheel companies, a bolt and nut works, and an auto body producer. Timken-Detroit Axle (later Rockwell International) was established in Detroit by 1909: Kelsey Wheel, later Kelsey-Hayes, later bought by Fruehauf, began in Detroit in 1910. The Champion Spark Plug Company began in Hamtramck in 1915. Budd began its Detroit operations in the 1920s.

Industrial location for many years tended to be along the riverfront at or near downtown; at convenient railside locations; and especially at Milwaukee Junction, that spot at the southwest corner of Detroit's present new General Motors plant site where various rail lines converged. The city's west side was the best locale for railroad marshalling yards, because north–south, eastern, and western long-distance lines all departed from there.

The rise of the auto industry, as everyone knows, tended to make Detroit an oversized one-industry city, together with related steel production, though it was always more diversified than commonly recognized. The 1920s were Detroit's boom time. In 1922 the city extended its legal boundaries. The sudden growth of the auto industry spawned skyscrapers both downtown and in General Motors' New Center, and miles of new single-family houses. Approximately one-third of Detroit's housing stock today was built in that single decade. Bootlegging of liquor across from Canada and the rapid immigration of workers gave the city some of the feel of a mining camp.

Steadily the many small auto companies were merged into fewer larger ones, a process that has continued up to the present. Almost as soon as the auto industry centralized in Detroit it began decentralizing. Ford's first u.s. branch plant was in Kansas City in 1911. By 1913 Ford had operations in Philadelphia, Minneapolis, Long Island City, and Buffalo. [Both Ford and GM acquired Canadian operations very early.] Ford had an office in Buenos Aires by 1914. Ford bought Vauxhall in England in 1925; General Motors bought Opel in Germany in 1929. While headquartered in Detroit, only for a very short time

was General Motors a purely Detroit company, in terms of control. Early in its history the company came under the control of Du Pont of Delaware, and of bankers in New York City.

During the 1930s, some auto company operations that had decentralized returned to Detroit, but after World War II, decentralization of assembly plants began in earnest, going near where the markets were. Foreign markets were growing; the U.S. population was shifting westward. Before long, General Motors automobiles were being assembled, or parts were being made, in Belgium, Denmark, Switzerland, Spain, Portugal, Canada, Mexico, South Africa, Peru, Venezuela, Uruguay, Australia, New Zealand, and elsewhere. Other auto companies had also internationalized.

Vertical integration had long since taken place. Ford interests, for example, included coal, iron, steel, lumber, rubber, glass, and plastics. Financing, insurance, and automotive services were all parts of an auto company's empire.

Some headquarters functions were in New York City, but most remained within the Detroit region. The implications of these changes for Detroit were a continuing suburbanization of industry and offices, the fact that new factories were built elsewhere rather than in the inner city, and a rise in the proportion of white-collar workers to blue-collar workers within the auto industry in the metropolitan region.

However, Detroit was still the third largest u.s. city in manufacturing employment in 1940. The Detroit area had 1.39 per cent of u.s. manufacturing employment in 1909; 4.47 per cent in 1937. In 1940, 52 per cent of the work force was in manufacturing, and by 1960 40 per cent was still in manufacturing. By 1976, the figure was 34 per cent, but 22 per cent in 1976 were in transportation manufacturing, compared with 19 per cent in 1960. Among those so employed, the proportion of production workers had decreased and the proportions of clerical workers, professionals, and managers had increased.

Despite decentralization, a high proportion of the auto industry remained in Michigan. In 1940, 47 per cent of u.s. cars were assembled in Michigan. In 1977, 32.3 per cent of u.s. motor vehicle assemblies were still in Michigan, according to Ward's Automotive Yearbook; 6.4 per cent were in Detroit. In 1980, 26.2 per cent of the autos made in the u.s. were made in Michigan, and 3.51 per cent were made within the City of Detroit. In 1979, of General Motors' 126 u.s. plants, 44 were in Michigan. The 9,700 Michigan auto industry suppliers were 49 per cent of the u.s. total. There were 507 General Motors car and truck dealers in Michigan in 1979.

The early 1950s were a major turning point for the City of Detroit. The population was at its highest point in 1950, nearly two million people, and has been dropping ever since. Between 1950 and 1980, the city lost nearly 650,000 people. Immigration to Detroit remained high until about 1968, because of changes

from labor- to capital-intensivity in the south, inducing black migration northward. Appalachian whites also flocked to the city, but they did not pull up their Appalachian roots and went home again when auto industry jobs declined.

The loss of the city population despite immigration was due to massive suburbanization abetted by new freeways and federal home mortgage and other policies. Employment opportunities went where the people were: chain grocery stores and other retailing and related wholesaling moved out of the city. The first regional shopping mall in the United States was built just northwest of Detroit's city boundaries. Soon others were built to the northeast and west. New office centers were built in suburban Troy and Southfield, and already existed in suburban Dearborn. In 1930, Detroit had 68 per cent of the population of the Standard Metropolitan Statistical Area. In 1970, it had 34 per cent. The estimate for 1978 was 27 per cent.

For economic reasons, several major Detroit industrial plants including Uniroyal, Parke-Davis, Burroughs' plants, and Chrysler plants were closed in recent years. Severe recession during the oil crisis years of the mid-1970s, and again for the auto industry since 1979, led to attrition among auto suppliers and dealers and the outmigration of workers, especially skilled workers. The completion of Detroit's new Renaissance Center, the transfer of auto industry white-collar jobs from other places into the city, considerable foreign direct investment, and a boom in tourist and convention-related business did not offset attrition in other sectors.

Detroit's labor force dropped in proportion to the city's population loss. Between 1960 and 1980 labor force participation rates remained at about 56 per cent, but the composition changed. The proportion of women in the labor force increased from 33 per cent in 1960 to 42 per cent in 1976. The proportion of non-whites in the labor force was 26 per cent in 1960, 52 per cent in 1976. (By 1980 over 63 per cent of the city's total population was black.)

Meanwhile, the proportion of the labor force working for government went from 10 per cent in 1960 to 17 per cent in 1976. The proportion in professional services went from 10 per cent to 20 per cent in 1976.

The most serious causes of Detroit's difficulties were national and international. The rise of foreign competition, of fuel costs, and of u.s. interest rates cut into the market for Detroit's auto companies. The rise of steel production in non-Western countries was a serious challenge to Detroit's steel. The growth of the u.s. oil imports and of u.s. trade with non-Western countries, and the increased size of ships and tankers, favored year-round warm-water ocean-tied ports, especially those near oil refineries. Large ships required large-capital investment which dictated fast turnaround time in port. The spread of containerization not only for general cargo but also for bulk commodities led to concentration in only a few ports. Concentration permitted an array of

services not available in lesser ports. Fuel costs and Corps of Engineers waterway improvements made barge transport cheap and efficient for bulk commodities. Although barges plied the Great Lakes, they did not pass beyond the St. Lawrence Seaway locks. Moreover, iron ore sources gave promise of drying up in the Great Lakes region. Barges down the Ohio and Mississippi could go directly to the Gulf of Mexico. In the early 1980s coal export shipping was in its boom time, but not out of the Port of Detroit.

Within the United States, outmigration from the south came nearly to a halt and turned to immigration in the 1970s. The proportion of Southern and Western population grew at the expense of the Northeast and North Central regions. New businesses grew up where the markets were. Federal military installations, aerospace and atomic energy programs, and defense contracts tended to favor the South and West. These in turn spun off new growth industries based on high technology. Proportionately very little federal research and development spending was done in Michigan or Detroit. The Detroit auto industry was not inclined toward more research and development than was economically necessary or made necessary by government regulations.

Federal regulation as well as foreign competition did force the auto industry to retool to make smaller front-wheel drive automobiles. This retooling effort and related factory changes entailed the investment of some \$80 billion. But much of the machine tool industry had spread away from Detroit to a wide circle whose perimeter ran through Rockford, Illinois and Cincinnati, Ohio. Fewer and fewer tool and die workers lived in the City of Detroit.

Smaller cars required lighter materials imported from other places. They also required a smaller work force. At the same time, national content laws in other countries made more American auto production necessary in those countries if they were to be markets for American cars. And cheaper wages in other countries encouraged the manufacture abroad of components destined for u.s. auto-assembly plants. All these changes led to a decline in the Detroit-based auto industry work force. Automation of factories and offices would lead to further attrition in the work force, or at least would dictate massive changes in the kinds of skills required. Detroit remained a blue-collar town in an era when the need for blue-collar workers was dropping rapidly.

Federal grant and loan money coming into Detroit since the 1950s did result in face-lifting the downtown and some residential areas near downtown, as well as improving various other parts of the city and assisting in the retention of some businesses and the jobs and taxes they provided. The Poverty Program was a training ground for several major black political leaders. The availability of federal money motivated the creation of a number of neighborhood organizations. The block grants, UDAG, and EDA grants under the Carter admin-

istration most certainly did a great deal to keep up the city's morale. The federal loans to Chrysler Corporation and Trade Readjustment Act funds to workers helped to prevent the unemployment rate from going beyond the near 20 per cent it reached in 1980, or at least helped cushion the impact of such massive unemployment (over 25 per cent of workers counted had given up looking for jobs). Social services and welfare aid from federal funds helped to alleviate some human misery.

However, when as much or more aid, perhaps in different forms, was furthering suburbanization and exurbanization, and was indirectly encouraging the flight to the sunbelt, direct federal aid to Detroit did very little to counteract the broader forces working against the city.

Almost every advanced country in the world had active programs for distressed regions, and laws to maintain or bring about greater regional economic balance. Beginning in the mid-1960s, the U.S. also had its regional commissions and some programs addressing issues of regional equity. However, what was equitable was a matter of debate. The sunbelt, some said, was merely coming up from a position as underdog to one of greater parity, and the frostbelt was simply losing some of its former special advantages; in population, per capita wealth, and income and capital resources, the older industrial regions were still ahead of average.

The issue might be couched not in terms of equity, but in terms of national interest. From that standpoint, it was questionable whether the fragile balance of the natural environment in the Southwest should be overloaded with people. It was also questionable whether the human resources represented by people who were deeply rooted in the older cities should be wasted by forcing them to wither on the vine or else to undergo the emotional trauma of migration. It was questionable whether the enormous capital investment in Northeastern and North Central industrial plants and public infrastructure should be wasted for want of the funds necessary for modernization. Reagan tax incentives for research and development, the building of plants, and the purchase of new industrial equipment were apt to accelerate the process of abandonment plaguing older cities like Detroit.

By the 1970s and 1980s, the problems of Detroit were preeminently the problems of black people. There was no way those problems could be resolved satisfactorily without entry into the rugged arena of national politics. The city's social problems and economic problems went together. Political power was essential to force satisfactory solutions to either set of problems. Consequently, Mayor Coleman Young spent much of his time working within the national Democratic Party and the National Conference of Mayors. His effectiveness through these channels and as a political leader within Michigan affected how

much leverage he would have in dealing with the state's Republican governor and in getting favorable actions from the state legislature. All of this political power, in turn, was what he had to bring to the table in negotiating with Detroit's big companies. Their support, even if limited to certain issues, was essential to the power mix he brought to bear in bargaining for federal and state aid and for the social/economic furtherance of his black constituency.

The highly-publicized General Motors Central Industrial Project should be understood within the context of all these circumstances: the economic and social trends, the realities of power politics. The largest automobile company in the world was vulnerable economically. World trends, world competition, dictated certain modernizations of plant and production methods. For the City of Detroit, the issue was whether it could afford to lose such a major industrial anchor; could it afford to let General Motors' industrial production in Detroit become a skeleton of its former vigor? The answer was "no." Not quickly and obviously "no," because there were deep and troubling questions to give one pause, but—under the total circumstances—the correct conclusion did not appear to be otherwise than what the actual decision was.

That anchor assured, Detroit still faces a troubled future. In January, 1981, a report on the u.s. auto industry to the u.s. president from the secretary of the Department of Transportation reached the following conclusions:

We anticipate there may be over-capacity in world auto supply, particularly in view of the internationalization and homogenization of the market . . . In view of the above, we expect the auto market in the decade ahead to be extremely competitive, particularly with regard to price . . . Japanese automakers currently enjoy a \$1,000 to \$1,500 comparative cost advantage over u.s. automakers, stemming from—greater productivity . . .—lower wage rates . . .—government relations [that are] more coordinated and helpful . . . . We project the potential loss of roughly 500,000 manufacturing jobs in the next ten years, almost all of them located in a handful of states and cities of the industrial Northeast and Midwest. The result could be enormous social and economic dislocation as the nation's industrial base permanently shrinks.

Arthur Andersen and Company's Second Delphi Forecast for the U.S. Auto Industry, dated July, 1981, made similar predictions:

The situation clearly posed a problem for the whole United States. As the U.S. Department of Transportation Report concluded, "The auto industry sits at the center of this country's manufacturing economy. Together with the steel, rubber, aluminum, iron, glass and electronics industries, it exerts an enormous influence on our economic course and that of the other

nations of the world. Roughly one of every six jobs in America is related to the auto industry . . . It utilizes 21 per cent of the nation's steel output; 60 per cent of the synthetic rubber; 11 per cent of the primary aluminum; 30 per cent of the ferrous castings; 25 per cent of the glass; 20 per cent of the machine tools . . . There are more than 100 plants involved in the manufacturing process of each automobile; over 2,000 companies produce goods primarily for the auto industry, which each year purchases \$40 billion of equipment and material from suppliers."

As automobile capital of the world, Detroit deeply benefited from the industry's centrality in the economy, but also profoundly suffered from the industry's economic dilemma. A number of public policy issues related to the City of Detroit's economic difficulties.

#### At the National Level

Should the U.S. Department of Defense deploy its contracts more evenly, or target them more forcibly to distressed areas?

Should placement of federal regional offices be targeted to distressed areas? Should a percentage of military-related shipping be required to go through the Great Lakes?

Should the trigger-price cutoff for imported steel be raised for steel coming into Great Lakes ports, to cover the extra costs of shipping there?

Should the Corps of Engineers be authorized to break up winter ice on the Great Lakes to permit an extended shipping season?

Should restrictions be placed on the activities of Canadian shipping companies in the u.s.?

Should there be a North American Common Market?

Should there be national auto import limitations?

If the Japanese are required to manufacture autos directly in the u.s., should their investments be targeted to distressed regions?

Should there be national laws putting restrictions on industrial plant closedowns?

Should there be a more integrated national industrial policy, with regional impact safeguards as a significant component?

Should the u.s. try to hold onto its maturing industries for reasons of national stability and security; should it cut bait and put most of its resources into new growth industries; or what balance should be struck between the old and new?

What kinds of aid, if any, should be given to individual workers and their families caught in the wake of major economic structural change?

## At the Level of the State of Michigan

Should state workmen's compensation and unemployment taxes on employers be lowered?

Should labor unions be encouraged to accept pay freezes or cutbacks to make Michigan wages more competitive with other states; or would this accelerate the flight of the state's skilled workers?

Should more state funds be committed to economic development, and how should such funds be targeted by sector and geographically?

## At the Metropolitan Region Level

How integrated should or could economic development efforts be at the metropolitan regional level? Through what mechanisms?

#### At the Local Level

How far to go with tax abatement and other special financial incentives for industry and business?

What to demand in exchange? For example, should all or some of the abatement be remitted if the company later leaves the city?

How much and what kind of aid to give companies for their modernizing? What kind of worker retraining program to mount and how to fund it?

The most fundamental issue for Detroit was how much to try to sustain and reinforce traditional industry (the auto companies, farm implement manufacture, steel, etc.), and how much to try to introduce diversifying import substitution—and export related growth—industries. And if the decision was to emphasize the latter more, by what means, by whom, in what sequences?

One of the problems was the nature of the local business leadership. The auto companies had either already diversified internally (that is, integrated their operations both horizontally and vertically), as in the case of General Motors; or they were in the process of divesting themselves of diversification as an economic measure, the case of Chrysler Corporation. Some traditional Detroit companies (e.g., Burroughs, Strohs) had become, or were in the process of becoming, so national or international that their ties to Detroit were correspondingly weakened. Some companies were so thoroughly suburban (e.g., Bendix), that their executives did not focus on the City of Detroit as the primary arena for their contributions to civic leadership. The tie to the city public utility companies were also weakening. American Natural Resources, headquartered in Detroit, was in the process of divesting itself, in 1981, of Michigan Consolidated Gas Company, which supplies Detroit's natural gas. Detroit Edison, electric utility company, and Michigan Bell Telephone Company looked more to their suburban customers than to Detroiters; so did Hudson's department store, especially after it became part of the Dayton-Hudson chain. Deposits in the commercial banks came mostly from the suburbs. Commercial banks necessarily put branches where the customers were. How long would investment banking continue to be centralized?

Purely local businessmen were becoming fewer, or were in the ranks of the relatively powerless. Well-established, purely local, often family-owned businesses often dated back to the beginning of the 20th century or earlier, and by the 1980s many of them were far from modern. Most black businesses were relatively recent in origin. Blacks did not yet have a major share in business ownership, though in 1980 blacks were 63.3 per cent of the city's population.

Weakening white business leadership was not being supplanted at a commensurate level by black business leadership (that is, commensurate in terms of playing an equally significant role in national and international business.) Since major companies, to be major, were necessarily part of an international and national ebb and flow of interlocking directorates, special transactions, and personnel exchanges, this time of transition was especially difficult for Detroit.

Just as it is in the interests of national security and stability for the u.s. to achieve more energy independence and to keep its international payments accounts balanced, so it is also to keep its auto and steel industries viable, to be frugal about limited capital resources, and not to waste precious human resources. All of these reasons suggest that national policy should be directed toward making the u.s. auto industry genuinely competitive, and should assist the economy of the City of Detroit toward greater diversification. Clearly, the emerging world division of labor will cast advanced industrial countries into the role of new-industry begetters—new industry based on new technology permitting substitutions for scarce and costly raw materials; requiring more skills from labor and hopefully creating better work environments; increasing speed, quality and reliability of productivity; lowering costs, including the aggregate costs of professional services; and probably embedded in revolutionary new communications systems.

As a center for industrial decision-making and high-technology conventions and exhibitions, Detroit can become a natural center for the application and dissemination of new technology, a program that the City was espousing some time before the state of Michigan adopted similar policies. Major changes looking toward this kind of future have already taken place in Detroit's primary and secondary school curricula, in its community college and university programs. What remains is for state and federal policy clearly to recognize and assist this necessary future and especially to assist the retraining of adult workers resident in the city. Role models for generations of young black people have been preachers, social workers, teachers, or politicians. Special attention should be given to black engineers, scientists, and computer specialists so that black youth will be motivated to acquire new skills for a technological future.

City planning for the future will undoubtedly emphasize mixed-use pedestrian scale neighborhoods—work, home, and play all within walking distance. Small businesses are the generators of new technology. However, in a time of transition, dramatic images are required to act as levers of major change; highly visible centers should dramatize where the new world is a-borning. This new world will require major cultural and institutional changes—in the way authority is structured and decisions are made, in the ways information flows, in how resources are allocated, in work-flow patterns, in educational content, in leisure life styles, and in basic values. The new possibilities need to be discussed and debated. In this process, the phoenix can rise from the ashes. There is no time more challenging than a time of major change.