A PROCEDURE FOR THE
REDEVELOPMENT OF INDUSTRIAL AREAS

by
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(1942)

SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF
MASTER IN CITY PLANNING
at the
Massachusetts Institute of Technology
(1951)

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Dear Professor Adams:

In partial fulfillment of the requirements for the degree of Master in City Planning, I submit this thesis entitled: "A Procedure for the Redevelopment of Industrial Areas."

Sincerely yours,

Hugh C. Faville

City Plan Commission
City Hall
Providence 3, R.I.
To the experienced reader of theses, this one will appear to be lacking the customary page of "Acknowledgements." It is not from a lack of respect for the members of the faculty in the Department of City and Regional Planning that this thesis is minus a separate page recognizing their contributions, but rather due to the fact that the major part of the work was done during the summer term, when there was less opportunity for contact with these gentlemen. As a result, it was decided to rely more heavily on outside sources for information (duly noted in Appendix A), although none of these people was in continued contact with the thesis or asked to read any of the written material. The important exception to all of this was Prof. Burnham Kelly, my thesis advisor, who prodded and questioned me into producing what it is hoped is a reasonably coherent and acceptable work, assembled from what I am sure seemed to him like complete chaos. His help was greatly appreciated.

The subject of this thesis was evolved from suggestions offered by Mr. Louis B. Wetmore and Mr. Donald M. Graham of the Providence Redevelopment Agency, with the former providing many of the questions on which the discussion is based. The subject as originally suggested was expanded and modified by Professor Kelly and Prof. Roland B. Greeley.

With the first draft completed before my departure
from the hallowed halls of Cambridge, no attempt has been made to greatly alter the original procedure evolved even though my present employment is in work closely allied to the subject and new ideas are constantly appearing. However, it was felt that this was a never ending process and any attempt to up-date the thesis would result in its never being completed. Opportunities for obtaining additional information have been utilized instead to fill certain gaps in the first draft. A work produced as the result of my limited contact in recent weeks with the redevelopment process in action would undoubtedly be of a somewhat more pessimistic vein.

Insofar as a thesis is as much a means of acquiring additional knowledge as it is a work to demonstrate competence in a given field, this one has been a great success. While at times a choice of topic more akin to classroom design projects appeared more desirable, a present recognition of the educational value of the selected subject invalidates these past desires.

Nor should the incidental knowledge acquired be overlooked, although the use of such things as one of Samuel Gompers' favorite stories (learned from a co-worker), and the problems of driving fire trucks down a Tremont Street clogged with traffic is not quite so apparent. Use of the thesis as a legitimate excuse for traveling to cities not previously visited was especially appreciated.

While acknowledgements in this foreword are few,
I find myself in the position of being unable to assign the blame for what might be contained herein to anyone else. Errors from thought to typing, where they exist, are all mine. I also join the ranks of those who advise against attempting to write a thesis while working at a full-time job. Rather than take any credit for finally meeting a self-imposed deadline, I would prefer to consider the completion of this thesis an Act of Providence.

H.C.F.
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CHAPTER I

INTRODUCTION

During the past decade the term "urban redevelopment" has come into general use as describing the process of rebuilding our cities, principally by private enterprise with the help of Federal, state, and local governments. To some the intent of redevelopment is quite narrow--concerned only with the clearance of slum, blighted, and deteriorating residential areas for replacement with new housing, constructed either by private enterprise or by public housing authorities. To most planning technicians, however, it has now come to stand for much more--the broadest concept treating urban redevelopment as a tool for aggressive and creative city planning. "And since cities are places not only to live in but also to work and play in, their rebuilding implies new factory sites, new business districts, new parks and playgrounds, new public and private facilities of many kinds, as well as new housing."\(^1\) It is this concept of redevelopment which provides the foundation for this thesis.

More than one-half of the states in the United States

have adopted some form of enabling legislation to help their cities carry out the procedures for urban redevelopment. The range of the legislation reflects the various views, with the redevelopment powers vested in housing authorities in some states, and the construction of housing their only objective, while at the other extreme the functions are handled by a separate redevelopment agency, entirely divorced from the local housing authority, but more closely tied to the planning commission and with residential, business, and industrial areas all coming within the scope of redevelopment.

Despite the varied approaches, there underlies all of the legislation a basic procedure, with the various steps being performed by a public agency or by a private redevelopment corporation, depending upon the nature of the particular statute. It is the opinion here that it is desirable to place the emphasis on a public agency, and this provides the basis for outlining the "fundamental redevelopment process" on which the problem of industrial area redevelopment is discussed. Briefly stated, it is:

1. Delimitation, by a public agency, of blighted areas considered suitable for redevelopment.
2. Selection of a project site within the larger area, suitable for reconstruction as an unit.
3. Acquisition of the land within the project site by the public agency, using its powers of eminent domain if and where necessary.
4. Clearance and preparation of the site by the public
agency, with streets and utilities installed and land graded in conformance with the final project plan.

5. Sale or lease of the prepared site to a private redevelopment corporation for construction of the project in accordance with the previously established plan.

Associated with this process is the financial problem resulting from the discrepancy between the high cost of acquiring built-up land and the lower use-value of this land to the developer. This is, of course, the crux of the whole problem of urban redevelopment and the reason for the entry of government into the field. With a public agency acquiring, clearing, and preparing the site, the land may be sold or leased at a fair-use value, with the agency (and thus the municipality) absorbing the loss.

Utilizing the various legislative acts, many cities have done the necessary planning for the commencement of redevelopment, but, unfortunately, comparatively little action has resulted. With the impetus of the Housing Act of 1949 and its provision for Federal capital grants and loans for urban redevelopment, the re-shaping of our cities should move out of the planning stage into the reality stage.\(^1\) And, if a thorough job is to be done, this redevelopment mustulti-

mately if not immediately be extended to the blighted industrial areas, especially if we agree with the statement that "our cities have become, above all, factories and centers of trade."1 The fact that commercial and industrial construction is, on the average, substantially equal to private housing in dollar volume is additional argument for their consideration in city rebuilding.2

**History of Thought on Industrial Redevelopment**

The redevelopment of industrial areas, as one segment of the larger field of urban redevelopment, could be described as the renovation or rebuilding of worn-out and obsolete or stagnant industrial areas. Closely related to this is the conversion of residential slums to industrial areas by redevelopment, as well as the replacement of industrial blight by residential projects. While these last two phases receive incidental mention subsequently, the real concern of this thesis is with predominantly industrial areas which are to be continued in industrial use.

As a segment of the larger picture, it might be supposed that industrial redevelopment had been given an increasing amount of thought proportional to the general sub-

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ject of redevelopment. However, with the immediate post-war problem one of housing and not factories (with which we were at least temporarily well-supplied as a result of war-time expansion), priority was rightly given to the former. Consequently, while the literature on urban redevelopment in general has been growing rapidly in volume since before World War II, only in the last few years has there been increasing mention of industrial blighted areas and in only a few cities do we find technical staffs concerned with the redevelopment of such areas for continued industrial use.

Among the earliest recognition of the problem was that contained in Ihlder’s comments on blighted areas, written in 1930:

These blighted areas fall under all three of the principal zoning classifications:

Industrial--due to changes in transportation, to intensive land use, to change in character of industries, to obsolescence, to plant expansion, to lack of employees' housing and recreational facilities, or to other causes that made new areas more efficient or more economical for industrial operation.¹

The subject received little further attention until some comprehensive remarks concerning industrial slums were written by the National Resources Committee in 1937:

...the urban slum is a contagious blight on a large scale. It is by no means limited to derelict residential areas, but often consists of decaying business and industrial sections.²


Decayed residential neighborhoods, deteriorated business districts, and deserted, tumbled-down industrial areas--these are the slums of the city, the visible signs of urban disintegration. They are the cut-over areas and the eroding lands of the city, the places of material decay and human erosion.\textsuperscript{1}

Moving from mere recognition of the problem, the National Resources Planning Board came forward in 1942 with the broad concept of urban redevelopment widely accepted today:

With the acceptance of the neighborhood concept, we can free ourselves from the identification of "slum clearance" with the provision of "low-cost housing" which crept into the first legislation making Federal financial aid available for housing in 1932. We can propose the tearing down not only of substandard residences, but of decrepit warehouses and dank sweatshops; we can plan to replace them by schools, playgrounds, parking lots, markets, shops, residences, work-places--all the appropriately placed elements of integrated communities.\textsuperscript{2}

Neighborhoods and industrial blight were brought together again in some comments by Henry Churchill, when in 1943 he wrote:

We know little or nothing about industrial blight, for example. What are we going to do with the area from Washington Square south to Canal Street? With the Red Hook area of Brooklyn? What about the increasing vacancies of stores and lofts throughout the city? How can we possibly talk about neighborhoods when we haven't begun to think about business and industry which are the sources of our incomes and consequently of our city's wealth?\textsuperscript{3}

A growing recognition among lay groups of this phase

\textsuperscript{1} Ibid., p. 75.
of the redevelopment problem was shown by the conclusions of a citizen group drawing up recommendations for redevelopment legislation in California, stating in their 1944 report that "most urban redevelopment laws have been directed exclusively at residential redevelopment. Some of the worst conditions of blight are to be found in industrial or commercial areas."¹

Meanwhile, the professional city planning societies were expressing their opinions on the subject of redevelopment. In 1943 the American Society of Planning Officials distributed the "Draft of an Act for Urban Development and Redevelopment," prepared by Alfred Bettman, in which a blighted territory was defined as one "developed or to be redeveloped to any extent for industrial, business, or other non-housing uses, as well as housing uses, or any mixtures or combinations of such uses."²

Two years later, at the 1945 conference of A.S.P.O., it appeared that this very broad concept of redevelopment had not been accepted without reservation by the membership. At the conference, Ladislas Segoe pointed out the applicability of the redevelopment laws to blighted commercial and industrial sections for non-residential uses, as well as to run-down residential areas which should be redeveloped for

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¹ The Need for Urban Redevelopment Legislation in California (Los Angeles: Town Hall, Regional Planning and Development Section, 1944), p. 20.

non-residential uses. His mention of possible profit from such redevelopment along the Cincinnati waterfront and the preparation of parking lots for industries by the removal of substandard residential properties brought critical comment from Charles Ascher and Walter Blucher. The former felt there were definite limitations on Federal aid for that type of redevelopment and the latter criticized the implication that the function of the city is to make money and that redevelopment projects should be selected on that basis, concluding that, anyway, you can't get away from housing.  

Alfred Bettman's name was also prominent in the statements and actions of the American Institute of Planners in redevelopment matters. While under his chairmanship, the A.I.P. Committee on Legislation issued a statement on redevelopment bills and statutes (with the District of Columbia law the impetus) which emphasized very strongly the need for a broad approach to redevelopment, leaving it open to industrial redevelopment:

Good city planning is impossible unless those who plan may take into account the entire population of the community which is to be served and all types of land uses which they will need; and therefore any limitation which openly or by implication excludes any class of use needed by the population or any group within the population will inevitably have an adverse effect upon the quality of the planning and therefore upon the soundness of the redevelopment.  


In 1945, at the Congressional hearings held by the Special Committee on Post-War Economic Policy and Planning, Mr. Bettman presented this approach before Senator Taft and other members of the Committee:

So, while housing construction will always form the larger proportion of all urban redevelopment or development, a costly mistake will be made if urban redevelopment be conceived of as the replanning and rebuilding of slum areas only or the replanning or rebuilding for housing only. The redevelopment or rehabilitation process needs to be applied to all areas which need it and for all the classes of uses which, according to good city planning principles, are appropriate to those areas.1

Aside from the activity of the professional societies, the case for industrial and commercial redevelopment was argued subsequently by Justement, writing in 1946:

The tax on real property constitutes 86 per cent of the revenue of cities with over 100,000 population. Unless the increasing blight in the central areas can be arrested and reversed, this most important source of revenue will be constantly decreasing. Of special importance, in the case of many large cities, is the decay of central business and industrial areas. ... The centrifugal tendencies that have long been in evidence in residential neighborhoods are now affecting both commercial and industrial property. Unless the conveniences of the central city can be restored by effective city planning, the blighted business areas will result in a greater loss of taxable values than the loss resulting from blighted residential areas.2

About the same time, city planning commissions were informing the public of the desirability of industrial redevel-


velopment. In Providence, a report stated that "it is the considered opinion of the City Plan Commission that although the problem is neither so complex nor so extensive, industrial redevelopment is at least as vital to Providence as housing redevelopment."\(^1\)

Across the country, the San Francisco Planning Commission, in a 1947 report, noted that "urban redevelopment, contemplating the reshaping of districts that have grown without plan, generally stresses the rebuilding of residential areas, although the problems of blighted commercial and industrial areas are not to be minimized."\(^2\) Listed as one of the recommendations in this report is a study of blighted areas that would be suitable for industry. "Until redevelopment studies of these areas have been completed, it may not be possible to say how useful the Community Redevelopment Act will be as an instrument for reconstructing decayed industrial districts, or rundown residential areas that would be more suitable for industry."\(^3\)

Finally, a somewhat different view was provided by a photographic essay and article on industrial "dreck" or dirt, which appeared in a recent issue of Fortune. This latest step in the educating process stated that

\(^1\) Providence City Plan Commission, Plan for Fields Point and Industrial District (Publication No. 2; Providence: City Plan Commission, February, 1946), p. 2.

\(^2\) San Francisco City Planning Commission, Western Addition District Redevelopment Study (San Francisco: San Francisco City Planning Commission, November, 1947), p. 13.

\(^3\) Ibid., p. 64.
business should attack the problem of water pollution and waterfront rehabilitation in hundreds of communities. Having done that, business might lend a hand in what could be a very rewarding national effort—a whole-hearted effort to pick up, rake up, and clean up the littered American landscape.

It matters not that men now living inherited rather than created our baneful industrial landscape. As proprietors of the leavings of the industrial revolution, they can't escape being called to account. Millions of people have to live near and with these leavings—that's the rub. For its part, industry can't afford the luxury of looking on its Beautiful Dreck with the artist's eye. ¹

Too often industry violates the sensibilities by its errors in juxtaposition. It is a problem, of course, for city planning, but there can be no real integration without industry's utmost aid. ²

The Present Status of Industrial Redevelopment

In response to that old cliché, "a little less talk, and a little more action, please," industrial redevelopment can not at present provide a ready answer. The preceding summary of the literature shows a growing recognition of the problem, admittedly the first step, but Henry Churchill's 1945 comment can still be applied, adding only a "comparatively" to his: "Little thought has been expended on industrial slums." ³

As previously noted, there are a few cities in which the subject has progressed past the mere recognition stage.

The 1948 report of the Philadelphia Redevelopment Authority describes two areas, Lower Eastwick, and Aramingo, both of which have been certified as redevelopment areas and while both can be called industrial redevelopment areas, the former contains considerable substandard housing.\(^1\) The latter, on which some preliminary work in the form of site planning has been done, appears to offer considerable possibilities and it is stated that the Authority is working with the Chamber of Commerce to investigate its potentialities. Recently completed by the Franklin Institute was a study of the problem of noxious industries in the area--prime contributors to the arrested development of Aramingo.

In Chicago, the Michael Reese Hospital planning staff has made a study of a redevelopment industrial area in conjunction with the extensive plans of the Hospital, the city, Illinois Institute of Technology, and others, for the redevelopment of a considerable area on the South Side. This area, crossed by several railroad main lines, is already spotted with industry where it is not strung out along the railroads. In general, the northernmost section of this area, nearest the "loop", is slated for industrial re-use and preliminary site plans to show the possibilities have been prepared.\(^2\) At present a prospectus entitled "An Opportunity


for Industrial Investment in Rebuilding Chicago is being prepared—a parallel to an earlier publication on housing investment.¹

Behind this endeavor is the South Side Industrial Study Committee, composed of most of the large organizations which have an interest in the area. As its contribution as a Committee member, the Program of Education and Research in Planning of the University of Chicago prepared in 1949 an industrial study as background for definition of the role of the South Side in the Chicago industrial area. In addition, on the basis of their characteristics and the local problems which were to be solved, certain industries were selected which might be most suitably located in the area.²

Studies are in progress on an area in Providence which contains considerable industry, both good and deteriorated, as well as substandard housing, with the hope that elimination of the latter will enable it to qualify for Federal funds. Much of the redevelopment plan in this area is concerned with the acquisition of land for use by the stable existing industries. Meetings with industrialists in the area have disclosed a keen interest on their part in the possibilities of acquiring additional land for plant expansion

¹ An Opportunity for Private and Public Investment in Rebuilding Chicago (Chicago: Illinois Institute of Technology et al., 1947)

² "Industrial Study of the Chicago South Side" (prepared for the South Side Industrial Study Committee by the graduate students in the Program of Education and Research in Planning, University of Chicago, Spring 1949), mimeographed.
and parking facilities, assuming the price is right. If this type of redevelopment can pass the critical eyes of the Rhode Island Supreme Court in a test case, the area under study offers attractive possibilities.

The San Francisco Department of City Planning has designated an area "South of Market" where light industry and commerce are becoming the predominant uses as one of the first four areas to receive intensive study in a redevelopment program. However, present plans call for studies of the other areas ahead of this industrial and commercial area.¹

As far back as 1946, the Cincinnati Planning Commission published a report on riverfront redevelopment, before redevelopment legislation had been considered by the Ohio legislature. However, while the area under discussion can be called at present an industrial and commercial blighted area, redevelopment plans show mainly public and residential (apartment) uses, with only one small section left for light industry.²

Although other examples might be cited, the most significant is in Pittsburgh, where the redevelopment of the Triangle area, although mainly concerned with commercial use and re-use, will provide information of great value in industrial area redevelopment.

¹ Letter from Paul Oppermann, Director of Planning, Department of City Planning, City and County of San Francisco, California, August 18, 1950.

² Cincinnati City Planning Commission, Riverfront Redevelopment (Cincinnati: City Planning Commission, 1946).
With enabling legislation in several states considered broad enough in scope to permit the redevelopment of industrial areas, the redevelopment provisions in Title I of the Housing Act of 1949 go half-way in the consideration of these areas. To qualify for Federal assistance, projects must be predominantly residential either before or after their redevelopment.¹ The interpretation of the word "predominantly" is rather broad, meaning, first of all, a little more than 50 per cent. Secondly, an area or structure is residential by Federal definition if any of the following is the situation:

1. It was originally built for residential use, regardless of what it is now being used for.
2. It is now being used for residential use, regardless of the use for which it was built.
3. The land was subdivided for residential use even though it was not built upon.²

A good many areas, such as the Philadelphia Lower Eastwick and Providence areas mentioned previously could thus be considered eligible for Federal aid. However, for the most part, this Federal legislation will not aid the cause of the redevelopment of predominantly industrial areas of the


² Information from personal interview with Mr. James Drought, Housing and Home Finance Agency, Division of Slum Clearance and Urban Redevelopment, Washington, D.C.
type with which this thesis is primarily concerned.

One of the obstacles facing industrial redevelopment was indicated by proponents of the broad approach when they wrote in 1948 that "all of the wise thinking behind the present concept of rebuilding for all urban uses will be of little avail so long as the country faces a housing shortage of today's magnitude."¹ This attitude has been tempered in some cases by the easing of housing shortage pressures due to extensive residential building and in other cases by recognition of the difficult problem of family relocation due to the wholesale elimination of dwellings by redevelopment projects, making areas with extensive commercial and industrial uses more attractive as project sites. Local conditions will determine whether or not it is diplomatically wise to spend public redevelopment funds on purely industrial areas before considerable progress has been made towards the creation of better housing. However, since redevelopment for housing purposes by private enterprise requires the interesting of groups with considerable capital, a city with a somewhat indefinite future might influence private capital if it moved to improve its basic economy through the redevelopment of blighted industrial areas.

**Purpose and Boundaries of the Thesis**

Following this summary of notable thoughts on the subject of redevelopment of industrial areas and the present

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¹ Wetmore and Milne, *op. cit.*, p. 94.
status of activity in the field, it is fitting and proper to discuss the purpose and boundaries of this investigation.

Since at the present time no blighted industrial area has been redeveloped for industrial re-use, there are in the minds of those who have given some thought to the subject many questions on specific issues which will arise as well as on the overall procedure to be followed. If we are to use the powers of eminent domain this type of redevelopment must be for a public use. Can this be justified? Similarly, if public funds are to be expended for writing down land costs or other uses there must be a public purpose involved. Is there? How do you define a blighted industrial area? Will some sort of subsidy be needed, in the form of tax exemption or otherwise? What types of industry will move into these redevelopment areas? What do you do about the relocation of industries in project areas? With every interview producing more questions than answers, the list could go on to even greater lengths.

With a full appreciation of these many questions, it is the intent of this thesis to analyze the problem of redevelopment of industrial areas and from this analysis to suggest a procedure based in general on the previously outlined "fundamental redevelopment process." This procedure is admittedly only a framework, not intended for use in any particular city or state, although familiarity with the situation in Providence and knowledge of the availability of information in that city and the Boston area have slanted
the analysis somewhat. It is believed that the procedure suggested is usable both in the smaller cities with limited redevelopment staff funds as well as in the larger cities where the financial pinch may not be felt.

One basic assumption is that there will be no major change in the governmental organization of the community concerned with industrial redevelopment. Despite the extreme desirability of having metropolitan government or at least metropolitan planning where industrial development is concerned, neither is assumed to exist, although the presence of either does not necessarily negate the suggested procedure. Consideration of the subsequently discussed competitive aspects of industrial location emphasizes the logic of a broader approach than is afforded by considering the central city as a separate entity.

Another assumption is that our present concept of free enterprise will continue to hold sway in the future. Some authors, blaming still existent *laissez-faire* policies and "free competition" for all the shortcomings of our present industrial economy, advocate rather strict control of industrial location by city planners and the Federal government. Unfortunately, while these people look at our industrial blight and correctly point out that it was developed in periods of *laissez-faire* and free competition, they fail to mention that the fine new industrial plants which they hold up as examples of what we might have are likewise the product of these two nefarious concepts. The philosophy subscribed
to here is that, with zoning and other controls already limiting to a certain degree industry's freedom to locate and do as it likes, it is up to the planner to understand and encourage the fine type of development we can have under our present system, rather than damning it for past mistakes. The ultimate decisions on industrial location are much better made by the concern which must survive or fall on its decisions, rather than by a group of people, not infallible, who have only a secondary interest in the success of the venture.

Finally, one problem which must be faced in undertaking industrial redevelopment (or even a discussion of it) is the shortage of available background data. This is in contrast with residential redevelopment, which can draw on a considerable volume of theoretical and practical background along with years of public housing, war housing, and slum clearance experience. War-time and post-war experience in the field of industrial development has not been subject to the analysis which it warrants, especially as background for industrial redevelopment. Following chapters do have references to certain worthwhile factual studies, but such appear to be the exception rather than the rule.
CHAPTER II

RELEVANT INDUSTRIAL LOCATION TRENDS

One of the first trends that is apparent in the perusal of literature on industrial location is a trend towards semantic confusion. Intentionally or otherwise, various planning and industrial sources have chosen to attach different meanings to the same word—likewise using different words for the same thing—with both actions reflecting the various viewpoints.

Recognizing eight different types of industrial movement, Cady included the following: decentralization (breaking up plants into smaller ones), and migration (moving the plant to a new location of the same general kind as the present).\(^1\) This latter term is the only one which appears applicable to the movement of industry from the central part of a city to or towards the suburbs.

The National Industrial Conference Board states that the term "decentralization" has various meanings, with their explanation as follows:

In industry decentralization refers to the geographic spreading out of a company's physical plant facilities.

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It also refers to the granting of a large degree of authority and responsibility to local plant management. Generally, the two go together, but it is possible to have physical plant decentralization without decentralization of managerial authority and responsibility.¹

To them, "migration", or the transfer of a large part of an industry from one section of the country to another, is not a part of decentralization. But, giving consideration to the movement Cady ignored, they have labeled as "suburbanization" the movement of industry from the center of the city to the periphery, or suburban areas. Only if it involves the establishment of several relatively small units rather than one large plant similar to the original is it considered decentralization.

But others have chosen different meanings. Some city planners, lumping industry with other city elements, have called both the movement of people and industry towards the suburbs "decentralization." The Tax Institute, recognizing several aspects of industrial decentralization, lists as one the shift of industrial activity from the center of the city to its periphery, or to a small city or village (despite later reference to the N.I.C.B. report).² In an earlier work, Creamer distinguishes between inter-regional movement and decentralization. The latter consists mainly of intra-regional shifts and included is the movement within

an area of industrial concentration from the congested central city to its periphery or suburbs. The climax of confusion was one author's noting that "the decentralization of industry is creating new problems of centralization in the area of dispersal."

Chosen for use in this thesis are the N.I.C.B. definitions, mainly because they are the most descriptive without being confusing. Inter-regional shifts do not concern us at this point. The interest lies in:

1. Suburbanization; the movement of industry from the center of the city to (or towards) the periphery or suburbs.

2. Decentralization; the geographic spreading out of a company's plant facilities.

Suburbanization of Industry

In its comprehensive study of cities, the National Resources Committee spoke of using the natural trends in the shifting of industry between established industrial areas and its diffusion within such areas, of the drift of population from congested central districts to outlying sections, of the improved means of transit and the general fluidity of the population—in order to loosen up the central areas of congestion and to create a more decentralized metropolitan pattern.


Since these words were written, the shift of factories from close-in to outlying sites has been mentioned by nearly every author making a comprehensive study of city patterns.

While this general city decentralization and industrial suburbanization are in evidence, this "natural trend" has not necessarily been the type encouraged by sensible city planning. Greer speaks of the vicious spiral common to nearly all United States cities: high assessed valuations and taxes on the blighted property; more and more people and business and industry driven away, partly by high taxes and partly by unpleasant conditions generally; falling real estate values; increasing difficulties in raising enough municipal revenues, and the necessity of maintaining or raising the assessed valuations and taxes, thus helping to drive away more people and business and industry.¹

Left behind in the industrial areas have been obsolete buildings, some eventually to be used by other industries or to be torn down to save on taxes, with the space thus created used for junk yards or small, inefficient, and certainly unsightly parking lots for neighboring industries or business areas. Fortune summarized the problem, observing that: "Worst of all, when irritated by its own repulsiveness, it (industry) has a tendency not to clean up and reconstruct but to flee and build anew elsewhere, thus capping the ugliness of the original environment with an air of desolation and waste."²

Unfortunately, there is all too little factual data to go along with these opinions and statements. That there

has been a movement away from the central areas of cities seems to be agreed upon—the volume and distance of such movement are more open to question. While some extremists envision industry in a mass exodus to the country and small towns, less emotional looks at the subject have led others to the conclusion that the movement has tended towards suburbanization rather than migration to smaller isolated cities or towns.

An early study by Creamer showed that in the period from 1928 to 1933, inclusive, while the principal cities suffered a net loss of 21,186 wage jobs due to the relocation of plants, the industrial peripheries showed a net gain of 13,168, or nearly 61% of the gain experienced by all types of location. Even this does not give the complete picture, since the census data on which his study was based considered only relocation outside of the original political unit, thereby ignoring the intra-city movements towards the periphery which would make this percentage even higher. In addition, this study showed only the actual relocation of plants and did not show absolute or relative shifts causes by increases and decreases in employment in plants that remained in operation in the principal cities or industrial peripheries. While the age of this data might warrant some criticism, the study covered both years of prosperity and depression and is one of the few factual studies available.

1 Creamer, op. cit., p. 55.
More recently, Bassin noted a similar trend:

It is quite apparent from their movements in recent years that while industries are being forced for the sake of economy to move out of the congested portions of our large urban areas, they generally remain within the orbit of centralized urban activity. Interrelations among manufacturing plants are becoming more complex and sensitive, and to an increasing extent industry is being set up on an assembly line basis, in which the operation of one plant is contingent upon that of another.¹

As will be subsequently discussed, there are a number of factors which influence industrial movement within and out of the central areas, and therefore the type of movement may vary with the factors. As an example, building permit records show that on a value basis, only 7 per cent of the residential building in Rhode Island during 18 months of 1949 and 1950 has been in Providence, while 33 per cent of the non-residential building during the same period has been in the city.² In so far as it can be assumed that the "non-residential" and "industrial" percentages are at least roughly the same, no mass exodus from the city is indicated. However, in Rhode Island, tax rates do not vary greatly amongst the various cities and towns in the Providence metropolitan area, and, with land still available in the central city for industrial use, there is less incentive to move out. The trend that is apparent, even with some of the light manufacturing plants, is a movement from the old central areas

¹ Arthur Bassin, "Where Can Industry Flourish Best?" American City, Vol. LV, No. 6 (June 1940).
² From information compiled by the Providence Redevelopment Agency from records published in the Providence Sunday Journal.
of the city to newer industrial areas, such as Manucenter, nearer the boundaries, which is in line with the generally noted suburbanization trend.

During the war, the shift within metropolitan areas to the suburbs was accelerated in some cases because of the necessity of locating large munitions plants in the suburban districts. The availability of these plants for conversion to peace-time uses facilitated the post-war suburbanization process in these areas.

There is, of course, a certain selectivity to such suburbanization. Industries with large capital investments in plants and requiring concentrated pools of labor have shown less of a tendency to move. The smaller plants are not the most mobile, either, due to the expense of relocation. A move just beyond the city's limits frequently requires the construction of one's own plant, which the smaller industries cannot afford to do.

A distinct difference in trend by type of industry is also apparent. Although Creamer's study specifically lists the industry groupings in which suburbanization was the predominant trend, it suffices to note here that in general it was the heavier industries, such as machinery manufacture and chemical products. The National Resources Committee subsequently wrote that certain types of light industry, such as clothing, printing, and light manufacturing, still favor the center of the city.

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1 Creamer, op. cit., p. 71.
2 National Resources Committee, op. cit., p. 39.
A 1942 study of industrial movement in Chicago (predominantly to the suburbs) showed five reasons for the location and relocation of plants outside of the city:

1. Lower taxes. For example, the Clearing Industrial District property tax is only one-third that of Chicago.

2. Excessively restrictive building codes and onerous industrial regulations and inspection services in Chicago. There are no building codes and little regulation in some suburban areas.

3. Lower land acquisition costs. Despite the cost of developing raw land without utilities, suburban sites are cheaper.

4. The ability to acquire large unobstructed sites.

5. The attraction of the Clearing Industrial District with its facilities for designing, building, and providing for all the needs of a small industry with limited capital.¹

Although not many cities have to compete with an area as well organized as the Clearing District, these factors have quite general application. Other reasons for suburbanization which have been significant are:

1. Central city congestion, with all its attendant delays in the movement, loading, and unloading of goods.

2. Escape from higher wage rates following urbanization. This is not so important now with increased unionization.

3. Decreased labor turnover in suburbs. This is due in large part to better housing nearby and a more desirable working environment.

4. Freedom from collective bargaining and urban social control. This, too, has been changed by unionization.

5. Better provisions for rail service with belt line connections to two or more systems.

6. Obsolete buildings which could not be modernized or expanded for present requirements.

While these factors are of great importance to the industry that is planning to rebuild or expand its plant, their influence does not immediately affect a settled industry, which may use an uneconomic location for some time.

A more cynical approach (but with fundamentally the same reasons) to the advantages of migration, not necessarily suburbanization, has been given as

one way to get the money and the banker-controller's permission to modernize. Escape from oppressive taxes, bad tax trends, crack-pot legislation, racketeering, etc. Secure better raw materials, buildings. Cash in on the offers of industrial bureaus. Escape union domination. Follow migration of skilled workers to new districts.¹

For the sake of industrial redevelopment it is hoped that this is not representative of industry's current attitude towards municipal and industrial location problems.

¹ Cady, op. cit., p. 17. (1937)
Decentralization of Industry

While the subject of decentralization might be as difficult to tie down as that of suburbanization, fortunately there is available an excellent factual study by the National Industrial Conference Board.\(^1\) Their conclusions are based on direct reports from 148 large manufacturing companies and are used as the basis for this discussion.

Summarizing some of the points, they found that 27.7% of the companies surveyed had a definite policy of decentralizing plant facilities. Actually, 59.3% were already decentralized, but many of the additional 31.6% were so because of the acquisition of going concerns or war plants rather than as the result of any policy decision.

There is a trend towards locating manufacturing plants in the smaller cities and towns. In the period from 1940 to 1947, only one-third of the total number of new plants went to cities over 100,000 population, as contrasted with about 37 per cent to municipalities in the 10,000 to 100,000 class and another 30 per cent to towns under 10,000. The trend is shown by comparison with the figures for plants established before 1940, when about one-half went to cities over 100,000, approximately 30 per cent to cities in the 10,000 to 100,000 population class, and 20 per cent to towns under 10,000. This does not necessarily conflict with the statement in the discussion of suburbanization that the mov-

\(^1\) National Industrial Conference Board, *op. cit.*
ment did not appear to be to smaller isolated cities and towns. First of all, with decentralization the concern is with new plants, not the relocation of existing plants, and secondly, the cities in the various population groupings given above may well be suburbs within the industrial peripheries of larger cities, rather than isolated cities or towns.

As for the nature of operations, over one-half of the decentralized manufacturing plants turn out a particular product or group of products of the company's line. One-sixth of the plants are duplicates in that they manufacture the same product as the main plant, while of the remainder, one-tenth are feeder plants and one-tenth assembly plants.

There are several factors contributing to industrial decentralization by giving industry greater mobility or latitude in site selection. These are: extension of electric power grids, extension of natural gas lines, better highways, development of air freight, and advances in the utilization of by-products. Other factors which have important bearing, through providing necessary reservoirs of labor, include the rapid population growth of recent years, along with shifts from congested cities to the suburbs and less populous areas. These last factors also indicate an important change in the location of market potentials. Outside influences for greater decentralization are given as: natural defense considerations and availability of surplus

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1 Ibid., p. 5.
war plants, higher freight rates and minimization of regional differentials, promotional effects of various local groups, and increased use of machinery with less dependence on skilled labor.

As with suburbanization, decentralization is an important trend with only selected industries. Manufacturing industries are the freest to move while service industries are tied to specific centers of population. In addition, it is something of importance only to the large company, for the small industry consists of only one medium sized plant. A large degree of decentralization was shown in the following three industry groups: chemicals; drugs and pharmaceuticals; and rubber and rubber products. Of the 14 industry groupings, these three were the only ones that contained no companies with a definite policy of centralization. Machinery (except electrical), iron and steel and products, and petroleum refining showed the greatest degree of centralization. The number of plants that any one company may have is not a measure of the degree of decentralization--such plants may have been acquired as going concerns. Decentralization is measured by company policy and is indicative of a willingness to build new plants in new locations or take over existing buildings for their purposes. Additionally, the results of the survey show that industries with small plants are not necessarily decentralized and several, in fact, have the opposite tendency.

Complementing the contributing factors, the industries
surveyed gave their reasons for decentralizing. In order of frequency, these were:

1. Proximity to important new markets.
2. Permits tapping new reservoirs of labor.
3. Small city or town location.
4. Small decentralized plant more efficient.
5. Desire to avoid dominating economic life of any one community.
6. Public relations value of being a local employer in important market areas.
7. Permits segregation of unlike operations.
8. Enables large companies to expand and yet retain features of the small company.
9. Decentralized plants serve as training centers for future top executives.
10. Human relations likely to be better in smaller decentralized plants.¹

An important consideration is the "technical maturing of industries" discussed by Hoover. Industries requiring specialized or highly trained labor generally have a concentrated and rather stable pattern, centered around points where such a labor supply has developed. However, as the operations become routinized to an extent where ordinary labor can be used, the industries tend to disperse. Labor may even become an inconsequential factor so that the new locations may be determined by whatever factor was formerly second in importance. "Industry matures when rate of growth of market has slackened, questions of product design have been settled, and the necessary specialized machinery devised."² This maturing affects not only the dispersal of companies within an industry grouping, but also the decen-

¹ Ibid., p. 9.
tralization policies within the companies themselves. Thus industries which do not show a decentralizing trend today may in the future move in that direction.

Of interest are some of the comments of the executives on reasons for decentralization. General Electric considers it undesirable, from both company and community standpoint, for one employer to require the services of as much as 60 per cent of the local labor force, as they were going to do if they expanded in their original locations, hence their decentralization policy was initiated. The social aspects of decentralization have been particularly emphasized by plant managers of Sylvania Electric Products, Inc. They place great emphasis on the improved labor relations and generally better working conditions due to the smaller sizes of plants and close relationship of labor and management, and this is especially true in the small towns where they live, work, and play together. Johnson & Johnson state a similar view. Whether the success of these operations will influence other industries remains to be seen, but the inherent compatibility of these views with the "neighborhood" concept of planning which receives considerable recognition in urban redevelopment plans is obvious.
CHAPTER III

OBJECTIVES OF INDUSTRIAL REDEVELOPMENT

In the days before "urban redevelopment" had become such an universal part of the planner's vocabulary, the National Resources Committee set a goal for city planning:

Provided the urban community possesses a fundamentally sound economic base and has a site whose disadvantages are not too costly to overcome, the Committee is of the opinion that the realistic answer to the question of a desirable urban environment lies not in wholesale dispersion, but in the judicious reshaping of the urban community and region by systematic development and redevelopment in accordance with forward looking and intelligent plans.

... a desirable urban community sketched in these broad terms would usually include a sound, well-balanced industrial structure; a rather compact community pattern with ample light and air and adequate streets, recreational and other public spaces available in all sections; a balanced development free of congestion in building, population, or traffic; a relatively stable and reasonable level of land values with all the land in efficient and socially desirable use. 1

The creation of such a city has now become the joint responsibility of city planning and urban redevelopment.

The objective has lately been summarized with the statement that "our problem is to develop or redevelop a city in which it is good to work and to live." 2

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gon is described as having four characteristics:

1. **Livability** - well planned residential areas with good housing.
2. **Efficiency** - activities of business, industries, and persons should be carried on with a minimum of waste.
3. **Appearance and amenities** - worthy of the pride of its citizens.
4. **Flexibility** - allowing for changes in habits of citizen, business, and industry.

As a part of the larger field of urban redevelopment, industrial redevelopment shares its objectives. It is a very important part if we accept the maxim: "The primary purpose of the city is to provide adequate living and working accommodations for its population." These desirable working accommodations, as an ideal, should provide the following:

**For the worker**: a clean, healthy atmosphere; proximity to, possibly within walking distance of, decent housing; a variety of industries to expand his range of opportunities; easy access by highway or walk; adequate parking space; factory buildings with good lighting, well ventilated, and containing all the facilities required for the protection of health and safety; cafeteria facilities (either in the plant or nearby); and space for lunch-hour recreation.

**For industry**: sites large enough for modern one-story buildings with landscaping if desired; room for expansion; adequate utilities and transportation facilities,
free from congestion; freedom from unnecessarily stringent building codes and regulations; location near to a good labor supply; and for the smaller industries: modern loft buildings for rent; certain auxiliary services such as truck rental agency, restaurants, employee recreation and welfare buildings, union headquarters, and warehouses.

For the city: a reliable source of income from taxes or rent, with decreases due to the natural obsolescence of age, rather than external factors; ease of supplying area with services; freedom from congestion; no blighting influence on surrounding areas due to smoke, noise, and traffic.

Industrial redevelopment, like any economic development program, can not be expected to suddenly attract industries from far-distant communities. The limitations on any such possibilities have been given:

As the nation matures, such rational considerations in plant location as nearness to markets and raw materials, labor supply, accessibility of cheap land, and economical transportation become more important. Since these factors in location are not likely to change markedly in the near future, our national pattern of industry, insofar as it is molded by them, is also not likely to change greatly.¹

Unforeseen at the time this was written were the economic growth of the South with the concomitant growth and changes in both markets and labor supply in that area as well as the spectacular growth of the West Coast with its effect on locational factors. However, despite these changes, the general observation is still valid insofar as it applies to

¹ National Resources Committee, op. cit., p. 39.
established industrial areas.

Industrial redevelopment will make possible the preparation of sites which may be attractive to the types of industry that will help provide the city with a balanced economic base, as well as giving cities greater control over the types of industry that settle in the redevelopment areas than they have ever had before. In the matter of attracting industry, industrial redevelopment shares, along with a general economic development program, the obligation to interest industries that will help secure full utilization of the available labor supply, minimize cyclical fluctuation, utilize local natural resources, and maximize industrial efficiency through the establishment of interrelated industries. These factors come up for later discussion but it should be emphasized that the scope of industrial redevelopment is broader than economic development. Even a city with an ideal economic base might be ripe for the redevelopment of its industrial areas.

Some of the locational factors mentioned above can be affected, admittedly not drastically, by the process of industrial redevelopment. While redevelopment land will not be cheap, it will cost the redeveloper less than if he had to buy and clear it himself. Rent based on profit or other changes in taxation may lower the yearly cost of the site to the occupier. Certainly improvement of highway access, elimination of congestion, and other measures will lower transfer costs, with the redevelopment of waterfront
sites especially attractive. Urban redevelopment in general will have effects on market potentials and labor supply. The creation of desirable working accommodations will have a secondary effect on labor costs through the reduction of absenteeism and turnover. "Foot-loose" or labor-oriented industries, as contrasted with materials- or market-oriented industries, offer the greatest possibilities for attraction to redevelopment areas, with the distance of move less important.

Nor should the desire of industry to locate in communities with good housing, progressive government, and adequate facilities for education and recreation be overlooked. Considerable emphasis in the literature on industrial location has been placed on industry's desire to locate in municipalities with good housing nearby, minimizing both commuting time and cost. A community that is a desirable place to live, with good educational and recreational facilities, can provide industry with a more highly skilled and efficient labor force less subject to absenteeism and excessive turnover. Aside from the economic pressure of other locational factors, industry is desirous of locating in the type of community that city planning and urban redevelopment are striving to create.

It should be realized, however, that for the most part, sites resulting from the redevelopment process are in competition with other sites on the periphery of the city and in suburban and satellite towns in the region. There
are exceptions, of course, such as in the case of waterfront sites which compete with more distant sites because of the low cost of water shipment for some products. Principally, however, the objective of this aspect of industrial redevelopment should be the creation of industrial environments which will keep the present industries from moving out and will attract those industries beneficial to the economy which might otherwise locate in one of the aforementioned nearby sites. This is not to imply that there will be no movement of the existing industrial establishments. It is hoped that most will be relocated within the city but the possibility of displacement by redevelopment providing the final push to an industry on the verge of moving out should be recognized.

Industrial redevelopment may take three forms. One is the rehabilitation of areas; demolition of some obsolete structures, modernization of others, provision of off-street parking space and off-street loading areas and improvement of the street pattern. Most of the industrial buildings are not touched and the industries continue to occupy them. In addition to easing problems of congestion, this treatment would be effective if there are a few noxious industries in the area which blight adjacent residential and industrial buildings.

Secondly, as in some central areas with old mill buildings, redevelopment may call for complete clearance and installation of new streets and utilities. Industrial buildings may be supplied by the industries themselves or by
a redevelopment corporation which will build and rent space in the manner of some industrial district developers now in business.

Thirdly, there are the arrested industrial areas in which development has stopped due to the need for filling of land, extension of utilities, better street access, or due to the presence of a few inharmonious uses which prevent easy site assembly by private enterprise. This type of area has been given only incidental consideration in this thesis.

An interesting article on industrial location summarizes quite well the general objectives and problems of industrial redevelopment:

The new plants constructed both with private and public funds on the edge of metropolitan areas have further complicated the already grave problems of community redevelopment within the core of many of our older cities. Redefinition of land use and controlled redevelopment are in order if decay is to be stopped.

It will be very difficult indeed to get industry to move from one part of the metropolitan area to another ..., but over a period of years this movement is subject to direction if planning authorities select and the community adopts those districts most satisfactory for future manufacturing operations. Movement would undoubtedly be stimulated by varying the real estate taxes in line with the burden on community services. Publicly financed programs for housing improvements, parks, and other public facilities will help to clean up many marginal industrial areas that are eyesores and actually dam, or at least warp, the rational growth of a community. Large public investments, including Federal aid, may be needed. Development of central markets and warehouses and a co-ordination and modernization of transportation facilities are necessary steps in the rehabilitation of rundown properties in many poorly used industrial districts. These will create the opportunity for a realignment of manufacturing activity and may allow branches of light manufacturing to develop within the center of the area, particularly of types closely tied to consumer markets.
At best, rearrangements of the industrial structure of an area will be a slow and expensive process, but it can be worked out so as to be satisfactory to the manufacturers as well as to the community as a whole.¹

CHAPTER IV

LEGAL CONSIDERATIONS

Some of the most important questions concerning the redevelopment of blighted industrial areas revolve around the legality of such an operation. The principal attacks on urban redevelopment in general have been through a challenge of the right of eminent domain, since it is a well established principal of law in this country that property can be taken by the government without the owner's consent only for a "public use." The restrictions on the Federal government's use of this power of eminent domain are contained in the Fifth Amendment to the United States Constitution which states: "...nor shall private property be taken for public use without just compensation." State constitutions have similar provisions which apply to their exercise of this power and in addition, the due process clause of the Fourteenth Amendment is applicable. The expenditure of governmental funds obtained by taxation raises other questions since, here too, the use of such funds must be for a "public purpose."

In this chapter the various court cases concerned with urban redevelopment which might have a bearing on the more particular problem of redevelopment of industrial areas
are reviewed. Following this, attention is given to interpretations and definitions of "public use" and "public purpose" by the courts and legal authorities, insofar as they are germane. No attempt is made to build up a case for industrial redevelopment in any one state—the composite opinions are not necessarily representative of any particular jurisdiction.

Court Decisions on Urban Redevelopment

The body of judicial opinion on urban redevelopment is small, with only seven states having had decisions on the legality of their statutes as of the middle of 1950, and each state is represented by only one or two decisions. In five of these (Pennsylvania, Illinois, Michigan, New York, and New Jersey) the statutes were upheld by the courts; in one (Rhode Island) there was a split decision; and in one (Alabama) it was declared unconstitutional. The last law was of such nature that it is not pertinent to the discussion nor was its defeat considered undesirable. The Pennsylvania decisions have the widest applications.

Most of the statutes contain legislative declarations to the effect that the action contemplated under redevelopment legislation is a "public purpose" and therefore the public power of eminent domain is being granted. The importance of such declarations in establishing the legal basis

1 Unless otherwise noted, the information in this section of this chapter is based on: Urban Redevelopment Decisions (Chicago: American Society of Planning Officials, Jan. 1950).
for redevelopment is shown by the courts' opinions that although they are subject to judicial review, nevertheless, the declarations are entitled to a prima facie acceptance of their correctness. The Supreme Court of Illinois said:

"But if the use is public, or if it be so doubtful that the courts cannot pronounce it to be such as not to justify the compulsory taking, the decision of the legislature...that a necessity exists to take property, is final and conclusive."¹ The Pennsylvania Court has likewise upheld this idea, while the New York law receives authority for eminent domain from an article in the State Constitution which specifically grants this power for housing and redevelopment.

In a more positive vein the Illinois Court also said:

"The taking of property for the purpose of the elimination redevelopment and rebuilding of slum and blight areas, meets all the requirements of a public use and public purposes within the principles of the law of eminent domain."² The Pennsylvania Court, in taking note of the single purpose (blighted area elimination) of the redevelopment law as compared with the dual purpose (slum clearance and provision of low-cost housing) of the previously approved Housing Authority Law, stated:

In the case of the Urban Redevelopment Law, therefore, the justification of the grant of power of eminent domain is even clearer....there being in the present act only the one major purpose of the elimination and

² Ibid.
rehabilitation of the blighted sections of our municipalities, and that purpose certainly falls within any conception of "public use", for nothing can be more beneficial to the community as a whole than the clearance and reconstruction of those substandard areas, which are characterized by the evils described in the Urban Redevelopment Law.1

In both instances the courts were deciding cases concerned with residential redevelopment, although neither the Illinois nor Pennsylvania laws (see Chapter VII) are specifically limited to residential areas. Their attitudes towards the redevelopment of industrial areas as a proper field for the exercise of eminent domain powers must await court decisions or opinions on that specific question.

However, in the case of Pennsylvania, a better indication of the Court's probable attitude towards industrial redevelopment is obtained from a subsequent decision concerning a Pittsburgh redevelopment project (in the Triangle) which dealt with a commercial area and did not result in providing improved living or residential areas.2 Here the Court found that it was proper for the Pittsburgh Redevelopment Authority to exercise the power of eminent domain for the purpose of "redesigning and rebuilding such areas within (its) limits as, by reason of the passage of years and the

1 Belovsky v. Redevelopment Authority of Philadelphia, Supreme Court of Pennsylvania, 359 Pa. 329, 54 Atl. (2d) 277 (1947)

2 This paragraph is based on material from: Ira S. Robbins and Marian Wynn Perry, The Use of the Power of Eminent Domain by Local Agencies to Acquire Predominantly Open Land, and Open Land Needed for Sound Community Growth, Under Urban Development and Redevelopment Legislation (Chicago: Urban Redevelopment Study, April 1950) Advanced Copy, mimeographed, p. 28.
enormous changes in traffic conditions and types of building construction, no longer meet the economic and social needs of modern city life and progress.\(^1\) Factors taken into consideration by the court were the "economically and socially undesirable land uses" where shown to exist, and the fact that there had been "a continuous reduction in appraised value of the properties for tax purposes."

Other issues which might come up in industrial area redevelopment have been brought out in the various court cases. While tax exemption of redevelopment projects is provided for in the New York Constitution, it has been upheld as part of the statute in New Jersey, where the Court said:

> The urban redevelopment law and the ordinances under review do not constitute a donation by a municipality to a private corporation of any property. The whole purpose is to remedy in part a situation now a public danger to public health and welfare. As we have seen, the city receives in rent (through the proposed contract) more than it received years ago by way of taxes, or would receive today by way of taxes if the lands in question were in private use.\(^2\)

Continued ownership of the property was not considered essential in either the Pennsylvania or Illinois decisions:

> (Urban redevelopment) is directed solely to the clearance, reconstruction and rehabilitation of the blighted area, and after that is accomplished, the public purpose is completely realized.\(^3\)

\(^1\) Schenck v. Pittsburgh et al., 364 Pa. 31, 37 (Advance Sheet).

\(^2\) Redfern v. Board of Commissioners of Jersey City et al., Court of Errors and Appeals of New Jersey, 59 a. 2d 641 (May 13, 1948).

\(^3\) Belovsky v. Red. Auth. of Phila., op. cit.
The fact that the continued use of the property for public purposes...is only partially assured...is wholly immaterial. When such areas have been reclaimed and the redevelopment achieved, the public purpose has been fully accomplished.¹

The final debated point, and one of importance in industrial areas, was that of possible profit to private parties. Both Pennsylvania and New York courts considered that problem:

If, upon completion of the project, the public good is enhanced, it does not matter that private interests may be benefited.²

Nor does the taking (by eminent domain) lose its public character merely because there may exist in the operation some feature of private gain, for if the public good is enhanced it is immaterial that a private interest also may be benefited.³

While these favorable citations provide the background for this study, cognizance should be taken of a dissenting view. The opinion of the Rhode Island Court to the Governor showed a distinct split, with two justices feeling that the act was intended to serve a public purpose, and a third not sure but inclined to agree with them. They agreed with the other cited decisions as to continued ownership and incidental benefit to private interests. They did not consider the law authorized a municipality to enter into real estate business in general or to enter upon the utilization of vacant areas. A further line was drawn which

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¹ Zurn v. Chicago, op. cit.
would severely limit industrial redevelopment and the delimitation of such areas:

However, by our present opinion we are not to be understood as holding that under this act a community through an agency may engage in a redevelopment project based mainly upon esthetic views or upon consideration of economic advantage to the municipality, or a combination of both. Unless it is found that under the act, as herein construed and limited, a community redevelopment program is necessary to protect the public health, morals, and safety through the elimination of blighted areas the act does not apply...

While even these three judges felt that redevelopment had its distinct boundaries, the remaining two judges flatly said the law was unconstitutional. Any attempt to make the industrial redevelopment procedure conform to even the majority opinion would straight-jacket the analysis, and it has for the most part been ignored, assuming that the more liberal view of the other courts is more representative of feeling throughout the country.

In the Philadelphia opinion, one dissenting judge questioned the rather indefinite criteria (see Chapter VII) by which blighted areas were to be determined, feeling that the delegation of the power to determine what facts constituted such criteria to planning commissions or other bodies not composed of elected representatives of the people was unconstitutional. While this minority opinion does not carry much weight, some thought was given to it in choosing the factors used for the delimitation of areas.

1 Opinion to the Governor of the State of Rhode Island by the Rhode Island Supreme Court, 59 A. 2d 531 (Nov. 14, 1949).
Robbins and Perry summarize the redevelopment and housing court opinions by writing: "With these decisions it becomes apparent that the taking of land for the purpose of imposing upon it a healthy pattern of use beneficial to the public at large and for the purpose of preventing future blight as well as aiding in the elimination of existing blighted areas is an approved public use."

Relevant Decisions and Opinions

While the previously cited cases have mostly dealt with the problems of urban redevelopment in general and not specifically industrial redevelopment, older court cases and other legal opinions provide additional background for both types.

Oddly enough, if industrial redevelopment had been attempted in the years preceding the middle of the nineteenth century, it appears that there would have been little concern over the employment of the power of eminent domain, since "its use by private corporations and persons for the purpose of developing the industrial and natural resources of the states was generally regarded as proper." This extended to the acquisition of railroad rights-of-way, storage facilities, private mill dams and flowage rights, and the securing of

1 Robbins and Perry, op. cit., p. 29-30.
2 Unless otherwise noted, the information (but not the conclusions) in the remainder of this chapter is from: Robbins and Perry, op. cit.
3 Ibid., p. 5.
irrigation and drainage for private farms. Similarly, mu-
unicipal tax funds were used to aid railroads and to persuade
private industry to locate in a town, with only the loose
requirement that such activities be for the public benefit
or advantage.

As might be expected, this laxity led to excesses and
the United States Supreme Court finally declared such expend-
itures of tax funds as illegal. Similarly, the exploitation
of the power of condemnation by private interests led to the
adoption by many courts, between 1850 and 1910, of a test of
legality described as the "use by the public" test. This
new doctrine required "public employment" of the land taken,
which was satisfied if the public had equal right to go on
the land, as in the case of a railroad, or if those using the
land were required to furnish services to the public gener-
ally, as in the case of a public utility. While this con-
cept was developing, eminent domain was exercised by govern-
ments for such non-controversial uses as highways and public
buildings. Finally, this concept was abandoned insofar as
it applied to the governmental exercise of the power of emi-
nent domain and the present theories on the use of this power
evolved. Except in the case of a few redevelopment corpo-
ration laws, the private use of eminent domain has never
returned to the status it held in the nineteenth century.

The present feeling on this distinction has been
summarized by Robbins and Perry, writing that "the require-
ment that land taken by eminent domain be devoted to use by
the public generally, as of right, upon an equal footing, is a restraint upon private donees of the power and is not applicable to states and their subdivisions. 1 Supporting this recognition of the difference between the condemnation powers of public and private agencies is a part of the opinion in a Pennsylvania public housing case: "Furthermore, a stronger presumption arises in favor of the public nature of the use where the taking is by the government itself instead of by a private corporation endowed with the power of eminent domain." 2

Somewhat akin to redevelopment (despite its age) is Cooley's comment, written in 1868, that government may take land for a public use without being subjected to the limitations of the "use of the public" test, wherever "the government is supplying its own needs, or is furnishing facilities for its citizens in regard to those matters of public necessity, convenience or welfare, which, on account of their peculiar character, and the difficulty--perhaps impossibility--of making provision for them otherwise, it is alike proper, useful, and needful for the government to provide." 3

Placing little weight on this last opinion because of its age, it is nevertheless concluded that in the case of

1 Ibid., p. 5.
the redevelopment of industrial areas the exercise of the
powers of eminent domain for purposes of land assembly should
be retained by a municipal authority to strengthen the legal-
ity of an operation which in some jurisdictions would be open
to question.

That there might be less question about such an oper-
ation in the future is shown by the courts' recognition of
changing conditions. Thus in the Pennsylvania public
housing case the court said:

....views as to what constitutes a public use necessarily
vary with changing conceptions of the scope and functions
of government, so that today there are familiar examples
of such use which formerly would not have been considered.
As governmental activities increase with the growing com-
plicity and integration of society, the concept of "public
use" naturally expands in proportion.1

Similar was a comment of a Tennessee court, typical of several
decisions, in saying the "term 'public use' is a flexible one.
It varies with the growing needs of a more complex social
order."2 As far back as 1920, in reviewing the purposes of
a zoning ordinance, the Supreme Court of Minnesota said:
"The tendency is in the direction of extending the power of
restriction, either through the exercise of the police power
or the exercise of the right of eminent domain, in aid of so-
called city planning or the improvement of housing con-
ditions."3 To the court, the public use involved was an

1 Dornan v. Phila. Housing Authority, op. cit.
2 Knoxville Housing Authority v. City of Knoxville,
174 Tenn. 76, 123 S.W. 2d 1085 (1939).
3 State ex. rel. Twin Cities Building and Investment
v. Houghton, 144 Minn. 1, 176 N.W. 155 (1920).
effort to achieve the end of proper planning of cities, elimination of congestion, resulting diminution of taxes and greater satisfaction with homes, all of which, it stated, contribute to the general welfare.

The land reclamation policy in this country is sometimes cited as a precedent for present-day urban redevelopment. However, the former is for the most part concerned with the reclamation of vacant land for agricultural uses, with the courts usually adopting very liberal attitudes towards agricultural problems as compared with industrial problems. As a result, it is felt that for the most part court decisions on reclamation cases are not pertinent, except possibly in the case of vacant, arrested industrial areas which are receiving only incidental attention in this thesis. One interesting reclamation decision of somewhat broader scope was that handed down by the Massachusetts Court which allowed Boston to acquire the Back Bay flats by condemnation and resell them at a profit to railroads for terminal facilities. The Court felt that the project would "tend to the prosperity and welfare of large portions of the community."\footnote{Moore v. Sanford, 151 Mass. 285, 24 N.E. 323 (1890).}

Frequent mention is heard of the subsidies and tax exemption provided industry in various areas (especially the South). In view of the earlier comment concerning the one-time illegality of the use of tax funds for purposes of this nature, it is fitting that we look at the present status of
"public purpose." McDougal and Haber trace the changing thought on this subject:

Liberalization of public purpose is further evidenced in the use of government funds for the support of private industry. Until recently, financial aid to private interests in the guise of gifts, loans, leases or stock subscriptions was generally held invalid. Although conceding that the establishment of factories in a municipality might incidentally advance the public welfare, courts stressed the more immediate benefits to private individuals in prohibiting such expenditures. But this doctrine has been discarded in recent cases involving the encouragement of industrial development in the South. In Albritton v. City of Winona [181 Miss. 75, 178 So. 799 (1938)] the Mississippi Supreme Court sustained a statute empowering cities to build, acquire, operate, sell or lease any industrial enterprise under the supervision of a State Industrial Commission; and construction of a textile mill for private manufacturers under authority of the statute was justified as beneficial to the general economic interests of the city. Similarly, payment of commissions to individuals procuring the location of factories in a Florida city has been deemed a valid exercise of the tax power. 1

It is difficult to see how the Mississippi Court could object to the redevelopment of industrial areas after such a declaration.

"Public Use" in the Federal Courts

Although the United States Supreme Court has not handed down any decision on the constitutionality of state urban redevelopment legislation, it is expected that it would go along with the state court. On the basis of other decisions, Robbins and Perry write:

The doctrine that benefit to the public is sufficient to support the use of eminent domain is firmly estab--

lished in the federal courts. The Supreme Court will not condemn as a violation of the Fourteenth Amendment a taking upheld by a state court as a taking for a public use in conformity with its laws.1

As for their attitude towards Federal activities, which are limited by the Fifth Amendment, the court has said: "Where the federal government under the Constitution has power to undertake the purposes for which the land is sought to be acquired then the use is a public one."2

In the case of People of Puerto Rico v. Eastern Sugar Associates, the 3rd Circuit Court of Appeals handed down a decision which bears out this doctrine in a case which appears quite important in considering the legality of industrial redevelopment in the eyes of the Federal government.

The statute under consideration provided for the creation of a Land Authority with power to condemn in order "to take necessary action to put an end to existing corporation latifundia (and) block its reappearance in the future, to insure to individuals the conservation of their land, assist in the creation of new landowners, facilitate the utilization of the land for the best public benefit, ...and take all action leading to the most scientific, economic and efficient enjoyment of the land by the people of Puerto Rico."3 Although the evils supporting the legislation—the dense population, shortage of homes, poverty, etc.—are not relevant, the

1 Robbins and Perry, op. cit., p. 32.
court's opinion that eminent domain need not rest upon the power to protect the public health, and could properly be exercised to promote the prosperity of the community gives an indication as to the Federal government's probable attitude towards urban redevelopment legislation of a broader scope than is common at present.
CHAPTER V

CHARACTERISTICS OF BLIGHTED INDUSTRIAL AREAS

Up to this point blighted industrial areas have been spoken of in very general terms—obsolete, worn-out, and decayed. In order to move from a recognition of the problem to the consideration of the criteria for the delimitation of redevelopment areas, it is necessary to go beyond these very general terms and actually determine the characteristics of the areas. However, it will be seen subsequently that some of the ascribed characteristics are somewhat vague and of little value in any attempt at delimitation of areas.

As with residential redevelopment, two types of blighted industrial areas are recognizable:

1. Built-up industrial areas which have deteriorated, with a corresponding decrease in their value to industry.

2. Arrested industrial areas which have not been built-up due to certain inherent faults, poor planning, or poor utilization of part of the area.

In addition, there are faults within the structures themselves which are not necessarily apparent and which do not affect other structures in the area but do diminish their usefulness to industry. Finally, both types of area may
have a blighting affect on surrounding residential districts
due to the character of their industries or the amount of
traffic they generate. The emphasis in this thesis has been
placed on the problem of the built-up areas, the belief being
that they present the greater problem and a procedure evolved
for their redevelopment would be adaptable for use with the
arrested areas.

A survey of the literature and interviews with quali-
fied persons have produced the following list of character-
istics of blighted built-up industrial areas. Not necessar-
ily in order of importance, these characteristics are:

1. Buildings in a bad state of repair--not being
   properly maintained.
2. Little or no new building or replacement.
3. Unsubstantial buildings, poorly constructed, which
   are the scene of most industrial fires.
4. Structures obsolete for original use and converted
   for present use.
5. Lack of railroad service (where the character of
   the industries is such that it would be beneficial)
   or other major transportation deficiencies.
6. Trucking and traffic congestion.
7. Lack of loading space and parking areas.
8. Poor location for obtaining raw materials and
   shipping out finished products.
9. Falling land values (over a long period of time).
10. Lack of room for expansion.
11. Undesirable climatic or other natural conditions, such as unstable soil or flood danger.
12. Too numerous minor streets and poor lot subdivision.
13. Large proportion of abandoned buildings and abnormal and continuing vacancies.

One source has described the typical blighted industrial area as one in which the structures are not used for their original use, but instead by tenant industries with little capital, paying modest rents for buildings which to them are merely space, bearing no functional relation to their processes. Examples of this type of industry are the manufacture of paper flowers, costume jewelry, and clothing, all usually found in old loft buildings.¹

These industrial areas may blight adjacent or even more distant residential districts. The blighting characteristics of these areas (or industries) are:

1. Scattered industry in residential areas—unrestricted dispersion that preceded the adoption of zoning.
2. Air pollution from smoke, fumes, odors, and dust.
3. Water pollution with wastes.
5. Generation of heavy traffic which turns adjacent residential streets into freight thorofares.
6. Fire and explosion risk.

¹ Information from personal interview with Mr. Cornelius Beard, Housing and Home Finance Agency, Division of Slum Clearance and Urban Redevelopment, Washington, D.C.
Deficiencies Within the Structures

Not so apparent to the observer are the deficiencies within the structures themselves. Walker notes that whereas "blight" is used in an economic sense, the designation "slum" is essentially of social significance. The characteristics given have for the most part been concerned with economic considerations, although the blighting characteristics do have social as well as economic implications. Sert uses the term "industrial slums" to describe the factories which many are required to work in, and here the social implications are obvious. Sert gives the following characteristics for these factories:

1. Inadequate protection against exterior elements—heat, cold, humidity, rain, and wind.
2. Presence of foul air.
3. Poor lighting conditions.
5. Absence or insufficiency of common necessities such as first-aid facilities, wash rooms and showers, toilets, cloakrooms, and lunch rooms.
6. Unfavorable site for employees due to climatic or topographical considerations.

Nor is the internal structure of the obsolete

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buildings of disadvantage only to the employees. There are economic implications acting to the detriment of the occupying industry:

1. Poorly elevatored.
2. Too many columns to permit installation of modern machinery.
3. Too heavy wall construction to permit flexibility.
4. Too light a floor system to support heavy machinery.

Just as our modern living standards have made obsolete older housing containing what we now consider inadequate facilities, so too has our present building technology made obsolete older industrial buildings, even though they have been kept in a good state of repair. Sert summarized these modern construction methods as follows:¹

1. Steel or reinforced concrete frames, reducing the number of supports.
2. Window space unlimited by removal of supporting walls by construction as in 1.
3. Artificial or natural lighting as desired.
4. Effective insulation against elements.
5. Adequate control of heat, ventilation, cooling, etc.
6. Vibration eliminated as well as noise minimized.
7. Smoke reduction through better combustion or use of electricity.

¹ Ibid., pp. 146, 148.
Mixtures of Residences and Industries

Aside from the industrial structures and areas themselves, blighted industry may be the product of indiscriminate and unplanned mixtures of residential and industrial structures. As mentioned previously, such mixtures are frequently detrimental to the residences and it is commonly assumed that is the only disadvantage. That such is not the case is shown by experience:

Scattered throughout the area are many large industries—R.R. Donnelly printing plant, Cuneo Press and Mentzer-Bush printing; the Simonize Corp. and E.L. Mansure textile concern. Many of these companies, like Michael Reese, were considering moving. Lack of housing for workers plus the fact that girl workers hesitate even to enter the area made their labor supply increasingly unstable. In addition, the tangled traffic situation slowed down plant operation.¹

And in Providence, one plant has to replace yearly 1500 panes of glass broken by vandals from the surrounding slums. Similar examples are undoubtedly available from many other industrial communities.

The conclusion which might be drawn is that industry must be completely isolated from residences to prevent the blighting of both. However, once again it is a case of comparing past unplanned chaos with what can be accomplished utilizing modern planning backed up by progressive zoning ordinances. While many industries must indeed be confined to strictly industrial areas, zoning ordinances which permit light industrial plants in residential areas with proper

restrictions and safe-guards are becoming increasingly popular. This is an important step in meeting the previously stated objective of providing employment within easy access of the workers' homes, especially important where a large percentage of female labor is employed.
CHAPTER VI

PREREQUISITE PLANNING STUDIES

As with any type of urban redevelopment, certain preliminary planning studies must have been completed before work can commence on industrial redevelopment. These are: the Economic Base of the community, Proposed Land Use (especially industrial land), Major Highways, Public Transit and Transportation Facilities, and to a lesser extent, Proposed Population Distribution. A study of the economic base is usually preceded by a study of present and future population, and that is assumed here. A special study of Industrial Movement, although not usually included in a planning program, is required prior to industrial redevelopment planning.

Economic Base Study

The study of the economic base of a community has two functions, both of which are related to the process of industrial redevelopment. The first of these is to make possible a forecast of the growth of the city and from that to determine the amount of land required for various purposes. The second function is to provide the basis for a sound program for the development of the economic resources of the com-
munity, based on the strong points and limitations of the community as brought out in the compilation of factual data. Information so acquired not only has value in the community's self-evaluation, but also provides the basis for promotional literature to be given to outsiders who are or might consider locating industry within the community.

A survey of the economic base studies for various cities discloses that there is no set pattern and the resulting products vary considerably in their fulfillment of the second function. **Local Planning Administration** outlines the desirable economic studies, while for the purposes of industrial redevelopment, the following elements are the most important:

1. Income - source and amount of income of residents of the city, with a breakdown by major types of economic activity, such as manufacturing, wholesale trade, retail trade, etc.
2. Jobs - by occupation, skilled or unskilled, and by sex and age groupings.
3. Available labor supply - with the same breakdown as for "jobs". Based on employment service records, unemployment compensation records, and other sources.
4. Seasonal and cyclical changes in employment.
5. Existing industries by type and size.
6. Estimated size and character of future labor supply.

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7. Competitive advantages and disadvantages of the community as to such items as public services, tax rates, transportation facilities, and housing. As is becoming the practice, the economic base study should identify those industries, represented in the community or not, which have employment patterns that would be beneficial in rounding out the community's economic base. These choices are based on the matching of the conclusions obtained from the above data with the characteristics of individual types of industry. A few examples, not necessarily considered good, will give an indication of the nature of these recommendations:

For Brockton, Massachusetts, faced with a serious unemployment problem, Hoyt recommended industries such as plastics, light metals, scientific control instruments, and electrical machinery, all of which depend upon scientific research. Brockton's proximity to Harvard, M.I.T. and other universities in New England puts it in an advantageous position as compared with locations in other parts of the country. Also recommended is the encouragement of the garment industry, which could make use of women with skills acquired in the declining shoe industry.¹

In Detroit, the need is felt to be for increased employment in the production of other consumers' durable goods (besides automobiles) to provide a further stabilizing

influence upon the economy in periods of stress, and also increased employment in the production of non-durable consumers' goods, due to the more constant demand for such products in depression periods.¹ These recommendations are of a more general nature, based on long-term fluctuations, rather than any present unbalance in the labor supply-job relationship.

A Sacramento study suggested specific manufacturing activities utilizing the area's products and by-products (food processing), goods for Sacramento's regional market (air-conditioning, recreation equipment), and other manufacturing items for general distribution (auto assembly, printing and bookbinding, plastics, and others).²

In contrast to some recommendations which seem to be the product of rather wild swings of the arm, the most scientific analysis was contained in a study of the economic base of the Cincinnati area, with this system subsequently used in an investigation of the Philadelphia economy. Cincinnati based its recommendations for community action on a "selective expansion" of the local economy. The system of evaluation of the 109 activities contained in the 1940 U.S. Census of Population was based on the contribution each could make to the economy of the area, entirely on the basis of labor force


considerations.

The "general criteria" used for the 109 activities were:

1. Use of skilled workers.
2. Medium annual wage or salary.
3. Proportion of employment receiving $2,500 or more.
4. Seasonal stability.
5. Cyclical stability.

Since the study of the labor force showed that certain groups presented the greatest unemployment problem, three additional "specific criteria" were used:

1. Use of older workers.
2. Use of female workers.
3. Use of Negro workers.

Weighting and grading of each criterion and the summation of all gave a rating for each of the 109 specific activities and also for each of the 15 activity "groups". Manufacturing, as a group, ranked tenth in their analysis in the order of preference, but individual manufacturing activities in some cases fared better.¹ The Philadelphia results were similar, with the highest ratings going to tertiary industries--services, construction, professions, etc.--with the outstanding manufacturing activities also listed.²

¹ Cincinnati City Planning Commission, The Economy of the Cincinnati Metropolitan Area (Cincinnati: City Planning Commission, December 1946).
This last type of analysis of desirable industries for expansion should be a part of the economic base study preceding industrial redevelopment. The "general criteria" will, of course, vary from city to city only if different sources of information are used or if different weighting and grading systems are adopted. (The U.S. Census is probably the best, if not the only, source of such data.) The "specific criteria", on the other hand, reflect local conditions as revealed in the survey portion of the economic base study and will vary from city to city. Limitations on the use of such a selective expansion study and necessary modifications are discussed in Chapter IX.

**Industrial Movement Study**

Chicago's study of industrial movement and location was mentioned in Chapter II, which study was a part of an analysis of the economic base of the city. Whether it is part of the economic base report or presented separately is unimportant, with custom favoring the latter. The important thing is that industrial movement and location in and around the city should be analysed.

The objective is to determine the specific reasons for industries locating or moving out of, or within, the city. Information should be obtained from reliable sources in the companies, preferably from the executives responsible for selecting plant locations. The reason for this is fairly obvious. It is the only way the redevelopment agency
can find out just what is wrong with central city sites, beyond what is apparent to the eye. For example, traffic congestion might appear to be a major factor in relocation, but actually, as in Chicago, irritation with building codes and regulations might be an equally important factor.

There is no point in attempting to re-vitalize an in-town area by providing all of the physical amenities of a desirable industrial district if industry has an intense dislike for the policies of the local administration. This study is needed to orient the objectives of industrial redevelopment—to point up the real sore spots; physical, legal, administrative, and financial.

**Proposed Land Use**

The next major prerequisite planning study is that of proposals for future land use. Industrial area requirements may be lumped with the general discussion of all land uses, or handled as a separate study and report.

For the more stable Eastern cities proposals call for a rather modest expansion of total city industrial area above what is now being used for that purpose. This will allow for some new industry as well as the horizontal expansion and rebuilding of present industries into one-story buildings with off-street parking and loading facilities. This conservative approach is in contrast with the rather wild-eyed dreams manifest in the first zoning ordinances, with large percentages of the cities zoned for industry. As a result
of this over-zoning and the location of establishments before
the adoption of such ordinances, there are industries now
located in areas best suited for residential and other uses,
as well as residences located in areas best suited for indus-
try. However, unless industrial location in the past has
been warped by a since negated factor, future industrial
areas will include the vast majority of existing industrial
areas in any practical land use plan.

There is general agreement that the trend, and prob-
ably one to be encouraged, is for heavy industry to locate at
the edge of the central city or in adjacent suburban towns,
while the wholesale and light manufacturing plants are lo-
cated within the city, somewhere nearer the focus of extra
transportation facilities. While a zoning ordinance can
foster this type of development within any given political
unit, the desirability of planning for industry on a metro-
politan basis is apparent.

With vulnerability to atomic bomb attack receiving
increasing attention in matters of industrial location, some
mention should be made of its relationship to land use
planning and industrial redevelopment, especially since the
recommended dispersion would appear to negate the need for
the redevelopment of central industrial areas for industrial
re-use. However, the problem of dispersal is especially
important for concerns producing a large percentage of a
critical item, industrial developments which are highly in-
flammable or explosive (which should not be in the center
of the city anyway), and groupings of several plants all producing related military items.¹ Insofar as their wartime production would not fall within one of these categories, there are a good many manufacturing industries as well as most of the service industries which will remain in the central areas. It is believed that the dispersal movement, if it becomes significant, will affect mainly the larger plants that have so far remained in the center of the city, with their removal only emphasizing the problem of creating suitable industrial environments for the remaining establishments.

Major Highways

The highway plan for a city is of great importance in the consideration of industrial redevelopment. New highways are one of the instruments by which congestion in the industrial areas can be relieved, they establish the relationship between industrial and residential areas as well as improving access to the areas, and, finally, highways and expressways are logical redevelopment and project area boundaries.

Public Transit and Transportation Facilities

Handled independently or together, these two subjects are as important as the highway proposals. The study of public transit should deal with the layout of the transit

system, the type of equipment in use, and the adequacy of both in the performance of the job of transporting people from home to work. The parallel study of transportation facilities, except for a discussion of passenger railroad terminals and airports, is concerned mainly with the movement of goods. Rail facilities and service, air-freight service, trucking terminals and lines, and harbor and water shipping facilities, all should come under consideration. In the case of transportation facilities, the study should extend out into the region, since outlying rail yards, airports, and regional port facilities are important parts of the picture.

Population Distribution

Proposals for the future distribution of population are frequently tied in with land use plans, where such specify certain dwelling unit densities in the residential areas. Some estimate of population distribution is desirable to relate industrial area proposals to labor supply in the vicinity.
CHAPTER VII

THE DELIMITATION OF BLIGHTED INDUSTRIAL AREAS

Provided with the basic material obtained from fundamental planning studies, the first drafting-room phase of industrial redevelopment centers around the problem of the delimitation of the blighted areas. The chapter on the characteristics of blighted industrial areas provides the background for the discussion of such criteria, which must satisfy certain requirements.

Whereas some of the characteristics listed are somewhat nebulous, the factors used for delimitation must be based on material which can be readily obtained and plotted and mapped in such a way as to definitely point out the areas which should be considered. The method of delimitation should be simple and cheap so that it can be universally employed, not only by professional planners but also by less skilled persons. There may be some justification for the use of expensive criteria if the material obtained has other uses. Such is the basis for the use of the American Public Health Association system for the evaluation of housing in some cities—the high cost of such a survey being offset by its multiple uses in redevelopment work as well as health department work.
Examples of Redevelopment Area Delimitation

There is little precedent for the delimiting process as applied to industrial areas, with Chicago and Philadelphia offering the best examples in cities where such areas are being studied. The Pennsylvania redevelopment law specifies that redevelopment areas are areas which "have become blighted because of the unsafe, unsanitary, inadequate or overcrowded condition of the dwellings therein, or because of inadequate planning of the area, or excessive land coverage by the buildings thereon, or the lack of proper light and air and open space, or because of the defective design and arrangement of the buildings thereon, or faulty street or lot layout, or economically or socially undesirable land uses."\(^1\)

On this basis the Philadelphia City Planning Commission designated the Aramingo area as blighted for the following reasons:

1. Inadequate planning of the area. (see 2 and 3)
2. Faulty street or lot layout: blocks too small for industrial sites; inadequate provision for easy motor truck and railway access; some subdivision into narrow lots for row house development, for which area is unsuited.
3. Economically or socially undesirable land uses: arrested area, much unused; scattered residence blighted by nuisance industries; unused waterfront

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despite demand for sites with such substandard housing.¹

The Lower Eastwick area was similarly designated, with emphasis on deteriorated housing, poor drainage of area, and general suitability for industry with development hampered by existence of housing and poor street pattern.²

In Illinois, the Blighted Areas Redevelopment Act of 1947 defines a slum and blighted area in the following manner:

"Slum and Blighted Area" means any area of not less in the aggregate than two(2) acres located within the territorial limits of a municipality where buildings or improvements, by reason of dilapidation, obsolescence, overcrowding, faulty arrangement or design, lack of ventilation, light and sanitary facilities, excessive land coverage, deleterious land use or layout or combination of these factors, are detrimental to the public safety, health, morals, or welfare.³

Operating under this statute, the Chicago Plan Commission defines a blighted area statistically as follows:

Age: 50% or more of the residential structures built before 1895, and
Condition: 50% or more of the dwelling units substandard, (a) and 20% or more of the dwelling units in structures in need of major repairs or unfit for use, and
Per cent of land in residential use: (b) 50% or more.⁴

On this basis the area in the "near South Side" of Chicago, containing considerable industry, was designated as a redevelopment area.

The limited usefulness of such precedents for the problem at hand is apparent. The Philadelphia designations, made under one of the most liberal statutes, are concerned with obviously arrested areas or prospective industrial areas which have enough residential blight to qualify on that basis alone. The "economically or socially undesirable land uses" provided for in the Pennsylvania law is a catch-all and would make possible the designation of any area which did not conform to a well thought out land use master plan. In addition, it would take considerable time on the part of experienced planning personnel to ascertain just what areas had inadequate planning, faulty street or lot layouts, excessive land coverage, and inadequate light and air.

The Chicago definition of blight makes it possible to include industrial areas within redevelopment areas--areas which may be only half residential with only half of that substandard. While many of the central industrial areas in Chicago could be included in redevelopment areas on this basis, such a system really evades the issue and would not have general application. For the industrial redevelopment being considered here, other criteria more indicative of the condition within built-up industrial areas themselves must be selected.

Two other examples, actually for residential areas,
give a better sample of the type of criteria desired. Walker felt that the most valid criteria for the delimitation of blighted areas were: falling land values (over a long period); detrimental shifts of business or population; failure to make or maintain improvements over extended period; substandard housing.\(^1\) She felt further that the first three alone should be sufficient, the fourth being an inevitable consequence of the third. If it is omitted, the criteria can be applied to industrial areas as well.

For its delimitation of blighted residential areas, the Providence City Plan Commission used the following: inadequate housing, high density, overcrowding, juvenile delinquency, deaths from tuberculosis, decline in land value, and high incidence of fire.\(^2\) It was criteria of the type in these last two examples that were sought for use in the blighted industrial area delimitation.

**Discussion of Factors for Delimitation**

Industrial areas, and in particular industrial buildings, may be viewed from four standpoints: (1) the worker in the plant, (2) the industry in the plant, (3) the city, and (4) the neighboring residential areas. With considerable interdependence apparent in these viewpoints, all four have

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been considered in the investigation of delimiting criteria. Due to the availability of information, particular emphasis has been placed on the material available in a Massachusetts municipality, but it is believed that most of the criteria have general application.

**Zoning ordinances.** From the city planning standpoint, the local zoning ordinance is obviously the first place to look for standards by which to evaluate industrial areas within the municipality. Since its provisions are adopted in the public interest, non-conformance with these provisions would, literally, indicate buildings and lots which do not come up to present standards, although it would be impossible to call all such non-conforming buildings and uses "obsolete". Care should be taken that the use of ordinance requirements as delimiting factors does not take on the appearance of an illegal insertion of retroactive provisions. Although some of the provisions discussed are contained in only the most up-to-date ordinances, it should be obvious that unless a community is operating under a modern ordinance to control the development of new industrial areas by private enterprise, industrial redevelopment loses much of its value.¹

The zoning ordinance provisions which should be considered include the following:

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¹ For the latest comprehensive discussion of zoning ordinances see: *Zoning and Civic Development* (Washington: Chamber of Commerce of the United States, January 1950).
1. Off-street loading space. This requirement is of utmost importance in that it is so directly related to the problem of congestion, which affects all four of the previously mentioned parties. While the exact ratio of loading area to building area (as specified in the ordinance) may not be readily available, the general adequacy of such an area should be apparent by observation. A field check of loading area along with measurements from insurance atlases would make possible a rough calculation of this ratio. However, for the most part, it is merely a question of the presence or absence of such loading space.

2. Off-street parking space. Although recommended, the requirement of such space in industrial areas is not too common in spite of its important bearing on the problem of congestion. With parking space sometimes found on vacant lots not on the land of, or under the control of, the industries, the general adequacy of such space in addition to industry-provided areas might be determined by visual observation during working hours.

3. Prohibited uses (noxious). Since uses which are prohibited in various industrial zones are noxious or at least considered undesirable, their presence may be considered a blighting influence. In the Philadelphia Aramingo area, the presence of plants working with fertilizer, greases, leather, rubber, and certain other materials is to a large extent responsible for the area remaining 90 per cent vacant, since even industrial firms have environmental standards when
it comes down to locating new plants. While in a case like this the pattern of noxious industries was significant, it is improbable that in the average built-up industrial area there would be enough such uses to really establish a pattern useful in the delimitation process. In addition, some of the prohibited uses may actually be governmental (such as incinerators or sand storage, etc.) or of such nature that their removal in the redevelopment process would be too costly. The presence of the other prohibited uses would, however, serve a useful purpose as supporting data. In cities where a "performance code" is used, measurements in accordance with its provisions might produce information for use in the delimiting process.

4. Prohibited uses (non-noxious). With many new ordinances prohibiting residences in industrial zones, their presence, if of sufficient magnitude, could be used as a delimiting factor even though the residences themselves are not especially bad. Going beyond the ordinance, other scattered uses, such as light commercial, which have usurped lots and prevented the acquisition of large unobstructed sites for new industry or the expansion of existing plants might be considered.

**Building codes.** Similar to the zoning ordinance in legal status, the building code of the municipality provides other bases for delimitation on the basis of building obsolescence.

The date of acceptance of building codes in different
cities varies, of course, but the first code recognized by the National Board of Fire Underwriters was in 1905. The majority of buildings erected before the adoption of a local code probably do not conform to all the standards contained therein, and can be consequently be considered more or less obsolete by modern construction standards. Because of their earlier acceptance date in many communities, building codes would be better than zoning ordinances in indicating buildings that should be removed, since in many cases with the former it is safe to assume that the cost has been amortized since it became a non-conforming structure. Having already discussed the shortcomings of old buildings and the desirable features of new buildings (see Chapter V) there is no point in elaborating on obsolescence as reflected in floor loadings, use of columns, window space, and other building features.

However, one important additional consideration is the provision in some codes for "fire zones". Usually established around the center of the city or in intensely built-up sections (and sometimes of very large size), new structures in these zones are limited to certain types of construction. Thus the "first fire zone" may be limited to Class I construction (determined by the fire resistance of the floor structure) and the "second fire zone" limited to new buildings in Classes I and II, such limitations sometimes only applying to buildings of more than one story. With Class I construction indicating a "fireproof" building, it is obvious
that many of the older industrial structures in these central fire zones fail to comply with this section of the code, creating a considerable fire hazard due to the proximity of other buildings in these crowded areas. Especially hazardous are the old wood frame buildings in which the problem of oil saturation is acute.

Whether age of building, *per se*, could be used as an indicator of obsolescence from the standpoint of building codes would depend upon building practices in the community prior to the adoption of the code, as well as the length of time the code had been in effect. Revisions and new codes should be taken into account. If age by itself is not satisfactory, it would be possible to determine from insurance atlases which buildings conform to fire zone construction requirements, although other questions of floor loading, columns, etc., could not be easily answered.

**Fire hazard.** Closely associated with the building code requirements are the ratings of industrial buildings prepared by the New England Fire Rating Association, Factory Mutual Insurance Co., and similar organizations; such ratings forming the basis for the determination of fire insurance rates. These take into account the construction of the building, the hazards of occupancy, and the exposure hazards. Unfortunately, being the product of private organizations, these ratings are not available to municipal authorities. Expanding the aforementioned study of insurance atlases...
might produce some evaluation system but its accuracy and value as compared with the time required make it appear undesirable.

The actual incidence of fires is a much better factor to consider since the data is available from fire department records and is indicative of the more pertinent issues of expense and damage to the community than is an evaluation of hazards as such. Also a problem from the fire protection standpoint is the interference with the movement of fire fighting equipment resulting from the congestion in the blighted industrial areas—an additional argument for off-street loading and parking areas.

A desirable building from the fire fighting standpoint has been described as being of Class I construction, with automatic sprinklers and party walls to break up floor areas. Of interest also is an indicated preference for one-story buildings, which permit better control of the fire through roof ventilation.\(^1\)

**Land values.** Of prime importance to the city is the tax revenue from industrial areas. While even a good industrial area may not produce a very high tax income for the city on a per acreage basis, it is second only to business areas in its ratio of tax income for the city to allocated costs by the city. This surplus income is of course needed

\(^1\) Information from personal interview with Acting Chief C.S. Bowers, Boston Fire Department, Fire Prevention Division.
to offset the low-rental and low density residential areas where the cost to the city exceeds the income from the area.¹

A decline in building value (as indicated by the assessment, which should be related to market value) is of itself to be expected due to natural depreciation. However, with a long-term decline in land value reflecting the decreasing desirability of the lot as an industrial location, it can be used as one factor in delimiting the blighted areas. This continued decline over a long period of time can be determined from the assessor's records, although with some systems in use it will admittedly involve considerable work. However, this criterion is important enough in its relation to the city and public welfare to warrant the expenditure of the necessary time.

Adequacy of streets. The Philadelphia delimitation process was criticized for its use of the rather vague "faulty street or lot layout". However, the adequacy of the street system should not be ignored, and it is believed that width is a good criterion. A discussion of industrial area street standards is beyond the scope of this thesis, but it should be possible to determine their adequacy from the width, need for parking due to the lack of off-street facilities, estimated or measured traffic flow from the industrial plants, and use by heavy trucks. Lack of any major street should

¹ Boston City Planning Board, Report on the Income and Cost of Six Districts in the City of Boston (Boston: Boston City Planning Board, December 1934), pp. 17, 29.
should also be counted against the area. The major consideration here is the problem of congestion, which it may be impossible to bring out with the aforementioned zoning ordinance requirements.

Standards for working environments. One field in which it was hoped valuable criteria for delimitation could be obtained was that of the working environment, especially within the industrial buildings. Two approaches were tried:

1. Labor union standards. Unfortunately, neither the Committee of Industrial Organization nor American Federation of Labor national organizations have such standards. Matters of working environment are handled by the local unions in their contracts with individual employers; grievances providing the instrument by which undesirable conditions are brought to the attention of the employer. Although the Bureau of Labor Statistics has compiled a digest of typical safety, health, and sanitation provisions in collective bargaining agreements, no usable pattern appears.¹

2. Standards of Federal and state agencies. This approach likewise produced negative results. The Federal government has no standards which could be applied to the working environment in industrial buildings.

More information was available from the State of Massachusetts. The Division of Industrial Safety of the

Department of Labor and Industries is concerned with both lighting (under an obsolete code) and the provision of toilet facilities in industrial establishments. However, since conformance to their codes and regulations is mandatory, there is no opportunity to separate "the sheep from the goats" and define some buildings as obsolete because of non-conformance.

Similarly, the Building Inspection Division of the Department of Public Safety is concerned with the provision of adequate exits and use of safe floor loadings, but again conformance is required. Of possible use is their record file on all industrial buildings in the state, listing, among other things, the date and type of construction.

**Industry's viewpoint.** Several indices point to industry's dissatisfaction with certain industrial buildings and areas. One of these is the previously discussed drop in land values. Building inadequacy is reflected by excessive vacancies over a period of time, frequent changes of occupancy, and to some degree, use of the building by other than the original occupant.

Information on vacancy and changes in occupancy can be obtained, if not from one source, by a synthesis of assessor's records (which are more concerned with owner than occupant), state inspection records, and old city directories. Consideration of the use of the building by other than the original occupant as an index of obsolescence depends upon the reasons for leaving and whether or not the building was
built by the original occupant or merely rented. State inspection services have stated that plants which have been converted by division for use by other industries present several problems, among which are the providing of adequate exits and toilet facilities for each separate section of the plant as well as the adapting of the heating system for use in a sectionalized plant. It is suggested, however, that emphasis in the delimitation process be placed on the problem of excessive vacancy and turnover, rather than the less reliable removal of the original occupant.

**Blighting factors.** Except for the small amount of work done on zoning ordinances based on the performance of industries, little has been done on the matter of industrial noise and vibration that would be of use. At present it would appear difficult to call an area blighted or blighting due to excessive noise except on the most subjective basis.

A similar problem is that of smoke, which due to its wider distribution is at the same time more important and more difficult to track to its source. Some city-wide measurements of soot fall have been made but with most of the variation correlating with time rather than with location, they fail to point out trouble areas except in a most general manner. A better approach to this problem would be through recourse to the records of the local smoke abatement officer. These would point out the most frequent violators of the ordinance as well as indicating which industrial buildings have obsolete heating equipment. Here too, the data must be
used judiciously since sometimes the worst offenders are governmental buildings burning cheap fuel or industries which obviously cannot be touched in the redevelopment process.

Smoke, along with vibration, noise, dust, and odors, is considered in the selection of prohibited uses in zoning ordinances and it is probably best to handle the problem that way in the delimiting process. If there are industries with smoke problems of a correctable nature, the approach should be through a vigorous air pollution control ordinance --as essential to proper industrial development as a modern zoning ordinance.

Finally, traffic generated within an industrial district might mark it as a blighting area if such traffic is carried by adjacent residential streets. Unless plans for the area include a definite reduction in the number of workers in the area or a great improvement in major street access to the area, traffic generation would not be a valid factor to consider.

The Delimiting Process

Factors for delimitation have been discussed here in a general way--it is believed the most important ones have been considered. Which factors are actually used in a particular community will depend upon what data is available as well as upon the character of the industrial areas.

The mechanics of the delimiting process is likewise dependent upon local conditions. It is necessary to prepare
city-wide maps (or at least maps of all the industrial areas) showing the presence of the various conditions chosen for delimitation. Each factor should be plotted on a separate map and a final map prepared which combines or totals the various factors. With indices of residential blight usually expressed in terms of percentages or ratios, e.g., percentage of substandard dwellings in a given block, the question of using that technique will arise with the industrial areas. The increased size of industrial buildings and sites, as well as irregular block patterns, will probably make mapping on an "absolute" basis (for each building or lot) more practical. For this, industrial area maps showing the individual buildings would be very desirable, but here again local conditions and experimentation will decide the question.

Naturally, a high incidence of only one of the discussed factors does not point out a blighted area ripe for redevelopment. A decision must be made as to how many factors must be present in a given block, or industrial unit, to classify it as blighted. The presence of half of the factors selected for delimitation should definitely point out blighted blocks or units. The redevelopment areas as finally drawn should have fairly regular boundaries, describable in words, and should include all the blighted blocks or industries feasible plus such other area as is necessary to provide logical area boundaries and integrated project sites.

It is suggested that two types of deteriorated areas be delimited:
1. "Rehabilitation areas" in which the deterioration shows up in the factors of congestion, decline in land value, scattered residences, and others concerned with non-structural, non-industrial elements, assuming that the area has been built up to a predominantly industrial area which can be successfully retained in that use.

2. "Clearance areas" in which the deterioration is indicated by the incidence of industrial fires, building vacancy, occupancy turnover, and other factors concerned more with the industrial buildings themselves.

It is recognized that some factors, such as a decline in land value, may be related to both types of areas and judgement will have to be made on the basis of the local situation as to their proper use.
CHAPTER VIII

THE SELECTION AND ANALYSIS OF PROJECT AREAS

The delimited redevelopment areas will be, in the majority of cases, too large in area to be handled as one project area. In clearance areas the choice of a large project would necessitate tying up more funds at one time than might be available, as well as complicate the relocation problem. Rehabilitation project areas, on the other hand, could be larger because of the anticipated lower expenditures and minimal relocation problem.

Survey of Existing Industries

By the time the preparatory work on project areas has begun, the community at large and especially the industries within it should have been informed as to the limits of the industrial redevelopment areas. Working through the local Chamber of Commerce or manufacturers' groups, a survey should be conducted amongst all of the industries within the city, whether or not they are included in redevelopment areas, to determine the following:

1. Which industries, if dislocated in the redevelopment process, would relocate in the city if an adequate site and/or buildings were available.
2. Which industries, not dislocated or not in redevelopment areas, would like to move to new sites or buildings in the redeveloped areas.

3. What these industries require with respect to buildings and area facilities.

Concurrently, a detailed analysis of existing buildings in the redevelopment areas should be made, including the valuation of both structures and land (assessed and approximate market values), present condition and degree of obsolescence, and occupancy. Evaluation of the data from both this analysis and the aforementioned survey will enable the planning group to quite definitely establish which buildings should be conserved in the redevelopment process, for reasons of condition, occupancy, or expense of removal.

Selection of Project Areas for Study

Knowing which buildings in the redevelopment areas will probably be conserved, the project areas themselves can be chosen. These should be "natural areas", lending themselves to redevelopment as an unit, with the following considered valid features for defining their boundaries:

1. Natural features such as rivers and steep slopes.
2. Major streets or proposed expressways.
4. Boundaries of underground utility service areas.
5. Large industries or groups of buildings which are to be conserved.
6. The redevelopment area boundaries, which may be along residential or other zones.

Theoretically, every redevelopment area should be pretty well covered by project areas. From the practical standpoint, it should not be necessary to go to the trouble of defining them all. By this stage of the process it will be apparent that certain areas warrant early attention, and efforts can be concentrated on them.

Several factors will influence this assignment of priority. One is the degree of blight—those areas showing the most vacancy and greatest obsolescence not only appear ripe for redevelopment, but also might be the most economical of the clearance areas to redevelop. On the other hand, it may be more desirable to work on rehabilitation areas in which the expenditures will cover more area and may have immediate value in keeping industries in the city, especially those that are growing weary of congested locations which provide none of their open land needs. One of the most important factors, however, is the status of associated projects; harbor dredging, extension of natural gas lines, residential redevelopment, major highways and expressways, and works of this nature. It is these related activities that will make many of the redevelopment sites economically feasible and attractive to industry; there is no point in redeveloping too far in advance of these other projects if such is the case.

Having selected a number of project areas that show
the greatest promise, preliminary studies should be prepared for office use. The major objective of such studies is the production of a tentative site plan which will permit evaluation of the sites available after selective or complete clearance of the area. The study should include all of the area facilities, such as utilities, and rough calculations of the cost of acquisition, clearance, and site preparation.

The Comparative Analysis

The fact that centrally located industrial sites are, for the most part, competing with other sites in the region has already been discussed— it now provides the basis for the next step in the redevelopment study. If these central sites are to successfully compete with the others, they must offer the same attraction to industry from the locational standpoint.

Using the tentative site plans already prepared, the areas available for industrial building should be compared with similar available areas in the region. For this purpose, it is suggested that the following factors be considered: (1) Location of production materials; (2) Labor; (3) Sites; (4) Industrial fuel; (5) Transportation facilities; (6) Market; (7) Distribution facilities; (8) Power and water; (9) Living conditions; (10) Laws and regulations; (11) Tax structure; (12) Climate.¹

Obviously, the importance of many of these factors varies from industry to industry and no really accurate comparison of sites can be made without a specific industry in mind. However, this preliminary comparison can be made on a more general basis since the interest is in knowing whether or not the site has potentialities worth exploiting--its outstanding advantages and disadvantages. For this, the basic factors should be ramified somewhat as follows:

1. Location of production materials: proximity to raw materials, supply warehouses, foundries, etc.

2. Labor: general quantity within commuting distance, predominance of skilled or unskilled, prevailing wage rates, age and sex composition.


4. Industrial fuel: cost of delivered coal and oil, availability of manufactured or natural gas.

5. Transportation facilities: railroad access, major highways, public transit, trucking and air service.


7. Distribution facilities: freight forwarding companies, express service, frequency of rail and trucking services.

8. Power and water: electric rates and quantity available; water rates, quantity, and quality.

9. Living conditions: housing supply, educational and
recreational facilities.

10. Laws and regulations: zoning, building codes, inspection regulations, labor laws.


12. Climate: the overall climate is probably fairly uniform throughout the general area but special conditions, such as susceptibility to fog, should be noted.

This comparison will make it possible to determine which sites would probably not appear attractive to industry, or which ones might be of value to certain materials- or market-oriented industries. The presence of several disadvantages does not necessarily disqualify a site. For example, the apparent disadvantages of high wages may be offset by other site advantages which will make possible the use of less labor or the more efficient use of it. Or the higher wage rates may be indicative of a better quality labor. Also, where one or more of the factors is expensive, it may be possible to economize by their intensive use or substitution of other lower cost factors; e.g., where labor is expensive, it may be possible to minimize its use and invest more in machinery or land. These considerations are mentioned only to point out the interdependence of locational factors and to emphasize that the objective of this comparative analysis is only to determine which sites obviously do not warrant further immediate attention in the redevelopment program.
Preparation of Promotional Site Plans

With these various surveys and analyses as background, attention can be focused on a few sites for further study, with more detailed site plans for promotional purposes and financial analyses the desired product. Here displacement of existing industry is a major consideration and the possibility of having sites available for relocated industries, in arrested areas being redeveloped or elsewhere, must be given attention.

Site plans for industrial areas differ from those of residential redevelopment areas in that the new industrial buildings are not indicated and there is more flexibility provided. These promotional site plans should indicate all the buildings that will be conserved, existing roads that remain, proposed major streets, underground utilities and required easements, and zoning and building code restrictions. It is likely that there may be additional restriction on setbacks, heights, etc., for the redevelopment areas and these should be indicated on the site plan.
CHAPTER IX

SELECTION OF INDUSTRIES AND "SALE" OF SITES

All of the previous work is, of course, to no avail unless industries or persons can be found who are interested in acquiring the redevelopment sites either through lease or outright purchase. It was mentioned before that industrial redevelopment is not necessarily predicated on a program for industrial expansion, but, to face the facts of life, it is virtually impossible to point out a community that would not benefit by some limited program of selective expansion.

For the purpose of contacting interested parties, the redevelopment agency will have to work closely with the local chamber of commerce, state departments of commerce or development commissions, and the industrial development agents of railroads and utilities.

Unlike advertisements for low-cost apartments, those for industrial sites do not bring prospects flocking to the door of the owner. It is for the most part a buyer's market and the redevelopment agency, or someone acting in its behalf, must present the advantages of particular areas in a more forceful way. There is no intention of discussing here the proper method of entertaining prospective purchasers or developers, but rather to indicate what work must be
performed by the redevelopment agency prior to that event. Suggestions for the promotion of sites is given in several publications, those of the New York and Pennsylvania Departments of Commerce being excellent examples.¹

Selection of Industries to be Approached

The logic and value of a list of industries based on a "selective expansion" of a community's economic base has been discussed. It is concluded that it provides a reasonable foundation for the selection of industries to be approached in the process of "selling" industrial redevelopment sites. There are two limitations to the use of this list, per se.

One is that it is based solely on the nature of the income of the workers in the various industries and the unbalances in the local employment pattern. While this is indeed important from the standpoint of the community, it considers only one of the several major industrial location factors and is consequently not indicative of the desires of the listed industries to locate in the community, no matter what effect it might have on the local economy. Only in the case of labor-oriented industries does this list give a fairly good indication.


Secondly, while selective expansion industries may be of the proper "type" to aid the community, the "character" of an individual plant in these industry groupings may be such as to be definitely detrimental to the area. Thus in the final stages of selection of individual companies to be approached, the nature of their existing operations, including their relationship with the communities in which they are then located, must be examined to ascertain their true character.

In view of the first of these limitations, the selective expansion list should be narrowed down by several different processes. The first is that of comparing the selected industries with some tabulation which evaluates the importance of the various locational factors to these industries. The United States Department of Commerce has prepared just such a guide and there is also one contained in the aforementioned New York State publication. The former considers 14 factors for 50 industries while the latter lists 4 factors with 12 requirements evaluated for approximately 100 service and manufacturing industries which conform rather closely to the standard Industrial Classification Code.

As an example of this type of tabulation, the New York list is as follows: (1) Raw materials: nearness, bulk transportation; (2) Plant and Equipment: specialized building, power, coal and other fuels, processing water; (3) Labor:

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1 Basic Industrial Location Factors (Washington: U.S. Department of Commerce, Office of Small Business, Area Development Division, n.d.).
special skills, female, male, bulk; (4) Market: consumer goods, specialized. The other locational factors, such as tax rate, climate, and living conditions, are considered important but vary little from industry to industry, being more closely associated with the number of employees or capital investment of a prospective industry.\textsuperscript{1} (The U.S. Department of Commerce publication takes these factors into consideration.) Application of one of these check lists to the "selective expansion" industries will narrow the field to those not only desirable from the employee income standpoint, but also those that can most likely make use of the redevelopment sites. Naturally, if there is considerable variation between the sites being considered, this comparison will have to be made for each one.

A second step in the screening process, although one that should be used cautiously, is the correlation of the remaining industries with those showing the greatest trend towards decentralization, as discussed in Chapter II. Since industry rarely moves a plant "lock, stock, and barrel" from one location to another (except for national defense considerations), those industries having definite policies of centralization would offer little likelihood of establishing a new plant or moving their existing plants to a redevelopment site. Although the factors which determine these trends are subject to change due to technological developments

\textsuperscript{1} Community Industrial Development, op. cit., pp. 20-22.
in the industry, those indicated as having a definite decentralization trend would be the most likely to establish a new plant. The National Industrial Conference Board report itself is the best source of information for this data.¹

Other factors which might be considered in the screening process are: the presence of other industries of the same type in the region, indicating the general suitability of the area; implications of location of the industry in the area—the subsidiary benefits or disadvantages; and its place in the production line, with "foot-loose" industries, neither materials nor market oriented, having the greatest flexibility in location.

Following this screening process, some embarrassment may result from the fact that few if any of the original list of selective expansion industries remain. If this is the case and the list appears too small for successful use, the original list should be examined. One fact is apparent; a selective list that is so narrow that it only includes industries which would help overcome certain local unbalances in the labor supply (as indicated by the specific criteria used in the evaluation process of Chapter VI) may not be entirely desirable. Although they might not correct the unbalance in the labor supply, there are probably quite a few industries which could be added to the list which would not make the unbalance appreciably greater. If we believe that an expanding

economy contributes to the general economic welfare and that new positions in industry will create new jobs in tertiary activities which may help the labor unbalance, then additions to the original selective expansion list are justified. This action is of course determined by the overall community development program and the availability of housing for new industrial workers. If these additions are made, the screening process must again be carried through for these industries.

It should be noted that this process is not very difficult or involved. It does not attempt to eliminate with great accuracy all of the industries which could not economically operate on the selected redevelopment sites, but only to narrow the field down so that only those industries are approached which are most likely to be interested in the sites, saving both time and money on the part of the redevelopment agency. The ultimate decisions on location are still in the hands of the industries themselves—the only ones capable of making or having made a scientific analysis of the suggested sites as they apply to their particular operations. However, since "the quality of such business decisions is sometimes surprisingly poor," the redevelopment agency should be willing to provide technical aid on location if asked for, although it would be expected that the industry would ultimately desire the advice of a more

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impartial judge in the form of an outside consultant.

When a list of possible and desirable industries has been determined for a specific project area or site, it may be advantageous to place it directly on the site plan, with final selection of companies within these industry groupings to be approached contingent upon the outcome of the aforementioned "character study".

Where to Look for Industries

The emphasis up to this point has been on the problem of attracting non-resident industries to the redevelopment sites within the city. However, this is not necessarily the only or the best source of supply, as is indicated by the statement that "about 80 per cent of the economic growth of the average community derives from the creation and expansion of locally-owned and operated industries."\(^1\)

Therefore, the first place to look is within the community itself, with an investigation of the possibility of organization of new industries. Six reasons have been given for this approach:

1. Existing local enterprises sprang from local needs and/or local resources.
2. Existing local enterprises have proved their adaptability to local conditions.
3. Many local enterprises were developed with local money and are using local natural resources. All of them provide jobs for local people. Such interests deserve first consideration.
4. Growth and improvement of existing local enterprises should make them more efficient and therefore more productive of income for local people.

\(^1\) Diehl, Millman, and Wyand, op. cit., p. 36.
5. Internal growth usually results in a net expansion of the national economy. Relocation of industry from one town to another may do little more than shift the checkers on the board.

6. Your Industrial Development Committee will normally get quicker action by dealing with its neighbors who manage local enterprises than it would by negotiating with strangers.¹

The role of the city as an incubator for new industry should not be overlooked, with the larger and better established industrial centers especially attractive for this function. In such areas there are apt to be numerous opportunities for the establishment of ancillary industries, supplying or using the products of the existing firms, or unexploited natural resources. Creamer's calculations showed that whereas the principal cities had the highest industrial birth rates, the industrial peripheries had relatively low birth rates.² This implied movement of industry from the central areas of the city towards the peripheries after they have achieved a certain degree of prosperity is in contrast with the opposite movement of people from their birthplaces in the rural areas towards the city.

The possibility of expansion of existing local plants is the second field for "backyard" promotion. Some aspects of this have already received attention in the relocation survey discussed in Chapter VIII, but a more important and perhaps better response would be obtained after the redevelop-

¹ Ibíd.

ment agency has shown it means business and can display actual site plans for various areas. This expansion may be in a purely local enterprise or in one of the branch plants of an outside concern, with the latter perhaps representing a shift of operations to the community through the expansion of local plants and contraction of operations elsewhere.

It should be apparent that such expansion may not decrease, but rather increase the labor supply-job unbalance if the expanding plant is one of the major contributors to the original unbalance.

The Pennsylvania groups write that experience has shown local industry sometimes needs and welcomes local cooperation in dealing with a good many problems, including the following which fall within the province of industrial and general urban redevelopment:

1. Changes of any kind in buildings or sites.
2. Securing better transportation or adequate public utility service.
3. Improvement of municipal services—police, fire, traffic problems, sewerage, local transportation, etc.
4. Civic action on housing, health, safety, education, relations with government agencies, taxation legislation, publicity, etc.

Here again is an expression of the inherent compatibility of industry's desires and urban redevelopment objectives.

After investigation of these "backyard" possibilities, attention can be turned towards the outside industries which it is hoped can be attracted to the city. For them,

1 Diehl, Millman, and Wyand, op. cit., p. 37 (numbers of items not quoted).
additional work on the part of the redevelopment or development staff is required. Whereas local industries are as well informed as the selling group on the advantages and disadvantages of the city as an industrial location, outsiders must be apprised of these facts.

Much of the needed data can be obtained from the Economic Base study, while the information accumulated in the preparation of the comparative analysis of sites will also prove of value. A comprehensive report containing just this kind of information, along with data on available sites, was prepared by Concord, New Hampshire, for distribution to prospective industrial "settlers". ¹ The Bonneville Power Administration has outlined a suggested procedure for obtaining the necessary background information on a community, and has prepared instructions and field report forms for a comprehensive survey covering all of the characteristics of a community which a prospective industry would be interested in knowing. ² A slightly different type of report, but an excellent one, was that published by Kansas City, Missouri, containing maps of the industrial areas, showing and listing the location of the major industries, and indicating the range of nearly all the conceivable locational costs, from

¹ Concord City Planning Board, Industrial Advantages of a Concord Location (Concord, N.H.: City Planning Board, 1941).

² "Instruction Sheets and Field Report Forms for Industrial Plant Site Survey" (prepared by the U.S. Department of the Interior, The Bonneville Project, Market Development Section, January 1940).
land to insurance to truck fees. This type of publication would be a valuable supplement to general data on the city itself.

The Possibilities of Action

There is practically no experience to indicate how industry will react to the prospects of industrial redevelopment and the sites prepared by this process, although the interest in land adjacent to existing plants made available by rehabilitation of areas has been mentioned. Reference has been made to the compatible objectives of urban redevelopment and the desires of industry, but the actual value of this cannot be determined. It is apparent that several problems will arise in the process of "selling" redevelopment sites.

One is the possible reluctance on the part of industry to commit itself to the acquisition of a site that will not be ready for occupancy for one or more years. Thus a site which will not be available until the land has been acquired, some perhaps by the slow process of condemnation, the industries and people relocated, buildings demolished, and site prepared, must compete with outlying sites already for use with the possible exception of utilities. Since industry is not interested in merely investing its funds in real estate, as are the residential redevelopers, but rather

1 W.D. Bryant and Frances Gaw, Locational Costs in Industrial Areas -- Greater Kansas City (Kansas City, Mo.: Research and Information Department, City Hall, November 7, 1945).
in utilizing land as one of the tools of production, its reluctance to enter into involved proceedings would be understandable. Industries which are in the practice of acquiring sites for future use and which can afford to hold them on that basis would be most likely to enter into redevelopment negotiations. However, this practice is usually limited to outlying sites with lower taxes and costs than would be expected on redevelopment sites within the central city.

Most of this problem centers around the theory that the redevelopment agency must have located an interested party and have a contract in hand before work on the site is started. It is believed that for the most part this will be the case. Arrested areas and other areas that can be prepared with little dislocation of existing industry and at low cost to the agency might be prepared in anticipation of future development by industry. However, it would be unwise for the agency to tie up its funds in expensive land that might not be used for some time in addition to exposing itself to the criticism that would certainly come from the taxpayers in general, as well as industries that had been moved out of the project area.

A second problem is industry's interest in buildings for rent (and sometimes purchase) rather than merely land to build on. This is especially true of those lighter manufacturing industries which are most likely to locate in the central part of the city on redevelopment sites, although one
case is cited where one of our large industries chose to convert a recently built night club of ample proportions, rather than build a new plant.¹ However, the smaller enterprises lack the necessary capital to build or buy their own plants, and failure to consider this problem might result in forcing some of the smaller industries, especially of the "home-grown" variety, out of business. This is made more acute by the replacement of older, lower-rent buildings with modern, higher-rent structures.

These problems bring up two possible solutions, with one that of the redevelopment agency (or city) building the plants for lease. The Mississippi Balance-Agriculture-With-Industry (BAWI) Act of 1936 authorized municipal authorities to buy or build industrial facilities for rent to new industries (at very low rent). This procedure for the most part appears questionable and was a depression emergency measure, although it was revived in a somewhat different form in 1944. It does not appear desirable for the city, through the redevelopment agency or otherwise, to construct the necessary industrial buildings, especially since failure to adhere to the concept of redevelopment as rebuilding by private enterprise would alienate many of the people now supporting it. In addition, in those communities which have constructed buildings for lease to special groups, undesirable industry-community relationships have sometimes sprung up.

¹ McLeughlin and Robock, op. cit., p. 48.
Mention of the Mississippi plan brings up the whole question of special inducements for the attraction of industry into the city. These principally take the form of free sites, payments on buildings, or some form of tax exemption, none of which is advocated here beyond the obvious subsidy provided in the form of a write-down on redevelopment site land costs from the high cost of acquisition and preparation. Industry for the most part does not desire special inducements and the disadvantages in a good many cases offset any temporary gains. With most of the inducements associated with site or building costs, it is only those industries in which these items represent a large part of the total plant investment that they are very effective. As a result, only in the shoe and garment industries are such inducements very generally accepted, with machinery rented in the former case, leaving the building the major part of plant investment, as it is also in the latter case where comparatively little machinery is used.

The drawbacks to municipal construction of buildings direct attention to the second possibility—the development of intown industrial redevelopment areas by "industrial district corporations", such as those of the Clearing and Central industrial districts in the Chicago area. The present practice of these corporations is to purchase a large undeveloped plot of land in an area where industry is permitted (or not specifically prohibited), improve the land, lay out streets, provide railroad sidings for every site, and
dispose of these prepared industrial sites by sale or lease. Going beyond this, the corporation may provide design and building services which will build a plant to suit the purchaser's requirements as well as provide for its financing. For tenants preferring to lease, the corporations build general service buildings, flexible enough to be used by a variety of tenants. In the case of a few of the largest areas, such as the Clearing district, the corporation goes even further and provides "community facilities" such as club rooms and cafeterias for the use of the industries in the district.

The similarity between such industrial district corporations and the usual concept of a private redevelopment corporation is apparent, although their role may be limited. Experience has shown that for the most successful areas, a minimum of 25 to 30 acres is desirable for an independent district, with this allowing for off-street parking for each plant.¹ This minimum size means that not all clearance areas would be of sufficient size to develop on the "district" basis, and the small clearance sites that might appear in rehabilitation areas would be even less attractive for this kind of development. Industrial development corporations should be quite interested in the larger arrested areas for district development. It is not expected that the previously mentioned "community facilities" could be provided in

¹ The information on industrial districts was obtained from a personal interview with Mr. Rice, assistant to Mr. Wells, manager of the Clearing Industrial District, Chicago.
clearance areas unless adjacent industries of sufficient number and size could be brought into the program on some contract basis.

Despite these possible limitations, industrial district corporations should be approached on the possibility of developing the areas prepared through the process of industrial redevelopment. It should be recognized, however, that development by them will call for the abandonment of a strictly "selective expansion" development program, since an industrial developer could hardly afford to operate under such limitations.

A somewhat different attitude must be assumed towards industrial redevelopment than towards residential redevelopment. In the latter instance the ultimate goal is the creation of housing, with projects usually carried through only if there is a redevelopment corporation prepared immediately to build on the land, whereas in the former case, achievement of the intermediate goal of creation of industrial sites may be sufficient justification for the carrying through of the project.

The question of maintenance of open land, or land reserves, for future industrial use has received a small amount of attention in redevelopment circles.¹ Since one of the cited reasons for industries moving out from the central part of the city is a lack of land for horizontal expansion, there is the question of reserving land for future

use, not only by new industries, but by the expansion of existing ones. Again this is a problem which the larger industry can cope with if the land cost is low enough, whereas the smaller industry can not afford to tie up funds in this way.

If these land reserves could be put to some low-density, easily removable use which would produce some income while the land was thus in reserve, the maintenance of such by the redevelopment agency might be justified. Just what these uses could be is difficult to determine and would vary greatly with the condition of the land.

For the most part, such industrial land, unless in a virgin condition, would be unsuited for short-term agricultural uses such as truck farming or allotment gardening. With much of it apt to be filled land, containing the debris from demolition and dumping, this otherwise attractive possibility is limited. If the neighboring industry was not objectionable, the land might be used for temporary displacement housing (preferably of a movable or demountable type) for public housing and redevelopment projects. The short-duration aspect of its use would probably make the land unattractive to used-car lots, open-air industrial storage, or like uses. The maintenance of such areas for temporary uses, such as carnivals, circuses, and open-air roller-skating rinks is one attractive possibility. This is a field requiring considerable study and is completely dependent upon local conditions.
CHAPTER X

LAND ACQUISITION, PREPARATION, AND DISPOSAL

Following the finding of an interested industry or developer and the signing of the necessary contracts (if the redevelopment is to be predicated on prior sale or lease), the agency is ready to commence work on the actual site. The first problem, of course, is the acquisition of the necessary land, with several possibilities open for examination.

The role of the power of eminent domain and justification for its use in industrial redevelopment has been discussed at length. However, it is only one of the methods by which the necessary land can be acquired and is actually one of the least desirable because of the time required for condemnation proceedings. To be more useful, the eminent domain process should be accelerated by legal changes authorizing a "declaration of taking" similar to the Federal procedure of quick condemnation.

Even in its present form, it does serve as a legal weapon to fall back on to insure acquisition of all the necessary land at a reasonable price, having the additional feature of automatically clearing title to the land in question. The title on industrial land in use is very apt
to be in good order but there may be some questionable titles associated with vacant land in the area. An indication of the limited necessity for exercising the power of eminent domain is shown by the fact that in the experience of the United States Housing Authority, it was not necessary to acquire more than 10 per cent of the parcels by condemnation.¹

The suggested procedure is to place the greatest emphasis on open market purchase of the land in industrial redevelopment project areas, with the "threat" of condemnation exerting its influence on asking price. In clearance areas it is expected that many owners will be glad to get rid of their obsolete and vacant buildings, while even the occupied properties could be purchased at a reasonable price if at the same time the owner-occupant is aided in relocating in a more modern plant in a better location. The absentee owner of a profitable building would be the one most likely to cause the use of the power of eminent domain since there is no provision for him to continue his business in the redevelopment areas.

With most redevelopment enabling legislation permitting land acquisition by a number of methods, one of the most important in the case of industrial properties may be by exchange. Industries in blighted areas could be offered, in exchange for their present crowded sites, larger areas of land with room for modern buildings in arrested redevelopment

areas or in other redeveloped blighted areas through the careful scheduling of projects. One possible disadvantage is that exchange might require sale of the new site, preventing continued ownership of the land by the redevelopment agency. Exchange for sites in rehabilitation areas might allow sale without disadvantage, a subject which comes up for later discussion. Finally, an arrangement might be worked out in which the exchange could be expressed as rent-free leased land for a number of years.

Tax foreclosure is another way in which industrial land may be acquired, but the prevailing procedures for doing this are long and costly besides producing a questionable title, making it undesirable in cases where other methods are available. A few states have passed laws permitting in rem proceedings in which the objective is repossession of the land, ignoring all liens and refraining from seeking a money judgement. With this procedure, one low-cost advertisement permits the city to re-acquire control and marketable title to all the tax-abandoned lots within its borders. Successful use of tax-reversion for redevelopment land acquisition is dependent upon the adoption of this system.

In the case of residential redevelopment areas, the possibility of purchase of foreclosed mortgages from the holding Federal credit agencies (such as the Home Owners' Loan Corporation) has been mentioned as a way to get properties easily for reasonable prices. There would be no parallel opportunity for industrial buildings, with the
possible exception of very occasional properties which the
Reconstruction Finance Corporation has acquired and it is
unlikely that they would be in redevelopment areas.

In rehabilitation areas the problem of land acqui-
sition should be simpler, with only some of the properties
to be acquired outright. The land belonging to industries
which remain would not be acquired and such industries should
be quite cooperative in granting the necessary easements and
selling what land is required for the overall improvement in
streets, utilities, and other facilities.

Relocation of Displaced Industries

The problem of the displacement of industries is no
less a problem than the displacement of people in residential
redevelopment. Some industries are just about as financially
incapable of moving, so that measures should be taken to ease
the relocation problem, with the previous survey providing a
background for studying the problem.

One of the prime requirements is that there be ac-
commodations available for these industries within the city.
Since many of them will be small, low capital enterprises,
this means there must be rentable building space, calling in
some cases for the construction of new loft buildings and
other types on new sites before relocation can commence.
Temporary accommodations would necessitate two moves and are
not to be considered a solution unless the industry is de-
sirous of returning to its original location after new
buildings have been constructed. Obviously, considerable study of this problem will be required and a separate group or person familiar with industrial real estate should be a part of the redevelopment agency and assigned the responsibility of coordinating the movement of industries and finding new places to locate.

Since the smaller industries would probably lack the facilities for moving their equipment from one location to another, the expense of this operation with its attendant hiring of special trucks and men might be considerable. With several industries likely to be moving within a short time, some overall plan of operation might prove economical. It is proposed that the redevelopment agency assume the responsibility for intra-city moves up to whatever limit appears legally and financially feasible. This might possibly include using city-owned equipment but more probably a contract with an industrial moving concern to cover all of the necessary moves of that type from a given project area. Even though the agency may be able to pay only a part of these moving costs (if legally permissible), it is believed that this patronizing attitude on the part of the redevelopment agency will result in a better spirit of cooperation on the part of the displaced industries, expediting land acquisition and improving the general reaction to redevelopment.
Site Preparation

After acquisition of the various land parcels in the redevelopment project areas, demolition of the buildings can be started by a private concern under contract with the redevelopment agency. The salvage value of old industrial buildings will probably be slight, with the wooden members oil-soaked and scarred from use, and the hardware items obsolete. As a result, it is not anticipated that demolition can be accomplished without cost to the redevelopment agency.

Concurrently with the land acquisition and clearance programs, the final site plan for the project area should be prepared in accordance with the requirements of the industry or industrial developer who is to do the building. In accordance with these plans, streets and utilities are to be installed in areas for public use but on the sites themselves only the necessary grading and filling to produce an usable site should be done by the redevelopment agency.

Sale or Lease of Land

Considerable controversy in urban redevelopment centers around the question of the sale or lease of the redevelopment sites, with substantial arguments on both sides. These debates are closely associated with the general discussion on the pros and cons of public ownership of land, although with urban redevelopment's present concern with only specific portions of the city, they are not completely analogous. Several aspects of the question have especial
application to industrial redevelopment areas.

Strong arguments for leasing as contrasted with sale have been well phrased by Justement:

It is bad enough that the public should be required to incur this cost once. It will be absurd if we undertake to repeat all the mistakes of the past by permitting the municipality to sell the land. There is no excuse for going through the whole painful process every forty or fifty years.1

The really expensive improvements, which seriously interfere with the desirable development of the city, are multistory apartment houses, commercial, industrial, and institutional buildings. In no case should municipally acquired land be sold for any of these purposes.2

In addition, industry is reluctant to own real estate beyond their own indispensable requirements, and often prefer to lease land rather than own it. Experience in cities where the ground rent system prevails shows that ownership of the site is not essential to industrial development.3 On the other hand, industrial district corporations are predicated on the purchase, development, and sale of land (although some is leased) and it is to be expected that it will be necessary to sell the project sites where such corporations are the redevelopers.

With greater control of the use of land assured by lease than by sale, the latter does not necessarily imply a reversion to the former blighted condition. Sale of the land with restrictive covenants in the deeds of conveyance,

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2 Ibid., p. 36.
3 National Resources Planning Board, op. cit., p. 12.
plus the exercise of the controls contained in modern zoning ordinances and building codes should assure an use of the land compatible with good planning. Even aside from such restrictions, the industrial district corporations are today setting many of the standards for desirable industrial development and, in general, we must look at what private enterprise is doing today, and not what it did 50 to 100 years ago.

The best plan is to provide for both sale and lease of the land in industrial redevelopment areas, permitting the choice of the financial plan best suited to the site in question. There should be a distinction between land in rehabilitation areas and that in clearance areas. In the former case, where redevelopment will produce room for existing industries to expand and space for associated open land uses, such as parking lots, the sale of the land is logical to get it into one ownership and eliminate the possibility of having a plant on half-owned, half-leased land. Even the scattered sites for new industries which may be prepared in rehabilitation areas might be sold rather than leased, depending upon the situation and the size of the site. There is justification in doing this in that the faults of the rehabilitation areas are not necessarily due to the industries themselves, and they should be capable of maintaining the higher quality of the area once it is established with the aid of the redevelopment agency.

In the clearance areas, with their larger sites,
leasing of the land on the basis of 40 to 50 year leases appears more desirable when possible. One advantage is that the industry or other developer will be able to move in without having to worry immediately about the financial arrangements necessary to purchase the land outright. In addition, leasing will permit controls to insure proper use and coordination in an area that may have a multitude of occupants.
CHAPTER XI

FINANCIAL ASPECTS

A complete discussion of the financial problems associated with industrial redevelopment is obviously beyond the scope of this thesis, and only a cursory look can be taken. As mentioned in Chapter I, the discrepancy between the cost of acquisition of built-up urban areas and the possible sale or use-value of this land for re-building after clearance is the raison d'être of the "redevelopment process" which has provided the basis for the discussion and evolution of the procedure.

Some sources have indicated a belief, which appears unwarranted, that industrial redevelopment can be accomplished with little or no need of a write-down of land costs for most industries to acquire redevelopment land and operate economically. But what they could do is not the question. The role of redevelopment areas in their competition with other areas has been duly emphasized and only in the cases of extreme advantages associated with intown sites would industry be willing to pay enough to cover the cost of acquisition and preparation. This is not, of course, necessarily the case with arrested industrial areas which have not been emphasized in this study.
No financial analysis of a possible industrial redevelopment project is available, but a rough picture of the problem can be obtained from data culled from various sources. In Kansas City, industrial area land costs range, for the most part, from 5 cents to 75 cents per square foot, depending upon a multitude of factors, including the particular location, access to railroads, and the size of the site, with sales on an acreage basis much lower than square footage figures.¹ Of special interest is the Central Industrial District, a rather heavily developed area of a type such that the "razing of blighted structures would increase the amount (of vacant land) somewhat."² This district has the highest industrial values in Kansas City, with extremes ranging from 25 cents to 2 dollars per square foot, and the majority at 50 to 75 cents. While this gives some idea of the price individual industries are willing to pay for sites, the Chicago Clearing Industrial District management has indicated that they could pay from 25 to 45 cents a square foot for cleared redevelopment land, with only the basic streets provided and ready for development as an industrial district.³

It is concluded that for the most part, industrial redevelopment land will have to be sold at prices ranging

¹ W.D. Bryant and Frances Gaw, Locational Costs in Industrial Areas -- Greater Kansas City (Kansas City, Mo.: Research and Information Department, City Hall, November 7, 1945).
² Ibid., p. 10.
³ Information from personal interview with Mr. Rice, assistant to Mr. Wells, manager of the Clearing Industrial District, Chicago.
from 25 to 50 cents a square foot to attract large-scale industrial developers and to compete with other areas in the attraction of individual industries, although certainly some sites will command higher prices because of their particular advantages, such as water frontage. One factor which has a depressing effect on land prices is the present high building costs, which is especially true where a company has only a fixed amount to invest in new plants. Considerable industrial construction is being postponed because of these high building costs.

In contrast with these sale prices are the probable costs to the redevelopment agency for the acquisition of the land. In Providence, for example, the assessed valuation of industrial land alone ranges from 20 cents to 3 dollars per square foot, including valuations of 1 dollar along some blighted waterfront area and as high as 2 dollars and 50 cents along one important street which divides two areas already defined as residential redevelopment areas and in which considerable industry is located.\(^1\) It is quite obvious that in some of the central industrial areas which will have to be acquired for industrial redevelopment the land alone will cost more than 50 cents per square foot, and adding to that the expense of acquiring the buildings and preparing the site, it is equally apparent that in some cases the write-down required may be considerable. Conclusions based on a

\(^1\) Information from personal interview with Mr. Albert Galotta, City Assessor, Providence, R.I.
synthesis of data from different cities may be open to question, but it is believed that the figures used are at least typical enough for this very rough comparison.

While arrested area redevelopment might show a profit due to the lower cost of acquiring land, there are two favorable possibilities for built-up areas. One is in the rehabilitation areas, where the industries might be willing to pay a price at least equal to the cost of acquisition and preparation for land adjacent to their plants in which they already have a heavy capital investment. As an example, one plant in Providence recently paid 5 dollars per square foot for land in which to expand their operations. While it is not necessarily expected that industries would be willing to pay this much in the normal redevelopment operation, they might be willing to pay the lower price that could result from the use of the powers of eminent domain for the acquisition of property. It is obvious that land is usually more valuable to the adjacent industrial plant than to one not in the area.

The other possibility for the reduction of the write-down on redevelopment land is the use of long-term leases, which may permit the spreading out of the high acquisition cost over a longer period of time. On the whole, however, it is concluded that industrial redevelopment will cost the municipality money.
Source of Funds

Mention of these costs brings up the question of a source of funds with which to absorb the write-down losses. It is difficult to see how the cost can be borne ultimately by any other than the municipality itself. Loans from state and Federal governments, utilizing their low-interest rate bonds to reduce the cost, appear feasible, but direct grants-in-aid from either source would be subject to criticism due to the competitive nature of industrial redevelopment. Such action on the part of the Federal government, especially, would imply somewhat more economic planning than has been voted for so far. In general, the creation of desirable industrial areas in certain sections of certain communities is not really a Federal problem and in only some cases could it be considered a state problem.

Tax Aspects

Closely associated with questions of financing and leasing of redevelopment sites is the matter of taxation. Industrial redevelopment with leasing of land opens up avenues of escape from the conditions that in many places are helping to drive industry away from the city. With the ad valorem tax increasingly damned, revenue-producing rent could replace such taxes in redevelopment areas. If leases were drawn with a rent based on a percentage-of-profits and a guaranteed minimum, then industry would be benefited with
an overhead item that varied with economic conditions, while
the city would always be assured of at least the minimum
rent.

In cases where land is sold and taxes collected in-
stead of rents, several possible changes in assessing methods
have been suggested, all, it is believed, requiring changes
in state laws. These include proposals for basing assess-
ment more on the income or annual use value of the property
than at present, and Walker's promotion of a system which
retains a levy on land as at present, but with the levy on
the improvements based on imputed earnings.¹ Justement,
aiming at the elimination of obsolete buildings, proposes a
building permit providing for a legal life of 50 years on
buildings (after which they would be destroyed) with those
willing to accept such a limitation receiving a 2 per cent
per year reduction in the assessed valuation of the improve-
ments.² This would seem to assume a constant flow of new
construction within the city to keep the total assessed
valuation up, which is at least a desirable objective but
one as yet far from being attained. The question of changes
in local taxes on industry and leases tied to profits is com-
plicated by different state corporation taxes on earnings,
profits, personal property, and so on. The whole problem

¹ Mabel Walker, Urban Blight and Slums (Harvard City
Planning Studies, XII: Cambridge: Harvard University Press,
1938), p. 255.

² Louis Justement, New Cities for Old (New York:
of industrial taxation should be studied as an unit.

**Subsidy for New Industry**

Although special inducements to attract industry into the city have been frowned on in the suggested procedure, one type of subsidy is advocated. That is one to aid new "home-grown" industries just organized, with such subsidy in the form of rent reduction or short-term tax exemption. If the old, low-rent buildings are going to be eliminated, new activities with very limited capital might have trouble meeting the rents in more modern industrial buildings. Studies of industrial experience would show in what length of time such industries could be expected to have grown to the point where they could pay their own way and take their proper place in the economic life of the city. Industries failing to grow sufficiently might, of course, be forced out of business at the end of the specified time but the assumption is that such are not basically healthy and would not contribute materially to the economy. The important role of home-grown industry has been discussed, and the right to start new enterprises a fundamental one in our society—industrial redevelopment must not be guilty of destroying the opportunity for industrial innovation.
CHAPTER XII

OUTLINE OF THE SUGGESTED PROCEDURE

1. Preparation of the required planning studies.
   A. Economic Base Study, including recommendations for "selective expansion" of the economic base of the community.
   B. Industrial Movement Study, indicating the locational trends of industry within and around the city and including the reasons for selection of locations and for moving.
   C. Proposed Land Use, with at least the industrial areas well defined.
   D. Major Highways, with both existing and proposed highways and expressways.
   E. Public Transit and Transportation Facilities, especially as they relate to the movement of goods and people to and from the industrial areas.
   F. Population Distribution, for correlating labor supply with the location of industrial areas.

2. The delimitation of blighted industrial areas.
   A. Selection of delimiting criteria, with the following suggested:
(1) Absence of off-street loading space (and perhaps parking space).
(2) Presence of uses prohibited in the zoning ordinance.
(3) Non-conformance of buildings with fire zone requirements of the building code.
(4) Incidence of fires.
(5) Long-term decline in land values.
(6) Inadequate streets for required uses.
(7) Continued building vacancy.
(8) Frequent changes of occupancy.

B. Delimitation of redevelopment areas on city-wide basis, with two types of blighted built-up areas recognized:

(1) Rehabilitation Areas in which the blight is indicated by non-industrial and/or non-structural elements.

(2) Clearance Areas in which the blight is manifest in the industrial structures themselves.

3. Survey of existing industries to determine attitudes towards redevelopment sites and relocation preferences.

4. Selection of project areas for study, with determination of areas suitable for redevelopment as an unit and preparation of tentative site plans.

5. Comparison of proposed project sites with competitive sites in the region from the standpoint of location factors, with subsequent elimination of those which do
not appear attractive to industry.

6. Preparation of detailed site plans for promotional purposes.

7. Selection of outside industries to be approached.
   A. Use of "selective expansion" list from Economic Base Study as basic list of industries.
   B. Screening of list by consideration of locational factors for those industries.
   C. Final screening on the basis of decentralization trends and other factors.
   D. Expansion of original "selective expansion" list if necessary to provide a sufficient number of possible industries after screening.

8. Investigation of possibilities for project development by:
   A. New "home-grown" industries.
   B. Expansion of local industries or branch plants.
   C. Outside industries on the selected list, with the individual companies to be examined by a "character study".
   D. Industrial district corporations.

9. Acquisition of land in project sites.
   A. Direct purchase the principal means with occasional condemnation where necessary.
   B. Possible exchange of sites in blighted areas for new sites in arrested redevelopment areas or in other projects.
   C. Relocation of displaced industries with the aid of the redevelopment agency.
10. Preparation of sites in accordance with the final site plans completed after consultation with the industry or developer.

11. Disposition of the sites.
   A. Leasing recommended for clearance areas except when
development by an industrial district corporation
necessitates sale.
   B. Sale permissible (and recommended in some cases) in
rehabilitation areas.
APPENDICES
APPENDIX A

PERSONS INTERVIEWED AND OFFICES VISITED

American Federation of Labor, National Headquarters, Washington, D.C.:
Miss Florence Stone

Boston Fire Department, Fire Prevention Division, Boston, Mass.:
Acting Chief Carl S. Bowers

Cambridge Board of Assessors, City Hall, Cambridge, Mass.:
Mr. Thomas Ahern, Assessor
Mr. Thomas Gibson, Assessor

Clearing Industrial District, Chicago, Ill.:
Mr. Rice, Assistant to Mr. Wells, Manager

Committee of Industrial Organization, National Headquarters, Washington, D.C.

Commonwealth of Massachusetts, Department of Labor and Industries, Division of Industrial Safety, State house, Boston, Mass.:
Mr. Pratt, Inspection Supervisor

Commonwealth of Massachusetts, Department of Public Safety, Building Inspection Department, 1010 Commonwealth Ave., Boston, Mass.:
Mr. A. V. Beaudry, Inspector
Housing and Home Finance Agency, Division of Slum Clearance and Redevelopment, Normandy Building, Washington, D.C.:

Mr. Cornelius Beard
Mr. James Drought, Assistant to Mr. Carl Feiss
Mr. John Innes, Planning Analysis Section, Community Planning and Development Branch

Mr. Louis Kahn, Architect, Philadelphia, Pa.

National Fire Protection Association, Boston, Mass.:

Mr. J. K. McElroy, Assistant to the Technical Secretary

National Security Resources Board, Information Office, Washington, D.C.

New England Fire Rating Association, Municipal Department, Boston, Mass.:

Mr. P. C. Charnock, Manager

Massachusetts Institute of Technology, Department of Building Engineering and Construction, Cambridge, Mass.:

Prof. H. R. Staley, Associate Professor of Building Construction

Massachusetts Institute of Technology, Department of Business and Engineering Administration, Cambridge, Mass.:

Prof. C. J. Brown, Assistant Professor of Business Management

Michael Reese Hospital, Planning Staff, Chicago, Illinois:

Mr. Reginald Issacs, Planning Director
Mrs. Beth Simkin

Mr. Paul Oppermann, Director of Planning, Department of City Planning, City and County of San Francisco, California, (letter).
Philadelphia City Planning Commission, Division of Land Planning, Philadelphia, Pa.:

Mr. Sidney Barnes, Senior Site Planner
Mr. O. M. Fanning, Senior Land Planner
Mr. James Dillon, Assistant Land Planner


Providence Department of Finance, City Hall, Providence, R.I.:

Mr. Albert Galotta, City Assessor

Providence Redevelopment Agency, City Hall, Providence, R.I.

Mr. Louis B. Wetmore, Executive Wetmore
Mr. Donald M. Graham, Senior Planner
Mr. Harold Toal, Associate Analyst


Miss Sophronia M. Elmer
Mr. Irving Rubenstein, Division of Industrial Relations
Mr. Abraham Weiss, Division of Industrial Relations
APPENDIX B

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Miscellaneous


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