STEEL AND SOUTHEAST CHICAGO:

REASONS AND OPPORTUNITIES FOR INDUSTRIAL RENEWAL

A Research Report to the Mayor's Task Force on Steel and Southeast Chicago

Ann Markusen

with

Joshua Lerner
Wendy Patton
Jean Ross
Judy Schneider

Center for Urban Affairs and Policy Research
Northwestern University
2040 Sheridan Road
Evanston, Illinois 60201

November 1985
© Ann Markusen 1985
This research was sponsored in part by the City of Chicago, Harold Washington, Mayor. The findings do not represent the views of the City or the Task Force and remain solely those of the authors.
Preface

A balanced approach to Chicago's development should build upon its manufacturing and commercial strengths. Popular analysts, however, have often argued that U.S. heavy manufacturing is dying, and that Midwestern cities should be cultivating service and high technology firms as a replacement. For instance, a recent blue-ribbon report on the Chicago economy urged the City to emphasize the development of the software, international financial and health-care industries.

This vision of the Midwest's future has gained wide circulation, but is based on a questionable assumption: that services and high technology can prosper in the Midwest without a healthy manufacturing sector. A balanced economic development approach -- which encourages services, high technology firms and manufacturers -- makes far more sense for Chicago and the region. Services are linked far more closely to manufacturing than first meets the eye. For example, during the recent recession, which so afflicted Midwestern manufacturers, almost all of Chicago's services encountered economic hardship as well. In many ways, services are a companion, not a substitute, for basic industry.

A similar pattern exists for high tech. Chicago has traditionally had many high technology jobs, mostly in machine tools and electronics. But most of the growth in recent years has taken place in sunbelt states, fueled by military contracts. It is unlikely that Chicago will attract many of these military-related projects: if the City is to have a high tech future, it will in many cases grow out of existing steel-related businesses, such as machine tools.

During his mayoral campaign, Harold Washington addressed these concerns by promising to pay immediate and strategic attention to Chicago's steel industry. As Mayor, he faced the challenge of how to best marshal the City's limited resources to preserve (and even expand) manufacturing jobs, while continuing to nurture other economic sectors. To this end, Mayor Harold Washington established the Task Force on Steel and Southeast Chicago.

The Task Force is a diverse and talented body, composed of experts from the steel industry, labor unions, academia, business, real estate and the community. Members have devoted more than a year to researching and analyzing the strengths and weaknesses of the steel industry and the southeast Chicago community, and are now formulating recommendations for the Mayor. A portion of the steel and steel-related research conducted by the Task Force was designed and directed by Dr. Ann Markusen, Visiting Research Scholar, Center for Urban Affairs and Policy Research, Northwestern University. That research is reported in this document. Members of the Task Force, its working committees, and DED staff also made important research contributions, and these, along with Dr. Markusen's findings, will be incorporated into the final report of the Task Force.

Dr. Markusen's research has had a significant impact on the Task Force process. The members' perception of the extent and importance of the local steel industry has been broadened, particularly in respect to the considerable advantages that Chicago offers to basic industry. Most importantly, this research has suggested many more ways to respond to the problems of steel and
southeast Chicago than were initially under consideration, ranging from joint research ventures to programs for steel-using firms. But research alone does not produce clear, achievable recommendations. The Task Force was needed to put these proposals into context: a process which requires focusing, balancing, and assessing the feasibility, political acceptability, and time-frame of many ideas first suggested by the research.

Research can be understood as playing a similar role throughout the public policy arena. Students of public administration have decried the lack of adequate research in the policymaking process for many decades. The Washington administration has attempted to address these concerns: for example, through the establishment of a Research and Development Division within the Department of Economic Development. At the same time, research can only clarify possible policy options -- but cannot determine the definitive course of action. The conflict between the limitations and importance of research appears to lie deep within the nature of public administration itself.

I am pleased to introduce this report to the larger public. Its production results from a pioneering cooperation between the City and Northwestern University which we hope will continue. I believe it constitutes a significant contribution to the level of knowledge and awareness of the role of steel in our local economy and lays the basis for concerted action to revive our most industrially distressed communities. At the conclusion of this report, Dr. Markusen makes a number of recommendations that are based on this specific research, her wide experience in studying steel in other regions, and her own policy preferences. I hope these recommendations are provocative and stimulate debate as they did for our Task Force on Steel and Southeast Chicago.

Chicago, Illinois
November, 1985

Robert Mier, Commissioner
Department of Economic Development
City of Chicago
Another example is the recent growth of business services. Much of this new economic activity has resulted from manufacturers cutting costs by spinning off functions once performed internally, e.g., factories are frequently laying off their maintenance staff and subcontracting to outside services. Without a healthy manufacturing sector, many of these business services will also suffer.

This view is also advanced in the only recent comprehensive analysis of the Midwest economy, the Ameritrust study by SRI International, Choosing a Future: Steps to Revitalize the MidAmerican Economy over the Next Decade. Menlo Park, CA: SRI International, Public Policy Center, 1984.


This conflict is also explored in Howard E. McCurdy and Robert E. Clearly, "Why Can't We Resolve the Research Issue in Public Administration?" Public Administration Review 44 (January/February 1984) 49-55.
# Contents

**List of Tables**

**List of Figures**

**Acknowledgements**

**Executive Summary**

## 1 The Southeast Chicago Economy Today

1.1 The Boundaries of the Southeast Chicago and Regional Economies........3

1.2 The Troubled Industrial Base........................................5

1.3 Consequences for Steel-Related Business..........................12

1.4 Consequences for the Local Community..............................17

1.5 Future Work Prospects: Matching Skills to Prospective Industries...28

1.6 Southeast Chicago's Comparative Advantages.........................36

## 2 Divergent Routes for Southeast Chicago

2.1 Bowing Out..........................................................................40

2.2 Bidding Down.........................................................................42

2.3 Betting on the Basics..........................................................44

2.4 Specific Regional and Local Programs for Steel.......................48

2.5 Where the Differences Lie....................................................52

2.6 Directions for Southeast Chicago...........................................54

## 3 The Chicago Steel-Based Industrial Complex

3.1 The Chicago Area Industrial Complex Refined.........................58

3.2 Chicago as the Heart of the Industrial Midcontinent................64

3.3 Chicago's Complex: A Closer Look.......................................79

3.4 Two Alternatives: Defense Contracts and High Tech................96

3.5 Implications for an Economic Strategy.................................101
List of Tables

Table 1.1. Steel-Based Industrial Jobs, Cook and Lake (IN) Counties, 1956-1982.

Table 1.2. Job Change in Five Basic Industrial Sectors, 1979-1983.

Table 1.3. Basic Steel Plants and Jobs in Cook County, 1978-82.

Table 1.4. Firm and Job Decline in Southeast Chicago Steel-Related Manufacturing, 1977-83.


Table 1.6. United Steel Workers Membership, Chicago Area, 1980-84.

Table 1.7. Barriers to Securing New Employment, South Works Survey, 1984.


Table 1.10. Occupations Currently Held by Former Steelworkers.

Table 1.11. Occupational Structure in Selected Industries and Southeast Chicago, 1980.


Table 1.13. Selected Service Sector Job Change, Chicago Area, 1979-1983.

Table 3.1. The Chicago Area Steel-based Industrial Complex: Specialization Rank and Inter-industry Relationships.


Table 3.3. State Basic Steel Employment, SIC 3312, 1958-1982.

Table 3.4. Steel Shipments from Illinois and Indiana to Region of Destination, 1977.

Table 3.5. State Specialization in Steel-Related Industries, 1982.


Table 3.7. U.S. Imports of Steel Mill Products by Customs District (Net Tons), 1975-1984.

Table 3.8. Import Product Mix, U.S. and Chicago Customs District, 1983.
Table 3.9. Industrial Complex Employment by County, 1956 - 1982.

Table 3.10. Selected Product Groups, Chicago Area Industrial Complex.

Table 3.11. Selected Intra-Chicago Economic Area Sales from Blast Furnaces and Steel Mills, 1977.


Table 3.15. Metropolitan High Tech Job Shifts, 1972-77.

Table 4.1. Integrated Steel Facilities in the Chicago Area.

Table 4.2. Steel Consumption by Industry: Chicago District and the United States, 1983.

Table 4.3. Steel Consumption by Product Line: Chicago District and the United States, 1983.


Table 5.2. Number of Minimill Plants By State and Geographic Region: 1984.

Table 5.3. Average Total Annual Steel Capacity In Minimills By Custom District Region: 1973-1977, 1980-1984 (000 tons).

Table 5.4. Imports of Four Minimill Products As a Percent of Apparent Supply, 1983.

Table 5.5. Relationship Between Apparent Minimill Production and Imports of Minimill Products for the Four Customs District Regions and Total U.S., 1973-1979.

Table 5.6. Minimills Located Within 300 Miles of Chicago.

Table 6.1. Investments in Blast Furnaces and Steel Mills, SIC 3312, 1967-82.

Table 6.3. Research and Development Spending by Major Steel Corporations.

Table 7.1. Shipments of Domestically Produced Steel Products of Steel Service Centers, 1948-1984 (tons).

Table 7.2. Costs of Possession.

Table 7.3. Domestic Steel Shipments to Service Centers, 1962-1983. Percent of industrial steel product shipments as compared to percent of total steel product shipments.

Table 7.4. Mill Shipments by Product Line to Steel Service Centers in 1983.

Table 7.5. Scope of Operations of Steel Service Centers.

Table 7.6. Number of Service Center Establishments in Leading States and SMSAs, 1977-1982.

Table 7.7. Location Quotients for the Steel Service Center Industry in Selected SMSAs, 1982.

Table 7.8. Service Center and Manufacturing Employment in Selected SMSAs, 1982.

Table 7.9. Employment Change in Service Center Industry and All Manufacturing in Selected SMSAs, 1977-82.

Table 7.10. Proportion of Total Steel Imports into the United States by Port of Entry, 1970-1983.


Table 8.1. Steel Shipments, Consumption and Imports, U.S., Selected Years.


Table 9.3. Promising Energy-Conserving Steelmaking Technologies.

Table 9.4. Labor Productivity Gains in American Steel, 1981-85.

List of Figures

Figure 4.1  Chicago Area Steel Employment, Integrated Steel Mills, 1980-1984.

Figure 4.2  U.S. Steel Business Segments.

Figure 5.1  Net Capacity and Number of U.S. Minimills, 1960-1984.

Figure 5.2  Minimill Plants in Five Customs Districts, 1973-1984.

Figure 7.1  The Chicago Steel Service Center Industry Market Area.

Figure 8.1  Causes of Chicago Area Steel Job Loss.
This research was funded by the Department of Economic Development, City of Chicago in conjunction with the Mayor's Task Force on Steel and the Southeast Chicago Economy. The Center for Urban Affairs and Policy Research at Northwestern University contributed substantially to the project in salary, office space, word processing and publication assistance. I would like to take this opportunity to thank the many individuals who contributed in major ways to the outcome.

The report itself contains a number of original contributions by my research staff. Josh Lerner wrote Chapter 6 on steel technology, and the portion of Chapter 8 on energy costs. Wendy Patton wrote Chapter 7 on steel service centers. Judy Schneider wrote Chapter 5 on steel minimills, which was also her Master's Thesis at University of California - Berkeley. Jean Ross wrote the bulk of Chapter 4 on integrated steel strategies. Additional research assistance was furnished by Lorraine Pederson, Evelyn Laggos, and John Metzgar of the University of Illinois at Chicago, and by Adan Kuan at the University of California - Berkeley.

The members of the Task Force and the City's Department of Economic Development shaped the research agenda. Dr. Frank Cassell of Northwestern's Kellogg School of Management, the Task Force's Chair Leanne Lachman, and Commissioner Robert Mier were particularly helpful in this regard. David Allardice of the Federal Reserve Bank of Chicago, Joe Persky of the Economics Department at University of Illinois Chicago, and David Ranney of the University of Illinois at Chicago's Center for Urban Economic Development each read the entire first draft and gave us invaluable feedback. Hans Mueller, a steel economist at Middle Tennessee State University, gave us thoughtful comments on Chapters 6 and 8.

We received a cordial welcome from steel producers, suppliers, distributors, and trade associations many of whom granted us interviews in early 1985. Instrumental in this effort was Brian Marsden, President of the Iron and Steel division of Interlake Corporation, whose personal insights and feedback have been very useful. We would like to thank Bernard Lashinsky and Norm Robbins of Inland Steel, Robert Wendt and Hunter Harris of Bethlehem Steel, Wayne Tegeder and Cecil Jones of LTV Steel and Jerry Kendall at Interlake for their time and views on steel markets and futures. In the minimill department, we would like to thank Peter Dillon at Northwestern Steel and Wire, Robert Thomas of Thomas Steel Corporation, James Mertz of Calumet Steel, and Oliver Dulle at the Steel Bar Mills Association in St. Louis.

On steel service centers, we would like to thank Gertrude Scott of the Steel Service Center Institute in Cleveland, and William Laptham Jr. of Japham Hickey Steel, Chairman of the Midwest Chapter of the Steel Service Center Institute, as well as those center managers we interviewed: Al Jensen at Central Steel and Wire, Stanley Hasselbush at L.B. Foster, James Tams at Jorgenson Steel, Len O'Connor at A.M.
Castle, David Stuebbe at MSL Industries, and Edward Mullin at Ryerson Steel. Thanks to John O'Connor of Great Lakes Supply for documenting one supplier's efforts to cope.

A number of private and public research agencies provided us timely data. For Chicago and the Midwest generally, we would like to thank David Allardice and his team at the Federal Reserve Bank of Chicago, Randy Jackson at the Institute for Governmental Studies at Northern Illinois University, William Denham at the State of Illinois' Department of Energy and Natural Resources, Bob Schnorbus at the Cleveland Federal Reserve Bank and John McDonald at the University of Illinois Chicago. In Washington, Elaine Marshall at the Bureau of the Census and Peter Avery, Bob Eninger and Lynn Featherstone at the International Trade Commission helped us with national and international steel data, as did David Levy of the American Institute on Imported Steel and Michael Locker of Locker/Albrecht in New York. Julia Putterman's survey of laid-off South Works employees provided us crucial evidence unavailable elsewhere.


The labor representatives on the Task Force and working groups contributed valuable aid to our effort to assess the magnitudes of unemployment, subcontracting and supplier linkages. In particular, we would like to thank Ed Sadlowski, Alice Peurala, Tom Farr, and Mark Collins in this regard, all of District 31 of the Steelworkers. We are grateful to the research staff of several labor organizations for sharing data with us, particularly Jim Smith and Ed Ghearing of the USWA and Candace Howes of the United Auto Workers in Detroit. Tom DuBois of the Midwest Center for Labor Research compared notes with us frequently on his project on the Northern Indiana steel mills and shared with us his original data. A number of working group members and community representatives gave us valuable criticisms on our preliminary conclusions. They include Phil Nyden of Loyola University, Jack Metzgar and Sam Rosenberg of Roosevelt University, Jerry Harris, and Roberta Lynch.

The one person who has been key to our effort from the beginning, particularly in ensuring that it bore a close resemblance to the directions which the Task Force has taken is Steve Alexander of the Department of Economic Development. His multiple contributions include research support, excellent feedback, timely liaison work and easing of the contractual red tape. We are also grateful to Josh Lerner, who has continually read, commented upon, and followed up loose ends in the research. Other staff members at DED to whom we owe thanks are Robert Giloth, Kenneth O'Hare, Kari Moe, Dennis McAvoy and Margarete Delgado.
I have been very fortunate to have the sponsorship and colliague-
ship of the members of the Center for Urban Affairs and Policy Research
at Northwestern University. I would like to thank in particular
Margaret Gordon, John McKnight, Audrey Chambers, Janet Soule, Alice
Murray, Kathryn McCord, Barbara Angelescu and Gaye Haverkos for
creating an environment conducive to exciting, productive, and readable
research. While the final report has profited from the input of
members of the Policy Committee, its working group and personnel from
the City and the Center, the sole responsibility for the contents and
any errors therein lies with the editor.
Executive Summary

This research project, conducted in conjunction with the Mayor's Task Force on Steel and Southeast Chicago, probed two dimensions of a major economic development challenge. First, what are the causes of and prospects for combating unemployment and business distress on the City's Southeast Side? Second, since the community's recent decline is so heavily bound up with the steel industry, what forces are at work and what might be done to reverse the alarming rate of steel mill and related plant shutdowns in the area? Our findings suggest that although the current situation of both steel and the Southeast Side approaches crisis proportions, there are opportunities for industrial renewal. We hope the findings will serve as a foundation for the Task Force effort.

Southeast Chicago: The City's Industrial Engine

We found that Southeast Chicago performs a very special function for the larger Chicago economy. It operates as the power plant for the region's durable goods sector, a heavily interrelated complex which "exports" large quantities of metal products and machinery to the rest of the nation and world. Chicago's major steelmaking facilities are located here, as are many of their suppliers, distributors and finishing plants. Radiating outward, throughout the City and the midcontinent, are the metalworking, parts, machinery and transportation equipment plants which consume large portions of this steel. Despite heavy setbacks, these steel-based durable goods sectors still account for about 12% of all jobs in the City of Chicago. This "export-base" supports other City services through a multiplier process, so that overall it accounts for 30% of the jobs in the City.

Southeast Chicago remains a tightly knit milltown in its local economic relationships and cultural cohesiveness. But its function as a major engine fueling the City's economy means that it is highly dependent upon the larger national and international economies. Setbacks in steel and related industries since the later 1970s have resulted in a recorded loss of more than 20,000 steel-based jobs in this area, led by large-scale closings at Wisconsin Steel and South Works.

The shutdowns have created severe adjustment problems. A large sample of laid-off South Works employees report an average drop in family income of around 50%. Unemployment has tripled. As many as one in three local labor force participants is unemployed. Among local suppliers of the shuttered mills, conservative estimates are that one in two firms have failed and an additional 3,000 workers have been thrown out of work. Survey research suggests that lack of available alternatives is the single biggest reason for persistent joblessness.

From the labor supply side, re-employment prospects in high tech and business services do not appear to be good. We found that the occupational structure of those industries does not match closely the profile of southeast Chicago workers. Other sectors, such as health care, do provide a better fit of jobs with local skills. However, the
growth of this type of activity is closely related to the viability of the economic base, making it a complement rather than a substitute for basic industry employment. Thus, no good alternative to an economic development focus on basic industry is available.

Southeast Chicago remains a very attractive location for steel-based activity. It possesses a skilled and stable labor force, first-rate infrastructure for the assembly of industrial materials and disposal of wastes, and adequate supplies of water and energy. It has a large inventory of available industrial land and buildings. It is served by one of the nation's most vigorous and diversified business service complexes in nearby downtown Chicago. From a regional point of view, it is strategically located with respect to markets and offers ready access to Chicago's nexus of water, rail, highway and air transportation facilities. The Southeast Chicago economy is the subject of Chapter 1.

How Other Industrial Cities Are Coping

Other midwestern cities face problems as severe as Chicago's southeast side. We surveyed recent efforts in Pittsburgh, Cleveland, Michigan, and Indiana to analyze and prescribe strategies for their ailing industrial base. The strategies often differ strikingly from each other in their diagnosis of the problem and their designs for redress. These alternatives are the subject of Chapter 2.

One course can be characterized as "bowing out," relinquishing the manufacturing role and concentrating on recruitment and strengthening of services, high tech and small business. This strategy accepts the premise that manufacturing attrition is an inevitable product of long-term historical and competitive forces. The future lies, instead, in the "sunrise" industries.

A second route can be dubbed "bidding down." This strategy espouses retention of basic manufacturing as the only viable route for revitalization of the midwestern economy. It is built on the view that the region's industrial ills are a function of uncompetitively high labor and public sector costs. The remedy is the elimination of differentials between Chicago and competitor regions' wage and tax rates, along with relaxation of regulatory rules which hamper business operation.

A third approach, called "betting on the basics" rejects the hypothesis that cost differentials are the major source of the problem. Instead, it attributes current distress to a postwar industry structure which tolerated poor management and investment decisions. It also underscores the growing bias against heavy industry in recent macro-economic policy choices. The distortions produced by these forces are reversible, in this view, with a Japanese style industrial policy, an infusion of capital, and a series of quid-pro-quo's which guide investment decisions to ensure community and job stability.

For Southeast Chicago, the choice of an appropriate strategy depends on two factors. One, can the area expect to maintain and
expand its role as the center of steel-related activity in the midcontinental region? Two, is it reasonable to expect that steel and steel-using industries can reverse their dismal recent performance? These two questions shaped the second portion of the research effort.

Chicago's Steel-Based Industrial Complex

Steel forms the glue in a basic industrial complex which spans the melting of ore in the blast furnace through to the production of bolts, metal shelves and buildings, boilers, engines, finished rail cars, tractors, and automobiles. Steel is the most important material input into a large array of products which are sold mainly to other producers or to consumer as "durables" -- cars, stoves, refrigerators. The industries which make up this complex are Primary Metals, Fabricated Metals, Non-electrical Machinery, Electrical Machinery, and Transportation Equipment. Each is a large supplier and/or customer of the others. Their significance for Chicago is the subject of Chapter 3.

The steel-based industrial complex has a distinct geographical identity. Many of its plants have "agglomerated" around certain metropolitan centers where they can take advantage of the savings afforded by the proximity of their suppliers, customers and competitors. Chicago is the most prominent of all these metropolitan steel-based agglomerations. It is the nation's number one job center for fabricated metals and both types of machinery, and second only to Pittsburgh in steel. It is also the largest steel distribution center in the nation. Unlike some of its sister cities, like Detroit and Pittsburgh, it is more evenly diversified across the industries within the complex.

Links between these sectors and supplier industries form an auxiliary component of the Chicago area industrial complex. Interindustry data reveals that area steel mills alone accounted for $135 million in construction maintenance, $300 million in transportation services, $285 million in utilities, $275 million in wholesaling services, and almost $150 million in business and financial services in 1977, all purchased in the area economy. Chicago area households, of course, are a major supplier to these industries in the form of labor. Payments to households accounted for 35% of the expenditures of steel mills and 46% of those of metal fabricators. Thus, when any one plant closes, it leaves a lengthy series of local customers, suppliers and workers to readjust to its absence.

But the Chicago area steel mills also form the core of a series of larger regional complexes. The machinery and transportation equipment sectors in particular are dispersed throughout the Great Lakes and midcontinental areas. About 87% of raw steel produced locally is shipped within the east and west north central regions. Fabricated steel products are shipped even more broadly to manufacturers throughout the Tennessee Valley and Plains states. Indeed, since Chicago is within 500 miles of half of all U.S. manufacturing employment, and since domestic steel is generally shipped within a 500-mile radius, the midcontinental market for steel can be roughly drawn from
the Appalachians through the Rockies, bounded on the south by the Gulf and encompassing industrial Ontario to the north.

Vis-a-vis this midcontinental complex, steel remains the key sector for Chicago. Of all the member sectors, it is the only one in which the Chicago area is increasing its national share. From 10% of national output in 1910, the Chicago area mills have steadily increased their share to around 30% currently. The Chicago area mills are relatively newer and more productive, specializing in higher valued added lines like sheet for which the demand is relatively more stable and imports less of a threat. As steel mills have been closed in New York, Pittsburgh, Ohio, and California, Chicago area mills have assumed a larger role in national output. This has occurred despite the erosion of its midcontinental market for certain product lines, like rod and wire, by minimills in decentralized sites.

Our research shows that the linkages among the member sectors are weakening in the Chicago-area economy. Steel-using sectors are decentralizing throughout the midcontinental region. International competition, magnified by a severe bias in exchange rates, has depressed both domestic and foreign demand for midwestern machinery, parts and appliances. As a result, some distressed companies have closed plants and moved overseas. Furthermore, a major shift in the federal budget away from spending on housing and infrastructure toward military hardware has depressed demand for steel generally and shifted the location of that demand toward the south west where it is more easily served by imports.

However, these adverse regional shifts are countervailed by three important factors. One, new methods of just-in-time production favor continued spatial proximity of steel-using sectors with steel mills. Second, a shift toward trucking and away from rail and barge enables Chicago-area mills to reach manufacturers in more dispersed locations. Third, more complex processing and customer services in steel service centers help reinforce their attraction to the Chicago area. How well are Chicago-area steelmakers adjusting to these changes in their market?

Chicago's Integrated Steel Industry

The bulk of Chicago area steel is produced in what are known as integrated mills, the subject of Chapter 4. Integrated mills are distinguished from minimills by their basic steelmaking operations -- combining ore, lime and coke to make iron from scratch, whereas minimills are essentially recyclers. Integrated steel mills are generally quite large, their size determined by considerable economies of scale. Chicago's integrated mills also possess rolling mills which specialize in products such as hot and cold rolled sheet, hot rolled bar and alloys.

Much of Chicago steel's current problems arise from the demand side. We found through interviews and market analysis that the products in which Chicago mills specialize are heavily oriented toward the machinery and transportation equipment industries. These are
industries where the overvalued dollar has deeply depressed export sales, while favoring the importation of competitors' products from tractors and cars to components like axles. Almost all of the major steel-using industries in the industrial complex are in serious trouble domestically as well. Only autos and appliances improved their 1984 performance over a very poor 1983. Others, such as industrial machinery and farm equipment, suffered from low levels of investment in the nation's farms and factories.

In facing a depressed market, Chicago steel must also cope with heightened competition from imports. Our analysis suggests that import penetration has been less severe here than in other regions. The overvalued dollar has been the major cause of the recent rise in imports into the midcontinental region, rather than cost or quality differentials.

In light of the market and import adversities, all Chicago-area steel firms have taken strong measures to reverse several years of extremely low profitability. As a group, they have chosen to cut capacity drastically and to increase productivity through restructuring of the work process, resulting in significant job loss at every mill. However, the five integrated firms operating in the area exhibited surprising differences in market, product, investment, marketing, organizational and manpower strategies. Among the more successful were firms which either concentrated on bulk production of high value-added lines like sheet for a limited number of large customers, or on smaller batch, tailor-made runs for a large group of smaller customers. Less successful were strategies for diversifying into non-steel related businesses and mergers designed to trim and fit together two previous companies' facilities.

We found that area steel firms have recorded significant gains in productivity in recent years, both from elimination of less efficient lines and improvements like continuous casting. However, their performance in the area of product innovation has been less impressive. Since product innovation has a relative superior impact on job creation than does process innovation, which often displaces workers, this appears to be an area for job creation opportunities.

Chicago's Steel Minimills

In the postwar period, a new type of steel plant called a minimill has continually gained market share at the expense of the integrated steel producers. Concentrating on simple and low value-added products, minimills recycle steel by melting scrap in relatively small batches and making steel in electric arc furnaces. The newer generation of minimills have been located in nontraditional places, like Nebraska and South Carolina, where they can dominate regional scrap markets and sell to the construction industry in the surrounding region. Minimills now claim about 20% of the domestic market, up from 3% in 1960.

Chicago's minimills are the subject of Chapter 5. In the Chicago area, there are three minimills -- one in Chicago Heights, one in Lemont (DuPage County) and one in Sterling. In addition, there are
seven others within a 300-mile radius, three in Illinois and one in Indiana. U.S. Steel's South Works is now a minimill as well, since it melts scrap in electric furnaces to make its structural products.

In interviews with three Chicago area minimills, we found that they are relatively older than most and relatively less profitable. Varying in size from 120,000 tons per year to 1.5 million in capacity, they serve a predominantly regional market, within 300 miles. In addition to the construction industry, the agricultural and construction machinery industries are their major clients. All are committed to remaining in business in the area, are investing solely in their existing steel operations, and are aggressively modernizing, despite the additional costs this incurs.

Despite the minimills' impressive record nationally, the relative age and condition of Chicago area minimills places them at the low end of minimill performers. Two of the three were operating at relatively low levels of capacity utilization in early 1985, a bit above the integrated mills but substantially below the newer minimills. In the past decade, job loss at these mills has been 30%, 25% and 65% respectively. Total employment at the three combined has fallen from about 4700 to 3100. Much of the job loss is attributable to labor saving innovations, although in at least one case, layoffs resulted from a permanent move from three to two shifts.

Chicago area minimills face a challenging future. A statistical analysis shows that there is room to increase market share in minimill product lines at the expense of imports in the Chicago area. The mills themselves have demonstrated a will to survive and compete; they are investing in continuous casters, entering new product lines, and searching for market niches. In large part, their success will depend upon the future of the heavy machinery industries regionally, since these are the markets targeted by the new product lines. The same macroeconomic factors which have hurt Chicago's integrated mills are also adversely affecting the area's minimills. A revived construction industry and the resurgence, and retention regionally, of capital goods industries are essential to their longer term future.

Investment in Future Steel Technologies

The U.S. steel industry has changed its investment strategy considerably during the 1980s the subject of Chapter 6. All steel producers have become far more cautious about modernizing and building new equipment, and are concentrating on investments with the highest return. Integrated steelmakers differ greatly in their willingness to upgrade and construct facilities, while minimills are uniformly expanding product lines and boosting quality.

When specific steelmaking investments are examined, it is clear that spending has been extremely uneven. Very little, for instance, has been spent on upgrading coke ovens and basic oxygen furnaces, while massive sums are being poured into new continuous casters and electrogalvanizing lines. In general, investments are being pursued in the profitable finishing end of steelmaking, while many facilities
in the production or "hot" end are being neglected or shut. At the same time, many steel companies are focusing their production on the most remunerative product lines, especially steel sheet for automobiles and appliances.

Future steel industry investments will depend on trade, technological and market considerations. But three likely outcomes can be anticipated: a centralized steel industry, with production primarily in the existing large Midwestern mills; disaggregated production, in which innovative changes will enable steelmakers to scatter widely; and uniformly declining steel production.

The first scenario would clearly be best for the City, as several leading mills would be located in the Chicago region. Thus, research should be encouraged that will advance "centralization," such as new coke production methods and computer networks. Alternatively, radically new technologies could alter the geography of the U.S. steel industry. Chicago must strive, therefore, to also become a center of steelmaking innovation. We have identified a variety of potential steel-making technologies which require research support. They range from technologies which could make integrated mills more efficient to radical breakthroughs which favor smaller, streamlined mills. Only through such a two-pronged approach will a dynamic Chicago steel industry be assured.

Steel Service Centers: A Chicago Specialty

In the postwar period, a new phenomenon called the steel service center has increasingly played a pivotal role in the steel industry, the subject of Chapter 7. Originating in steel warehousing activities, the service center performs the inventory storage and management functions for both suppliers and buyers, and processes steel through pickling, slitting, and sizing. Service centers eliminate the cost of possession for clients and economize on scrap loss and transhipment costs. As just-in-time delivery has become crucial for steel users, service centers' role has been enhanced, largely at the expense of sales operations in domestic mills.

The growth of service centers has been impressive. They distribute more than 25% of domestically-produced steel currently, up from 17% in the late 1940s, and are expected to handle in excess of 40% within a decade. Jobs in metal wholesaling have increased over 200% in the same period, from 28,000 in 1947 to almost 90,000 by the 1980s. Jobs in steelmakers sales offices have declined modestly in comparison. Service center jobs are also associated with the handling of steel imports and steel substitutes such as aluminum, copper, and plastics.

The Chicago area is a major steel service center hub. More than 3/4 of all steel supplied to industry moves through Chicago. The Chicago metropolitan area has more metal service establishments in the latest Census than any other -- 620 centers accounting for almost 15,000 jobs. Even in the period from 1979 to 1982, when steel employment dropped precipitously in the area, steel service centers posted an impressive 7% growth in jobs.
In the research reported here, two forces were found to favor further gains for the region. Long distance transportation rates are falling, expanding Chicago's market toward the outskirts of the midcontinental region, often at the expense of cities like St. Louis, Milwaukee, Indianapolis and Peoria. Second, the addition of more elaborate activities such as steel processing and sophisticated data processing to automate orders and distribution, has created "supermarkets" in major metropolitan areas, especially those like Chicago, which are major supply regions.

Cook County accounts for over 80% of the employment in steel service centers within the region, but surrounding counties have recently added jobs at a faster rate. The smaller, less specialized wholesalers appear to be following their manufacturing customers out of the city, while the more specialized centralized functions serving a larger regional and national market remain in the city. The City of Chicago's ability to maintain and increase steel service center jobs will depend upon the maintenance of basic steel production in the region, the superiority of transportation networks within the city and larger region, and the condition of the major industries which buy from centers -- agricultural machinery, construction equipment, machine tools, auto parts, and the steel industry itself.

Causes of Steel Job Loss

A final portion of our research effort was devoted to dissecting the complex causes of steel job loss in southeast Chicago. This involved splicing together diverse bits of evidence on both the national steel industry and on Chicago's large but unique share of it. We concluded that three distinct forces have been at work, each accounting for about one-third of job loss in the first half of this decade. This is the subject of Chapter 8.

First, new sources of competition have emerged which have successfully wrested market shares away from Chicago-area mills. Minimills in Minnesota, Iowa, Nebraska, Kentucky, Indiana and Michigan have successfully entered Chicago's markets for bar, rod and light structures. As much as 10% of area steel job loss can be ascribed to minimill competition.

Another group of new competitors are the international companies, often nationalized, which sell steel in the U.S. These imports, which have risen dramatically in the last year, may account for as much as 10% to 15% of area steel job loss. Another 5% may be the casualty of "indirect" imports -- the foreign steel embodied in machinery components and consumer goods imported from other countries. Internationally-tied job loss is also a function of a precipitous decline in steel exports from the U.S. and in "indirect" exports -- the steel that previously was contained in machinery exports to other countries.

The second set of forces are those shaping the patterns of steel consumption. Two factors are at work here. One is the success of substitutes for steel -- plastics, aluminum, glass, and concrete. As much as 10% of area steel job loss can be associated with these
materials. However, most analysts believe that this transition has been completed. The emergence of new steel uses (e.g. metal buildings, new construction techniques) and development of better quality, lighter and less corrosive steels have helped steel meet this type of competition.

A second factor in steel consumption decline is the extensive recomposition of the economy which has been taking place since about 1967, closely associated with the integration of the international economy and accelerating with recent budget shifts. The U.S. is increasingly assuming the role of supplier of raw and processed materials, business services and military equipment to other nations. As a result, these sectors are growing rapidly, displacing non-military durable good exports and permitting the importation of larger portions of consumer goods. The expanding sectors require little steel in contrast to the traditional manufacturing sectors. As much as 25% of Chicago steel job loss can be attributed to these shifts.

Production restructuring is the third major cause. In 1984, sales of steel at area mills resurged, but employment did not. Restructuring has taken three forms: automation, intensification, and disintegration. Capital-embodied technological changes displace workers by substituting machinery for manpower. Intensification occurs when fewer workers operate the same machinery to produce the same level of output, achieved by job combinations and increased use of overtime. Disintegration occurs when firms shut down specific portions of their operations and purchase the service elsewhere when they resort to subcontracting to eliminate regular jobs. As much as 40% of area steel job loss is associated with these phenomenon.

In analyzing area job loss, we found that two important statistics often used to argue that the steel industry is "dying" are seriously biased. A decline in apparent consumption figures (domestic steel shipments minus exports plus imports) suggests that Americans are consuming less steel. But increasing portions of steel are consumed into rising imports of cars, tractors, machine tools, appliances, radios, T.V. and imported components and escape measurement. Loss of export sales in machinery that embodies steel further depressed the consumption figure.

Second, the figures on job loss in steel are overestimated by the failure to adjust for the fact that restructuring has resulted in many mill-oriented functions spun off to new firms, subcontractors, or emerging segments such as steel service centers. The jobs involved are no longer counted as steelworker jobs, but appear as trucking, wholesaling, construction and service sector jobs. Therefore, steel-associated job loss is considerably less than that recorded, by as much as 50%.

Are Chicago-area Wages and Energy Costs Too High?

Chicago, as noted in Chapter 1, has an extraordinary ensemble of superior locational features for basic industry. However, two factors, energy and labor costs, are often mentioned as comparative disadvantages
for the City. We investigated each of these problems, reported in Chapter 9.

We found that energy cost differentials in steelmaking are largely a domestic issue. The U.S. steel industry faces similar or better utility costs than most of its foreign competitors, although its record in energy utilization is inferior to that of Japan. Chicago's energy costs do appear to be rising faster than those in other regions, largely because of the imminent increase in Con Edison's rates. This cost problem could be mitigated by a concerted effort to increase energy efficiency.

Labor cost differentials, on the other hand, are largely a national not regional issue. Indeed, Chicago steelworker earnings are lower than those in competitor regions. American steelmaking wage rates are higher than those in other steelmaking nations, although a major portion of the differential is accounted for by bias in exchange rates.

However, much of the discussion about labor costs confuses the problem of employment costs per ton of steel with what steelworkers actually make. Press articles often report that steelworkers are making $26 per hour. Actually, steelworkers base pay is now around $11 per hour, down from almost $12 in 1982. In addition, they receive small increments in incentive pay, overtime, and shift differentials. In 1985, steelworkers' average hourly earnings, adjusted for inflation, were below what they had been in 1977. This is not due to declining productivity; indeed steel labor productivity has increased tremendously since 1979. It is the product of successful company bargaining for wage concessions.

The $26 per hour frequently cited refers to the total employment cost for companies. This figure is inflated because U.S. firms, who are free to lay off or retire workers during downturns, add the costs of unemployment benefits, pensions, and insurance for these displaced workers into the hourly compensation figure. These figures sometimes include the white collar salaries and benefits, estimated to be 50% of total employment costs.

Similar analyses of the auto industry suggest that there is no conclusive evidence on the contribution of wages to competitive disadvantage. Indeed, a major joint Japanese/American study has concluded that lacking proof of their significance, greater damage could be done by concessions-related rancor. Improved labor-management relations and greater worker participation have been suggested as a preferred strategy for responding to employment cost differentials. From a public sector point of view, this is a particularly attractive option since concessions erode family incomes and adversely affect other local businesses. In other words, a "bidding down" strategy may not be effective, but will surely lower the community's standard of living.
Future Directions for Steel and Southeast Chicago

Our research results suggest that neither the "bowing out" nor the "bidding down" strategy will work for Chicago's Southeast Side. In an era when other city's leaderships are counseling the abandonment of steel and heavy industry, Chicago would be well-advised to pursue the counter strategy of espousing its steel-based industrial mission. Chicago is the midcontinent's Number 1 city, and the nation's third largest metropolitan area. Its vitality has always been based on the powerful complementarity of its heavy industrial base and its agricultural hinterland, both the most productive in the world.

If Chicago's leadership abdicates industrial advocacy, it may face a chain of adverse closing and relocation decisions which will hasten the disintegration of its industrial complex and further depress the entire economy. It can choose, instead, to marshal its resources and savvy, intervening to retain selected basic manufacturing facilities and pioneering needed innovations. It has a good chance to restore the City's industrial primacy and forge a mission for itself far into the future. We make three sets of recommendations in this final chapter, aimed respectively at basic steelmaking, steel-using industries, and Southeast Chicago. These directions represent options which have emerged in the research effort and represent the views of the authors as distinct from the Task Force itself.
CHAPTER 1: The Southeast Chicago Economy Today

In the past decade, the southeast side of the City of Chicago has visibly deteriorated to a degree some would consider catastrophic. Many storefronts have been boarded up, some subsequently trashed. Weeds grow in front of rarely visited bars, and neighborhoods have become less stable and less safe. The chief causes of this decline is the shuttering of plants in steel and related industries.

When an industry as large as steel restructures or closes capacity, the repercussions spread throughout the surrounding economy. While it is not too difficult to chart direct job loss resulting from plant closings, these numbers do not fully reflect the damage. Increased unemployment ripples through the community adversely affecting other producers, suppliers, area businesses, small shops and restaurants. Workers lose their security, their homes, their cars, their health insurance, and their self-respect.

But it is not only the job and income loss which saps the local economy. The inter-industry linkages, which have historically provided strength within the industrial complex, are deteriorating. Suppliers to a closed steel mill find their market diminished. The mills' former customers must search farther afield, and perhaps pay a higher price, for their steel. The elimination of a local input or market may loosen these firms' commitment to producing in the Chicago area. This bodes ill for the local economy, as more job loss follows cutbacks and relocation in related industries.

Since 1958, Cook and Lake (IN) Counties have suffered a net loss of 187,000 steel-related jobs. Most of this loss has occurred since 1970, and most has been concentrated in blue-collar occupations. Even
if the service sector were growing feverishly (and it's not), the jobs created would not closely match the skills of the unemployed. No economy can absorb this kind of occupational restructuring easily, and southeast Chicago is no exception.

The southeast Chicago area has been particularly hard hit by the decisions that have been made within the steel complex, since a substantial number of the community residents were craftworkers, operatives, laborers or clerical workers for the steel companies. A large proportion of these displaced workers have had very little success in finding other employment which requires the skills and experience they acquired while working within the steel industry. Retraining programs have largely failed and many of these workers are now chronically unemployed. Unless manufacturing can be revitalized in the Chicago region a substantial number of Chicagoans will remain unemployed, and the once viable economy of the southeast area will experience permanent underemployment of its labor force, infrastructure and service sector.

In this chapter, we trace the recent decline of industrial work in the Chicago area, with a special focus on the southeast side. We review the corresponding rise in unemployment and outmigration of the population, and marshal what evidence we can on the experience of the unemployed. We show the changing gender and occupational structure of the work force, and match these to the labor needs of various sectors in the economy. We take a brief look at service sector industries, concluding that they are complements of rather than substitutes for, basic industrial employment in the area. We conclude by showing that
despite current ills, southeast Chicago remains a highly attractive site for heavy industry.

1.1 The Boundaries of the Southeast Chicago and Regional Economies

In the modern internationalized world, it is becoming increasingly difficult to think of any national or regional economy as a single independent entity, let alone a set of neighborhoods in a City. In the case of southeast Chicago, few of the necessities that people consume are actually produced within the area. On the other hand, an enormous amount of the labor expended in the community's workplaces goes into products, like steel, that are "exported" to other communities, states, and regions of the United States and abroad.

Yet it is this very specialization in steel and heavy industry that gives southeast Chicago its workaday character. Furthermore, many of the local small businesses -- grocery stores, gas stations, hardware stores, bakeries, clinics, bars and so on -- are totally local-serving, their livelihoods dependent upon the spending of people who live in the neighborhoods and work in the area. In this sense, southeast Chicago does form its own "economy" which is highly sensitive to steel production and quite distinct from other portions of the Chicago area.

In order to track both the uniqueness of this area's economy and its linkages with the larger region, we have retained the use of several geographical units of analysis in the discussion which follows. For reasons which have to do with data availability as well, we use principally three different groupings: Southeast
Chicago, the Chicago Area Industrial Economy, and the Midwest Manufacturing Economy.

**Southeast Chicago**

The geographic area commonly referred to as the Southeast Chicago area is bounded by the following:

- 79th Street from Lake Michigan to Cottage Grove Avenue
- Cottage Grove Avenue South to the City Limits
- City Limits East and North to Lake Michigan

The following neighborhoods are contained within these boundaries:

- Avalon Park
- South Chicago
- Burnside
- Calumet Heights
- Pullman
- South Deering
- East Side
- Hegewisch
- Riverdale
- Chatham

This area is also divided into 33 census tracts.²

**Chicago Area Industrial Economy**

References made to the Chicago Area Industrial Economy will refer to:

- Cook County, Illinois
- Lake County, Indiana
- Porter County, Indiana

These counties contain the bulk of steel-related industry in the region.³ They also contain virtually all of the integrated steel mills west of Cleveland and Detroit, east of Utah and north of Texas. These mills make almost one-third of the nation's steel. They confront common problems in the midcontinent steel market and draw upon the same labor market. Many Chicago workers commute to Indiana mills and the competitiveness of mills located within the City of Chicago is often affected by conditions at the Indiana mills. We will also be referring to the City of Chicago, Cook County and the Chicago Standard Metropolitan Area (SMSA) when appropriate.⁴
The Midwest Manufacturing Region

Our use of the term Midwest Manufacturing Region, sometimes implying the midwestern economy, refers to the following states:

Ohio
Michigan
Indiana
Illinois
Wisconsin

This group corresponds to the Bureau of the Census' East North Central region. About three-fourths of all the steel produced in Indiana and Illinois is shipped within this region. At times, we will refer more broadly to the midcontinental steel market, or midcontinental economy, which refers to the region stretching from the Appalachians to the Rockies from the Gulf of Mexico to the industrial portions of Ontario.

1.2 The Troubled Industrial Base

A disproportionate share of the businesses and jobs in southeast Chicago are steel related. This connection is a long standing one; indeed, much of southeast Chicago was one grand milltown in its origins. For much of the twentieth century, steel provided a vigorous base to the local economy, and only recently has this interdependence become a mixed blessing. With the massive extraordinary restructuring currently taking place in steel, the local economic base has suffered extraordinary levels of layoffs and persistent unemployment.

Southeast Chicago as Milltown

Like many other midwestern cities, Chicago in the mid-19th century had its share of small iron foundries. They made hand tools for the craftworkers who built the city's factories and housing, and implements for the outlying farm economy. The first steel mills appeared on the north side of the Chicago River. But as the demand
for steel skyrocketed with the coming of the railroads, the industry outgrew its narrow, urbanized confines and moved to the "suburbs", principally southward. When the Calumet Canal and Dock Company began promoting southeast Chicago to developers after the great Chicago fire, they successfully lured two mills -- Brown Iron and Steel (predecessor to Wisconsin Steel) in 1875 and the South Chicago mill (predecessor of South Works) of the Chicago Rolling Mill Co. in 1880, -- to an area which was not then part of the City.

The communities in the Lake Calumet area sprang up as industrial towns for the rapidly growing workforce, often recruited from immigrants. Pullman, of course, was an entirely planned community, but many of the other neighborhoods in the area were built as worker's housing, within walking distance of the mills. The "Bush," for instance, adjacent to South Works between 83rd and 86th Streets, first housed English, Irish and Welsh laborers who built the mill. Subsequently, the two-story densely packed houses filled up with Eastern European families and their boarders. South Deering's Post Office was officially called "Brown's Mill" for almost a decade, as it was the paymaster at the mill who distributed the mail. That community was for a century informally called Irondale. Its streets were made of mill slag, and the revamped Wisconsin Steel mill supplied gas and electricity to portions of the town.

Side by side with steel grew the railroad industry, making rail, rolling stock and locomotives, and the farm machinery industry (plows, harvesters, tractors). As a result, these communities grew to provide the tremendously skilled and varied workforce required by this unique industrial blend. Even as recently as 1966, a study documented the
close knit nature of this community. Residents tended to live, work, shop and use social services within the area. Their habits and culture distinctly "milltown" rather than urban (Greenhill, cited in Kijewski, Brosch, and Bulanda, 1972:46).

While Southeast Chicago continues to be a very large producer in terms of output, job growth has evaporated since the late 1960s. This pattern is in large part an expression of enormous productivity gains in manufacturing in general, which have enabled continual increases in output to be produced with the same or even fewer workers. In 1956, the five basic sectors listed in Table 1.1 employed in excess 500,000 workers. By 1982, only 327,000 jobs existed in the same sectors. Proportionately, job loss was heaviest in transportation equipment and nonelectrical machinery sectors, and least severe in fabricated metals. In Cook and Lake (IN) counties, there were 50,000 fewer primary metals jobs, mainly steel, at the end of the period; in all five sectors, there were 187,000 fewer jobs.

Recent Job Decline in the Southeast Chicago Industrial Base

The job loss in Chicago's industrial base has accelerated in the past decade. In the Chicago area industrial economy, there were 20% fewer jobs in the five sectors in 1982 than just four years earlier. For the City of Chicago and the Southeast side, the job loss was even more dramatic (Table 1.2). Primary metal job loss was 45% on the Chicago side of the border from 1979 to 1983, 54% for the City and 65% for the southeast side. For every industrial category except electrical machinery, job loss rates on the southeast side exceeded those in the City, which in turn exceeded those in the SMSA.
Table 1.1. Steel-Based Industrial Jobs, Cook and Lake (IN) Counties, 1956-1982.

<table>
<thead>
<tr>
<th>SIC</th>
<th>Industry</th>
<th>Employment by Year (000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>33</td>
<td>Primary Metals</td>
<td>131.1</td>
</tr>
<tr>
<td>34</td>
<td>Fabricated Metals</td>
<td>100.1</td>
</tr>
<tr>
<td>35</td>
<td>Nonelectrical Machinery</td>
<td>116.4</td>
</tr>
<tr>
<td>36</td>
<td>Electrical Machinery</td>
<td>121.9</td>
</tr>
<tr>
<td>37</td>
<td>Transportation Equipment</td>
<td>44.4</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>513.9</td>
</tr>
</tbody>
</table>

Source: U.S. Bureau of the Census, County Business Patterns.
Table 1.2. Job Change in Five Basic Industrial Sectors, 1979-1983

<table>
<thead>
<tr>
<th>Sector</th>
<th>Chicago SMSA</th>
<th>City of Chicago</th>
<th>Southeast Side</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Metals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1983 Jobs</td>
<td>31164</td>
<td>14185</td>
<td>7074</td>
</tr>
<tr>
<td>% Change 1979-83</td>
<td>-45%</td>
<td>-54%</td>
<td>-65%</td>
</tr>
<tr>
<td>Fabricated Metals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1983 Jobs</td>
<td>76345</td>
<td>28070</td>
<td>1195</td>
</tr>
<tr>
<td>% Change 1979-83</td>
<td>-23%</td>
<td>-29%</td>
<td>-52%</td>
</tr>
<tr>
<td>Nonelectrical Machinery</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1983 Jobs</td>
<td>70257</td>
<td>20760</td>
<td>2423</td>
</tr>
<tr>
<td>% Change 1979-83</td>
<td>-38%</td>
<td>-40%</td>
<td>-57%</td>
</tr>
<tr>
<td>Electrical Machinery</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1983 Jobs</td>
<td>97105</td>
<td>25539</td>
<td>1296</td>
</tr>
<tr>
<td>% Change 1979-83</td>
<td>-19%</td>
<td>-34%</td>
<td>+296%</td>
</tr>
<tr>
<td>Transportation Equipment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1983 Jobs</td>
<td>19065</td>
<td>7574</td>
<td>3650</td>
</tr>
<tr>
<td>% Change 1979-83</td>
<td>-40%</td>
<td>-40%</td>
<td>-45%</td>
</tr>
</tbody>
</table>

Altogether, southeast Chicago lost 19,556 jobs in these five sectors in just four years.

Looking more closely at the steel sector itself, job losses for Cook County show short-term losses at around the same 50% level (Table 1.3). Plant closings were proportionately greatest in steel-making (SIC 3312). And it is important to note that these figures predate the closing of South Works. Plant shutdowns in steel wire and related products were also severe, cutting employment by 72%. The more sophisticated products, such as sheet and tubing, often produced in separate establishments, were relatively less hard hit. Only the latter category posted job gains.

Steel job loss in the most recent period is a more complex phenomenon than it was previously, when productivity gains could be said to account for most net loss. As Chapter 8 discusses in detail, productivity enhancing changes account for only about one-third of recent loss. New forms of competition -- minimills, imports and competitors for steel-using export industries -- account for another third. Finally, changes in consumption patterns, much of them the artificial product of recent federal government budget priorities and macroeconomic policies, account for another third of the loss.

Despite these losses, steel and related industries remain a critical core of the Southeast Chicago, and indeed the area's, economy. In 1983, primary metals accounted for over 31,000 metropolitan area jobs (not including the Indiana counties) and over 14,000 jobs in the City of Chicago. They account for over 78% of durable manufacturing, 46% of all manufacturing employment in the City. Indeed, these five sectors account for 12% of all jobs in the
Table 1.3. Basic Steel Plants and Jobs in Cook County, 1978-82

<table>
<thead>
<tr>
<th>SIC</th>
<th>Sector</th>
<th>Establishments</th>
<th>%change</th>
<th>Employment</th>
<th>%change</th>
</tr>
</thead>
<tbody>
<tr>
<td>3312</td>
<td>Blast Furnaces and Steel Mills</td>
<td>19</td>
<td>-29.6</td>
<td>14,240</td>
<td>-51.6</td>
</tr>
<tr>
<td>3315</td>
<td>Steel Wire and Related Products</td>
<td>16</td>
<td>-20.0</td>
<td>764</td>
<td>-71.5</td>
</tr>
<tr>
<td>3316</td>
<td>Cold Finishing of Steel Shapes</td>
<td>18</td>
<td>+63.6</td>
<td>1,119</td>
<td>-18.5</td>
</tr>
<tr>
<td>3317</td>
<td>Steel Pipe and Tubes</td>
<td>14</td>
<td>+27.3</td>
<td>1,642</td>
<td>+6.8</td>
</tr>
</tbody>
</table>

Basic Steel Total 67 -4.3 17,765 -49.6

City of Chicago. With a multiplier of 2.0 to 2.5 (see Chapter 3), these sectors are responsible for up to 1 in 3 Chicago paychecks. The Chicago metropolitan area ranks "Number 1" in the country in fabricated metals, nonelectrical machinery, electrical machinery, and locomotive production, and "Number 2" (to Pittsburgh) in primary metals employment. 8

Southeast Chicago is the heart of this industrial complex. It hosts about half of the City's primary metals jobs and about 40% of its transportation equipment jobs. While its customers in fabricated metals and machinery tend to be more spread out in surrounding communities, they remain heavily oriented toward the southeast side's steelmaking core.

1.3 Consequences for Steel-Related Business

When major plant shutdowns occur, many suppliers confront drastic cutbacks in their business. For this reason, studies which document job loss and multiplier effects from income loss severely understate the full economic repercussions of plant closings. This is particularly true in the case of southeast Chicago, where the mills are the major customers of other local employers. And not all of these impacts are local. Some spread out to suppliers in the City's surrounding communities, especially on the west side.

The Case of Great Lakes Supply

How this process works, and how a supplier tried to cope with it, is forcefully demonstrated by Great Lakes Supply, a firm which specializes in hand tool sales to industrial companies. Great Lakes was until recently the third largest such supplier in northern Illinois and Indiana, its entire regional market. While it had
between 3000 and 4000 customers, its major customers were the large steel mills in southeast Chicago, especially U.S. Steel which consumed about 70% of its sales. Great Lakes had, in the late 1970s, aggressively modernized, introducing a Japanese-type just-in-time inventory system and offering customers a first rate "Volume Industrial Purchasing" program.

Beginning in 1979, the firm's problems mounted with the recession and steel company rationalization (see Chapter 4). As the large integrated steelmakers began to shut down lines and forego maintenance, their demand for tools diminished. In 1979, LTV cancelled an order which amounted to about $500,000 worth of inventory for Great Lakes, just under one-third of its entire inventory. Inventory carriage is a major expense for this type of supplier, since they must borrow to finance it. To make matters worse, interest rates had soared from 9% to about 22% in the same period.

Subsequently, the Great Lakes big steel operation was approached by its large customers asking for discounts of 2% off the top. The final blow was the shutdowns at South Works. In 1981, Great Lakes had sold South Works $3.5 million worth of tools; in 1984, its sales to the same plant were a mere $10,000. By 1984, the drop in sales, interest rates and cash discounts wiped out Great Lakes' entire profit margin. In early 1985, Great Lakes Supply was forced to file for bankruptcy under Chapter 11.

In the view of Great Lakes President, John O'Connor, his company's problems are largely those of a small supplier facing a few large and powerful buyers. He notes that big steel companies will negotiate with ore companies and General Electric, offer discounts to
Chrysler and GM, but will not give the little guy special treatment. On the contrary, they appear to take advantage of their monopsonistic position by squeezing the small supplier and playing one off against another. This disadvantage is reinforced by the fact that the banks will not lend to small firms in trouble, like Great Lakes, when they consider the risk too high, but will lend to the larger steel companies, who can borrow at well below the prime rate by virtue of their sheer size.

The Range and Extent of Supplier Closings and Job Loss

Supplier closings range from other manufacturing firms which make materials and equipment for the mills to the strictly service sectors that provide soft drinks for vending machines, janitors for clean-up and printing for company circulars. It is difficult to fully trace the layoffs and shutdowns on the part of those suppliers, who are heavily dependent upon particular mills. The steelworkers' union identified several closings directly linked to South Works: Illinois Slag and Ballast (82 jobs), Chicago West Pullman Railroad (75 jobs), and ore boat operations (30). Partial shutdowns include Chemtron Gas and Baltimore Lumber. These are but examples of the way in which a closing ricochets through a supplier community.

The best way of documenting supplier-related job loss would be to survey every vendor, identified from lists supplied by the major mills in the City. An effort to do this in progress at the Center for Urban Economic Development at the University of Illinois. CUED will submit questions to the South Chicago Economic Development Corporation, who will be visiting vendors as a part of a general industrial visiting program.
An alternative way of assessing supplier difficulties is to use an available data base, like Dun and Bradstreet, making some assumptions about job loss in sectors that are typically mill suppliers. The CUED group has done this for both the City as a whole and for southeast Chicago (Zip Codes 60617, 60628, and 60633). The results are shown in Table 1.4.

While not all of the job loss documented in each industry is a direct result of steel mill closings, the CUED team chose only those sectors in which they could identify one or more vendors directly from the lists supplied by the mills in question. Furthermore, the net figures understate the true level of displacement, since many more jobs actually disappeared and were replaced by others in new firms. In many cases, the workers from the former group did not secure employment in the incoming establishments.

Overall, their selected sectors show a decline of over 3000 southeast Chicago jobs in these manufacturing sectors between 1979 and 1983. At least one sector, railroad equipment, may figure more prominently as a steel customer than a supplier, although to be included here, at least one firm was supplying a major local mill as well. Even if that sector's huge job loss is eliminated, these sectors suffered a decline of some 1300 jobs, or about 64%, in the southeast Chicago area. The number of firms successfully operating in southeast Chicago in these sectors was cut by almost 50% in the four-year period. Citywide, the losses were much greater numerically.

It is important to stress that the CUED analysis was performed only for the manufacturing sectors that supply the steel mills. There are many other types of suppliers who did not fall into these
Table 1.4. Firm and Job Decline in Southeast Chicago Steel-Related Manufacturing, 1977-83

<table>
<thead>
<tr>
<th>SIC</th>
<th>Industry</th>
<th>Firms</th>
<th>Jobs</th>
<th>Job Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>229</td>
<td>Misc. Textile Goods</td>
<td>3</td>
<td>1</td>
<td>40</td>
</tr>
<tr>
<td>239</td>
<td>Misc. Fabricated Textiles</td>
<td>6</td>
<td>3</td>
<td>67</td>
</tr>
<tr>
<td>264</td>
<td>Converted Paper Products</td>
<td>8</td>
<td>3</td>
<td>256</td>
</tr>
<tr>
<td>289</td>
<td>Misc. Chemicals</td>
<td>1</td>
<td>1</td>
<td>80</td>
</tr>
<tr>
<td>328</td>
<td>Cut Stone Products</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>334</td>
<td>Nonferrous Metals</td>
<td>6</td>
<td>2</td>
<td>239</td>
</tr>
<tr>
<td>335</td>
<td>Nonferrous Rolling, Drawing</td>
<td>3</td>
<td>1</td>
<td>114</td>
</tr>
<tr>
<td>343</td>
<td>Plumbing and Heating</td>
<td>1</td>
<td>0</td>
<td>35</td>
</tr>
<tr>
<td>344</td>
<td>Fabricated Structural Metals</td>
<td>15</td>
<td>12</td>
<td>341</td>
</tr>
<tr>
<td>354</td>
<td>Metalworking Machinery</td>
<td>5</td>
<td>6</td>
<td>107</td>
</tr>
<tr>
<td>355</td>
<td>Special Industrial Machinery</td>
<td>4</td>
<td>3</td>
<td>69</td>
</tr>
<tr>
<td>356</td>
<td>General Industrial Machinery</td>
<td>4</td>
<td>3</td>
<td>520</td>
</tr>
<tr>
<td>359</td>
<td>Misc. Non-electrical Machinery</td>
<td>11</td>
<td>4</td>
<td>122</td>
</tr>
<tr>
<td>374</td>
<td>Railroad Equipment</td>
<td>1</td>
<td>0</td>
<td>2000</td>
</tr>
<tr>
<td>399</td>
<td>Misc. Manufacturing</td>
<td>8</td>
<td>3</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>77</td>
<td>42</td>
<td>4031</td>
</tr>
</tbody>
</table>

Source: Dun and Bradstreet Data, Compiled by Lynn McCormick and David Ranney, Center for Urban Economic Development, University of Illinois at Chicago.
categories. Distributors of raw materials or equipment, are not included -- they would fall into wholesaling categories. Great Lakes Supply, for instance, would not be encompassed in this effort. Transportation services comprise another large set of suppliers, especially as the mills have been relying increasingly upon outside trucking companies and independents for hauling their steel. Business services, such as advertising, office supplies, duplicating, accounting, legal, mail, maintenance and security services would not be included. Finally, employee services, such as canteen supplies, health services, and other on-the-premises functions are not included. If job loss in these supplier sectors was also included, the consequences of a shutdown would be multiplied substantially.

1.4 Consequences for the Local Community

Hardest hit by the layoffs and plant closings in steel are the southeast Chicago neighborhoods themselves, both their residents and the retail and service establishments that depend upon their paychecks. Unemployment has tripled over the past decade, and the actual number of residents employed fell, despite a national job growth rate of over 25%. As a result, population growth has been minimal, as natural increase was countered by outmigration. Whether measured in terms of unemployment, income, housing or health indicators, the situation in the community remains critical.

Unemployment

Officially, the unemployment rate for southeast Chicago rose from 4% in 1970 to 11% in 1980 (Table 1.5). Strikingly, the total number of residents in the area who held jobs in 1980 was actually lower than in 1970, a drop from 63.5 thousand to 61.2 thousand working. Fewer
Table 1.5. Population, Employment and Unemployment, Southeast Chicago, 1970-1980

<table>
<thead>
<tr>
<th>Indicator</th>
<th>1970</th>
<th>1980</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult Population</td>
<td>108781</td>
<td>110418</td>
</tr>
<tr>
<td>Men</td>
<td>51035</td>
<td>49512</td>
</tr>
<tr>
<td>Women</td>
<td>57746</td>
<td>60906</td>
</tr>
<tr>
<td>Labor Force</td>
<td>66166</td>
<td>68794</td>
</tr>
<tr>
<td>Employed</td>
<td>63525</td>
<td>61246</td>
</tr>
<tr>
<td>Unemployed</td>
<td>2641</td>
<td>7548</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>4.0%</td>
<td>11.0%</td>
</tr>
<tr>
<td>Men</td>
<td>3.5%</td>
<td>11.4%</td>
</tr>
<tr>
<td>Women</td>
<td>4.7%</td>
<td>10.5%</td>
</tr>
<tr>
<td>Labor Force Participation Rate</td>
<td>61%</td>
<td>62%</td>
</tr>
<tr>
<td>Men</td>
<td>79%</td>
<td>77%</td>
</tr>
<tr>
<td>Women</td>
<td>45%</td>
<td>51%</td>
</tr>
</tbody>
</table>

southeast-siders worked in 1980 despite the fact that more of them were participating in the labor force. By the end of the 1970s, then, before the bulk of the steel mill closings, 5000 more residents of the area were unemployed than at the outset of the decade.

Unofficially, unemployment in the area is much higher than these figures suggest, especially since the Wisconsin Steel (3200) and South Works (6000) closings. The South Chicago Development Commission's survey in October 1982 found 22,450 people unemployed on the Southeast Side, estimating the rate of unemployment at 35% (Metzgar, 1985:9). The East Side Chamber of Commerce estimated that the neighborhood's official unemployment rate of 10% was woefully underestimated and that the actual rate was around 30% (Melaniphy and Associates, Inc., 1983:24).

When steelworkers no longer bring home a paycheck, their purchases from other local businesses fall precipitously. Total community job loss -- from steel mills, suppliers and local merchants -- is thus a multiple of initial steel layoffs. Several efforts to estimate this multiplier effect have been made. The Steelworkers Research Project in 1984 estimated that steelworker job loss had reached 11,000 following the South Works debacle. Using a multiplier of 2.1, estimated by Professor Joe Persky at University of Illinois, they placed total job loss at 23,000. A Center for Urban Economic Development study assessed steel job loss on the Southeast Side at 15,000 from 1979 to 1983, with an additional 12,600 jobs lost elsewhere in the community, for a total of 27,600 (Metzgar, 1985). A somewhat larger multiplier of 2.5 was computed using regression
analysis for the Northwest Indiana Economy by economist L.P. Singer (Singer, 1982:11).

Averaging across these estimates, which vary modestly in the geographical coverage and data calculated, it appears that about one in three members of the area's labor force are without work. These extraordinary levels of unemployment within the community are a major contributor to the poor performance of the Chicago economy as a whole in official statistics. In both 1960 and 1970, Chicago area unemployment rates were less than the national rate. But by 1980, they were greater, especially in the City proper. Of the fourteen largest metropolitan areas in the U.S., only Detroit (16%) posted a higher official unemployment rate in 1982 than Chicago (12%).

The major burden of new unemployment was borne by unionized blue-collar men. The United Steelworkers Union lost more than 40% of its members in the Chicago district (including the northwestern Indiana mills) from 1980 to 1984 (Table 1.6), a decline of 27,000. And these were by no means predominantly white male workers. Of 673 laid-off workers surveyed in 1984 who had been working at South Works in 1981, 43% were black, 15% were hispanic, and 8% were women (Putterman, 1985). The "average" unemployed steelworker then, is black, male, and unionized.

Unemployment rose dramatically for both women and men in South-east Chicago in the past decade. But hidden unemployment is probably greater among men. Men's labor force participation rates actually fell in the community during the 1970s (Table 1.5). This undoubtedly reflects the "discouraged worker" phenomenon, where men no longer looking actively for work are not counted in the labor force nor as
Table 1.6. United Steel Workers Membership, Chicago Area, 1980-84

<table>
<thead>
<tr>
<th>Year/Quarter</th>
<th>Average Membership (000)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1st</td>
</tr>
<tr>
<td>1980</td>
<td>66.3</td>
</tr>
<tr>
<td>1981</td>
<td>63.9</td>
</tr>
<tr>
<td>1982</td>
<td>57.8</td>
</tr>
<tr>
<td>1983</td>
<td>45.9</td>
</tr>
<tr>
<td>1984</td>
<td>44.7</td>
</tr>
</tbody>
</table>

Source: United Steel Workers of America.
unemployed. The bulk of the community's job loss in the 1970s had been in manufacturing -- down more than 4000 jobs -- and these jobs had been predominantly male. Older men have a more difficult time finding reemployment (Puttermann, 1985:39). In 1980, for the first time in many decades, women's unemployment rates fell below those of men's. On the other hand, among steelworkers, women and minorities re-employment rates are far below those of white men. Among the laid-off South Works employees, 32% of whites were unemployed, 62% of blacks, 46% of hispanics, and 61% of women (Puttermann, 1985:44). This evidence is similar to the findings of a national Department of Labor study of 5.1 million workers displaced between 1979 and 1982. Only 3.1 million had found work by January 1984. Among these, blacks and Hispanics fared particularly poorly (Flaim and Sehgal, 1985).

The primary cause of high levels of persistent unemployment is simply the lack of work alternatives. Of 44 unemployed South Works workers responding, the most often cited barrier to working was "no available jobs," a cause which was twice as likely to be mentioned as any other (Table 1.7). A 1980 City-wide study of unemployed workers, heavily focused on minority and high unemployment neighborhoods, found surprising skill levels, education and a commitment to work. Most respondents had had full-time work experience and sought full-time work again. The typical respondent was young, likely to have finished high school if black or white (but not if Latino), was likely to be unmarried but if minority, supporting at least one child. Only about one-third were receiving unemployment insurance, less than one-fifth public assistance, and only one-fourth were being helped by their families. Most had at least one close friend unemployed and most

-22-
Table 1.7. Barriers to Securing New Employment, South Works Survey, 1984.

<table>
<thead>
<tr>
<th>Reported Barriers</th>
<th>Percentage Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>No available jobs</td>
<td>81</td>
</tr>
<tr>
<td>Lack of education</td>
<td>20</td>
</tr>
<tr>
<td>Lack of skills</td>
<td>35</td>
</tr>
<tr>
<td>Wages offered too low</td>
<td>30</td>
</tr>
<tr>
<td>Age</td>
<td>25</td>
</tr>
<tr>
<td>Race</td>
<td>13</td>
</tr>
<tr>
<td>Sex</td>
<td>6</td>
</tr>
<tr>
<td>Inadequate transportation</td>
<td>12</td>
</tr>
<tr>
<td>Inadequate childcare</td>
<td>4</td>
</tr>
<tr>
<td>Poor health</td>
<td>4</td>
</tr>
<tr>
<td>Haven't looked</td>
<td>3</td>
</tr>
</tbody>
</table>

Source: Putterman, 1985:20. Workers surveyed were given a list of barriers and asked to check all that applied to them with no ranking necessary. Responses from 447 workers still not working full-time in June of 1984.
reported knowing other people who were doing illegal things in order to get by (Alexis and DiTomaso, 1982). If work were available, these unemployed workers indicated they would eagerly apply.

Supporting evidence for the view that there are not enough jobs for unemployed workers is borne out in empirical research by a University of Illinois economist who found convincing evidence that employment location factors play a role in the relative lack of economics opportunities for black workers in metropolitan Chicago...This means that the movement of employment opportunities out of the minority areas is particularly damaging to the job possibilities for minority workers. The reality of the housing situation, in my view, is that the movement of minority workers to the suburbs has not and cannot be rapid and extensive enough to overcome the problem...The best alternative would thus appear to be strategies to help businesses that are already located in minority areas to grow larger (McDonald, 1984:208).

McDonald also documents the uneven pattern of industrial job decline across the metropolitan area. He shows that through the late 1970s, the Far South side experienced lower manufacturing job loss rates than any other area of the City, a situation which has been reversed since (McDonald, 1984:29-30).

**Population, Income, Housing and Health Effects**

The corollaries of unemployment are outmigration, income loss, and deterioration in housing and health. Southeast Chicago is historically and at present a very stable community. Of the South Works unemployed, 77% had lived here for five years or more (Futterman, 1985:22). Yet even in the 1970s, outmigration was stunting population growth. The 1980 Census showed that adult population increased only slightly, far below national rates (Table 1.5). This differential is explained by net outmigration. Of
unemployed workers surveyed, 57% expressed a willingness to move if offered a job more than 100 miles away. Fewer, however, are willing to move without a job in sight (Puttermann, 1985:34).

The composition of households has been changing at the same time. In the 1970's, because of job loss and sustained unemployment for men, their recorded numbers actually declined -- there were 1500 fewer adult men counted in 1980 than in 1970. At the same time, the number of adult women increased. As they did so, the share of female-headed households also rose. These trends have probably accelerated since 1980.

Income loss has been enormous for households of laid-off steelworkers, including those who have found new work (32% of the 673 respondents were working full-time in June of 1984). The hypothesis that other household members (mainly women) will go to work to counterbalance the loss of unionized male jobs did not hold for southeast Chicago in this crisis. The average household surveyed had fewer members earning income in 1984 than in 1979. This may be because many spouses already working or because more households became headed by a single parent or individual. Median household income fell from $20-25,000 in 1979 to $10-$15,000 in 1984, a drop of nearly 50% (Puttermann, 1985:10-12, 42).

Job and income loss translates into crisis in meeting basic family needs. Nowhere is this more apparent or distressing than in the housing situation of families. The steelworker study found that 168 families were forced to move because of reduced income (26%), 78 were evicted (12%), 270 had fallen behind in monthly payments (47%), and 25 had lost their homes to bank foreclosures (6%). Many
households had to do without a car. Before the layoffs, 92% owned at least one car; afterward, only 78% did. Cars were sold for cash, and because maintenance and insurance costs could not be covered, in 31% of the families, and one or more cars were lost to repossession in 15% (Putterman, 1985:22).

Health problems have mounted in families of unemployed workers. More than a third of the workers experienced physical changes such as weight gain, increased smoking, headaches and lack of energy. Psychologically, more than half related feelings of depression, anger, and anxiety, and reported increased TV viewing. Health problems are compounded by the dramatic cut in insurance coverage. More than four out of five families suffered insurance cuts, and three-quarters have deferred health care because of this. Perhaps most distressing of all, 44% of these workers have no health insurance at present (Putterman, 1985:23; Rosenblum, 1984).

This evidence from the large survey of former South Works employees can only be suggestive of the range of suffering across the entire community. This group included just over 300 of the community's currently unemployed. If other members of the unemployed pool confronted problems even half as serious as this group has, the total income loss and decline in living standards and health would be enormous. At least one effort\(^\text{15}\) has been made to quantify income loss ($1.5 billion) and associated costs to governments from unemployment compensation, other forms of aid, and tax loss ($600 million) (Table 1.8).

Southeast Chicago as a milltown in crisis is embedded in a larger political unit. In Youngstown or Pittsburgh, a single mill shutdown
Table 1.8. Estimated Costs of Steel Layoffs, Southeast Chicago, 1979-1983

<table>
<thead>
<tr>
<th>Category</th>
<th>Total Employment Loss</th>
<th>Steel</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>27,600 workers</td>
<td>15,000 workers</td>
<td>12,600 workers</td>
</tr>
<tr>
<td>Total Production Loss</td>
<td>$1.9 billion</td>
<td>$1.2 billion</td>
<td>$.7 billion</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Income Loss</td>
<td>$1.5 billion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compensation to Steelworkers</td>
<td>$.9 billion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Income</td>
<td>$.6 billion</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Total Costs to Government                   | $607 million          |                |                |
| Unemployment Compensation to Steelworkers   | $105 million          |                |                |
| Unemployment Compensation to other workers  | $25 million           |                |                |
| Food Stamps                                 | $33 million           |                |                |
| Tax Loss                                    | $444 million          |                |                |

looms much larger in the local consciousness. Southeast Chicago has had a more difficult time capturing public attention and action around its steel situation. As the Steelworker Study puts it:

One of the glaring problems facing dislocated workers was not only their lack of preparation for long-term unemployment, but the unpreparedness of the surrounding community, health and social service providers, both public and private, the union and local government. Simply speaking, no one anticipated the urgency nor extent of the crises facing the workers and if they did, they kept it a secret. There was no advance planning for social interventions nor public policy changes which might have helped lessen the trauma of job loss (Putterman, 1985:49).

It is precisely for these reasons that the Task Force on Steel and the Southeast Chicago was set up.

1.5 Future Work Prospects: Matching Skills to Prospective Industries

In order to absorb the high levels of unemployment, jobs must be created in sectors which demand existing labor skills. An occupational analysis shows that the southeast Chicago residents have a distinctive occupational structure, skewed toward blue and pink-collar (clerical) categories. Since the biggest steel-based losses have been in these skilled blue-collar occupations, and these same occupations have not grown proportionately in other segments of the economy, unemployed steelworkers have been forced to turn to other, mostly lower-skilled and lower-paying, types of work. An analysis of various alternative economic development prospects indicates that some fit the area's existing labor supply better than others.

Southeast Chicago's Occupational Structure

Southeast Chicago residents in 1980 displayed an occupational profile not terribly different from that of the City or the State of
Illinois (Table 1.9). The major difference was that while the latter both had white-collar shares on the order of 36-37%, only 27% of southeast Chicago's residents held this type of occupation (managers, technical/professional workers and sales personnel). Southeast Chicago had a relatively high share of pink and blue-collar workers by contrast -- 73% compared to 63-64% for the larger units. Undoubtedly, if the occupations of the unemployed had been included in this Census count, the concentration of southeast Chicago residents in blue-collar skill categories would be even higher.

The difficulties that Southeast Chicago labor pool has had in coping with structural change is illustrated by the extraordinary losses the community suffered in the craft and operative categories in the 1970s. Altogether, 5800 fewer residents worked in these occupational categories by 1980, compared to relatively modest declines Citywide. By contrast, southeast Chicago participated only weakly in the vigorous growth of the managerial, technical/professional and service occupations. In only two occupational categories did southeast Chicago's workers gain jobs faster than the City's: in transportation, up 1000 workers, and sales, up almost 2500. Despite these gains, the mismatch between new jobs created in the economy at large and the community's skills was serious enough to produce the tripling of unemployment documented above.

What Jobs Have Steelworkers Moved Into?

As jobs shift toward the white-collar occupations, steelworkers cannot easily make the transition. Of the 339 (out of more than 700) former South Works workers surveyed who had managed to find work for at least some period since being laid off, very few managed to move
<table>
<thead>
<tr>
<th>Occupation</th>
<th>Share of all Employment, 1980</th>
<th>Percent Gain or Loss, 1970-80</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Southeast Chicago</td>
<td>Chicago SMSA</td>
</tr>
<tr>
<td>Managerial</td>
<td>6%</td>
<td>12%</td>
</tr>
<tr>
<td>Technical/Professional</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>Sales</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Clerical</td>
<td>23</td>
<td>21</td>
</tr>
<tr>
<td>Service</td>
<td>14</td>
<td>12</td>
</tr>
<tr>
<td>Farming</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Craftworker</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>Operatives/Laborers</td>
<td>19</td>
<td>15</td>
</tr>
<tr>
<td>Transportation</td>
<td>6</td>
<td>3</td>
</tr>
</tbody>
</table>

into these growth occupations (Table 1.10). Only 35% of these blue-collar workers managed to find work in the crafts (23%) or as operatives (12%). The greatest number (53%) found themselves "de-skilled" into laborer, sales and service worker categories. If one takes into account the large number of workers who remained unemployed altogether, the probability that a former South Works production worker would find a comparable job is only about 20%.

Which Sectors Create Jobs that Match Southeast Chicago's Occupational Profile?

The skills and experience of Southeast Chicago residents more closely match those needed by employers in manufacturing and certain service sectors (especially health) than other types of activities (Table 1.11). The manufacturing sectors offer heavy concentrations of jobs in the occupations traditionally considered "male". Basic steel, for instance, and most of the other heavy industrial sectors, have more than 65% of their job offerings in the craft and production categories. The selected high tech manufacturing sectors shown -- measuring devices, medical instruments and opthalmic goods -- have larger professional/technical offerings than the local economy and relatively substantial needs for skilled blue-collar workers.

Certain service industries, such as health, match the area's existing workforce rather well, because they offer a mix of clerical and blue-collar jobs. In contrast, the striking fact about heavy industry is that it does not offer traditional "women's" work, largely clerical, at the levels matching these occupational concentrations in the population. Indeed, many Southeast Chicago industrial jobs are held by men commuting in from surrounding communities. In general, women have commuted farther to work from the community to reach their
<table>
<thead>
<tr>
<th>Present Occupation</th>
<th>Former Occupational Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Production Workers</td>
</tr>
<tr>
<td>Professional/Technical</td>
<td>3%</td>
</tr>
<tr>
<td>Managerial Administrators</td>
<td>2</td>
</tr>
<tr>
<td>Sales Workers</td>
<td>8</td>
</tr>
<tr>
<td>Clerical Workers</td>
<td>4</td>
</tr>
<tr>
<td>Crafts Workers</td>
<td>8</td>
</tr>
<tr>
<td>Operatives</td>
<td>11</td>
</tr>
<tr>
<td>Laborers</td>
<td>26</td>
</tr>
<tr>
<td>Service Workers</td>
<td>35</td>
</tr>
<tr>
<td>Others</td>
<td>3</td>
</tr>
</tbody>
</table>

Source: Putterman, 1985:16.
Table 1.11. Occupational Structure in Selected Industries and Southeast Chicago, 1980

<table>
<thead>
<tr>
<th>Sector</th>
<th>Management</th>
<th>Occupation Prof/Tech</th>
<th>Clerical</th>
<th>Sales</th>
<th>Craft/Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Steel</td>
<td>6%</td>
<td>6%</td>
<td>8%</td>
<td>2%</td>
<td>67%</td>
</tr>
<tr>
<td>Steel Foundries</td>
<td>6</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>74</td>
</tr>
<tr>
<td>Cutlery, Hardware</td>
<td>6</td>
<td>5</td>
<td>11</td>
<td>2</td>
<td>68</td>
</tr>
<tr>
<td>Metal Stampings</td>
<td>5</td>
<td>3</td>
<td>7</td>
<td>1</td>
<td>75</td>
</tr>
<tr>
<td>Misc. Fabricated Metals</td>
<td>6</td>
<td>6</td>
<td>12</td>
<td>2</td>
<td>67</td>
</tr>
<tr>
<td>Farm Machinery</td>
<td>7</td>
<td>9</td>
<td>9</td>
<td>1</td>
<td>67</td>
</tr>
<tr>
<td>Metalworking Machinery</td>
<td>8</td>
<td>7</td>
<td>11</td>
<td>3</td>
<td>64</td>
</tr>
<tr>
<td>Motor Vehicles, Parts</td>
<td>6</td>
<td>9</td>
<td>10</td>
<td>2</td>
<td>65</td>
</tr>
<tr>
<td>Ophthalmic Goods</td>
<td>8</td>
<td>1</td>
<td>10</td>
<td>6</td>
<td>46</td>
</tr>
<tr>
<td>Measuring Devices</td>
<td>6</td>
<td>19</td>
<td>16</td>
<td>1</td>
<td>48</td>
</tr>
<tr>
<td>Medical Instruments</td>
<td>11</td>
<td>10</td>
<td>16</td>
<td>3</td>
<td>39</td>
</tr>
<tr>
<td>SOUTHEAST CHICAGO</td>
<td>6</td>
<td>12</td>
<td>24</td>
<td>9</td>
<td>37</td>
</tr>
<tr>
<td>Health Services</td>
<td>7</td>
<td>39</td>
<td>17</td>
<td>0</td>
<td>36</td>
</tr>
<tr>
<td>Banking</td>
<td>17</td>
<td>2</td>
<td>58</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Securities, Commodity</td>
<td>14</td>
<td>18</td>
<td>53</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Real Estate, Insurance</td>
<td>25</td>
<td>0</td>
<td>35</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Computer, Data Services</td>
<td>9</td>
<td>27</td>
<td>37</td>
<td>5</td>
<td>0</td>
</tr>
</tbody>
</table>

workplaces. While the business service sectors, heavily downtown in orientation, offer high levels of clerical employment, they offer almost no blue-collar jobs that might fit the skills of the heavily minority and male unemployed.

A number of qualifications must be added. First, although high tech manufacturing would appear to fit well the area's skill profile, a more disaggregated analysis of occupations would show serious deficiencies, which might be made up in part by retraining programs. However, the research presented in Chapter 3 suggests that outside of the machining industries, Southeast Chicago has little prospect of attracting high tech industries, which are well-rooted in suburban, sunbelt and military-oriented locations.

Second, while the service sectors would create more clerical jobs, their fortunes are quite closely tied to the health of the basic manufacturing sector. Indeed, recent evidence on Chicago area service sector growth shows that from 1960 to 1982, the area's job growth in services, finance, wholesaling and retailing lagged the nation's by almost 50% (Commercial Club 1984b; Squires, et al, 1986). The Illinois Department of Commerce and Community Affairs (1985) estimates that from 1980 to 1985, Cook and DuPage counties suffered declines of 4% in transportation and utilities, 5% in retail trade, 0.2% in wholesaling accompanying a decline of 14% in manufacturing.

Indeed, the midwest economy as a whole has suffered much slower rates of growth in service industries than has the nation (Table 1.12). Both Illinois and midwestern growth rates have been far below the U.S. in evey category. In most service sectors the Southeast Chicago job loss rate exceeded that of the rest of the metropolitan

<table>
<thead>
<tr>
<th></th>
<th>United States</th>
<th>Midwest</th>
<th>Illinois</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population*</td>
<td>+4.2%</td>
<td>0.0</td>
<td>+0.7</td>
</tr>
<tr>
<td>Employment, Nonagricultural</td>
<td>+4.8</td>
<td>-4.5</td>
<td>-5.1</td>
</tr>
<tr>
<td>Employment in Manufacturing</td>
<td>-8.2</td>
<td>-17.3</td>
<td>-22.5</td>
</tr>
<tr>
<td>Employment in Service</td>
<td>+21.4</td>
<td>+13.5</td>
<td>+13.5</td>
</tr>
<tr>
<td>Employment in Wholesale &amp; Retail Trade</td>
<td>+9.1</td>
<td>0.0</td>
<td>+0.2</td>
</tr>
<tr>
<td>Finance, Real Estate, Insurance</td>
<td>+14.6</td>
<td>+6.7</td>
<td>+7.7</td>
</tr>
</tbody>
</table>


*Population figures are for 1980-84. All others are for 1979-1984.
area (Table 1.13). The exception is transportation, where job loss was less dramatic, suggesting perhaps some comparative advantage. These sectors are thus complements, rather than substitutes for, manufacturing activity. As mills close down, these sectors suffer a substantial loss of business, and therefore jobs, as orders for their services evaporate.

Finally, it should be stressed that job loss and unemployment is greatest in those categories generally considered "blue-collar." Clearly, the fastest way to mitigate these losses and replace them with new jobs is to target those manufacturing sectors in which Chicago has a special advantage.

1.6 Southeast Chicago's Comparative Advantages

While the excellence and stability of the labor force just discussed form the most prominent of southeast Chicago's comparative advantages, there are others that stand out as well. The area has an extraordinary infrastructure which facilitates the assemblage and disposal of industrial materials and wastes. Supplies of water, electricity, gas, and waste disposal facilities are abundant. Although energy costs are an increasing concern, especially as nuclear power plant construction and maintenance costs are blended into the rate base, alternative supply arrangements can be made. The area is crisscrossed with highways, canals, and rail lines that permit the easy movement of coal and iron ore into the mills, the transhipment of steel from one plant to another for finishing and fabricating, and the shipping of steel products out to markets in a broad region.

Second, the area has a large inventory of available industrial land, some of it in quite large parcels. In some cases, recyclable
Table 1.13. Selected Service Sector Job Change, Chicago Area, 1979-83

<table>
<thead>
<tr>
<th>Sector</th>
<th>Chicago Metro 1983</th>
<th>% Change</th>
<th>City of Chicago 1983</th>
<th>% Change</th>
<th>Far South 1983</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation</td>
<td>87763</td>
<td>-13%</td>
<td>29836</td>
<td>-25%</td>
<td>2147</td>
<td>-1%</td>
</tr>
<tr>
<td>Finance, Insurance and Real Estate</td>
<td>224344</td>
<td>+ 4%</td>
<td>153457</td>
<td>+ 3%</td>
<td>3246</td>
<td>-1%</td>
</tr>
<tr>
<td>Wholesaling, Durables</td>
<td>144825</td>
<td>- 6%</td>
<td>56400</td>
<td>-23%</td>
<td>2796</td>
<td>-23%</td>
</tr>
<tr>
<td>Contract Construction</td>
<td>78670</td>
<td>-24%</td>
<td>28842</td>
<td>-20%</td>
<td>2372</td>
<td>-31%</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>462623</td>
<td>- 1%</td>
<td>164019</td>
<td>- 7%</td>
<td>12221</td>
<td>-1%</td>
</tr>
</tbody>
</table>

buildings stand on the land; in others, it is ready for new construction. Because there are no significant competing uses for the land, it is inexpensive. It is also extraordinarily close to the center of the Chicago SMSA, an advantage for just-in-time production needs which are growing in significance to manufacturers. It is accessible to many different supplier and user sites in terms of both time and distance.

Third, the southeast Chicago industrial area is superbly located from a regional point of view. It is poised at the transportation hub of the midwestern and midcontinental economies. This centrality dates from the era of the railroads, but has been reinforced by the system of interstate freeways. Southeast Chicago facilities can serve diverse customers in a far-flung region. This continued prominence is ensured by the vigor of the wholesaling and warehousing sectors in the Chicago area.

Finally, Chicago industrial plants are served by one of the nation's most vigorous and diversified business service sectors. The best in consulting services, advertising, financial services and data processing is available locally. Furthermore, Chicago's business services firms specialize in the industrial and agricultural activities that dominate the nation's internal economy. Information about these services and choice among competing firms are available more readily to local manufacturers than to those in more peripheral locations.
CHAPTER 2: Divergent Routes for Southeast Chicago

In the past few years, a number of leading midwestern cities, states and private sector groups have fashioned economic development strategies for their regions. A stunning range of opinion on the necessity of retaining basic manufacturing has emerged from these blue ribbon efforts. Some counsel "bowing out" gracefully from heavy industry. They accept the inevitability of manufacturing decline and advocate policies for high tech and services.

Others argue that heavy industries are the heart of the regional economy and must be attended to if the current exodus of population and jobs away from the region is to be stemmed. One subset of these stress high labor and other public sector costs as the roots of industrial ills. They favor "bidding down" the cost of doing business as the chief remedy. Another subset argues that industrial revival requires creativity, innovation and new investment. They prefer betting on selected facilities and subsectors as the winners in a restructured industrial base.

To some extent, the differences in strategic posture arise from peculiarities of the subregional economies in question. But much more important are disagreements about (1) the causes of urban industrial decline and (2) the range of options available.

Competing visions for Southeast Chicago can be characterized by these alternative views. In this Chapter, the best of recent regional studies are reviewed. This Chapter concludes that Chicago would be better advised to "bet on the basics" for revitalizing the Southeast Chicago economy rather than to follow either than bowing out or bidding down.

-39-
2.1. Bowing Out

One prevalent view, nationally as well as regionally, is that basic industry is suffering from product obsolescence, unbeatable foreign competition, aging facilities, and poor management. These "Sunset" industries, in the phrase of Lester Thurow,² should be abandoned and resources focused on new growth industries, such as electronics, biogenetics, robotics and business services. A frequent corollary is that small business is the largest source of net new job creation. Strategies fashioned with these premises concentrate on venture capital for entrepreneurs, small business technical assistance, improvement of infrastructure for business services, and increased cross-fertilization between university research efforts and private firms. Two outstanding examples of this type of strategy are the Allegheny Conference on Community Development's 1984 study and the Commercial Club of Chicago's study of the same year.

A Strategy for Growth: An Economic Development Program for the Pittsburgh Region

The Report of the Allegheny Conference on Community Development, a CEO organization, takes this route. In listing the basic premises of its approach to a regional strategy, the Conference begins with

First: The strategy should recognize the inevitability of change. The forces that have been at work are irreversible. Never again will Pittsburgh and its surrounding communities be a region that depends so strongly on primary metals and other durable goods manufacturing. Nor would a return to this state be desirable. While durable goods manufacturing remains a key part of our economy, concentration on a single type of industry can prove to be a great vulnerability. (Volume I:8)
In addition to the troubles besetting the steel industry nationally, the study cites the westward movement of the market for steel and the extraordinary concentration of steel in the region as causes for pessimism.

The Conference's reticence to advocate steel and related heavy industry is reflected in the short shrift these industries merit in the summary volume:

> Our expertise in metals has diminished but need not fade entirely. Efforts should go forward to maintain what we can of the traditional primary metals base and its support industries. (Volume I:25)

This reluctance is particularly interesting in light of the fact that one of the Conference's nine Task Forces focused on manufacturing and strongly recommended a Manufacturing Retention and Expansion Program, jointly between the city and county, which would establish a financing assistance clearinghouse, assist with preparation and infrastructure, increase federal procurement, establish a supplier match-up program, and build a network of business consulting services for existing companies (Volume II:11-13). None of these ideas made the final report. The Conference's strategy clearly espouses funneling resources toward international headquarters, finance, regional services and high tech functions in lieu of basic manufacturing.

Make No Little Plans: Jobs for Metropolitan Chicago.

The Commercial Club of Chicago's study, released in December 1984, skirts the industrial issue in Chicago by more or less ignoring it (Commercial Club, 1984c). Five primary objectives are identified by the Steering Committee (p.8):
a. Stimulate new enterprises and assist existing small businesses;

b. Improve the business climate by correcting such weaknesses as the high cost of doing business;

c. Market the advantages the area has to attract and retain business;

d. Improve the net flow of federal funds;

e. Build on metropolitan Chicago's strengths in such areas as financial services, transportation, communications and health care.

To the extent that targeting is recommended, the Commercial Club study stresses promoting Chicago as a leading center for financial services, retaining and attracting banking and insurance industry processing centers, developing Chicago as a health care center, stimulating international business (especially in banking and regional headquarters), and software development (pp. 28-32). Nowhere is steel or other heavy industry, so critical to the South Side, explicitly mentioned.

2.2. Bidding Down

Another prominent view is that the midwestern economy must revitalize its basic heavy industrial sectors, whose crisis lies in their uncompetitive cost structure. This position stresses the cost differentials, across U.S. regions and among nations in international trade, of labor, capital, energy, materials, land, taxes, and environmental regulation. At the national level, this strategy has been most recently articulated by the Heritage Foundation's Richard McKenzie, in his "Blueprint for Jobs and Industrial Growth," where he espouses loosening business regulations, weakening antitrust law, eliminating labor rights and benefits, abolishing a number of business taxes and elimination of many environmental protections. Two midwestern studies
echo this cost-conscious strategy.

Cleveland Tomorrow -- A Strategy for Economic Vitality

The Cleveland Tomorrow program, the product of a committee of CEOs from 44 major Cleveland corporations, includes a commitment to basic manufacturing in its three-pronged strategy. But its remedy for manufacturing decline focuses singularly on wages and work rules:

The major cause of this job loss is high unit labor costs caused by a combination of a long history of adversarial labor management relations, relatively high wages and restrictive work practices. Given these high costs, Cleveland facilities bore the brunt of the changes in manufacturing worldwide. (Shatten, 1985:1).

As a result of this view, the recommendations for "anchor" industries target labor-management relations almost exclusively. The report argues that "labor and management are limited in their motivation and freedom to undertake a local initiative to reduce the high unit labor costs driving much of this loss" (Cleveland Tomorrow:11). It recommends an Industrial Competitiveness Project aimed at this problem. Beyond that, the only other aid suggested for anchor industries is a productivity center (pp.12-14). All other initiatives -- research, entrepreneurial services, the Cleveland Seed Capital Fund -- are set aside for growth industries (p. 15-18).

Economic Plan: Jobs for Metropolitan Chicago

In an earlier version of the Commercial Club Report, published in March of 1984, a great deal more is said about basic manufacturing. This earlier report contains summaries of seventeen resource committee efforts, one of which was devoted to manufacturing. This report notes
that manufacturing still provides 24% of all Chicago's nonagricultural jobs and that its industrial base is more diversified than other midwestern cities (Commercial Club; 1984a:63). This status report underlines "key weaknesses" and "threats" to include local labor rates, local taxes, and unsupportive political environment, and perceived low labor productivity. It recommends six areas for further investigation (p.65):

a. Promote "downstream" petrochemical production;
b. Create a "factory of the future" -- joint private-public efforts;
c. Examine the possibility of forming a management/union partnership to address key issues;
d. Develop programs which promote the use of industrial development bonds, municipal bonds and other financial incentives;
e. Develop and maintain an attractive climate for business professionals, especially the top business leaders;
f. Explore possible changes in the state's workmen's compensation and unemployment compensation laws.

What is noteworthy here is that only the last two items were deemed important enough for inclusion in the final report, which devotes a surprisingly long section (pp. 24-5) to the two issues of workmen's compensation and unemployment insurance, as the essence of the need to "trim the high costs of doing business."

2.3. Betting on the Basics

Several studies have chosen the controversial route of selecting certain key industrial sectors as the recipients of special research, investment and other public sector incentives. These studies reject the "sunrise" industry route because they do not believe that their economies will be successful candidates for these types of activity or
that the jobs created will be sufficient and of the appropriate sort to solve the unemployment problem. Secondly, they differ from the previous set of studies mentioned in that they do not believe that the major problems of these industries lie in their cost structure, but rather in their unique histories, their industrial structure, their product and process designs, and their current fate under national macroeconomic policy directives. The solution lies in enhancing the comparative advantages of particular facilities, product lines and subsectors in the existing heavy industrial complex, through pioneering new public sector economic development tools.

Choosing a Future: Steps to Revitalize the MidAmerican Economy over the Next Decade.

The only comprehensive study done of the midwestern economy in 1984, this SRI International study prepared for the Ameritrust Corporation, takes the bold position that the revitalization of basic manufacturing is essential for midwestern recovery.

The industries reviewed emphasize existing manufacturing because neither nonmanufacturing nor new manufacturing industries have significant potential to serve as a base for a MidAmerican recovery within this century. A MidAmerican recovery is impossible without a manufacturing recovery....Most of the Midwest's resurgence, therefore, must be based on recapturing a competitive position in its existing industries. (SRI International, 1984:38).

The report stresses that effective action must be tailored to the needs of individual industries, and that major steps need to be taken in the following areas (p.2):

- technology utilization
- management practices
- labor-management relations
- education and training
- capital investment

Its key conclusion is

...that MidAmerica can to a large degree take charge of its own destiny: it can choose a future. The easy -- and regrettable -- choice would be simply to continue with business as usual, assuming naively that the current economic upturn signals the end of the region's deep-seated economic problems. The more challenging -- and necessary -- choice would be to take major steps to restore MidAmerican competitiveness and revitalize key industries" (p.159).

The Cleveland Metropolitan Economy Study

In 1982, the Rand Corporation completed a study of the Cleveland area economy for the Cleveland Foundation. Their findings anticipated The Ameritrust analysis of the larger midwestern economy. They found that Cleveland's specialty within the durable manufacturing sectors lay in production of semi-finished metal goods, machine tools, electrical industrial equipment, and instruments.

Efforts to expand the export activities of some of the service sectors may pay off, but it is unlikely that these industries will sell enough outside the metropolitan area to replace manufacturing as the core of the Cleveland area's economic base. So, in a sense, the region is still wedded to its traditional strengths. Additional threats to this strength should be viewed very seriously... (Gurwitz and Kingsley, 1982:xvii).

They recommended ongoing monitoring of Cleveland's economic base and more detailed analyses of problems and opportunities in specific, key industries such as machine tools and metal stampings.
The Path to Prosperity: A Long-Term Economic Strategy for Michigan.

In late 1984, a panel of Michigan economists issued this report for the Governor's Task Force for a Long-Term Economic Strategy. They concluded that:

The central focus of any state economic development policy must be the expansion of the state's economic base (Task Force, 1984:9).

They found that farming and tourism account for few jobs, and that business services, the only other major element in the economic base, are located in the state primarily because there are manufacturing firms there to purchase their services.

Manufacturing industries, therefore, remain the real strength of Michigan's industrial engine. If we want to understand how that engine has performed, manufacturing must be our focus. (p.10)

The Michigan economists reject the "get out" strategy, as they dub it, demonstrating that high tech jobs are not a feasible nor desirable alternative to basic durable goods manufacturing.

They also reject what they call the "get poor" strategy of lowering wages to meet those paid to production workers in Oklahoma, Mississippi, Mexico and Taiwan. Pointing out that this would force a substantial cut in the standard of living of the state's industrial workers, they regard as "an unwelcome last resort any economic strategy that promises our children a future less prosperous than their parents' past" (p. 46). They also reject reductions of publicly-controlled business costs such as worker's compensation and unemployment insurance, pointing out that Minnesota has the highest such state and local costs in the region and has the most impressive manufacturing growth rate in spite of them.

The Michigan "Get Smart" strategy counsels that the state must shift from mass-produced, low-wage production toward complex, skill-

-47-
intensive manufacturing which cannot easily be transferred elsewhere.

These complex manufacturing processes are

...more automated, more precise, more flexible, more integrated and more customized... (p.51)

and must be mounted in the "factory of the future." (pp. 52-55). The public sector's role includes the engendering of new technologies, new skills, new labor-management relations and new managerial styles.

The Michigan study is in some ways an inheritor of ideas first put forth in a 1981 program called National Reindustrialization, an agenda for the recovery of the Detroit economy proposed by Dan Luria and Jack Russell (1984). They argue that Detroit's expertise lies in metal bending industries, and that new product lines need to be found to absorb auto displacement. They earmark energy hardware as a major direction: deep gas and heavy oil equipment, cogenerators and industrial process engines, and minemouth gasifiers. The program also advocates capital targeting, the use of eminent domain, tax increment financing, pension fund capital and employee ownership.

2.4. Specific Regional and Local Programs for Steel

Among the industries most carefully scrutinized by midwestern policy makers is steel. At least two major studies examined the possibilities for a revitalized steel industry, one in Pittsburgh and one jointly between Illinois and Indiana. Both espouse relatively bold steps for restructuring the steel industry within their respective regions.
Steel Valley Authority: A Community Plan to Save Pittsburgh's Steel Industry.

In 1984, the Tri-State Conference on Steel, a non-profit community action organization of workers, the unemployed, local union leaders, clergy and community activists, issued a full scale plan to revive the steel complex in the Pittsburgh area (Tri-State Conference, 1984; Stout, 1983). Noting that steel is the backbone of an industrial society and the main source of income for the mill towns lining the banks of the Monogahela Valley, they argue that there is no other choice than steel, since services and high tech will not meet the level or target populations experiencing displacement:

Industrial reconstruction must conform to the human and infrastructure resources available. It is senseless to break up our developed industrial centers and scatter the skilled labor to the four corners of the land in search of economic survival (Tri-State Conference, 1984:5).

They propose a Steel Valley Authority, modelled on TVA, which could use the power of eminent domain to condemn and purchase unused industrial property and refurbish it for resale or public sector operation. The market for renewed steel output would be tied to an infrastructure rebuilding program and targeted procurement programs by federal and state governments. Financing would come from publicly underwritten bonds, federal aid, and worker and community shares. Organizationally, the new Authority would be responsible to governments, organized labor, local business and other community institutions, and would employ a competent management.

Since early 1984, this proposal has garnered considerable public support. Some eight Mon Valley local governments have voted to set up the Authority. The immediate target of the plan is the Duquesne mill of U.S. Steel, which is presently idled. Demolition has been delayed for over a year. A steelworker-funded study found that the mill could
be profitably operated to produce semi-finished steel (Locker/Abrecht, 1985). A Lazard Freres study has found that a market exists for the mill's product (Tumazos, 1985). A Wall Street effort to secure financing for a conversion is presently underway.

**Strategy 21: Pittsburgh/Allegheny Economic Development Strategy**

In June of 1985, a joint partnership of chief executives from the City of Pittsburgh, Allegheny County and the area's two major universities issued a call for $203 million in-state funding for a set of projects to revive the Pittsburgh economy. The call was clearly a response to both the two studies cited above -- the Tri-State plea for a commitment to steel and the Allegheny Conference's advocacy of high tech and corporate headquarters. The Strategy 21, referring to the 21st Century, proposed major commitments to a new airport, to two new basic research centers (biotechnology and robotics), and to a comprehensive study of the metals-producing sectors. Its four goals straddle the basics and high tech (City of Pittsburgh, et al, 1985):

1. Reinforce region's traditional economic base as center for metals industry and corporate headquarters

2. Convert underutilized land, facilities and labor force components to new uses, especially those involved in advanced technology

3. Enhance region's quality of life, thereby attracting new residents and increasing tourism

4. Expand opportunities for women, minorities and structurally unemployed

Unlike the Tri-State's action-oriented plan for steel revitalization, Strategy 21 is more cautious about its metals industry proposals. It proposes a major ($750,000) study of these industries
--- the existing facilities, their condition and market prospects, and possible re-use of nonviable mills:

Initially the study would analyze which metals facilities have the best potential for becoming competitive in the international market and which facilities have no long-term viability. It would then recommend a joint strategy to provide needed support to those with the greatest potential and to assist in the conversion to new uses of those facilities which are no longer viable (p.3A).

An example of the latter is the Strategy's proposal to convert the old J & L mill into a major high tech research laboratory.

**Public Policy and Steel: The Bi-State Perspective**

A somewhat older study, and perhaps all the more remarkable for its farsightedness, is the 1980 Illinois-Indiana Bi-State Commission report. It concludes that

The outlook for this basic industry cannot improve without massive restructuring and a shift in attitudes on the part of industry management, labor, and government....A regional understanding of the dynamics of this trend within the industry appears called for, as is a mutual approach for developing public policies and programs which complement, rather than compete, with each other. (Illinois-Indiana Bi-State Commission, 1980:1)

The study summarizes the experience of the industry both nationally and regionally, surveying past initiatives by Chicago and other governments. It ends by calling for an Interstate Task Force on Public Policy and Steel, to be created by the Governors of both states, a call which has yet to be heeded.

The report raises some provocative questions about steel which are often skirted in other policy analyses. These include the following:

° Do current strategies assume that the steel industry will maintain its traditional level of
importance in the region or a weakening of that presence? Is this an accurate appraisal?

- Is the region actively pursuing those steel sectors which are growing (specialty/alloy and non-integrated producers)?
- How will technology influence the growth of steel suppliers in the region?
- Is the region capturing the full potential benefits of steel's presence?
- What mechanisms are currently available to deal with the immediate needs of the displaced employees when a mill is closed temporarily or permanently? What is the legal responsibility of employers who intend to close mills?
- What are the potential uses for abandoned steel facilities?
- What short and long-term assistance is available to local communities when a facility shuts down on a permanent basis?

In addition, the report raises a series of challenging questions about manpower and employment policies, taxing policies, environmental policies, transportation plans, and energy and raw materials policy.

2.5. Where the Differences Lie

The strategies reviewed, which represent a formidable response, at least in study form, to the crisis of midwestern industry, differ from one another so profoundly because they accept widely divergent underlying assumptions about what the nature of the problem is. The "Bowing Out" strategy assumes that post-industrial society is upon us and that the demise of manufacturing is a fait accompli. Critics of this approach argue that the current recessionary record is not a good measure of basic industry potential, that macroeconomic policy choices have seriously prejudiced resource allocation against basic industry,
and that manufacturing overall remains a constant share of GNP and has not declined in numbers of jobs. They also believe that there are no good alternatives.

The "Bidding Down" strategy assumes that high costs of doing business especially labor and public sector costs, are the major deterrent to midwestern manufacturing revival. The critics of this view argue that the evidence is not clear, and that historical choices, industrial structure and management styles that affect technological innovativeness and productivity have as much to do with current predicaments as do cost factors. Furthermore, they tend to view the erosion of wages, related small business failures, and public sector revenues as an unacceptable price for industrial revitalization.

The "Betting on the Basics" strategy assumes that a dramatic commitment to targetted sectors and facilities is possible both financially and institutionally, and will work. Critics of these assumptions argue that the private sector would be doing it if this were so, and the cost in terms of resources is too high. In response, advocates of industrial targetting argue that a one-time infusion is required in the present crisis to avert permanent shutdown of useable midwestern facilities and that such interventions have worked in the past (the New Deal, TVA, Conrail, Lockheed, Chrysler, war time production). They stress the opportunities for new products, market niches, new business structures, and improved technology.

To some extent, differences in political support for each strategy arise from the differential distribution of benefits from each. Workers and Mon Valley communities in the Pittsburgh area, for instance, believe that their needs won't be met by the Allegheny
Conference's preference for financial and business headquarters, while presumably banker and corporate executives in the latter group are not keen to see scarce resources directed toward reviving steel production. Industrialists are more apt to favor the "Bidding Down" strategy while financial and real estate groups are more apt to favor "Bowing Out" and going for high tech and services.

The major policy tools embraced by each strategy also differ. The "Bidding Down" and "Betting on the Basics" strategies favor targeting incentives and intervention toward heavy industry, while the "Bowing Out" strategy would target them toward newer sectors. In general the "Betting on the Basics" strategy would more narrowly funnel resources while the other two would prefer incentives, like small business assistance and tax breaks, that are generally available to all comers.

A second difference is the degree to which each strategy advocates the necessity for new sources of capital investment. "The Betting on the Basics Strategy" is the most insistent that new capital infusions are needed, directed toward selected mature sectors. The "Bowing Out" strategy favors it for new entrepreneurial efforts in the high tech and service sectors. The "Bidding Down" strategy omits emphasis on new investment, assuming that successful down pricing of regional resources will attract private sector capital.

2.6. Directions for Southeast Chicago

With the exception of the Commercial Club's work cited above, no major economic development strategies for Chicago have been designed. A number of excellent speeches, press articles and op ed pieces have been produced on the seriousness of the Chicago economy's long-term
problems (see for example, Longworth, 1981 and 1984; Lemonidas, 1984; Bennett, 1984; Klarich, 1984, and Rosenheim, 1985). Overall, they confirm a picture of industrial difficulties and insufficient compensatory growth in other sectors. The slowness of Chicago reacting with concrete and far-reaching solutions may be simply because this situation is so novel for the city. Long a major diversified production, distribution and service center, whose economy generally weathered the business cycle considerably better than Pittsburgh, Detroit, or Los Angeles, Chicago has always been cosmopolitan in its outlook and unself-conscious about the uniqueness of its own economy.

The research findings presented in the following chapters suggest that Chicago should concentrate on the third strategy and maintain its steel-based industrial complex, for three reasons. One, that complex, unlike Pittsburgh or Youngstown's is relatively youthful and has been gaining share nationally both in the postwar period and in recent years (Chapter 3). Chicago retains outstanding locational advantages (Chapters 1, 3, 7).

Second, the major problems of the steel-based complex are not natural or inevitable. They are the product of ill-conceived macroeconomic and international policies, coupled with a legacy of poor management and bad investment choices (Chapters 4, 5, 6, and 8). Wage and energy costs are a relative disadvantage, but do not pose an insurmountable competitive problem (Ch. 8). Despite a less than auspicious recent past, the steel industry is far from finished (Ch. 4, 8). New products and processes could turn the job loss record around (Ch. 7).
Third, the Chicago area has no good alternative. Its service sector is growing more slowly than elsewhere precisely because it is linked to basic industrial sectors (Chapter 1). High tech industries, which have been rather prominent here traditionally, are rapidly loosing ground and the newer. Fast-growing high tech sectors are disproportionately concentrated in heavy defense spending regions, especially the aerospace complexes of Southern California and Florida. Nor will big defense hardware purchases generate much demand for steel (Ch. 3, 8).

By emphasizing existing strengths, Chicago would be countering the general midwestern tide toward abandoning basic industry. However, this can not be done by standing still. Success in a "betting on the basics" strategy will require a commitment of energy and resources from private industry, the unions, the community, the area's universities, state and local government. An industrial renewal program needs concerted research efforts, an infusion of investment, and new cooperative organizational forms.