urban renewal planning in israel

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INTRODUCTION

Moshe Hill

The planning of urban renewal may be viewed as the planning of public intervention in the process of urban change in order to achieve public objectives. An analysis of this process inevitably leads to a recognition of the complex ramifications of the urban renewal phenomenon both from a spatial and a functional point of view. Such interrelationships are evident from the set of papers published in this volume. These papers were presented at a symposium on Urban Renewal Planning that took place at Technion, Haifa in June 1970.

The first part of this volume is devoted to two papers which provide a theoretical and methodological perspective. The paper by Hill and Shechter demonstrates how the complex interaction among areas and functions that must be taken into consideration in urban renewal planning, can be presented in the form of a simulation model. This model, which provides the basic data for the eventual plan evaluation, is considered more suitable for purposes of urban renewal than a mathematical optimization model. Nathaniel Lichfield analyses urban renewal planning in the context of the entire urban system. He demonstrates how the balance sheet of development may be employed in describing the interrelationship of various elements in the urban renewal process.

The second set of papers is addressed to social aspects of the renewal problem. Chester Rapkin emphasizes the social implications and consequences of renewal. He holds that rehousing the poor is the key element of urban renewal and is thus a most important consideration in evaluating the success of renewal programs. Ayala Hirsh studies the families re-located from Kfar Shalem to Nave Shalom, analyzing their population characteristics and the relationship between these and the problems involved in effecting the transfer. Population mix in the new location is viewed as desirable in order to avoid simply transfering problems from one location to another.
frequently economically inefficient. Different countries have
developed different institutional solution to problems of the
urban slums but the phenomenon is apparently a general one
and inevitably the interaction of the physical, social and
economic factors requires a comprehensive solution.
THE USE OF QUANTITATIVE MODELS IN URBAN RENEWAL PLANNING

Moshe Hill
Mordechai Shechter

INTRODUCTION

The city and its neighborhoods are in a constant process of change due to the mutual effects of the various factors at work in the urban environment: economic, social and physical factors.

Urban renewal can be defined in this context as a planned public attempt to give direction to the process of urban change. Urban renewal programs, both for an isolated site and for the gradual renewal of the entire city, can be viewed as the planning of the quality, location, quantity, and direction of urban change.

Evaluation in depth of urban renewal programs demands understanding of the process of urban change whether in considering alternative programs for a single site, in determining preference with respect to the selection of renewal sites, or in policy determination for renewal of the city as a whole.

The traditional methods for evaluating programs of urban development in general and urban renewal in particular, are mainly based on economic analysis. Cost-benefit analysis, the customary tool used for this purpose, is limited to the evaluation of economic aspects, and even so relates only to aggregate effects on the city (or state) as a whole. This method does not relate different effects on various sectors, zones, or population groups within the city. In the last few years, doubts have been raised as to the kinds of answers which this approach supplies for urban development programs, in view of the aforementioned limitations. New methods of evaluation have thus been developed which take into account the contribution expected from urban renewal, with respect to the complex of relevant goals - whether economic, social or physical. Aside from this, since these goals may
take on a different degree of importance for different population groups or with respect to different zones within the city, the new methods of evaluation attempt to estimate the degree to which goals are achieved with respect to sub-groups and areas within the city.

The improvement in evaluation and the expanded treatment of additional goals and their effects on various population groups require a great deal of variegated data. With the present level of knowledge, certain effects can be estimated in detail, explicitly, especially when these relate to the given renewal site and to the population which will continue living there after the execution of the renewal program. However, very little can be said of the population which is outside the renewal site, including those transferred from the site, and especially those who are not relocated in specific projects outside the renewal site. Likewise, it is not feasible to evaluate the effect of renewal programs upon the physical and economic situation of the urban surroundings outside the renewal site. In addition, questions such as the following cannot be answered: What is likely to happen if the site is not rehabilitated? - What would the natural change process be on the same site if there were no intervention with respect to changes in population, land uses, land value, etc.? - What is the preference with respect to the composition of the site's population in terms of age, income, and ethnic groups in the renewal process and in the various renewal stages?

In order to estimate objectively the effects of renewal programs upon the urban surroundings outside the renewal site and upon the site itself, a thorough understanding of the process of urban change is needed. Such an understanding can be arrived at only after the explicit identification of principal parameters of urban change and the functional interdependence among them. On the basis of this information, it is possible to predict the effect of changes in those parameters resulting from public intervention (that is, urban renewal).

In the last few years there has been an increased use of quantitative tools, such as mathematical models, for forecasting and evaluating these effects and as aids in urban renewal policy formulation.
Through the use of mathematical functions, a mathematical model attempts to give expression to the interrelationships among the factors characterizing the urban system. That is to say, the model is aimed at identifying the main parameters which characterize the city and at estimating quantitatively the interrelationships among these parameters in order to reflect the dynamic reality of the city. With the help of such a model, the implications of urban renewal programs can be examined with respect to given public objectives, both from the point of view of the isolated site and its population and from the point of view of the city as a whole, its population and characteristic spatial distribution.

Most of the models which have been developed to date for these purposes can be divided into two main types: simulation models and optimization models.

In the first group an attempt is made to simulate the development of the city on the basis of present and past data and a given policy. For example, by using certain basic data on employment, population, distribution of the different kind of land uses, the social structure at a given period and the interdependence among the various policies, one can forecast employment, population, land use distribution and social structure for some future period. The complexity which characterizes these models does not allow for their solution by means of traditional mathematical methods, but calls for the use of simulation. Simulation makes it technically possible to investigate many interrelationships and to identify the majority of effects arising from some specific planning activity.

Optimization models, on the other hand, are normative models; that is, they deal with the optimum allocation of limited resources among competing uses. Most of the mathematical optimization models that have been developed for urban planning purposes are linear programming models. In these models, all interrelationships among the variables are linear. Below we shall survey these two quantitative approaches to urban renewal in greater detail.

Most models that have been developed for urban planning attempt to explain and forecast land use distribution. They fulfil an important function in the planning of transportation, housing distribution, etc. Although these models do encompass some aspects of urban renewal, they were not developed especially for this purpose; hence their sensitivity to urban renewal alternatives is small. Only a limited number of models have been
developed specifically for the purpose of urban renewal planning. Among these are the models for Pittsburgh (12), San Francisco (10), New York (11), and Penn-Jersey (6) in the United States, as well as a number of models recently developed in England. (1,3,4,5,14,15,16). A number of linear programming models for urban renewal have also been developed in Israel (2,9,13).

A GENERAL REVIEW OF SIMULATION IN URBAN RENEWAL

A. General Outline of Simulation Models

A simulation model (that is, a model employing mathematical simulation to reach a solution) attempts to reproduce reality in order to attain several objectives:

1. The prediction of how complex processes will develop as these are reflected in the number and types of relationships among the variables.
2. The analysis of complex problems involving considerable functional interdependence between variables.
3. The tracing of the changes in the simulated reality, as a result of changes in the variables controlled by the policy makers.
4. The provision of aid to decision-making with regard to processes and problems with which there is no previous experience.
5. The identification of "bottlenecks" and other possible problems long before they arise, making it possible to solve these more effectively.

1) General Structure of the Simulation Model

A simulation model has the following components:
a) Variables represent the basic elements of reality relevant to the problem being investigated. They are classified into exogenous and endogenous variables.
   i. Exogenous Variables are independent variables, the input of the model, whose values are set outside the model. These variables may be controlled or uncontrolled. "Controlled Variables" are those which the decision makers can control while uncontrolled variables are those
that cannot be directly changed by the decision-makers.

ii. *Endogenous Variables* are dependent variables or output variables. Their values depend upon the processes simulated in the model. "Output variables" are those whose final values constitute the results of the model.

b) *Functional Relationships* express the connections among the various parameters and variables, and are usually represented by mathematical equations.

c) *Parameters* appear in the mathematical functions as constants (co-efficients) which do not change during the simulation process. The estimation of these co-efficients is performed through statistical methods from data relating to the simulated system.

2) Solution of the Model

The solution for the system is obtained in the following manner: for a given "history," given values of uncontrolled variables, and a given policy, the model is "run" on a digital computer. The computer processes the data through the model, yielding the output in the form of a single series of values for the endogenous variables. Through repeated runs, the behavior of the system (in terms of the internal variables) is obtained for a large number of periods. Thus simulation yields an inductive solution, as opposed to the more common analytical deductive solution. Assuming a change in policies, the behavior of the system can be simulated under the new conditions.

Simulation is not a substitute for customary methods of solution. Simulation is applicable where an analytical solution is either impossible, more complicated or more expensive than simulation. If an analytic solution is possible, then the use of simulation is inefficient and wasteful for solving the problem.

3) The Simulation Model in Urban Renewal

Every model which tries to simulate the development process of the city (or part thereof) necessarily attempts to describe a complicated and dynamic reality involving elements of uncertainty in the behavior of its components (people). There is therefore a stochastic element in the
model. In addition, there is a multiplicity of variables in the system with complicated interrelationships. A simulation model is thus very helpful in the field of urban renewal planning.

Simulation of the urban development process has not yet been successfully perfected and we may assume that even in the future it may not reach perfection. Yet, there has been some success in building models for certain purposes, such as urban renewal, which according to their proponents have contributed to the understanding of the renewal process and the factors affecting it. These models can be powerful and useful tools in the hands of decision-making bodies for predicting effects resulting from their decisions.

Two models which have been proposed for evaluating the effects of urban renewal will be described briefly - the models for Pittsburgh (12) and San Francisco (10). These reflect two different approaches to the treatment of the problem.

B. The Pittsburgh Model

The model for Pittsburgh is based on the Lowry model (7) both in its theoretical approach and in its causal structure. The starting point for the Lowry model is the basic industries in the urban areas. The locations and sizes of these industries are given exogenously. Distributed around these industries are the residences of the employees, and around these - commercial and service establishments. Beyond the commercial and service locations one again finds the residences of employees, causing further expansion of commerce and services, and so on. This process stabilizes when all the (given) population is distributed. From this we may conclude, according to Lowry, that in a given city, once the location of its basic industries is specified, we can simulate the present structure of the city or we can predict its future structure on the basis of industrial development forecasts. The model enables us to identify different population groups exhibiting different distributional behavior around their places of employment and around the consumption and service locations. Each population group with homogenous
tastes tends to live in locations in which people from the same group are concentrated.

The internal variables describe the distribution of the population. External controlled variables refer to external development and investment plans, both private and public, as well as to projected activities in urban renewal and improvements in the capital supply in the city (reconstruction, expansion of services, improvements in commercial centers and parks, and other public-initiated activities). By running the model with different values for the decision variables, the policy-makers can forecast the possible results of their different actions.

Recent adaptations of the Lowry simulation model were made in England in the regions of Preston-Chorley-Leyland (1,5), Reading (3), and Bedford (4). Other sectors likely to influence the location of residences, such as health and education, were taken into account. The population was divided into different homogenous groups from the point of view of their range of tastes in choice of residential locations. The population and basic employment forecasts were made by a sub-model which is dependent upon the development of the city. Lowry's assumption that distribution is dependent only upon employment was changed with attention also being focussed on the housing supply.

C. The San-Francisco Model

The simulation model for San Francisco (8,10) differs from the Lowry model in several respects, both in its basic approach and in the range of problems that it treats. This model concentrates on the problem of housing allocation and does not delve into the problem of the allocation of land for industry and commerce; consequently it does not deal with the interdependence between these land uses. The main emphasis of this model is on the simulation of the activities of the housing market in the city from the point of view of supply and demand aiming at attaining equilibrium for each period.

The basic assumption of the model is the existence of equilibrium in the housing market. New housing construction and housing improvements are conditioned by their profitability. The rise and fall of prices results from a surplus supply
or demand. Public intervention through entrepreneurial activities and limiting ordinances which generate or forbid improvements are also taken into account.

The internal variables of the system are forecasts for the various kinds of population, each with its complex of taste as expressed in the demand for housing and for urban renewal and development plans. The model is sequential: the input for each period is composed of the external variables and the land use supply, as generated by the predictions of the model from the previous period. These data are fed into the housing market model. The output of the market model includes residential land use forecasts for the given period. The process is repeated for a given number of periods. The analysis of alternatives for urban renewal and redevelopment requires additional runs of the model through the same number of periods for each alternative policy.

The last stage is composed of a cost-benefit analysis of all the policies in the light of the goals posed by the policy-makers with the recommended program being selected on this basis.

D. Evaluation and Comparison of the Pittsburgh and San Francisco Models

The principal difference between the two models lies in their basic approach to the problem of distribution. The San Francisco model attempts to simulate the market activities, and on the basis of this to reconstruct the urban distribution pattern. On the other hand, the Pittsburgh model postulates certain rules of population distribution pattern for each specific case.

The two models also differ in the problems they encompass and in the levels of detail of the problems with which they deal. The San Francisco model treats only one aspect of urban distribution - residential distribution.

This aspect is developed in isolation without an attempt to relate it to other land use distributions
and without an attempt to find the relationship between this distribution and the entire urban growth process. In contrast, the Pittsburgh model attempts to deal simultaneously with all the problems and interdependencies involved in the urban growth process, though it does not go into as much detail as the San Francisco model.

According to the comments of the model-builders, it seems that in the future the trend is towards a convergence of the two approaches. For example, in San Francisco they are inclined to include other aspects of the problem of urban growth and development, while in Pittsburgh there is a trend towards a greater level of detail.

**LINEAR PROGRAMMING MODELS FOR URBAN RENEWAL**

Linear programming models belong to the group of optimization models. Economic optimization as employed in urban planning is concerned with the problem of allocation of scarce resources for the different urban uses in an optimal manner.

In Israel much use has been made of this kind of model as an aid and tool in urban planning. On the other hand, there are few reports in the literature of use being made of linear programming for the specific purposes of urban renewal.

**A. The General Structure of a Linear Programming Model**

A linear programming model is composed of two main parts: a) Objective function b) Constraints

In the process of obtaining a solution, the value of the objective function is brought to a maximum (or minimum) on condition that the optimal values of the model variables are within the limits set by the constraints.

All decision variables appearing in the objective function and in the constraints are related linearly. The linear relationships in the system allow the use of accepted efficient methods of solution (algorithms) for calculating optimal values, internal variables and control variables for the decision sought.
B. The Objective function in the Urban Renewal Model

The objective function in the urban renewal model reflects the objectives of the planners or of the renewal policy-makers in view of the special characteristics of each renewal site. The objectives of urban renewal differ from case to case and depend to a great extent upon the bodies responsible for renewal. In addition, there usually is more than one objective facing the planners in the execution of certain renewal activities. For these reasons, it is not possible to define an objective function unambiguously which will meet the demands of the planners under all conditions; each case must be weighed on its own merits. Nevertheless, one can cite a number of central objectives, as well as some problems involved in the process of formulating them quantitatively:

1) Increase in the welfare of the residents of the renewal area through improvements in standard of housing, and in economic and social services.

The problem of measuring individual welfare in quantitative terms has not yet been solved. Moreover, the problem is even more difficult in the measurement of public welfare of consumers since here we are dealing with subjective benefits to the individuals involved in the renewal process. This is not the place to go into these in detail. Despite these difficulties, this approach is becoming increasingly common, though the solutions obtained are limited to ensuring each individual a minimum level of housing and services, without jeopardizing those whose housing standard and services are above that minimum.

2) increasing the general welfare of the city or region, or achieving efficient utilization of the renewal area from the point of view of the general public.

The problems involved in defining the objective function are especially difficult in the above case. They hold not only for urban renewal, but for urban planning in general. On the whole, it can be said that
the efficient utilization of urban land is expressed in the willingness of the public to pay more for this land, and thus in increased prices or rent derived from the land. The main problem in this approach is to estimate in advance the value attributed by the public to dwellings and various land uses under alternative policies. Usually, a solution to this problem must be found outside the model.

3) **Maximum profit from urban renewal**

This objective does not necessarily negate the objective of improving the welfare of the inhabitants. The additional income derived from the sale or rent of buildings and land can be taken into account in the calculation of income. In addition to these direct sources of income, there may be indirect ones as well. If the planning authority is a municipal one it can take into account future income from taxes, increase in the value of property adjacent to the renewal area, etc. These calculations must also be made outside of the model. Usually, this type of objective function is the easiest to express quantitatively.

C. **Constraints**

Two basic constraints usually appear in this type of model. The first is the land constraint. The constraint serves to ensure that the total amount of built-up land does not exceed the total area available for building. Sometimes this constraint may appear as an equation - that is, the model must find uses for the entire area. The second constraint pertains to the total number of housing units to be built. Generally, the problem is one of distributing certain population within the given area, and the objective is to build a sufficient number of housing units for this population. On the other hand, in some cases the objective may be just the opposite - to prevent over-crowding or to obtain both results at the same time.

In Israel several linear programming models for urban planning have been developed. They are: the model developed by the Israel Institute of Urban Studies which has been used in Yavneh, Kiryat Shmonah, and Safed (2);
linear programming model for Ramle, built by a research team from the institute for Planning and Development (13); and the model developed for the Nachlaot urban renewal plan (9).

COMPARISON OF SIMULATION AND LINEAR PROGRAMMING MODELS IN URBAN RENEWAL

The advantages and disadvantages of the two types of models - simulation and linear programming - used for urban renewal planning can be summarized as follows:

A. Advantages of the simulation model:

1. The model can be brought to approximate the simulated reality to a greater extent than other kinds of models and therefore is most useful for evaluating complex decisions.
2. The model is not limited to any specific types of interdependencies among the variables. All types of relationships including non-linear relations and stochastic processes, may therefore be included, as long as these are prone to quantitative expression. Therefore, external effects, economies of scale, etc., can be estimated with the help of this type of model.

B. Disadvantages of the simulation model:

1. Simulation is a relatively expensive technique for the solution of quantitative models.
2. Simulation is not an optimization technique. In order to select among alternative programs, the model must be run for each alternative separately.

C. Advantages of the Linear programming model:

1. The plan which the model selects is the best among all possible plans in terms of the objective function defined.
2. The model is standard, simple and inexpensive to run and use.
D. Disadvantages of the linear programming model:

1. In many cases the linearity of the model does not allow the expression of the objective function and constraints in a realistic manner, for in reality the functional interdependencies may not be linear.
2. It is difficult to use the model for the planning of processes in which there is an element of uncertainty.
3. The linear programming model cannot predict the processes of urban developments under different alternatives for renewal policies. That is, it is not a descriptive model, but only a normative one.

SIMULATION OF URBAN CHANGE IN ISRAEL

In attempting to build models for urban renewal planning in the Israeli context (or in any other specific situation) one is immediately confronted by the fact that the parameters and relationships which are appropriate for cities in other countries, are not always directly applicable to the local situation. Therefore, in constructing models for urban renewal - both linear programming and simulation models - there is a need to relate to the characteristics unique to that renewal area. One must thus collect the basic data for each city anew.

On the basis of this data a dynamic simulation model can be built for urban renewal planning in Israel. The model can be used as a tool for forecasting the expansion of housing, services, and commerce throughout the urban area when population growth and basic industrial development forecasts are given.
A forecasting tool should be sensitive to changes resulting from external intervention in the framework of urban renewal in order to make it possible to observe changes taking place in the urban distribution pattern as a result of such intervention.

A simulation model can contribute to the understanding of the urban distribution process and to the identification of the major factors which directly influence this process. The model can also point to additional research which is required in order to improve its forecast capacity. The simulation model here proposed tries to integrate the approaches of the two simulation models mentioned previously. It is an attempt to arrive, on the one hand, at an appropriate compromise between
the desired level of detail and the amount of information required and, on the other hand, at maximum savings in the costs of building and running the model by allowing a certain amount of generalization of the simulated processes.

A. Assumption and Theoretical Basis

In general this is a distribution model which does not attempt to simulate the processes of decision-making of individuals or private groups for whom only a limited amount of data is available. Rather, it is based on the assumption that the system is in equilibrium - i.e., that there is a balance between the supply and demand for land uses. Specifically, the assumptions upon which the model is based are as follows:

1. Exogenous population growth.
   The assumption is that the size of the population affects its spatial distribution and that there is no feedback effect on changes in population growth. Under existing conditions in Israel, where a sizeable portion of growth in population is a product of the policy of directing population and employment sources to specific settlements, this assumption seems warranted. In later stages of building the model, it will be possible to try to identify the feedback effects, if they in fact exist.

2. Exogenous growth of basic employment locations.
   Locations of basic employment are those places of employment which produce goods and services not only for the population in the immediate vicinity but also (and mainly) for the national market or, at least, for the metropolitan market. This category therefore, includes factories, large wholesale commercial centers and markets, nationwide service units, and also retail commercial centers and services which attract customers from the entire metropolitan region. The assumption that these places of employment are not affected by the population distribution in the immediate vicinity seems plausible. Clearly, the growth of commercial and service centers which at present supply goods and services to the immediate population may in the future require
their classification as places of basic employment. Initially, this phenomenon can be ignored since it is a long-term development. In future stages of developing the model, this phenomenon needs to be investigated.

3. Population distribution around places of employment, choice of residential neighborhoods and types of housing.

The spatial distribution process is divided by the model into three main stages. The order of these stages is chosen because of ease of manipulation and the model does not purport to reflect the actual order of choice processes, it being assumed that the final result will not be affected by the order of choices in the model. The three stages are:

1) The choice of residential zone within the urban area.
2) The choice of apartment size and type of structure in the zone.
3) The choice of type of neighborhood within the zone.

A detailed description of each stage follows:

a) Selection of the residential zone within the area

Empirical and theoretical research which has been carried out on cities with a single center in which most travel is to this center, has shown that the population distributes itself around the center in concentric circles. In these investigations the distance is usually measured in units of space or time, and the population density falls off according to an exponential or gravity function of the distance. Practically, there is no meaningful difference between the two functions, and very good correlation has been found between them. In addition, it seems that there exist "zones of indifference" - i.e. rings of various widths around an employment center in which people are indifferent to their location with respect to the distance from their place of work.

The factors which set the exact location within this ring are determined in the following two stages.

b) Choice of apartment size and type of building

"Apartment size" refers to floor area (or to the number of rooms) and "type of building" refers
mainly to the land area per housing unit. In principle, each family has the option of choosing either a place of residence close to the center in a smaller apartment at higher density (less land area per apartment), or a location further from the center in a larger apartment at lower density. From this it is evident that in a given zone of indifference, as defined above, a homogenous population group will live in apartments of a given size and density. With the aid of estimates of the distribution of apartment types for each population group and for each zone, the model will be able to simulate the processes of allocation of appropriate apartments to each type of population group for each zone and hopefully to arrive at a result approximating reality for the total population from period to period.

c) Choice of neighborhood type

The assumption here is that each population group will locate in a number of neighborhood types in each zone of indifference according to its system of preferences. Growth of the neighborhood resulting from the transfer of new population groups and from changes in density alters the character and type of neighborhood. Therefore, with the passage of time a portion of the existing residents leave and new population groups enter the various neighborhoods. However, in order to achieve exact simulation of the population exchange process in the different types of neighborhood, research must be carried out on patterns of population turnover as a result of changes in size of neighborhood, in housing density, the development of shopping centers, or the population composition of the neighborhood. Such research is still almost non-existent.

The assumptions related to population distribution are not intended to simulate the decision process of each individual in the population with respect to the location of his residence, but only to express a situation of equilibrium in the housing market, that is to
say - the sum-total of decisions by all the individuals involved. Similar assumptions have served as a basis for the construction of urban simulation models already in use.

4. The Location of Shopping centers and Neighborhood Services.
Shopping centers and neighborhood services will be located such that the population which they serve will be distributed around them according to a gravity function, where the size of the shopping center is a function of the population distributed around it and of the distance from the residential area to the shopping center.

B. Description of the Model

A general flow chart of the model follows, with explanations as to its mode of operation.

Stage 1. In this stage the population groups are distributed according to the distribution function. This function distributes the population around its place of employment. It is assumed that people are indifferent to their exact location with respect to their place of employment within a certain zone. The distribution will therefore be related to wider urban areas. Inside these areas the groups will be distributed in accordance with additional assumptions.

Stage 1.1 In each period the distribution function will change with respect to each employment center, corresponding to changes in the size of the center. In most of the zones and for most types of population there will occur a growth in density. It is possible that the density of certain population groups in some zones will decrease, and a transfer will take place from one zone to another. In this case older apartments will be left empty in the zone. These apartments will be added to the supply of apartments which will be occupied by other population groups.
INPUT A
1. The Population
(a) The existing population
(Number of Households): Classification of population groups according to size of household and characteristics of family head: age, country of origin, occupation and income. In the first period: the present location of these groups, type of apartment, age of structure, type of neighborhood and location of place and work.
(b) Addition of new population groups according to aforementioned characteristics.
(c) Change in status of existing population groups due to change in household size or change in income, education, in occupation, or in age.

2. Places of Basic Employment
Their location, size, and type of population employed by them (at least by occupation and income group). From the second period onwards, addition of basic employment places.

3. Distribution Coefficients
Distribution coefficients for each population group within the urban area.

INPUT C
Preference (in equilibrium) of each population group with respect to apartment type and size and land area as a function of location.

INPUT D
New apartments, built by public initiative, classified by apartment area, land and location; demolition and rehabilitation program, also by public initiative.

INPUT E
Rates of building deterioration in the different neighborhoods.

INPUT F
Distribution of the population into neighborhoods according to preference of household according to housing supply, preferences on demolition and construction.

STAGE 1
Choice of residential zone within the urban area, according to place of employment and population group.

STAGE 1.1
Supply of old apartments of those of the existing population who change their residences.

STAGE 2
Choice of apartment type by population group according to location and type of population.

STAGE 3
The aging of the physical building stock.

STAGE 4
Decisions on construction and expansion of shopping centers.

STAGE 5
Distribution of those employed in shopping centers.

STAGE 6
Change in type of neighborhood.

STAGE 7
Distribution of those employed in shopping centers.

KEY:
- Processing
- Decision
- Stage
- Input
- Stage
Stage 2. After the residential zone within the urban area has been selected, comes the process of determining the apartment type for each population group in the particular zone. The apartment type is determined by the residential zone in the wider urban area and is characterized by the floor and land area per apartment. For each new apartment with a given floor and land area, a system of preferences will be determined with respect to old apartments in the same zone (for example, a new apartment of 50sq. meters as against a five-year old apartment of 60sq. meters).

Stage 3. Deterioration of buildings takes place in this stage in accordance with the rules given for aging (Input E), the deterioration of a building being measured by its age. It is proposed to include two kinds of deterioration - regular deterioration (that is, the passage of one year ages the building by one year) and accelerated deterioration (the passage of one year ages the building by more than one year). These types of deterioration may be functions of the types of population residing in the buildings.

Stage 4. In this stage the neighborhood is chosen. A number of neighborhood types in the city could be characterized as described below, the following factors seeming to affect the types of neighborhood.

b. The types of apartments and buildings.
c. Housing density, building layout and population growth.
d. Distance from shopping centers.
e. Size and quality of neighborhood services.

A parallel system of preferences for each population group will be determined for the neighborhood. If all the empty apartments in a neighborhood are filled while there still are families in the neighborhood without apartments, additional new apartments will be built. If there is sufficient reserve of land for the construction of the additional new apartments, they will be built on this vacant land. If there is not
enough, old apartments will be selected for demolition. These apartments will be chosen in accordance with the criteria of density and age of structure. In place of these apartments, others will be built as needed (by the private market or by a public authority).

**Stage 5.** In this stage decisions about the establishment and expansion of shopping and service centers will be introduced. The size of these centers will be determined in accordance with a function similar in form to the distribution function in the wider area (see stage one). This function will determine the location of the centers, while their size will be determined by constraints with respect to the minimum size of the center. Existing centers will be enlarged and new ones will be established on the basis of population growth and distribution in the area. Their quality will be determined in accordance with the characteristics of the surrounding neighborhoods.

**Stage 6.** As a result of changes in the density and composition of the neighborhood population caused by stage 4, as well as resulting from changes in the location of shopping centers, the type of neighborhood will also change. These alterations will affect the status of the neighborhood in subsequent periods.

**Stage 7.** The shopping centers erected in stage 5 are centers of employment. The employees of these centers are distributed in residences according to the assumptions indicated above, by returning to stage 1.
POTENTIAL USES OF THE RESULTS OF THE MODEL IN EVALUATION OF URBAN RENEWAL AND DEVELOPMENT PROGRAMS

The results of the model will facilitate evaluation of various public policy alternatives in the field of urban renewal. This evaluation will be made on the basis of criteria which will make it possible to measure the contribution of each alternative to the overtly declared objectives or to objectives implied in the very process of public intervention. The development of criteria for the evaluation of public action in urban renewal depends on:

a) A definition of the objectives of the intervention and the relevant tools for their realization.

b) Quantitative and qualitative information - i.e. the output of the model, which will make the application of the criteria possible.

Even if well-defined objectives do exist, the usefulness of criteria for measuring goal-achievement is limited when we lack data (especially quantitative data) needed for applying them to the objectives for the purpose of comparison among alternatives. The above model has been proposed in order to produce this information, the results (output) of the model supplying the necessary quantitative data.

The criteria for measuring direct and indirect effects of public intervention must deal with the effects of this intervention upon individuals and groups within the population, both from the point of view of these groups and from the point of view of society as a whole. The model which has been presented above assumes an elementary decision unit which is a homogenous population group that can be characterized by socio-economic data. The output of the model includes information on what will happen to these groups during each period. The position of each group is a result not only of its own action, but also of the activities of the rest of the groups, of the public authority, and of the functional interdependence between these various activities.

The output of the model can provide data for existing or potential criteria for evaluation. An existing criterion used in Israel, is the net cost to rehabilitate a family. Potential criteria are those which will be developed simultaneously with the model and as such will enable greater and more efficient use to be made of the information which the model
will supply.

Potential indices for testing the effect of public activities in the light of various goals of urban renewal may include:

a) An index for measuring economic effects, such as changes in the quality of housing; changes in land values; the expected reaction of the private sector through additional investments in the renewal site; economic costs; and changes in the demand for housing in different areas of the city.

b) An index for measuring social effects, such as changes in the population composition of the site and of other neighbourhoods; the social cost of dispersing the site's population (as opposed to leaving it on the site after renewal); and the effect on the social structure existing before renewal began.
BIBLIOGRAPHY


URBAN RENEWAL IN THE URBAN SYSTEM

N. Lichfield

THE URBAN SYSTEM

First I will say something about the urban system itself as it is found around the world. The concept of a system is a very simple one. A system is a set of inter-connected parts: if you affect one, either positively or negatively, there are repercussions on the others. A watch is a very simple example. You only need to take off one of the wheels and the entire watch is useless. The human body is also a system; damage to one part affects the others.

More and more, we are beginning to think of the town as a system. Harvey Perloff, of the University of California, identifies the urban system as being made of three elements, three variables which mutually affect each other. The first is what we call "urban fabric" - the "physical" aspects of land and the buildings; the second variable pertains to the activities of the people themselves in the urban fabric, while the third refers to the movement of people in the urban fabric.

These elements are inter-related. It is difficult to think of the physical fabric of a university in isolation from the physical fabric of the homes of the faculty, of the students, etc.; these are parts of a university system. Similarly the people who supply the food to the restaurants we enjoy are all part of the urban system. Because we sleep in one place, work in another place, and enjoy ourselves in yet another place, we are all part of this urban system. In this connection, part of the problem in urban renewal and urban planning is that one man can wear very many hats. He can be at one time a resident, at one time a worker, at another time a pedestrian.

The third element - the one of movement - needs no emphasis, it is most clearly part of a system. In order for the town to function, certain activities have to be transferred in space.
Each of these three elements, if you visualise them as layers, operate vertically. The fabric thus interrelates with the people. University students and the university building interact, sometimes beneficially and sometimes disastrously. This interaction is one of the perpetual themes of urban sociology: what is being called and criticized as architectural determinism. Do the buildings condition the people, or are the people so tough and so volatile that they will survive whatever the building arrangements are? Architects and sociologists often argue about this theme.

**URBAN RENEWAL**

We have characterized the urban system above. It is into this system that we want to inject renewal.

We must pause to identify the concept of urban renewal. The simplest way of looking at it is to recognize that the forces of change acting on the urban system, whether internal or external, make an impact on this system—regardless of whether they act on the fabric, on the activities, or on the transportation. Thus there comes a point when the urban system gets out of accord with contemporary needs.

Let us be more specific. It is very difficult, and Prof. Rapkin makes this point very movingly, to carry on modern decent community and family life in rotten slums, for this is where the urban fabric is breaking down. It so happens that very often, in the slums there are people who are themselves breaking down. This is part of the interaction mentioned above. Do the slums create slum dwellers who are on the lower levels of society; or is it the lower, degraded levels of society who are attracted to the slums? Another example is drawn from the field of transportation: the roads we see around, and which are being actively renewed, were quite sufficient 100 years ago, when all we had were horses and carts. But this form of transportation is out of date. We therefore improve the road or build a new one. This is how the system adjusts itself.

However, the system does not adjust itself universally; it adjusts itself bit by bit. The feature of urban renewal is that it must, in a sense, take place project by
project. No town has the resources or the capacities to re-
new itself entirely. And so we try and identify those parts
of the town which have become obsolescent - and by this all we
mean is that they are out of accordance with contemporary needs -
and it is these areas which we try and renew in a variety of ways.

The causes of obsolescence are somewhat obscure. There is no
space here to consider what the causes are. What we do know
is that the analytical identification of causes can be seen
under five headings: structural, functional, locational, en-
vironmental and economic obsolescence. The understanding of
these forces enables us to understand what is, and what is
going to be, obsolete, and therefore - and this is the link -
what is going to be requiring renewal.

PLANNED URBAN RENEWAL

Urban renewal has been going on for centuries. Towns which
were built a long time ago did not remain as they were built,
and we have throughout history stories of towns which have
grown and been redeveloped and renewed and replaced long be-
fore planners were really dreamed of. But today we are mov-
ing into a situation of what we call "planned urban renewal"
within the planned urban system.

If we are planning the urban system, we want a comprehensive -
by which we mean a physical, social and economic - urban and
regional plan.

Planning for urban renewal means that each of the urban re-
newal projects (which by definition are partial bits of the
town) must be interrelated over space or time in conformity
with a plan. We must know the relationship of one urban re-
newal project to the next one. We must have a programme over
time, for we know that we shall be undertaking one project
today and another tomorrow and another one in a few years' 
time. These have all to be interrelated. If we know that we
are going to pull down an area and build a large renewal pro-
ject of housing, we have got to think in terms of eventual
transportation and other redevelopment, and we also have to
think in terms of the interrelated activities. This is where
relocation came in so forcefully in Prof. Rapkin's talk:
when we think of renewal as a project which displaces people,
we have to consider where those people are going to go, and
where, indeed, people are going to come from for the project. This is the interrelationship of activities.

Today we have advanced toward a concept of planned urban renewal. In many parts of the world there is either much planning without too much notice of the urban renewal problem; or the other way around, of which the United States is a very good example. Official Statutory planning there (as opposed to the methodology) is not well advanced. However, for quite different reasons American urban renewal received a major push in the 1940's and 1950's in a way which has given it the leadership in the world. The people associated with urban renewal found very quickly that urban renewal in an unplanned town made no sense; for how can you think in terms of the project as part of your system, how can you think in terms of the effect of one project on another if nobody tells you what the planning context of the project is?

So, in fact, in America it is the urban renewal dog which is wagging the planning tail, and it is urban renewal which is stimulating planning. And in my view, this could also be the position in Israel providing the urban renewal programme takes off. Official planning processes are lagging behind the kind of dynamic approach to urban renewal which is so ably put forward by Dalia Kadury-Lichfield.

However, we have to distinguish between planning in the statutory, official outline plan of the Ministry of the Interior - the official planning of Israel under the 1965 Law - and what we are today calling "development planning." The essential difference is that in a development plan, which is the kind of statutory town planning we do in Britain, one thinks in terms of the stages by which the town will evolve into the future. You do not think of the ultimate picture and then say "how much of the sausage are we going to eat in the next year?" Rather, you build up the ultimate picture out of a series of sausages. You build up one sausage after another sausage, and the general taste and form of the first sausage affects the later sausages. Thus in my view, Israeli planning must adapt itself to urban renewal, which is also developmental - one urban renewal sausage after another, all nicely inter-linked into the future. You must have planning for a system which is to be created in the image
of urban renewal; you cannot have forward-looking urban renewal in a planning framework which, I am afraid, is one of the inferior legacies left you by the British Mandate.

FINANCIAL AND SOCIO-ECONOMIC APPROACH TO URBAN RENEWAL

Now we come to the fourth heading, and that is the financial appraisal for urban renewal. Urban renewal is a very noble activity. It is the sort of thing that has to be done and, as Prof. Rapkin states, it aims at the highest social ideals. But like everything else, it has to be paid for by hard cash flows. Therefore, we get into the familiar situation of trying to make an appraisal of the financial costs and the financial return which will come out of the urban renewal project. An urban renewal authority, a development company, the Ministry of Housing, have all got to know what it is going to cost, and where the money is going to come from.

You should not go into a project if you cannot afford it. But, if you concentrate only on the financial appraisal for an urban renewal project, you are merely doing no more than the private entrepreneur does when he makes his financial analysis of a development project. There must be a difference between the approach of a private entrepreneur to building a shopping centre and the approach of a public authority which is concerned with urban renewal. The difference is this: if you carry out the appraisal simply on financial terms, you are ignoring the general social and economic costs and benefits and you are ignoring also the interrelationship of this project with the other parts of the system - i.e., the "externalities" of the project.

"Externalities" in economics, in terms of the system, means considering the repercussions of what you do here with what happens there. But it means something more precise too. It means that if you create a park in your urban renewal project, you are generating benefits to people outside the project at a cost which you may not be able to recoup. It works the other way around as well, in a way familiar in the Nesher cement plant near Haifa. An industrialist may be creating atmosphere pollution of which he is not bearing the cost. In his decision he is only concerned with the economics of his own operation.
Thus, if you consider only what the project can cost and what you will get out of it, you are ignoring these repercussions, these wider community costs and benefits. These, no public authority can afford to ignore. They are the concern and responsibility of the public authority (which we usually identify as the planning authority), and not necessarily of the urban renewal authority. It is the planning authority, the person or persons concerned with making the plan for the town, who must consider this wider range of costs and benefits. And so, we search for what Prof. Rapkin calls "the best solution" for an individual project in terms of the community.

EVALUATION OF ALTERNATIVE PLANS

The methodologies available for this search for the best solution are usually included under the heading of "plan evaluation." With any renewal project or, indeed, with any system of interrelated urban renewal projects, there are the alternative approaches which have been outlined by the previous speakers, including of course the alternative of doing nothing about the urban renewal conditions. In order to compare these alternative possibilities from the viewpoint of the community, we get into techniques of plan evaluation.

In a recent review article I have described something like twenty methodologies which are used for plan evaluation. I want to mention three in particular (the first two only in passing), because it so happens that the international pioneers of these methodologies are all in Israel (if I may include myself here). And in my view, these three methodologies offer most promising possibilities of advancement. The first one is the linear programming techniques and models of Prof. Shahar and his colleagues; the second is Prof. Moshe Hill's goals-achievement matrix; and the third is my own, which I call the 'planning balance sheet' which is the application to the problems of urban and regional planning of the costs and the benefits approach which are mentioned by Prof. Rapkin. This approach compares the social and economic costs and benefits of alternative proposals in order to try to select that alternative which is best in the interest of the community.
Here I want to make an important point: the words we use are "cost benefit analysis," which is an economic technique. But in the "planning balance sheet," the adaptation of cost benefit analysis to the problems of urban and regional planning is not simply economic analysis but a planning analysis and social analysis technique as well. Put in a nutshell, this analysis has the aim and means of coping with all the human and social problems that have been mentioned in terms of urban renewal.

The methodology itself has been publicised in many case studies and all I can do here is to give you the briefest outline of the approach. Then I am going to lead on to show one or two of its uses in urban renewal in addition to the evaluation which I have mentioned.

In cost-benefit analysis the aim is to find that project which gives the greatest difference between the socio-economic benefits that will flow from the project and the socio-economic cost, including what I have called "externalities."

The difficulty in this approach is that the goal of maximizing economic wealth by trying to get the greatest excess of economic benefits over economic costs, is too simple when one must consider the whole community. Economic growth and economic prosperity are not the only things that any country pursues. We are learning in modern society that the sole pursuit of Gross National Product, of increasing national wealth, might overlook many of the civilized amenities which are not in national economic accounts. For example, in the economic national accounts of Israel nothing is said of atmospheric pollution. But such pollution costs must be offset against the growth of production.

By contrast, although it is still an economic approach, the "planning balance sheet" attempts to bring into consideration all those features of human living which are considered to be important by planners. The methodology is this: you first of all attempt to visualise all reasonably feasible alternatives, recognizing that you should not try to maximize the net benefits for a simple single objective function. You must recognize that the community is made up of all the various sectors Dalia Kadury-Lichfield mentions, and we are interested in these sectors. We are interested in the people who walk, the people who go in motorcars, the people who live in the slums and the people who live outside the slums. We are interested in the neighbourhoods, the family ties of the people in the slums, etc.
Thus, you have to think to yourself; what are the sectors of the community who are affected by this proposal? and you list them.

This is done in terms of those who are concerned with creating and running the project - the producers - and those who are concerned with consuming the benefits or the results of what these people create on the project - the consumers. This is a tidy way of analyzing the sectors. The sectors flow from the nature of the project. If you are pulling down a residential slum area, you can work out those who are involved. And then you ask yourself: for each of these sectors, what is the difference if I do this or this or that? For each of these sectors you trace the impact through in terms of the costs and the benefits to them. The costs are the inputs that are required to increase and run the project, and the benefits are the outputs. From this you can develop "sector accounts" for residents, shop keepers, shoppers, industrialists, pedestrians, traffic of all kinds, and tax payers. In this way you know how they will fall under the alternative projects. Then you try and summarize the amounts you have obtained. It has to be very much a matter of judgement and common sense in the end, but you try and consider which of these would give the best over-all net benefit for all sectors of the community.

The methodology attempts to help the decision-makers to make judgements by giving consideration to the trade-off between different sectors of the community; we cannot do a project without hurting some people and benefitting others. For example, in one case there was an analysis of two alternative schemes for a road system and renewal project in the centre of town. Through the above analysis we were able to say that the two schemes can be judged on one simple factor: in one project you are favouring the motorists who are coming into this seaside town from other parts of the country to enjoy the seaside; and in the other, you are favouring the local people who travel around the town. It was a matter of judgement for the political decision-makers as to which of these two kinds of motorists they want to favour. That is their privilege. What the analysis did was to cut away a lot of very technical discussion and isolate the clue to the answer. In another analysis, relating to the four possible locations for a third London airport, two classes of the community were opposed to
SOME APPLICATIONS OF PLANNING BALANCE SHEET ANALYSIS

That, briefly, is the methodology of the planning balance sheet. Now I would like to mention two applications of this methodology to urban renewal. Firstly, relocation: it is important to know what happens to the displaced people. In 1959-60 I carried out relocation studies in San Francisco on an actual redevelopment project in the city, called Western Addition. From the Planning Balance Sheet analysis of the cost and benefits of this particular project, I was able to isolate its impact of relocation. The goal of the Urban Renewal Administration in the United States was that an urban renewal project should provide for relocation which was satisfactory on three criteria: the alternative accommodation should be decent, safe and sanitary, it should be within the financial means of the people affected, and it should be in a reasonably convenient location.

The analysis of the living conditions in the area before and after renewal began was able to trace through the repercussions under these three headings. The conclusions were, first, that after displacement the people were in reasonably convenient locations because most of them remained in central San Francisco around the renewal area; secondly, they were in decent safe sanitary housing, for although they were not being rehoused in the project (which was going for middle-income housing), they were in better non-slum housing. However, it was not as clear that the new housing was also within their financial means: in all cases, they were now paying more money and the rent-income ratio had increased substantially in about 40% of the cases.

The San Francisco case may serve as an example on how to attack the impact of relocation on displaced people. We follow the people and their activities to where they land up after relocation, and then compare the past and present situations. In San Francisco we were given the three urban
renewal criteria of the Administration. We could, however, have proposed many other criteria. For example, are the people living in pleasant neighbourhoods? Are they living near their work? Are they living nearer or further away from their mother-in-law?

I would like to give another illustration of a case in which we have used this approach. It is the kind of renewal project which is not very common in Israel, but is nonetheless very interesting. One general problem is that it is financially expensive. You cannot do renewal cheaply except perhaps by forcing out low income people who are living in well-located houses which are inherently well-designed and economically capable of being inviting to modern, decent residences or businesses. Old Jaffa is a rather dramatic example of this process which is going on all over the world. But there is only a limited number of cases in any city where you can turn a poor quarter into a rich one in this way. Usually renewal costs a lot of money. But we also know that urban renewal creates social benefits.

We thus have the situation where renewal imposes costs on the public sector, while the benefits are for other people. We came up against this issue in a study in England of the City of York, a "cathedral city." The inner part of York is medieval and Georgian, and thus has what we would call an architectural heritage, as have Bath, the Cheltenham, King's Lynn, Norwich etc. They create problems because by definition these older parts of the cities are in the middle, and urban change gives rise to increase of traffic and the need for more shops and offices in the central business district.

In this situation we tend to get urban renewal by redevelopment. The property, particularly if it is old property, is worth less for redevelopment than the site - the piece of land on which it stands - and so under market forces we get urban redevelopment. The constraint here is that these places ought to be preserved on any standards - they are

*This is an old, formerly Arab town which has become part of the Tel Aviv metropolis and which has been converted into an expensive residential area for art-based commerce and entertainment (ed.).
unique, they will never be built again, they are part of history, they have been handed down to the present generation. Nevertheless, the town must be adapted for modern living because people do not like to live in a museum. Why live in a place where you cannot use a car, and you cannot have enough shops?

This problem was tackled recently by the English Ministry of Housing, which commissioned various consultants to study these historic towns and come up with proposals. My firm was involved as economic consultant on one of these studies of York, working with the planning and architectural consultants who prepared a conservation plan. I refer to a "conservation" rather than a "preservation" plan because a conservation plan is one which aims to retain the fabric that ought to be retained, but at the same time it seeks to make the town a living, viable organism so that it can sustain itself economically. Otherwise it becomes preservation of a museum place.

We studied the economics of the town and found that the cost of conservation in York would be very heavy. For example, you had to eliminate non-conforming, unpleasant factory uses which had crept in, and rebuild dwellings to the same scale as the old. Much money had to be spent in modernizing and reconditioning the properties you were going to keep.

The question is: who benefits? And so we did a planning balance sheet analysis of this situation and came up with certain findings, simply by tracking through the costs and the benefits to the different sectors of the community in the way I mentioned before.

In this case our "producers and operators" were the City Council who had to carry out the renewal, the landowners whose property would be involved, and the central government which would have to pay subsidies. Our "consumers" were the pedestrians using the streets, shoppers, tourists (people come from all over the world to see York), motor traffic, the people living there, shopkeepers, office occupiers, etc.

We traced the repercussions through and found, in a nutshell, that whereas the City Council would have to pay a lot of money, the pedestrians using the place and the shopkeepers in the stores would obviously benefit considerably; the pleasant, cleaned up city center would be more attractive to pedestrians and shoppers. On the other hand, the people using motor cars
in this place would suffer because they would find that getting round would be more difficult because streets have been closed off, etc. In order to make the traffic circulation work we also found it necessary to envisage a situation of loading and unloading the shops at night as the only way of getting the trucks in; for otherwise they would be killing people on the pedestrian routes. And, of course, we assumed that the people living above the shops would suffer at night because of the traffic. We laid out this set of social accounts and used the results to trace through the cost and benefits of conservation.

This led to another point. The situation where a Local Authority pays the money and other people get the benefits is well known in planning as the issue of betterment. The problem is to try to find a way in which the public authority manages to charge betterment to the people who benefit from the increase in value. Having taken the planning balance sheet and traced it through, we answered the question of who is getting the benefit. We then said: if they are getting the benefit, is there some way of making them pay? After all, since the renewal is being done for their benefit, why should they not be charged a financial contribution to the costs of the renewal?

We went through the analysis and looked at it in this way. For example, the pedestrians would benefit because they would have a pleasant place to walk in, no traffic, beautiful buildings, etc. Yet, it is very difficult to impose charges on a pedestrian, a possibility we abandoned as rather impracticable. Tourists - the visiting public - were another matter. People come from all over the world to see York. Why should the local people spend a lot of money to give them the benefit of seeing a piece of medieval England? So we want to charge them. But how? If they want to see York Minister or the York Museum, or some other public place, this is an easy matter. Instead of charging them a sixpence to go in, you charge them more as a contribution to the renewal fund. No problem.

But there is another possibility. People in the hotels and shops benefit from the tourists. So we cast our eyes on the hotels and thought of a special tax as is customary
in various parts of the world. The problem is that the hotel-
iers then pass it on to the customers. But if they could not,
we would expect that in the end the landowner would pay. Well,
why not? He is the landowner of the hotel. He is receiving
ground rents or a capital receipts for his land, why should
he not pay towards the costs of renewal?

Another kind of people who benefit are those who get the vi-

sual benefit from the environmental improvement. If you are
a property owner in that area, you are going to get some in-
crease in property value; one of the obvious things to do is
to try and tax these people. This is a possible means of col-
lecting betterment in Israel: if the Ministry of the Interior
agrees, a Local Authority could get some money back in this
way by direct taxation on people who get benefit from public
expenditures. We can do this also in England. But it is a
very difficult operation.

Another simple possibility in the case of York was to say
that we are improving the whole centre of York, within the
walls. Since everybody within the wall is identifiable, they
could be charged a special local tax.

Finally, we identified the greatest beneficiary of all: a city
like York is a national heritage; the current generation is
bound to pass it on to the future generations. Yet, we do not
know whether our children and our grandchildren will like York.
There are a lot of people today who do not like medieval cities
and would question: why pay money for conservation?

This is a very important issue. One of my studies in San-
Francisco was on whether or not a building called the Old Mint
should be preserved. This was built about 1870 for coining
gold at the time of the gold rush. Although not a good build-
ing, it was a rare, historic specimen and so it assumed some
importance on the West Coast. This led to a struggle between
those who felt that this 1870 building should be passed on to
posterity, and those who felt that it was a prime site for
real estate redevelopment and taxes.

On this question I think that a Government has the responsi-
bility of passing the national heritage on to posterity, i.e.
the future generations. These are the great beneficiaries to
whom I referred. They may not agree with our estimation that
a cathedral built one thousand years ago will be of interest
to people living in one hundred years' time. But they are
going to benefit from the opportunity. Since the only people who can speak for them is the government, the government ought to pay. In other word, the government asks us to pay for preserving what we think our children will enjoy. But we all know what people are like. We probably will not be thanked. We will be blamed; we will be criticized. But in the end, we have go to do our duty as we see it. So we say to the government, it is your responsibility to contribute for this local renewal.

In this way, and this is the point I am ending on, we go from a means of evaluating which is the best urban renewal proposals for a project, to tracing through who pay benefits. So let us try and find out who gets the benefits, and let us try - if we can - to find some means of getting contributions from them to the urban renewal costs. In this way we get a more equitable solution to the problem, and speedier urban renewal.
URBAN RENEWAL AND ITS ROLE IN THE SYSTEM OF SOCIAL HOUSING

IN ISRAEL

Joseph L. Slyper

INTRODUCTION

In this paper I should like to set down the following initial assumption: that the burden of war we bear today will continue to be a partial war effort at most, and that our life in Israel will continue to be "almost normal."

This is an early basic assumption, but at the same time we should not ignore the various consequences of the period within which we live, from the point of view both of the economy and of security. Therefore, it can be expected that the emphasis in my report will not only be on problems of urban renewal, but also on what, in my opinion, precedes urban renewal - i.e., maintenance.

When we come to discuss the problems of urban renewal within the framework of welfare housing in Israel, we shall first clarify some concepts, and then identify needs and preferences. Then, we shall describe what is called, in the jargon of the Ministry of Housing, the National Housing Stock. In the third part I shall only touch upon the subject that will later in the symposium be the main point of the discussions dealing with neighbourhood renewal.

PRESSURES AND PRIORITIES

With regard to the first part of the review, we shall try to clarify the concept of social housing. The word "social" often brings to mind "social cases"; I shall only remind you that the origin of the word is "socius", which in Latin means "partner" or "ally." This latter concept has greater relevance for housing in Israel than the concept of welfare cases. Who are the people who need support for housing? I suggest the following definition: anyone who needs help in establishing himself, or anyone who needs governmental subsidies, is a candidate for social housing. Let us now examine this
category of persons — those in need of public support to solve their housing problems.

In the year 1968-69, the average income of wage-earners and salaried workers was IL.627; in the same year, the average price of a low-cost housing unit was IL.30,000. Furthermore, if we take into consideration the ratio of prices of new housing (i.e. the basic housing cost), to that of income, we find that it is equivalent to four annual incomes (before taxes). This is a very high ratio indeed; in other countries we find a much lower ratio. For example, in the United States the ratio between average income and the price of a new house is three to one.

My second comment pertains to the price of capital. When someone comes to live in an apartment, the question is not only how much it costs but what is the price of the credit he needs in order to be able to pay for the apartment. As an example let us take an apartment selling for IL.30,000. If we could allow the purchaser to buy the house in the same terms that were common some years ago in Western Europe, i.e., payments over a period of 30 years with an interest rate of 5%, then the monthly payment on that capital would have been IL.161, including interest and capital return.

Here I shall add a comment in parentheses. We are making intensive efforts (and the Ministry of Housing is among those putting on pressure, and rightly so), in order to reduce building costs. But at the same time only a few have realized that reducing interest, i.e., reducing the cost of capital, has more impact than lowering the initial cost of the house. I shall explain this with a few figures.

Let us return to the case of the apartment selling for IL.30,000 with payments over a period of 30 years at an interest of 5%. If we were to succeed, through greater efficiency and effort, to reduce the price of the apartment by 10% — and this is quite a significant reduction — the apartment would then cost IL.27,000; if, on the other hand, we raise the interest by only 1%, from 5% to 6%, the consumer will make a higher monthly payment. In the latter case, for a house costing IL.27,000 and monthly payments over 30 years at a 6% rate of interest, the monthly cost will be IL.162 (it was IL.161 before). Thus,
despite a reduction of 10% in the initial cost, we remain with the same monthly payment for the apartment. From this we can see the vital part played by the cost of capital within the system of public housing.

This has been a theoretical example. In reality, of course, the mortgages are obtained not at 5% or 6% but at 11% or 12% interest. If we now take the same apartment which costs IL.30,000 and calculate how much the monthly payment will actually be, the buyer will have to pay IL.340-350 a month; we must remember that he earns an average of IL.627 a month, so that, even if we take into consideration the fact that there are, on the average, 1.4 bread winners in the family, the family's income won't quite reach IL.900 (before taxes). But with a monthly income of IL.900, it is clear that the average worker cannot afford anything as costly as an apartment.

In other words, the broadest social classes, in fact all the blue and white collar workers in the economy, need subsidies in order to establish themselves. That, indeed, is one of the reasons why there is a need for the Ministry of Housing in the first place. But this factor leads us to a far more weighty conclusion: it is a forceful indication of the need to preserve what there is, to care for the investment already made, so as not to waste that which is so costly.

From here I proceed to defining the concepts associated with renewal. Today we shall deal mostly with neighbourhood renewal, i.e. geographical-physical renewal, and specially group rehabilitation. However, everyone who knows the problems of housing intimately, as do the workers of the Ministry of Housing, cannot ignore the fact that our first and basic role is rehabilitation of the individual - the person who has a family but lacks a roof over his head. We would like, first of all, to provide for the individual and his family what is called in international circles, a "modest and decent dwelling" - i.e. to guarantee a decent standard of living in the sphere of housing. This is, we feel, our first obligation, at a time when we have not yet recovered from the period of the ma'abarot (temporary camps), when 15,000 Israeli families still live in Swedish, Finnish and Austrian huts, in houses of asbestos, in all types of "Californian" houses, and in all the various improvisations which it was necessary to use at times of emergency in order to provide temporary solutions. In most cases the period of depreciation for these remaining ma'abarot
has long since passed - and still we have not yet been able to provide a substitute.

Another factor making individual renewal a matter of top priority is that 60,000 families in Israel still live at a density of three or more persons per room, and among them, 25,000 live at a density of four and more per room (I am using round figures rather than exact ones because they are more easily remembered and I wish to present the general scale of the picture). At the same time, so as not to paint too black a picture, it is worth mentioning that there is continuous progress being made in reducing these figures, and that each year represents an improvement over the last year in housing condition in Israel. Nevertheless, 60,000 families living in such conditions of density are a large number of families indeed.

In connection with this, we should also mention that nearly 2,000 municipal demolition orders are still "circulating" within the Development Authority. At a time when we have other such problems to solve, when for us the matter of housing is not a matter of improving the living conditions but of creating the very fundamental prerequisites for human existence, it is not a simple matter to devote the required resources for all we would like to do in renewal.

As we go on I shall try to define the path along which we must continue. However, first I would like to discuss, in a few words, why we were so slow and why we still drag problems like that along with us twenty two years after the creation of the State. Why have we not solved them yet? The reason is that throughout these years we have continued to absorb immigrants. And in our hierarchy of values the problems of immigrant absorption was given a high priority; how high this priority has been is illustrated by the following data.

In the year 1969/70, the Ministry of Housing provided about 20,000 "housing solutions." By "housing solution" we mean not only new dwellings, but loans, used dwellings and anything we can possibly do within the limits of the existing budget and physical framework to solve the urgent problems of the individual. Of this number of housing solutions (the exact number is closer to 21,000) ten thousand were allocated to immigrants, 2,500 to what we call "development areas," and only 7,500 were used to solve all the
types of problems of private individuals residing in the centre of the country. In other words: 50% of the housing solutions were given to immigrants, 12.5% to development areas and 37.5% were devoted to solving the problems of young couples, low cost housing, slum clearance, etc. This, then, is the picture emerging from an examination of the situation in terms of housing solutions. However, if we examine these same housing solutions of 1969/70 in terms of money spent, we find a different ratio: 71% of the money went to housing for new immigrants, 12% to development towns, and only 17% to other solutions.

These figures relate only to urban housing and do not cover rural settlements. But if we examine the housing budget for the year 1970/1 and include the budget for established and new rural settlements, we find that the percentage of money devoted to immigrant housing has risen by another 3% to 74%, while the combined allocations to the national-geographical priorities including rural housing and housing for veteran settlers in development towns, amounted to 19%. At the same time only 7% remained in the budget for those who are not in a development area or in a rural settlement, or who are not new immigrants. All this goes to indicate how limited is our ability to allocate means for individual rehabilitation when there is still such an urgent need for national rehabilitation and land reclamation. Our capacities for housing construction are limited, both in manpower and in resources.

I presented this assessment as a background to the central matter at hand: the pressures and priorities for urban renewal.

THE NATIONAL HOUSING STOCK

In the second part of this paper, we shall examine certain statistical data related to the concept of the national housing stock. Around 1980 the number of families in Israel will reach one million (this again, is a rough estimate). If the housing stock in Israel today is 750,000, then a simple—indeed oversimplified—calculation tells us that we must build 250,000 more units in order to house all the million households projected for that year.
However, the answer is not so simple. We must also inquire into the kind of housing which the million families will occupy in 1980: how old, and in what shape will they be? In addition we must also determine how many apartments will be lost to the existing stock up to the year 1980 as a result of improper upkeep, demolition, obsolescence, negligence, blight, etc.

One would expect that high building and capital costs would compel us to take special care of the existing stock; in fact, surprisingly, a lack of consciousness prevails which borders on levity. The upkeep of existing stock, which should precede urban renewal and be a preventative measure against deterioration, is quite deficient, often amounting to the destruction of capital.

There is a long-range planning team at work in the Programme Department of the Ministry of Housing. This team undertook a study of housing deterioration in cooperation with the Urban Renewal Authority. The study was directed by Azgad Paldi and included engineers and sociologists. Its purpose was two-fold: first, to measure the amount of housing lost to the national stock as a result of physical deterioration; second, to discover the causes of deterioration and the possible remedies that could slow it down.

The team studied a sample of households which had been selected by the Ministry of Housing for a survey of housing condition. I shall not go into detail but mention only that the concept 'deterioration' was classified according to six grades based on the physical state of the building. The team then tried to find the relationship between deterioration and various physical and social characteristics such as: the age of the building, the existence of cracks, the material used, the quality of construction and finish, the number of staircases, etc: these were the physical aspects. As for the social aspects, the following variables were examined: tenure, place of origin

*The study was completed in November 1970. It is entitled (in Hebrew) 'Deterioration of Residential Structures in Israel: Extent and Causes' (ed.).
of the dwellers, number of children playing on one staircase, the organization of maintenance activities (an important item), etc.

The first results of the study showed that 54% of the existing stock could be retained at the present level of upkeep. Thirty percent of the housing needs substantial improvement and 16% is in very bad condition and in need of immediate and fundamental improvement or demolition. I must emphasize that the following types of houses were omitted from the sample a priori: temporary dwellings, rural housing, apartments without bathrooms, or very small apartments. Thus, when we say that 16% of the existing stock is in very bad condition, we mean 16% of the housing units considered to be standard. The number of such units is about 100,000. Furthermore, the correlation found between the physical condition of a building and its age indicates that the present 16% will increase to 19% in five years and in ten years to 22.5%. As might be expected, the highest percent of deterioration among the various categories of housing (27%) was found in housing where the Law for the Protection of Tenants applies; however, I shall not go into detail at this time.

We must mention another matter related to housing deterioration. We do not as yet know how many residential apartments we have lost between 1948 to 1968. However, the Central Bureau of Statistics, on our initiative, has begun to register all dwellings which have been demolished or whose residential function has been converted to business or office use. It appears that by the latter process, a significant number of housing units are lost to the over-all housing stock, particularly in the large cities. It is important for city engineers to extend their help to us and to the Central Bureau of Statistics in order to obtain the most exact figures possible, so that we shall be able to make forecasts for the future.

Let us return to the central topic: where such a large amount of capital has been invested in housing, where the cost of capital is so high, and where the average income of the wage-earners and salaried workers is so low, we must find a way to preserve what we already have. I wish to strengthen this claim from another point of view: there is a very simple technique for predicting the aging process of the housing stock, which I shall briefly clarify.
In 1948, the housing stock was 150,000 units; today it is 750,000 units. Thus only 20% of the entire housing stock is over twenty years of age. Now let us go on and assume that each year we add 4% net to the existing stock, including private construction; this amounts to thirty thousand new apartment units. To be exact, the building rate is actually a little higher but we must subtract the rate of depreciation and demolition. Thus we shall base our estimate on a 4% rate of growth. Let us assume that this process of 4% annual addition to the housing stock continues for twenty years. Possibly, the calculation ought to be done on the principle of compound interest, but we can assume the difference in the results to be marginal. Thus in another twenty years the housing stock will more or less double, reaching 1,500,000. Let us now examine the age composition of the housing stock at that time. In the year 1990, today's entire housing stock - i.e. 50% of the total housing stock in 1990 - will be twenty years of age or over, as compared with today's 20%. Clearly, this "aging" stock demand much more upkeep. This is a development that should be followed carefully, for it will lead us directly to a point which I shall call: "M.M.M." The letters "M.M.M." stand for a concept which is well known in European countries - Management, Maintenance and Modernization. This subject was the theme of a Seminar held not long ago in Warsaw, sponsored by the European Committee for Housing, Building and Planning of the United Nations. Representative of our Ministry of Housing and Amidar* attended the conference. Much information was gathered and I should like to make use of it now in order to compare some aspects of maintenance in Europe with those in Israel.

* Amidar, Israel's National Housing Corporation for Immigrants Ltd., is a public corporation entrusted with managing housing for new immigrants: upkeep, rent collection, community work, etc. It is also in charge of much formerly-Arab housing (ed.).
The results of a research project on multi-storey apartments in Finland were reported in the Seminar. It was found that five years after the completion of a building, one-quarter-of-one-percent of its worth must be devoted to its maintenance annually. Thirty years later 1.6% must be expended, and forty years later, 1.8%. In most European countries, France for example, it is estimated that 1.2% of a building's value must be invested annually for maintenance, and a detailed breakdown of the expenditure has been worked out. We need not assume that this figure is accurate for Israel because our housing stock is relatively new. However, if we accept the European figures as a basis for estimation - and we have no other - we ought to invest in upkeep 1.2% of the value of our present stock of 750,000 units - i.e. the equivalent of 9,000 new apartments each year. In other words, if we estimate today's building cost at an average of 11.30,000 per unit, the annual cost of maintenance alone would reach 11.270,000,000. We are, of course, including the private building sector as well.

According to my estimation, the sum actually invested for maintenance is far below the above figure. We know that Amidar is investing somewhat less than ten million Israeli pounds - i.e. less than 20% of its budget - in the housing stock under its administration, consisting of 207,000 units. If we add to this another 11.6,000,000 for the enlargement of dwellings, and assume, therefore, a total expenditure of 11.16,000,000 for the maintenance of 200,000 units, we find that this figure is incomparably below the figures prevailing abroad. As already mentioned, we do not know the exact figures, for the entire subject of maintenance - which is so important from both the social and economic point of view - is not sufficiently known, suffering from poor organization, poor planning and a meager supply of relevant statistical data.

There is indeed a great deal of difficulty in solving the problem. The efficient organization of maintenance activities is a complicated problem all over the world, because these activities were dispersed, because they are not prone to industrialization, and because they require a high input of both skilled and unskilled labor. The Germans brought to the symposium on "M.M.M." data which shows that maintenance and repair work demand 80% skilled work, as compared with the 15-40% needed for new construction. In many countries the fragmentation of ownership and administration of property makes matters even more difficult. As far as this latter problem is
concerned, there is the hint of an advantage in Israel in the existence of Amidar. Possibly, we should create permanent teams of skilled workers to look after the rehabilitation and revitalization of this enormous stock, which today is poorly maintained. Let me mention that modern costing activities are based on the concept of "total cost" for new construction, i.e., a price that includes capitalization of the annual costs of maintenance for the entire estimated life-span of the building. This emphasized the relationship between the quality of construction on the one hand and the cost of maintenance on the other hand.

NEIGHBOURHOOD DETERIORATION

in the third and last section, we shall deal with the question of what can and should be done in the area of renewal itself, in addition to preventive and maintenance activities. First, however, we must forcefully stress one factor directly related to the phenomenon of decay; that is, that decay is not a technical, statistical or economic problem alone.

Anyone who works with the people who live in a neighborhood, anyone in our office who knows what allocating dwellings is, knows that a new neighborhood usually looks at its best before it is occupied, and that it is the occupants who determine its fate.

The architect always brings his camera to photograph the neighborhood before the residents arrive; afterwards the drying laundry, the garbage and the dirt appear, the make-shift attempts to close off balconies, the crooked signs, the neglected gardens, and perhaps, here and there a blue hand on the new plaster... The very same physical neighborhood may be maintained perfectly well or may just as easily soon turn into a slum; this depends on the qualities of the residents themselves and on their cultural level.

The social factor, difficult to measure in figures but apparent nonetheless, is of great importance in the process of decay. Social decline spreads rampant in a neighborhood like a contagious disease so that, to a considerable degree, the decline in housing stock and property
values take on a dimension of geographical concentration in a neighborhood, a street or an entire quarter.

From the moment we fail to block this process, it is clear that afterwards we shall be compelled to fight it with much more costly measures. At that stage we shall have to determine criteria for deciding whether we should undertake urban renewal or modernization (for indeed there still is a considerable difference between these two concepts).

Urban renewal is generally considered to be a far-reaching action, involving a great deal of demolition and a large investment. In modernization, on the other hand, the emphasis is much more on improving the level of what already exist - that is to say, on the preservation of the existing social, economic, and physical characteristics of the neighborhood.

In the past five years, the policies of the Ministry of Housing and the Urban Renewal Authority (which is closely associated with the Ministry of Housing) have tended more and more in the second direction - i.e. the direction of minimal clearance, coupled with maximum improvement, renewal and modernization.

In the final part of my paper I now turn to those aspects of renewal which are typical of Israel. These seem worthy of examination and experimentation.

In contrast to the U.S., social conflict is not too serious in Israel. In view of this fact, we have begun to seek ways for renewal which may be efficient in the Israeli context. We have begun to think in terms of drawing up comprehensive urban-development plans. In order to strengthen those neighborhoods of the city which are on the threshold of decay, we intend to accomplish this task through the impact of new construction.

The system we have used to date has been a response to urgent building needs. The Ministry of Housing has secured large vacant areas in the various cities and has answered emergency needs through the construction of neighborhood after neighborhood spread over large areas at the peripheries of towns while at the same time, a low-density area was left in the center of these towns, run-down and unworthy of serving as the town's core.

The new trend is to try, with available means and with the help of new construction, to achieve higher density and better integration in existing neighborhoods through efficiently coordinated
and compact common services; in other words: to achieve a much more sophisticated coordination between social and physical planning. Many mistakes have been made in the past on this point; perhaps we were not sufficiently advanced, perhaps we didn't have the time to research the problems properly. There are slums in many cities close to which we construct a modern neighborhood with nice apartments, as if malevolently. It was our task to find ways by which we could improve the run-down neighborhood through shared services with the new neighborhood, and by devoting part of the resources for development to the run-down surrounding. Instead, we have sometimes planned new neighborhoods in such a way as to isolate them entirely from the nearby slums, with separate communal services and in some cases even separate roadways. Such actions cause social unrest and much bitterness, deepening the gap that already exists between different strata of population. This is social poison - poison that no society needs at any time, and particularly not Israel in today's circumstances.

The very awareness that we cannot return to the past, that we cannot tear down and build anew, should lead us to the conclusion that we must work out a sophisticated way of combining the current forces of development with the rehabilitation of what exist. We should prepare comprehensive development plans for the city in its entirety, for a range of 10-15 years. These plans should include a greater degree of social planning than in the past. Our aim should be to achieve both renewal and new construction. For it is unlikely that in the near future we could afford to rely solely on new structures, neglecting those we have inherited from the past.
URBAN RENEWAL AND HOUSING THE POOR

Chester Rapkin

The proposition that I would like to put to you today can be stated very simply: I submit that city rebuilding is the essential problem of urban planning, and that housing of the poor is the essential problem of the city rebuilding. These statements are, of course, outrageous oversimplifications, but I believe that, in essence they are true. The guidance of urban physical growth can be based on more or less established architectural and engineering principles and on established modes of fiscal and financial management. The successful rebuilding of any of the existing section of the city calls for a comprehension of urban processes and connections that we are just beginning to understand; it requires grappling with powerful economic, legal and socio-psychological forces, as well as with a wide variety of vested interests. When a section of the city occupied by middle-or upper-income families, however, is rebuilt (such as Park Avenue above Grand Central in New York during the 1950's), they have little difficulty in finding alternate residence in the private housing market, new or existing. On the other hand, when a poor family is dispossessed it can rarely find an acceptable dwelling in the private market, without some sort of public subsidy — and the same is becoming increasingly true of lower-middle-income families. Their rehousing, then, becomes the central problem for urban renewal, which is one of the major tools of city planning. It must give this problem primary attention, lest this process generate unanticipated side effects, which cancel its intended benefits or stop it completely.

THE RENEWAL PROCESS

Internal changes in the physical structure of the city are constantly in process, reflecting variations in the complicated systemic institutional communications among its individuals, household, business establishments and governmental agencies. The most dramatic physical changes are those which occur in the city center, or at other preferred locations. As new uses emerge, the demand structure is altered, land is revalued and
then acquired by private investors. This development is accomplished first by a change in use within existing structures (altered to suit the occasion) and, later, by a change in the buildings, through demolition and new construction. The new structures reflect modern technology, plus the accommodational needs and rent paying of the potential occupants. When this rebuilding occurs on a massive scale, it can be considered to be urban renewal; otherwise, it is part of the normal continuous alteration and modification that goes on in the live city.

Unfortunately, this spontaneous market process of replacement is very limited. It does not take place in the slum areas or in the so-called grey areas—areas of massive deterioration that have neither amenity nor locational advantage to commend them. In these areas, the market for new investment is severely limited or entirely lacking, because the existing pattern of demand is not sufficient to support supply costs, while huge injections of capital would be required to elevate the quality of the environment and change the nature of the demand.

Expressed in terms of land economics, spontaneous market renewal does not take place in these areas, because there is no alternate use for which the value of the land exceeds the existing value of both land and buildings in their present use, plus the cost of demolition. If renewal is to take place in these areas, it can only be by public action which provides the legal authority for acquiring the land and the financial mechanisms for bringing its value into consonance with some realistic alternative use. In order to do this, the act must be endowed with public purpose contributing to the general welfare. In public urban renewal, the catalogue of such objectives is long indeed. It includes placing well-located land in more productive use, increasing the real-estate tax base, altering the density of the building pattern, creating new job opportunities, improving traffic and transportation, enhancing the appearance of the community, destroying harmful or dangerous buildings, erecting new housing, and many others.

The primary problem facing the planner in urban renewal is that the prospective area is an organic part of the city. It provides many people with their place of residence and of employment and the connections that
facilitate their journey to work. It is a region through which channels of transportation run, linking origins and destinations in other parts of the city. Its subsurface utilities provide service not only to the area itself, but also to many other districts. Perhaps most important for our subject today is the fact that, for the existing population, an alignment has taken place between the characteristics of the resident households and the characteristics of the housing units in which they reside. This means that all the compromises have been made between the income, rent paying capacity, space needs and tastes of the household, on the one hand, and the space, quality, location and rent of housing units offered by the market, on the other. A similar situation exists for business firms which have established arrangements with customers, suppliers, service agents and offices; they too have selected locations which represent economic compromises between rent, transport charges and gross income potentialities.

It is this set of circumstances that confronts the public agency responsible for carrying out a renewal project. It must attempt to serve a number of general and specific goals with a minimum of cost, disruption and damage. It is called upon to balance goals that are desirable but not attainable simultaneously. It must retain, as far as possible, the elements that are worth preserving, and eliminate those that are undesirable. And through the course of it all, it must be constantly aware of the consequences of its intervention, being prepared to alter its course as it discovers miscalculations or encounters unexpected changes in circumstances. In the housing component of renewal, this means that vigilance must be centered on the relationship between the occupant and the dwelling. As we shall see later, this requires more than mere concern with adequate shelter. Ultimately, it involves the whole person and the whole family.

**HOUSING THE POOR**

A great deal of confusion has arisen because of the similarity between urban renewal and slum clearance. Both are large-scale operations that involve the erection of new structures. Both usually involve public action and both materially alter the urban visual scene. The distinction between them, however, is of considerable importance. Renewal — public or private — implies a change in use or in the quality of use;
it may or may not involve housing at the beginning or at the end. Slum clearance has as its basic purpose the elimination of substandard housing, and at least in the United States - the provision of new housing, usually subsidized, on the same site. From the housing point of view, the purpose of slum clearance is clear, while the purpose of renewal is not. Urban renewal and slum clearance can both be devices for improving the housing conditions of the poor, but we also know from the American experience that renewal can further depress the housing conditions of the poor by reducing the supply of low rent housing. Even if the purpose is to provide additional low rental housing, it may still be injurious in the short-run. The reduction in the supply also means that the former slum residents and possibly their new neighbors find themselves paying higher rents for inferior units. Often the interval between demolition of the old slum and the provision of new housing is long indeed. During this period the resident families crowd into the existing supply, usually in nearby areas, congesting the units and thereby hastening their deterioration.

Houses stay in the supply too long and ultimately become substandard. The perennial housing shortage in every nation of the world guarantees that a large and ready market for units of every quality is always present. This means that housing units remain earning assets long after they have fallen below acceptable social standards. In some instances poor initial construction hastens the deterioration, while in others, the main factor is obsolescence. But in virtually all circumstances, the slide to slum is hastened by poor maintenance and general neglect, despite wide-spread governmental efforts to the contrary. Housing codes are more honoured in the breach than in the observance because few, if any, cities have found ways of enforcing housing standards above those imposed by the market itself.

This is so because a large section of the population is too poor to acquire adequate shelter, without depriving itself of other necessities. It is true that a certain proportion of families with satisfactory incomes elect to live in slum units, because they prefer to spend their money on other items, but this is a small group, that will grow smaller should the housing dollar become more competitive. On the other hand, the lowest income groups
could not command satisfactory accommodation, even if they devoted their total income to housing. In general, throughout the world, good housing is just too expensive for the bulk of the population. The gap varies with the income level and housing needs of the household, but is in considerable measure a function of high supply costs. The initial cost of construction, the cost of financing, the cost of maintenance and the cost of municipal services (represented by real estate taxes) are all too high for the average, or even above-average family and surely out of the reach of the low-income family. What is worse, an account of the housing situation of low-income groups in various nations of the world reported that costs are rising fast and that the gap is widening.

But the disparity is also a function of rising housing standards - a development that we must applaud. With rising incomes and advancing technology, general housing standards move upward. Unfortunately, the physical structures outlive the standards of the period in which they were built. Since standards tend to be set at levels of housing quality within the reach of families in the middle classes, as long as older units endure and income differences continue to exist, some families will not have sufficient income to pay for currently satisfactory accommodation and will be compelled to accept shelter in units considered to be substandard.

The fact of the matter is that there would be no housing problem if there were no housing standards, because no one would be concerned about the places in which human beings lived, even if they were holes in the ground or, as is now the case in some places, the public streets. In fact, Louis Wirth has told us that "a civilization may be judged by the minimum housing conditions that it tolerates."


Housing standards, in effect, represent the community consensus of what all families should have if larger social goals are to be met. In this sense, as adequate dwelling unit is one that satisfies the requirements of modern family living. It must be suited to the functions of the family by providing sufficient space and proper design for the care and rearing of children, the preparation and consumption of food, the pursuit of leisure time activities, sleep, and the maintenance of cleanliness and sanitation. These standards not only imply certain structural attributes, such as soundness of construction and proper design, they also include many items of equipment that go beyond sheer consideration of shelter and sanitation. Moreover, the concept has been extended to include the nature of environment, the absence of hazards and nuisances, and the availability of essential community services such as parks and schools.\(^3\)

I need not tell this audience that the distribution of standard housing diminishes as we go down the income distribution; but, among the poor the impact is uneven. It is the large poor family that has the worst time, because few housing units are of sufficient size to meet the needs of the family with many children or of the extended family. The rent charged for such units is normally higher than smaller units, even while other needs place additional claims on the family’s income. Slum areas also have a disparate proportion of older people, not only because the aged tend to have low incomes, but also because old homes and old people go together. Newcomers to the country also have a difficult time with housing (as with other sectors of life in the new land) because of language difficulties, employment problems and general unfamiliarity with prices and places. It is to the enduring credit of the State of Israel and its people that they recognized this problem in advance, and made sure by one device or another that every incoming family — regardless of its economic status — had a home and a job when it arrived in the new land.

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\(^3\) Committee on the Hygiene of Housing of the American Public Health Association. An Appraisal Method for Measuring the Quality of Housing. (New York: American Public Health Association, 1945.)
Let me summarize the housing conditions of the population in the United States and other advanced countries of the Western World and perhaps you will adapt the statement to Israeli realities. Briefly stated these are the four principal housing conditions of the population:

1) Most families can afford decent housing and have it.
2) Some can afford it but do not have it out of personal choice.
3) Some cannot afford adequate housing but have it by sacrificing other comforts or have it via public housing or other state aid.
4) Many cannot afford it and do not have it.

Aside from the excessive municipal costs resulting from slum areas and the social costs that stem from the unsound and unhealthful effects of slum living on families, one may submit that it is a basic right of every family to have a dwelling commensurate with the productive capacity of the nation. For the families enjoying such a dwelling because of sufficient purchasing power, efforts must be made to conserve both the dwelling and the neighborhood. The question, however, centers around those families who can afford adequate housing but do not elect to rent or purchase it (i.e. they prefer to allocate their incomes to other things, including savings). Since members of this group can afford better housing, there is no reason to subsidize them, and perhaps the better way of inducing a rise in housing standards is to insure that inadequate or unsanitary housing is not available for occupancy. Thus, the state may make it difficult or impossible to live in substandard units through the strict enforcement of the existing or strengthened police regulations and occupancy laws and through public slum clearance programs. Whatever program is pursued, elimination of substandard housing will raise rents in the private market. If the poor units are renovated, the enforced improvement of the existing housing stock will require additional investment from the owner and therefore raise rents of rental dwellings or compel investments in owner-occupied units. If irreparable units are removed, the supply will be reduced; this will raise the average value of the remaining stock. Or if new construction is encouraged, it will be higher in cost than the withdrawn stock.

If the resultant costs are too high for some family budgets, then the state must consider its interest in the matter, and in a way consistent with democratic and economic principles
make up the income deficit of this group. For groups that are essentially relief or welfare recipients, direct aid will be necessary. For many, there is little question that the public housing program, despite all of its limitations, has been the only approach to the problem that has achieved any measure of success.

NEIGHBORHOOD CONSERVATION AND REHABILITATION OF HOUSING

For a long time, folk-wisdom held that slums were places of social disorganization and their elimination would be no loss to the occupants or to the community. We now know that even the most apparently disorganized area has an internal life and style of its own. This has always been evident among nationality groups where language, food, dress and modes of life identified the strong community elements in the slum setting. Among working-class and lower-class groups this is as true as it is among nationality groups, characterized here as much by outlook and prospects as by modes of life. The typical worker depends upon his house and neighborhood, not only to provide shelter and amenity, but also safety and haven. The surrounding area provides him with his source of friends and with moral and other social support. When he moves, he usually stays within the same neighborhood area, unless a change in job takes him elsewhere. For the very poorest people, described and dominated by the culture of poverty, neighborhood ties are the most intense in our society. Families live on the street to the extent that climate and season permit. Many women and most children, rarely, if ever, leave the immediate vicinity of their homes. Visits to the park, museum, airport, central city and other points of interest and activity are never made. There is little doubt today that attachment to place tends to be stronger as we go down the income and social scale.

Recognition of this fact led to a shift in American urban renewal policy, away from total clearance of buildings and dispersal of population, to efforts at rehabilitation of slum areas, so that people could stay in the same neighborhoods and even in the same — albeit improved — residential structure. It then became necessary to determine the level at which the repair and improvement was economically feasible, because many were obviously beyond repair.
At first, it was thought that the cut-off point occurred when the cost of acquisition and rehabilitation equalled that of clearance and new construction. But more sophisticated analysts like Needleman, Chung and Schaaf pointed out that the computation must take into account the level of rehabilitation, the cost of new construction, the economic life of the structure, as well as differences in maintenance costs and rent levels between a new and rehabilitated building. The more refined calculations tend to show that, by and large, the physical rehabilitation of residential buildings in slum areas is less feasible economically than was previously thought. Costs were surprisingly high. Many of the buildings were poorly constructed initially. A number had been damaged by fire, flood or internal rot, which did not become evident until the job was begun. Moreover, rehabilitation has many other limitations. Often the original street layout and site planning were poor. And, on top of all this, there was the problem of co-ordinating the rehabilitated structures with the newly constructed units which were usually needed to some degree. Administratively, the job proved difficult and long, particularly if efforts were made to work with existing owners, rather than to acquire all the structures and undertake the entire job as a single public or private project.

Thus, rehabilitation was disappointing as a renewal process, particularly in view of the fact that it apparently worked quite well in private luxury rehabilitation. But, on closer examination, the successful private efforts were found in well-located areas near the center of town, usually on quiet streets, which were often culs-de-sac, and where the houses themselves had intrinsic charm, because of age and architecture.


Although rehabilitation has apparently not fared too well on the first round, it would be premature to dismiss it peremptorily. In compiling the balance sheet, let us remember that rehabilitation does contribute to keeping a community intact and it helps to preserve the visible physical history of the city, which is lost by widespread acts of clearance and reconstruction. The decision to conserve and rehabilitate, or clear and reconstruct, an area should not be based on an economic calculus alone, but on a cost-benefit analysis that gives due weight to important nonquantifiable factors. These in the final evaluation may be the essence of our ultimate purpose in undertaking the arduous, complicated and indeed costly process of city rebuilding.

RELOCATION

City rebuilding, regardless of the degree of physical change, is by its nature disruptive. If an area is cleared for re-use, the traffic pattern is altered, shops, work places, schools and other public buildings may suffer the swinging ball of destruction.

I have already pointed out that any section of the city not only provides sites for its residential and work places, but also originates or acts as a transmission channel for utilities, transportation facilities, and other services for the many geographic areas and institutions with which it is linked. All of these links must be reformed, at a varying degree of public and private cost. Possibly, the most costly in real terms is the repair of the disruption caused by relocation of families, who have neither the financial resources nor emotional neutrality of major businesses or city institutions. This relocation is necessary, even if rehabilitation rather than clearance is contemplated. Few families can live amidst the din and destruction of a dwelling that is undergoing massive reconstruction, and they must take quarters elsewhere at least during this period. Although this move may be viewed as a temporary one, rehabilitation often takes much longer than total reconstruction - The West Side Urban Renewal Project in New York City, begun in 1956, is still a considerable distance from completion - and frequently the rehabilitated dwelling is beyond the means or does not suit the taste of its former occupant.
Relocation is a polite word for being forced to move, a situation not taken lightly by anyone. Consider the consternation of a competent upper middle class family when it is ordered to leave its home by a certain date. Now consider the problem of a poor family, with limited housing opportunities, being confronted with the same necessity. Even further, consider an elderly couple's bewilderment in the same situation - their financial resources and their strength limited, their habits fixed, and daily neighborly supports established. For them, a forced move is usually a shattering blow. What possessions can they take, how can they pack and cart them, where shall they find a new place and, once there, who will help them with their daily routines; and most important for some, what kind of place of worship will they encounter in the new place? In addition to the social difficulties presented to families by relocation, for many business establishments, some of which are family owned, the shock of urban renewal may be devastating, and in some instances, lethal. In slum and blighted areas, business tend to be marginal and deeply dependent on the immediately surrounding population for their support. Small shops often survive because of low rent and because the same building which houses the shop often provides shelter for the family. During the initial history of modern urban renewal it has become painfully clear that the cost to the family and the firm in cash, inconvenience and anxiety, and possibly its destruction as well has been great.

It is ironical that, in the United States, urban renewal, undertaken to enhance the public welfare, did not recognize this obvious and important social datum until the program was well under way, and then largely because the chronic housing shortage after World War II made it difficult for families to find alternative accommodations on their own. This was particularly true for the Negro family, whose housing opportunities were limited not only by poverty but by discrimination as well. It is now a generally accepted principle that public actions undertaken to advance the welfare of the general community should cause a minimum of private pain. In urban renewal, this has meant that cities must now offer a choice of suitable alternative dwellings to the family about to be relocated and pay reasonable sums for moving expenses.

While this policy is a major step forward, it is only the beginning of an acceptable relocation program. In this regard, I comment to your attention a book by Paul L Niebanck called
"Relocation in Urban Planning: from obstacle to opportunity." In this book Professor Niebanck proposes that, at a bare minimum, relocated families be given assistance, prior to their move, in visiting and selecting the new accommodation; during the move, in packing, transporting and unpacking their possessions; and, after the move, in becoming acclimatized to the new neighbors and neighborhood. But more important, he proposes that relocation be made a positive action, in which the housing status of the resident families be considered as "equal rather than ancillary to the planned change in land use; that their housing and environmental needs be given special consideration prior to the decision to displace them... that rehousing services be available to any poor family seeking to move, and that the relocation service program be available to any poor family seeking to move, and that the relocation service program be broadened to include extensive social services along with comprehensive housing services."

Such a program would not only alleviate the plight of the family compelled to move in the course of urban renewal, it would also enlarge the relocation concept itself by aiding poor families outside of renewal areas who wish to leave their decrepit or dangerous quarters to move to superior accommodation, perhaps supported by some type of public subsidy. In any event the registration lists of such a service would provide the government with an indication of the minimum number of families that are in need of improved housing, and who have indicated their willingness to accept it. A building program, based on such an inventory, could make it possible to increase the volume of new residential construction, accelerating the amount of replacement housing where private building declines. At the same time, it can complement the formal renewal process by the systematic evacuation of families from the poorest areas. In order to prevent the adverse effect of housing abandonment, the evacuation from poor housing - systematic or random - must be accompanied by a program of immediate reuse, even if it only involves tearing down and making children's play

areas out of the space. In fact, planners should begin to devote some attention to the uses that can be made of vacant lots of various small sizes, including methods of keeping them clear of refuse during the interim period prior to long term reuse.

**CITIZEN PARTICIPATION**

In addition to lack of money, poor people also suffer from a lack of power, and in fact the two are not unconnected. In a simple sense, this means that if you are poor others can make you do what they want you to do, regardless of your wishes, and that you have little or no influence over others. Nowhere is this more vivid than in an area that is subject to urban renewal. A place where people live is suddenly thought to be of more value to the general community if it were used for something else. This decision is made by others, and often for the benefit of still others. The local residents are rarely consulted, even if they are presumably the beneficiaries of the action. As a result, they are often suspicious of governmental intentions and planners' purposes, particularly when the end product is not clear, or the gap between promise and performance appears to be long. The usual reaction under these circumstances in the past has been sullen resentment or quiet withdrawal. But they can also erupt into violent opposition, if the political climate is right. Middle class groups in similar circumstances know how to obtain the information they desire, and how to mobilize the resources necessary to obtain what they want. Poorer people are generally without political experience and therefore have been at a loss about how to conduct themselves under these circumstances. Powerlessness breeds frustration, frustration breeds aggression, and aggression breeds explosion.

Urban renewal and slum clearance both provide rich opportunities for the resident population to join in the determination of their own future by participation in the planning process from its inception. This represents a basic democratic challenge for it recognizes that, if people's social and economic needs are to be considered, no one can know them better than the concerned groups themselves. Their priorities may be imputed to them, and their time horizon is most certainly bound to be different. Their wishes have budgetary and land use implications, and the crux of the matter is the way in which these are translated into operational terms,
Sherry Arnstein has examined the various types of local participation which have developed in recent years in urban renewal, and particularly in the Model Cities Program in the United States, and has suggested a social spectrum of degrees of involvement. The lowest level consists of membership of advisory committees; the next step is consultation and the selection of a few worthy poor to serve on local boards. She points out that the end of the spectrum goes from partnership (in power-sharing through money-sharing), to delegated power (locals constituting a majority on the board), and finally to citizen control with no intermediary between the neighborhood corporation and the source of funds (which in the United States is the federal government).

In order to carry out an effective program of community participation, it is necessary to study the way in which the planning process in the given community affects the low income groups and their responses to it. It is also necessary to examine the dynamics of the process and to develop some sense of the embryonic development of power among the poor. This involves an examination of the nature of resource allocation — and indeed, patronage — as well as the positive-versus-negative aspects of local power. Militating against the sophisticated exercise of authority in planning by the poor are their utter lack of experience, their very short time horizon, and the inevitable conflict between their self-centred objectives and the interests of the city as a whole. Moreover, even when their interest exceeds past the immediately available reward, their prime concern has centered on

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the direct and current supply of housing. Even programs whose prime purpose is the provision of improved housing face neighborhood difficulties if they begin by removing occupied units no matter in what poor condition these are. Not only urban renewal projects, but installation of any public facility, has become subject to neighborhood veto if its effect is to narrow the supply of housing. Hence, housing is both morally and politically at the center of urban renewal policy.

In the United States, citizen participation has taken its most active and varied forms in the Community Action Programs of the war against poverty and in the Model Cities Program. In the latter case especially, in many sections of the country citizen participation has been particularly expressed in progression from local participation to various degrees of control. Large sums have been made available for planning and huge sums for construction. A bureaucracy has developed, with well-paying jobs on many levels. Control of the contracts was a powerful spur to local groups, who soon became more interested in the delivery system—with its immediate rewards—than in the end product of housing and urban renewal, whose realization was in the distant future. In this process, the local groups became more and more area-centric, placing their interests above those of other poor people who lived or worked outside the boundaries of the Model Cities area.

The nature and pace of these developments are directly attributable to the fact that the onset of the Model Cities Program coincided first with the civil rights movement and then with the gathering of momentum in the black revolution in the United States. This, in turn, accelerated similar movements among the Puerto Ricans, Mexican-Americans and American Indians. Along the way, the Model Cities Program and the black revolution fed each other, with the ultimate goals of the city rebuilding program frequently being consumed in the process. Because of the historical coincidence of these two movements, few, if any, lessons can be drawn directly for Israel from the American experience with citizen involvement in urban renewal, or from any other country for that matter. But one thing is certain. The word is abroad that renewal without some mode of local participation is a thing of the past and if the local residents do not insist upon it, the planners will.
PHYSICAL REBUILDING AND HUMAN RENEWAL

We are confronted with a difficult, arduous, complicated and endless process in the rebuilding of our cities and in rehousing the poor; difficult, because it will require enormous amounts of public funds for which there will be much competition; arduous, because there are no magic formulae to ease us towards facile solution; complicated, because we have yet to sort out the threads in the urban fabric and in our goal structure; and endless, because, when we finish the first round, it will be time to start anew. If we complete it sooner, it will mean that we are rich enough to raise our standards and that the beginning of the second round is indeed overdue.

Each area selected for renewal must be judged on its own terms. It must be subjected to the same careful diagnosis that we would lavish on the only renewal area in the world; for to people who live and work in it, it is the only renewal area in the world. The planning proposals should not be based on some technician’s intuition, but rather on that combination of integrity, intelligence and craftsmanship that reveals the creativity of the artist, as he expresses the wishes of people through the medium of the technology of the day. And above all, the plan for the future must be developed with the full participation of the people whose lives are being altered profoundly by the changes to come.

In a world that is becoming increasingly urban, the maintenance of the quality of our cities becomes a major test of the quality and coherence of our society. Without a systematic program to obliterate our slums and reconstitute our cities, the urban ambience will trail behind less important components in our social system. The public economy cannot lag behind our private economy, if we are to provide our population with the same degree of choice and quality in the vital area of education, housing, and public recreation that we find in the supermarket and the automobile showroom.

To my mind, the quality of housing is the major test, for its replacement is postponable and its cost high. In aggregate, the elimination of the slum constitutes a significant tax on the economy, but by the same token it is an indication of our unwillingness to permit happenstance
to determine which of our people — our poor people — shall live in acceptable housing, and which stand condemned to sub-standard dwellings.

Converting such a commendable social objective into programmatic terms cannot be done without massive public subsidy. This may take the form of capital subvention, tax remission, interest rate reduction, or a combination of these and other methods. It must be eclectic, responding to the needs of the occasion with the forms of organization, tenure, financing and construction that utilize the resources, predilections and social forms of society at the moment. Incredible as it may seem, it is impossible today, in the United States, to take all the families out of a given slum structure and place them in a publicly subsidized project. Each public program has its own requirements and criteria of eligibility. A family must be of a certain size, or age of head, or income level, or military or veteran's status, or legitimacy of offspring, or degree of housing need. But the families in each slum building have a variety of characteristics, which do not necessarily mesh with the demands of any one of the established housing programs or all of them together. To place families from a given slum building into satisfactory accommodation will most certainly take a number and variety of public and private housing buildings or projects. Even then, unless occupancy restrictions are relaxed, some families will have to return to the substandard housing supply, for they will not find themselves eligible for a public unit, or able to rent or purchase a satisfactory dwelling on the private market.

It is also high time for the tastes and desires of the people to be housed to play a role in the design of the accommodation in which they will spend their lives. The extensive workers' housing movement in Germany in the 1920's devoted considerable thought to the amount of space and the arrangement of rooms that were considered to be appropriate for a worker's family. But no one thought of testing the premises either by surveying their attitudes in advance of construction, or of testing the degree to which the occupant was satisfied with his home after construction. The initial intuition was considered adequate. We can no longer accept this in our world of market analysis, consumer surveys and product acceptability. The poor family is no less a consumer than the purchaser of a Cadillac, and his degree of satisfaction with his home should be of importance to the Ministry of Housing and the Urban Renewal Administration, who are responsible for the creation of the product.
In addition to the nature and quality of units, the staging of their construction is of importance, in order to make sure that new housing is available as the old slums are demolished in the renewal process. This not only assures the continuity of supply, but if the new units are in the same neighborhood as those removed, it also prevents the dislocation of the community which takes place when demolitions exceed the new supply and families must be displaced, usually against their will. Satisfactory staging also reduces the relocation burdens, both on the administrative agency and on the families who otherwise may be compelled to move more than once in the course of a single renewal operation. In any event, all families who are obliged by fiat to leave their homes in order to achieve some public purpose, should find the relocation process one that contributes to the enhancement of their welfare at least through improvement in their housing, and not a destructive experience which will inflict lasting financial, social or psychological injury.

Converting unavoidable relocation into a constructive experience should become part of the elemental stance of urban renewal. Its basis should be the protection of the vulnerable poor or otherwise deprived people who become particularly exposed to injury during the renewal process or whose plight, previously concealed, comes to light in the course of public intervention in their lives. Once having encountered the hidden suffering, public conscience and concern can no longer remain indifferent, and urban renewal and human renewal must then become part of the same public endeavour. For to undertake one without the other is to lose sight of the true ultimate purpose of rebuilding our city and erecting new and improved housing.

As important as is the injection of added capital into the process of city rebuilding and into the refurbishing of the housing stock, it is of equal, if not greater, importance to devise more satisfactory ways of maintaining the quality of the supply. Adequate maintenance is the difference between the slum on Third Avenue and the luxurious apartment on Fifth, for both were of the same initial quality. Devices must be found which will take the decisions regarding the sums spent on maintenance out of the hands of the people who stand to gain by reducing these expenditures, and to subject them to disbursement
by agencies or institutions licensed by the State. In this manner, maintenance expenditures can be co-ordinated with a program of capital preservation laid down by public authority. This is particularly important during periods of housing shortage, when a landlord—public or private—has no difficulty in finding occupants for his units, regardless of their condition.

The never-ending process of construction, reconstruction and preservation forms and re-forms the city. Its continuity enables the city to adapt to changes in technology, productivity and social systems. For it to triumph over the impulse to casual disarray requires the kind of force and direction that can only come from a strong urban planning process, of which public urban renewal is an integral element. And, as I have said at the start, a massive program for rehousing the poor is the key to renewal of our cities and our society.
PROBLEMS OF RELOCATION IN HOUSING PROJECTS

Ayala Hirsch

This paper will discuss problems encountered in the relocation of families from one Tel-Aviv neighbourhood to the other: Kfar Shalem to Naveh Shalem (today called Naveh Elishezer). We will deal with the problems from the following points of view:

a) Housing allocation norms;
b) Composition of the population;
c) Timing and scheduling of relocation;
d) Structure of the neighbourhood; and finally
e) Upkeep of the neighbourhood.

Note that these aspects receive special emphasis because of the specific character of the relocation problem discussed in this review.

DESCRIPTION OF THE NEIGHBOURHOOD

"Naveh Shalem" is one of the residential neighbourhood designated in the Kfar Shalem outline scheme (master plan). The neighbourhood is located in the south-eastern portion of the renewal area and is planned to accommodate 1,385 dwelling units at a net density of 16.4 units per dunam.

The neighbourhood is composed of four-storey apartment buildings on columns. Most of the buildings are square, with 16 dwelling units and one stairway entrance each. The size of every apartment is 80 square meters. In addition, buildings with several entrances (4-8 entrances) have also been erected, the majority of which have eight apartments per entrance. The size of these apartments is 56, 64, or 72 square meters. Apartments of 38 and 42 square meters were planned on the ground floor to accommodate singles and elderly couples. Up to now, 786 units have been built in ten buildings, out of a total of 1,385 planned dwelling units.
THE RELOCATION PROJECT

In 1964 the "Halamish" renewal company* began to bring residents into the neighbourhood. Relocated families were housed according to the following housing allocation norms: a young couple received an apartment of 56 square meters; families of 3-7 persons received apartments of 64 and 72 square meters; and families of 8 or more received apartments of 80 square meters (the largest apartment planned in the "Naveh Shalem" project).

These norms were set in accordance with the accepted norms for other public housing projects (e.g. housing for immigrants and for young couples), but with an additional consideration in mind - that of keeping the apartment price low in order to enable the families to meet their payments (the new apartments are offered to the relocated persons for purchase).

It became clear by the first stage (two years after the people moved in) that these norms were not appropriate for the needs of the population and that this caused considerable neglect of the neighbourhood. In order to prevent complete deterioration of the new housing project, the Renewal Company decided to change the housing norms, beginning in 1966. The new norms were set on the basis of two criteria: age and family size. For example: a young couple (up to the age of 39) received an apartment of 64 square meters, while an older couple (ages 40 years and over) received an apartment of 42 to 45 square meters. Families of 6-7 persons (up to the age of 40) received apartments of 80 square meters; and families of 8 or more persons received 87 square meters. Elderly couples and singles received the small ground floor apartments of 38 and 42 square meters. In other words, the change in norms in 1966 brought about a situation in which the new project continued to house families of only up to 7 persons, since apartments of 87 square meters were not planned in this housing project. The Company decided, in addition, to allow families to have bigger apartments than they would have received according to the norms, in as much as they were ready to pay the difference in price.

* Israeli law enables the creation of renewal companies jointly owned by Government and by the municipality concerned. "Halamish" is the Tel-Aviv renewal company (ed).
From the point of view of the number of rooms per apartment, the 786 apartments erected were distributed as follows: 4 percent were one room apartments; 7 percent were one-and-a half room apartments; 12 percent were 2 room apartments; and 77 percent were three room apartments (the largest ones). From the point of view of apartment area the distribution is different: 50 percent of all the apartments are 64 sq.m. in size and 14 percent are 80 sq.m.

In connection with apartment size it is worthwhile mentioning that in the census carried out in 1966 in the renewal area of Kfar Shalem,* the residents were asked about their preference in apartment size. Among families of 4-7 persons it was found that the preferred apartment size was 3 rooms, and among families of 8 or more persons, 4 room apartments were desired. The preferred relocation norm, in the opinion of the residents, was a housing density of up to two persons per room. This density norm is considered reasonable in Israel.

In contrast to the desires expressed as to preferred apartments size, it was found that the families managed with smaller apartment (from the point of view of rooms per apartment) when they voluntarily purchased or rented apartments. Among those relocatees who found apartments on their own ("independent arrangements"), 70 percent relocated in 2 and 3 room apartments irrespective of family size. These findings show that when dealing with immediate needs, objective conditions and real possibilities govern personal preferences.

Another aspect of the relocation norms is the building's population. It is sufficient to point out that the families of 8 or more persons received 80 square meter apartments, and that in the square shaped buildings, which have one entrance each, there are 16 apartments of this size. Thus we can calculate that the number of children housed in such a building is between 70 and 90 (without taking into account increases in family size at some point in the future).

An additional aspect of the relocation norms relates to the problem of the concentration of relocated families in the new housing project. The project's population includes 80 percent of the residents of "Kfar Shalem," of whom 23 percent are welfare cases. The other 20 percent are relocatees from temporary transit camps - i.e., immigrants who arrived after 1967 - and young couples. This concentration of relocated families in the new residential neighbourhood brought about, in fact, a transfer of social problems from the renewal site to the new project. It must be pointed out that due to consideration of population composition in the neighbourhood, and because of the need for a mixed population, the Renewal Company decided in 1968 to cease the transfer of families from Kfar Shalem, and construction was halted. However, the company enabled members of families who were housed in the project (young couples who were subsequently married) to obtain apartments 64 square meters large in the project.

RESULTS OF THE RELOCATION PROJECT

As a result of the housing allocation norms which lead to the concentration of relocated families in the project's population, and as a result of a certain degree of ambivalence arising from the provision of alternative housing on condition of purchase, we witnessed a number of undesirable phenomena in the new housing project:

a) A situation of high density was created in the apartments, in the buildings, and in the neighbourhood as a whole (we are referring to the built-up portion). The high density resulted from the housing norms, which were found to be inappropriate for young couples and large families. These norms did not take into account future growth in family size.

b) Within a short span of time, the above situation led to changes in the facades of buildings, to the closing-off of balconies, etc. The changes resulted from objective needs and from attempts by the dwellers to enlarge the apartment areas. At the time the norms were set, the fact that most of families from the renewal site had lived in one-storey houses with courtyards was not taken into
consideration. Even if it is smaller in area than an apartment in a multi-storeyed building, a house with such a courtyard allows for more comfortable living arrangements. This is especially true for families with many children. Another factor which was not taken into account and which affects density, discomfort in the dwellings, and maintenance, is the change from one type of dwelling to another. This change-over involves adjustment to new types of dwellings and to a modern neighbourhood.

c) The unbalanced population composition in the project - large families and "problem" families housed in multi-storeyed buildings - led to the inability of the dweller to maintain the common property in a decent manner. Poor relations among the neighbours were created, and practically speaking, the social problems of Kfar Shalem were simply transferred to the new project. It may be said that the initial stages of deterioration and the creation of a new slum are already under way in certain sections of the project.

d) A mistaken policy was adopted, whereby the apartments were provided to relocated families on conditions of purchase, involving not only the burden of payments and often the inability to meet them, but in addition, the lack of possibility of changing apartments and moving to larger ones. This situation was a consequence of the negative image of the neighbourhood and the lack of demand for apartments in the new project.

e) An atmosphere of bitterness and dissatisfaction was created among the residents due to the relocation norms and financial conditions, and as a result the renewal action took on a negative image which became a deterrent force in the relocation of subsequent families from the renewal site. This situation led to the slowing down of the pace of evacuation and to a rise in expenses to the Company.

This is the appropriate place to point out that in the years 1967/68 the Company had empty apartments which it could not fill for lack of residents willing to move into the housing project. Furthermore, when the Company offered apartments in other housing projects to families scheduled to be relocated, there was a rise in the number of residents leaving the renewal
site for the other projects offered.

**IMPLICATIONS**

In order to prevent the repetition of the situation examined above, special attention must be paid to several aspects related to the problem of housing allocation in public projects.

One of the central problems in urban renewal is the question of deciding on a proper relationship between actions involving rehabilitation of the persons relocated and those related to rebuilding the area.

In the majority of slums, as in Kfar Shalem, we find a high proportion of elderly people, of families with many children, and of problem families (welfare and delinquent cases). As a result of this population composition there is a need for a variety of housing solutions which will meet the needs of the several sub-groups in the population scheduled for relocation.*

However, on the other hand it is agreed that one of the important goals in evacuation and redevelopment of the area (for example, the case being discussed) is to change the population composition in the renewal site. This transformation can be accomplished by attracting population groups of somewhat higher status to reside in the site, thus improving its image.

Here several questions arise which may be divided into two categories:

a) Questions related to the rehabilitation of relocated families;

b) Questions related to the redevelopment of the site.

In the first group, questions such as the following may be included: What is the preferred manner of rehabilitation? what types of apartments and buildings are preferable? which factors should be taken into account in the construction programs for the relocation site? etc.

*Survey of Kfar Shalem, Program for Evacuation and Rehabilitation of the Population, September, 1969
To the second group belong questions such as: What is the proper proportion of relocated families in general, and problematic families in particular, that should be housed in the area under consideration? Should these families be concentrated in one section (or several sections) in the site or should they be dispersed throughout other neighbourhoods outside of the renewal site.

We shall now expand upon the special needs of three of the problematic groups involved in renewal: the elderly families with many children, and the groups of welfare and delinquency cases.

1. **Renewal housing for the elderly** (couples and single persons).
   In accordance with the opinions of welfare agency workers and with the experience gained in rehabilitation of the elderly, it seems that resettlement in old-age homes is not very satisfactory. In the majority of cases it is preferable to give elderly couples and single persons housing in an area of mixed population in regular buildings, near the renewal site. It should be pointed out that this form of renewal and rehabilitation implies special attention for the elderly not only from the physical point of view but also from other points of view. In fact, the renewal activities involving elderly and disabled residents of Kfar Shalem dealt with their rehabilitation also from the economic and social points of view. With the aid of the Department for Social Work of the Tel-Aviv-Jaffo Municipality and the 'Halamanish' Company, social clubs and work projects for the elderly were established. In addition, household help was provided for the singles, the disabled, and the chronically ill (3 times a week). In this manner employment possibilities were provided for older women residents of the site.

   Small rental apartments (32-45 square meters in size) on the ground floor were planned as an alternative housing for the elderly (couples and singles) and were found to meet their needs.

2. **Renewal housing for families with many children.** Experience has shown that housing of families with many children in large projects is undesirable because of problems of maintenance, noise, neighbourhood relations, etc. It is preferable to house these families in one-storey buildings or in apartments with courtyards.
The advantage of such dwellings are:

a) Greater convenience: the courtyard enlarges the actual living space which has been limited by the housing norms;

b) The elimination of the need for maintenance of common property, which exists in multi-storeyed buildings;

c) A type of housing which meets the desires of the families who currently live (in Kfar Shalem) in apartments with adjoining courtyards;

d) Minimizing the difficulties resulting from the change-over from one type of housing to which the residents of Kfar Shalem had been accustomed over a period of many years to another type of housing.

3. **Renewal housing for problematic families** - in this group of families a distinction should be made between families who are welfare cases and cases of delinquency.

**Welfare cases**: A survey of welfare cases among the residents of Kfar Shalem showed that the main reasons that families need welfare were: chronic illnesses, large families, old age, poverty and deprivation.

Rehabilitation of families in this category has several conflicting aspects. In the opinion of the Welfare Ministry and from the experience accumulated in rehabilitation of such families in Kfar Shalem, it seems that these families must be helped to leave the company's housing projects, and where possible they should be dispersed throughout other residential neighbourhoods. This course of action also demands, in fact, some expression of initiative from the families involved.

However, since most of these welfare cases are passive in character, do not recognize their own needs, and are not likely to improve their living conditions by themselves - treatment of these families falls into the hands of the renewal company alone. Since the possibilities open to the company are limited to the
The experience of Naveh-Shalem has shown that a ratio of 80 percent evacuees from the original slum to 20 percent other residents, is certainly undesirable. However, the question of what is the proper ratio remains open. It should be pointed out that we still lack sufficient information on this subject.

The question of how to create a balanced neighbourhood which will absorb different population groups from outside the renewal site (families from other residential neighbourhoods, immigrants, and young couples), when evacuated families are simultaneously relocated in the neighbourhood, raise another problem: the timing and scheduling of the relocation, i.e., the appropriate pace for evacuation of families and their rehabilitation in the new neighbourhood. It can be said from experience with relocation in other neighbourhoods, that it is preferable to settle families from other population groups at the same time as the relocated families, or even sometimes first to settle families from higher socioeconomic levels and only afterwards to relocate the evacuated families. This is an especially difficult problem since it depends upon the quantity of resources in the budget allocated for this action, the pace of construction, the market conditions, etc.

The creation of a mixed neighbourhood composed of different population groups requires special attention to the building layout and form. Since all the evacuated families (large families, problematic families, etc.) should not be concentrated in any one neighbourhood unit, and especially not in any one section of the neighbourhood, a variety of building forms and layouts is needed. This implies a combination of low buildings with high-rise or multi-storeyed buildings, in order to meet the needs of the different population groups. The building plans must include the appropriate distribution of structures of the different types in order to ensure smooth neighbourly relations among the groups of residents with different dwelling habits. It should be emphasized that the need for a mixed population does not necessarily imply that families from different population groups should be relocated in one building, but rather in various groups of buildings.
In planning residential neighbourhoods, areas for services appropriate for the relocated population should be taken into account; i.e., day-care centers and clubs for different age groups, an appropriate number of kindergartens, etc. The building density should also be lower than that customary in the urban areas, for instance 9 versus 16 dwellings units (respectively) per net dunam, as proposed in the master plan of the Kfar Shalem area.

Finally, one more aspect of the relocation problem should not be overlooked - the aspect of maintenance. In order to maintain the entire neighbourhood at an acceptable level, proper maintenance must be ensured right from the start of relocation. All the activities in this realm instituted by the Halamish Renewal Company led to surprising results. Starting in 1967, the Company committed itself to executing, through contractors, all the activities involved in maintenance of buildings completed in 1967 or thereafter, for a period of ten years. In the absence of appropriate by-laws, these activities are carried out through a special paragraph in the contract which each dweller signs upon purchase of the apartment. The Company employs a permanent superintendent who deals with complaints and maintenance matters.

In addition, the Company arranged an agreement with the municipality of Tel-Aviv for the completion of site development plans, i.e., everything related to construction of playgrounds and sport areas, public parks and youth clubs. The Company is also responsible for intensive community work, which is performed by a community worker employed by the Company.

These activities led to surprising results in those sections of the neighbourhood where the buildings are maintained by the Company, in comparison to other buildings in the neighbourhood which are not maintained by the Company. Furthermore, an atmosphere

\* one dunam = 1000 square meters.
4 dunams to the acre.
provision of housing in the new neighbourhood on the renewal site, or in projects adjacent to it, a reconcentration of these same families is necessarily created. Still, there should be concern not to over-concentrate these families in one neighbourhood unit.

Cases of delinquency: Here we are dealing with renewal housing for families with delinquent members or with rehabilitation of single delinquents. It should be pointed out that in Kfar Shalem no cases were found of families where delinquency has been 'inherited' from one generation to another. The delinquents in the neighbourhood were usually members of normal families, and most were in their youth. In addition there were also 'habitual' criminal elements, the majority of whom were single persons.

There are also two sides to the problems of rehabilitation of delinquents. For single delinquents, who usually are the more difficult cases, the preferred solution is monetary compensation which will allow them to obtain appropriate housing on their own. The experience of the police has shown that the majority of delinquents belonging to this category, request to move to residential areas which attract others like themselves. It should be held in mind that the concentration of delinquents in a certain residential neighbourhood may 'infect' the area and lead to its deterioration, thus causing the other families to leave. It seems, therefore, that practically speaking there is no one comprehensive solution to the problem of rehabilitation of delinquents, especially of habitual criminals.

Renewal of Housing for Families in General: Until now urban renewal of slum areas in this country has taken two forms: one form has been to give the evacuated family compensation for its property, and then let the family find alternative housing on its own; under the second method, the renewal company supplies alternative housing in one of its projects. These apartments must be purchased, and the compensation money is deducted from the cost of the apartment.

From experience gained in the case of Kfar Shalem, it can be said that among families who found apartments on their own, according to their own choice, the image of the relocation and renewal activities was positive and there was
a greater degree of satisfaction. Therefore, by granting various incentives, it is preferable to allow each family to make arrangements for alternative housing on its own. This is true for the problematic families as well.

The residents of the Company's housing projects, the majority of whom belong to low-income groups, should be permitted to obtain apartments on a rental basis as well, and not solely through purchase. This should be done because the evacuated families are hard-pressed to keep up with the burden of payments, because the resources in the budget of the bodies involved are limited, and because of the inability of families who wish to change their apartment to do so under the purchase scheme. In addition, those relocated in projects belonging to the renewal company should be offered a choice among residential sites, be they in the renewal area itself or in other projects outside the area.

We will now go on to discuss a group of questions related to the proper proportion of relocated families to be rehoused in the renewal area. The assumption is that the dispersal of evacuated families throughout various neighbourhoods outside the renewal area is likely to lead to their integration with other population groups and to improvement in their style of life. At the same time, such action will reduce the proportion of relocated families on the renewal site itself. This is likely to make it easier to attract residents from higher socio-economic groups to the renewal site.

The proper proportion cannot be fixed in any absolute sense; it varies from project to project, according to the conditions present.

Another question is: how should evacuated families be housed on the renewal site? Just as relocated families should be integrated with other population groups outside the renewal site, over-concentration of evacuated families within any one neighbourhood unit in the renewal area itself should also be prevented.
of help and cooperation was created among the residents through a series of committees (sub-building committee, building committee and neighbourhood committee) and through those who furnished the various services performed in the neighbourhood. We are currently witnessing the organization of various social activities, such as hikes and trips initiated by the residents themselves, the arrangement of various sports groups by Halamish, the provision of 'a helping hand' to immigrants in the project, and so on. In general, there is a greater degree of satisfaction with their dwelling among residents who live in the buildings and maintained and organized by the Company.

In summary, we can say that if there still remain many doubts as to the correct answers to the questions: what makes a balanced housing project from the perspective of population composition? and how can this 'proper and balanced' composition be obtained? With respect to the positive contribution of maintenance activities and community work there are no longer any doubts.

The need for a wide range of community work activities pertains not only to the more deprived groups in the rehabilitated population, but to all the rehabilitated families who need guidance and aid, in order to ensure a high level of care for the dwellings and maintenance of common property.

*Each group of families sharing one entrance to a building organizes a committee (ed.).
A FRAMEWORK FOR DEFINING RENEWAL ACTIVITIES IN ISRAEL

Dalia Kadury-Lichfield

INTRODUCTION

The subject of my paper is a framework for defining urban renewal activities. I shall preface it with a few words for the sake of clarification. When the organisers of the symposium met to draw up a list of lectures to be presented, they faced the usual problem with which all organizers of symposia are confronted: after the papers have been given, the participants are left saying 'what has all this to do with renewal?'

Actually, a subject as wide as renewal has many aspects. Different people are interested in different facets of the subject and look at the subject from different points of view. I was presented with the task of trying to draw a general picture which would encompass most of the topics constituting 'renewal theory' and which will be dealt with here. In drawing this picture, I will make reference to the particular paper which will elaborate each given aspect. This discussion will begin with a general survey of the fundamental concepts of urban renewal. The paper will proceed to discuss the revitalization of the urban fabric through individual initiative, and point out those distinct circumstances which make the participation of the public sector in renewal necessary. Finally, the paper will describe the activities of public bodies in Israel which deal with the field of renewal.

THE URBAN FABRIC - DEGENERATION AND RENEWAL : BASIC DEFINITIONS

Let us begin with a question: what is the urban fabric which is the object of revitalization and renewal?

The city is a total experience (this theme has been expanded upon by Prof. Lichfield). Part of this experience is the physical aspect, wherein the city acts as an instrument and container of human activity. This is what we call, 'the
The urban network provides the needs of the population to a large degree - including housing, transportation, recreation etc. Thus it encompasses various economic and social activities. However, it may happen that something goes wrong with the system; in such a case it no longer provides for the needs of the population. This occurs either because the urban fabric has deteriorated or because the needs have changed. I shall expand on this point later.

I suggest that we do not view 'defects' in the urban pattern as having any intrinsic meaning, but rather in terms of the damage they do to various sectors of the population. For example, if a road is in poor condition or too narrow, it does not suffer; it has no soul and does not feel its wounds. It is the people making use of the road who suffer. Thus we can attribute varying degrees of importance to the same degree of disrepair; the road may be used very rarely, or it may be used by one element or another of the overall population. The extent of disrepair will depend upon the importance we attach to the inconvenience felt by various groups of people. Thus we cannot talk about the poor condition of a road without defining exactly who is affected by it. This is true of any other aspect of the urban physical setting as well.

Another point to recognize is the reciprocal relationship between the physical infrastructure and the social and economic activities taking place within it (here too, I shall not go into detail since this topic has or will be dealt with in other papers). Finally we must recognize that the revitalization of the urban fabric and its adjustment to current needs is the essence of urban renewal, and that this process goes on continually. Whether a national renewal authority exists or not, renewal proceeds via individual initiative, albeit at a limited pace. (A good example of this is Be'er Sheva, where the

*Be'er Sheva is Israel's fourth-largest urban area (after Tel-Aviv, Haifa and Jerusalem) with a population approaching 100,000. Its center was formerly a small Arab town (ed.).
old urban centre was renewed without direct public intervention, though a closer analysis shows that there was indirect public intervention which produced the proper conditions for private activity). Some of the renewal results from the constant intervention of public authorities who build new roads, tear down houses, improve services etc.

Thus, one way or another, renewal goes on all the time. However, there are various conceptual definitions attached to "renewal." Each approach to renewal is valid as far as it goes, but the specific form it takes depends on each individual's point of view and subject of interest - just as you might correctly describe a car as an object weighing 500 kilograms, or as one which consumes a certain amount of energy. The question is - from what point of view do we want to approach the matter, what concerns the observer and what is his field of activity. On this principle, we may similarly ask what are the various definitions for the concept of urban renewal.

**DAMAGE, DEPRECIATION AND COMPARATIVE STANDARDS**

A faulty urban pattern is one which in essence does not provide for current needs. Part of this failure may stem from depreciation - i.e., the aging of materials such as rusty pipes or cracked roads. Depreciation can be gradual or sudden depending upon how intensively the road or other element is used and how much care is taken of it. These considerations introduce an economic or social factor, as do the 'housing culture' of the users, the economic justification for the intensive use of the resources, etc. Even depreciation depends upon social factors. The inability of a given element to carry out its assignment properly may arise from a change in the quantity or quality of the function, rather than any failure of the element itself. This is indeed a social phenomenon, for the word "unsuitable" actually means "we should like it to be different." We compare the given situation to the present-day standard we have established for ourselves; e.g., that an apartment will contain at least such-and-such a number of square meters per person, or that a highway will bear such-and-such a number of cars per hour. The standard is itself a variable; thus the housing density or road traffic that we consider to be desirable, change along with changes in circumstances.
Another cause for "unsuitability" may result from external circumstances which interfere with proper functioning of resources which are, in themselves, adequate. For example, houses located in the vicinity of factories emitting smoke or noise are unsuitable as homes. This circumstance is the result of changing activity within the environment.

In principle, there are three ways of dealing with problems of unsuitability: adjusting the physical fabric to the needs and activities, adjusting the needs to the physical framework, or adjusting the activities to the framework. The most common solution is to adjust the physical fabric to the needs; a fabric unsuited to the needs is considered faulty.

**REHABILITATION BY PRIVATE INITIATIVE**

Let us now examine the circumstances wherein improvements in the physical environment are made through private initiative. Most of the kinds of problems we have mentioned can be corrected. However, repairs cost money, some cost a smaller amount, others a great deal. For example, in the case of a factory, it is possible either to add acoustic insulation to keep out the noise, or to move the factory away—a high price to pay. When the price of the repair is lower than the value that the property-owner (or he who controls the property) expects to receive in return, the repair is worthwhile. When the price of the repair is higher than that of the expected return, it does not pay for the owner to make the necessary repairs.

In cases not worth repairing, the improper and inefficient function will continue until the price of the land rises beyond the value of the property plus the cost of moving the inhabitants. At that point someone will come along, tear down the existing buildings and rehabilitate the land through new construction. Professor Rapkin has dealt with this subject.

Understandably, when private initiative tackles urban renewal, it examines its objectives within a closed system. It identifies the deficiency, or lack of suitability, from its own particular and simplistic point of view: Whatever bothers me about the property is the 'damage'; whatever
will benefit me and give me a good return is a 'benefit'; and the price it will cost me is the 'cost.' Thus the private businessman asks himself only whether the benefit in repairing a given property exceeds the cost.

The measure of a project's worth for the private businessman may be influenced by external considerations. For example, if a house adjacent to the factory be improved, this improvement would not be worthwhile since the factory would still be a disrupting factor; a new coat of plaster and new floor tiles would not be of much help. This is an example of a negative influence. However, there can be positive external influences as well. For example, the factory might move elsewhere or, in other cases, public intervention might lead to improved transportation for the area or improvement in the value of the land. These factors might be taken into account when considering whether or not a renewal activity is worthwhile.

There is a special case of external influence which many people mention and which Davis and Whinston raise: a group of homeowners will not repair their homes because each one reasons as follows: "I live in a bad neighbourhood; even if I repair my house I will not get a sufficient return, since because the neighbourhood is bad, I will not be able to rent the house at a higher price even after the repair." If, on the other hand, all the homeowners repaired their homes jointly, the whole neighbourhood would improve and each would then be able to receive a higher rent. Thus, they all want some public body to organize the owners and co-ordinate renewal activity, so that the economic rationality of renewal as well as the extent of the general improvement will increase.

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* We must differentiate between external influences which are a consequence of the improvement, and external factors which influence the nature of the improvement itself; in this case we mean the latter.

In my estimation, this analysis is of limited value in Israel. For in homes protected by the "Law for the Protection of the Tenant," it is not possible to raise rents, and in those cases where the owner himself lives in his "condominium" apartment, he does not gain anything in increased rents.

However, beyond this factor there is an even more problematic aspect to consider. Let us say that the above process actually takes place and all the properties are improved. Such an activity would be carried out on the assumption that the present tenants will leave the apartments and be replaced by those who can pay a higher price; for it was precisely because the rents were low that the former tenants chose to live in such homes, despite the fact that they were in poor condition. Thus it is expected that if rents increase, the tenants will be forced to leave. When the original tenants leave, most will face a problem; for as improvement continues, the stock of cheap housing declines and the possibility of finding a home at a reasonable rent declines. Thus, although the property-owners have reaped private benefit from the renewal activity, they have jeopardized the interests of an entire segment of the population by decreasing the supply of inexpensive housing.

This is the first example of the importance of public intervention in housing. The renewal authority can encourage improvement of the kind mentioned above, upon the condition that it provide a sufficient supply of inexpensive housing or that it make up the difference in rents before and after the improvements, so that the tenants will continue to live where they are, and the homeowners will receive their due profit.

*The majority of housing units in Israel (in urban areas these are mostly apartment units) are self-owned, with the staircase and other common areas being run by the house committee (ed.).
THE DISTINCT QUALITIES OF RENEWAL BY PUBLIC INITIATIVE

We shall now proceed to the critical question: What are the conditions that distinguish public intervention in the physical setting? Within the concept "intervention" I wish to include all forms of intervention - through investment of money, construction, and selection of population; indirect intervention - through the encouragement supplied by various bodies by means of economic or other incentives; and finally - intervention through the law.

The least complicated situation calling for public intervention is that where the property belongs to the public sector. The fact of public ownership is not enough in itself to evoke the kind of activities which we might expect to be characteristic of a public authority. The reason for this is that often when the government finds itself in the role of property-owner, it behaves like a private body in terms of the calculations it makes. In other words, in evaluating the given project, the public considers only the costs and benefits accruing to itself, in view of its aims and budget. It does not concern itself with whether or not the activity will be harmful to any other sector of the city and the public. The public body does not pay for benefits it reaps from external forces, nor does it collect compensation for harm caused. The planners among us are familiar with many such examples. Therefore, I would prefer to omit this type of case and deal with those factors that, theoretically, characterize the intervention of the public sector. These, then, are the two basic factors:

a) The public sector takes into consideration, on the one hand, the costs and benefits of its activities to external bodies, and on the other hand, the costs and benefits accrued to itself from other bodies. For example, a new road will benefit not only those living in the area itself, but anyone making use of the road, even if that person should live at the other end of the city; if we build an industrial zone we may cause harm to those living in the city who suffer from noise and smoke; if the cost of housing rises, the poor will suffer; and so on.

b) The second factor which characterizes public activity is its ability to act in diverse fields and co-ordinate activities which the private sector cannot do.
What does the individual do? The home-owner can put on a new coat of plaster in his apartment; however, if he wants to fix cracks in the building or repair structural deficiencies, he must do so together with the rest of the building's occupants through collective activity. If the building is situated in a neighbourhood without sewerage or roads, its occupants must act in concert with the entire neighbourhood. This latter threshold of collective activity is much higher and much more difficult to pass. There are cases where the individual must co-ordinate the activities of elements not entirely related to physical renewal.

Let us give an example from the field of transportation. There is a narrow road which cannot carry a sufficient amount of traffic. The problem can be solved by widening the road; it can also be solved by altering the origins and destinations of the street, which presently generate the traffic, (e.g. thinning out the entertainment or commercial area); or it can be solved by an administrative act, whereby work and school hours are changed. In any given case, a different solution might be most effective and each situation must be examined on its own merits. It is clear that if the Transportation Engineering Unit of the Department of Transportation is the only body dealing with the problem, it can widen the street but cannot determine where new locations for commercial and residential functions can be established. In the best of circumstances it can seek advice from other departments; with much good will and patience such contact might bear results. In the case of private individuals, the situation is more severe, for they can act only upon the physical aspects of their property; they have no influence on the wider framework.

However, a public renewal authority can be established from the beginning so that it can act on a wider basis and achieve more effective results.

We shall now examine several typical situations demanding the intervention of a public body. The most obvious case is that where the property belongs to the public sector and the kinds of considerations dealt with include external factors and co-ordinated activity.
Another case is that of property owned by the private sector, which does not undergo improvement because it is not economically worthwhile to do so, but where the state of disrepair causes harm to sectors of the population which the public authority wishes to protect. In light of the approach with which we are concerned here, we shall not deal with the problems themselves but rather with the sectors of the population which suffer as a result of the problems. Any public authority will maintain a preference for certain sectors over others. The authority can decide that the provision of a certain level of benefits to property owners and wealthy investors is more important than protecting the interests of residents with an income of less than 1L,300 a month. Or the opposite may be true. One way or the other, the authority must make clear which interests it prefers to protect.

This subject was discussed from the point of view of the Ministry of Housing in the lecture given by Joseph Slyper. From his exposition we may conclude that the Ministry of Housing is primarily concerned with the interests of the poor. This is obviously a very general concept and allows for much elaboration. However, although the subject is an interesting one, this is not the place to go into it.

Another case is that where renewal originates from the private sector but the process creates negative consequences, or is inefficient. An example of negative consequences is the decrease in stock of low-standard housing. Inefficient renewal may occur when private persons set out to improve their houses but are limited by the existing subdivisions, so that they cannot reach the threshold of collective activity which will enable them to improve the infrastructure or rebuild the neighbourhood in a more efficient way.

Another situation justifying public intervention occurs when there is need to balance out high return to some sectors, and high costs to others. In other words, under circumstances where someone will gain a great deal by renewal, while someone else will have to pay a heavy price, public authority may, if it deals with such a case, take the returns from one, and subsidize the cost to the other. This
approach marked the "Almogi Plan" for renewal. On the surface, the land appreciation taxes fulfill this objective at present. In fact, the process is so complicated and goes through so many channels that its direct influence on renewal is hardly felt.

Finally, there is reason for a public authority to intervene (again, in view of external factors) when renewal provides the opportunity to attain ends beyond the context of the renewal activity itself. For example, one method for cutting down on unemployment is through the construction and repair of homes; this was the technique used in 1967. Another possibility is the use of renewal activity to soothe passions in areas of social tension such as Wadi Salib or Beil Shan.

To sum up, the public authority is unique in the sense that it attempts, through its activities, to reallocate the costs and benefits to the various sectors of the population. Its way of thinking is special because it takes these factors into consideration. The tools for implementation at the disposal of the public authority provide for a greater degree of rationality through the coordination of renewal activities and their expansion to spheres of activity which lie beyond the private sector.

THE SPHERE OF ACTIVITY OF PUBLIC RENEWAL AUTHORITIES

In turning to the subject of renewal activity in the public sector, we are immediately confronted with various views. What is urban renewal? What are the activities associated with this function?

A. Slum Rehabilitation or Urban Renewal?

It often happens that under the heading of urban renewal, activities are carried out where the stated objective is the rehabilitation of slums, while the actual goal often benefits entirely different sectors of

*Almogi was Minister of Housing until 1966. His plan consisted of a set of recommendations for making urban renewal as economically self-supporting as possible (an example of his suggestion was to impose a betterment tax to fund further renewal) (ed.).
the population. The residents are moved out because the actual concern is with constructing roads or high-cost apartment buildings. In other cases, it is stated openly that the objective is to improve commerce or roads, or to build high-cost apartments (here too, certain sectors benefit less than others or may even suffer as a result of the activity, although the influences are not explicit). Thus the technique of renewal is often presented in two self-contradictory ways. Some analysts, such as Herbert Gans, claim that urban renewal must concern itself only with slums, and no other consideration or sector should be involved. Others, like Gerbl'ir, insist, on the contrary, that this view is out-dated and should be forgotten; we must regard the renewal of urban centres in terms of the over-all urban economic point of view.

Are these views truly contradictory? It will be recalled that our point of departure was the fact that renewal is concerned with human beings. Every renewal activity influences various sectors of the population. When we improve a given neighbourhood we hope that the living conditions of those residing there will improve; that the value of property in the district will rise, to the benefit of its owners; that more tourists will visit the area, and that the country will profit thereby; that the storekeepers will increase their trade as a result of tourism; and that the municipal government will, in turn, be able to raise its taxes.

In other words, any activity in a slum area generates a wave of consequences affecting other sectors. Similarly, residents of slums are affected by renewal activities in areas other than their own. For example, the transformation of a market into a modern commercial centre had a direct effect on the merchants; but it also has an indirect effect on the slum residents since they can no longer buy in the cheaper market, and they must either travel further or shop in the more expensive stores.

We can view the residents of slums, and the harm or benefit they derive from an undesirable situation or from its improvement, as a particular case among the many sectors which gain or lose in the renewal process. Every activity affects various sectors of the population and the question in analyzing the activity is to decide which sectors receive preference. Will that activity be chosen.
which favours sector "a" or "b" or "c" or "d"? However, it is impossible to consider slum clearance as one thing, and urban renewal as something entirely different, since there are always reciprocal consequences. An example of the interconnected influences can be found in the renewal project of Safed; an example of the necessity to prefer one sector over another is to be found in Kfar Shalem.

As we shall see, the main difficulty in deciding upon a renewal activity or in selecting from among alternative activities, is to determine which sectors will profit from the activity, and to what extent.

B. Treatment of the Physical Aspects versus the Socio-Economic Aspects

An additional controversy about renewal has to do with the question of whether the renewal activity should concentrate on the purely physical environment, or on the social and economic aspects. In many cases, it is possible to ask which approach is preferable. Is it preferable to widen the road, alter the land use, or make an administrative change? This question is of particular importance in the area of housing. There is a reciprocal relationship between the existence of a poor population and a stock of cheap and rundown housing. As long as there are poor people, they will be concentrated in cheaper and poorer housing, and, therefore, there will be slums. Furthermore, this very concentration itself lowers the value of the housing because it leads to a more intensive use of the facilities and to a lower level of maintenance.

These reciprocal tendencies always exist, and in every renewal project the following question arises: what is the best way to act? If the house in the slum is repaired and the occupants continue to live there under the same conditions as previously, it is likely that within five years it will deteriorate to the same state where it was initially; therefore, nothing has been gained. Thus it would seem that in this case it

*See articles in this volume by Hirsch & Farber for details of the Kfar Shalem project, and by Galitz for details of the Safed project.
would have been necessary not only to repair the house, but also to organize a method of keeping it up, perhaps to raise the residents' level of income or perhaps to decrease and redistribute the population in the building so that the situation where 50-60 children live in a single apartment building would be eliminated.

In fact, however, the techniques in most cases are fragmented. The public body carrying out the work does not encompass all of the aspects, but engages in specialized activity: the Ministry of Housing deals with housing; the Ministry of Transportation with transportation; and the Ministry of Social Welfare deals with those who, as a result of not having jobs, are in need of aid, but it does not create jobs. The planning outlook is itself limited in the same manner in many cases. The reason is primarily institutional since responsibilities are divided among the institutions in a specific way, funds are distributed in a specific way, and as a result, renewal activities, as well as the planning and conceptualization of these activities, are fragmented along the above lines.

It is perhaps natural that the need for co-ordination was realized first in the subject of slum renewal rather than the renewal of any other part of the urban fabric. Perhaps the mutual ties between the physical conditions and the socio-economic conditions are more clearly evident in this case, or perhaps the special human quality of the problem encourages the planners - for they too are human beings - to grasp the problem in a manner that goes beyond its narrow technical side.

The strongest expression of the interrelated approach is to be found in the Model Cities Programme in the United States. Professor Rapkin has already dealt with this subject and I will therefore not expand on it. I shall just raise one possible aspect of criticism: to what extent is it possible to change the social and economic pattern through the marginal activities of renewal? The factors involved in creating slums are rooted within the existing social and economic structure. The Model Cities Programme seeks to bring about far-reaching changes. Its stated goals are: To build and restore large areas of slums and urban decay, to increase the possibilities of acquiring housing, obtaining jobs and increasing income, to decrease dependency on welfare, to improve the contents
and methods of education, to fight disease and ill-health, to decrease the amount of crime and juvenile delinquency, to develop facilities for entertainment and culture, to improve transportation between home and work, and, in general, to improve the living conditions of the residents of such areas.

The implications of the kinds of improvements advocated here are that the poor sector of the population should be raised to the level of, say, the middle class, such a change is a quantitative social change, in essence — a revolution. It is questionable whether the renewal authorities, which are established by the existing society and receive their funds from a government representing this society, can bring about such a radical change within the social structure and the government when it is the government which is the authorities' very source of power. Estimating the chances for radical change is a source of much debate. The gigantic cut-backs in the budget and thus in the possibilities for renewal activity in America in the last few years, indicate that the set of preferences of a government representing an existing society cannot be changed unless there is a prior change within the society itself.

Let us illustrate this point: there is an interesting, albeit somewhat ironic, development in the experiment with "citizen participation" — a subject also dealt with by Professor Rapkin. This activity is meant to create among the poor a feeling of belonging and of being able to influence whatever goes on within the society. However, various accounts have shown that as soon as the poor develop a sense of belonging and lose their feeling of alienation from society, they immediately feel that they are a repressed group, that the present situation is unsufferable, and that the only way to change the situation is through a struggle against society and its political institutions. In such instances, their arrows are first directed against those who in their eyes, represent the society and the political system in day-to-day life; and these include the authorities, the community workers and all those who are in contact with the poor in order to arouse in them a sense of belonging.......
It seems to me that the conclusion to be reached is the following: we must not deceive ourselves into thinking that we can achieve a radical change via renewal. We must not arouse, within ourselves or others, greater hopes than are warranted in this case. He who seeks a radical change must look to a broader political plane.

To sum up the question of whether we should deal with the physical infrastructure or with the socio-economic aspects of the population—let me say that the answer is not hard-and-fast, except for the need to examine the general urban setup. One may take the concept of renewal to be the renewal of the physical fabric, on condition that it is dealt with within the framework of a general urban system, including its social components; and, furthermore, on condition that renewal will repair the physical weakness in a way that is in keeping with the existing or predicted needs of the population in terms of its various sectors (in contrast to the process of simply repairing the physical fabric alone).

The advantage of approaching the city as a system lies, first of all, in the ability to identify the significant activities, where "significant" refers to the degree of impact on the various sectors. In this way we shall know when we are wasting our money on physical renewal which does not provide a sufficient return on our capital outlay in terms of the benefit it yields to the sector of the population with which we are concerned.

Secondly, by taking a general approach, we will know what activities are necessary beyond the physical. Such activities may include organizing the residents for purposes of building maintenance, they may include education, establishing better transportation facilities to places of work and of services, creating more of the latter on the site itself, or effecting legal changes. Another approach may stress activity in the social and economic realms, but again on condition that we do not ignore the functions of the physical network.

Finally, it has been suggested that renewal be achieved by legislating appropriate laws. I should like to mention a problem connected with the legislative process. Laws are passed to alter existing situations; but existing situations are created as a result of certain forces
acting in the real world. A change which the law seeks
to bring about is, in fact, an act against these for-
ces. Only rarely can a legal act change the living
conditions of people all along the social spectrum;
someone must suffer for the change. Therefore, be-
fore casually deciding to pass a maintenance law, we
must clarify and specify what forces are at work
in the existing situation, and who will pay the price
of the change.

C. Specific Activities or Co-ordinated Activities

The final controversy which I should like to mention
in connection with the definition of urban renewal in-
volves the question of whether it is better to carry
out renewal through specific activities of various or-
ganizations or whether there should be co-ordinated
activities among those organizations. From what I
have already said it is clear that I believe that the
planning and co-ordination of such activity must be
integrated. Within this integrated framework there
is room for specialization, but always on the condi-
tion that the subjects of specialization are received
as part of a larger whole, and that the various alter-
natives in other aspects of the problem are recognized.
This, then, has been an analysis of the general frame-
work for urban renewal.

THE ACTIVITIES OF A PUBLIC AUTHORITY IN THE AREA OF
SLUMS AND HOUSING

I shall now enter briefly into one of the fields with
which urban renewal is primarily concerned. At the be-
ginning we discussed the need to identify all of the sec-
tors within society, and to determine which of them we
shall favour. Let us, for the present, choose the po-
verty sector as the one to be given preference. We shall
see that for this sector there are many possibilities
for action in various fields; one of them is the field
of housing. We shall therefore concentrate on the sub-
ject of housing - though not to the exclusion of the rest
of the urban system. This subject covers most of urban
renewal as it is carried out by the Ministry of Housing.
A. Housing Renewal as Part of the Urban Housing Balance

Urban renewal must be regarded as related to the problem or urban housing in general. Let me elaborate.

B. Pre-planning to Prevent Decay

We shall now discuss three main ways of dealing with the problem of housing. The first was mentioned by Prof. Rapkin and has to do with planning ahead for the prevention of decay. I have my doubts as to the effectiveness of this method. The defects of the physical infrastructure or its incompatibility with contemporary needs arise as a result of the fact that the materials are worn out, that relative standards have changed, or as a result of external factors. Not all of these factors can be controlled by pre-planning or by the use of better materials at the start. However, it is possible to analyze the causes of such problems and prevent some of them.

We can plan small apartments that can be combined later. We can leave vacant spaces which will later be used for parking. We can make necessary preparations for an elevator with the stipulation that in the future an elevator will be the norm. Or, it is possible to use better construction materials. All of these methods demand investment in order to avoid extra costs or damage in the future. However, one must carefully calculate the value of future saving. The investment must be compared with the future cost expressed in contemporary prices, after deducting the interest. For example, an investment of IL.500 to-day which will save IL.1000 in another 10 years is not worthwhile; for IL.1000 ten years hence is worth less than IL.500 to-day after deducting the interest. Thus, there is a possibility of preventing deterioration, but one must take care to examine what changes will have an effect and whether or not the outlay is worthwhile. This area of activity has not yet been studied, at least not in Israel.

C. Halting the Process of Decay

The second method is that of halting the process of decay before it reaches the point where radical renewal is necessary. This field of activity was mentioned by Mr. Slyper
and I shall therefore not expand upon it, except to add a note of caution similar to the above: we must clarify what are the forces at work which create decay, for there are forces we can control and those we cannot. It is better not to waste resources in those areas where the decay is beyond our effective control and any repair will be superficial and short-lived. The investment will be worthwhile in those areas where we have the power to influence, or where our activities will include the control of the external forces creating decay.

D. Radical Renewal of Neighbourhoods or Separate Units

The final method is that of radical renewal, applied where the situation has become critical. The solution may be to overhaul the house completely, or to tear it down and build it anew. Within the realm of radical renewal, whether it be through rehabilitation or clearance, we may distinguish the following secondary divisions of activity.

It is possible to deal with the neighbourhood in its entirety, or with individual families. The latter method is the one normally used by the Ministry of Housing; Mr. Slyper has stressed this aspect in his presentation. In dealing with families or individuals, priorities are determined by criteria which measure the degree of hardship to the family unit in terms of the physical or, at time, the social and economic situation. It is possible to take into account how much the individual can, or cannot, contribute to the renewal process, and it is also possible to consider other factors affecting the particular situation of any given family.

Neighbourhood renewal means that the renewal resources are devoted to the neighbourhood in its entirety - also according to specific criteria. There are three basic topics that distinguish neighbourhood from individual renewal. First of all, housing conditions in the neighbourhood are not uniform so that if one takes on neighbourhood renewal he will, of necessity, deal with individual families whose situation is relatively less critical than other families outside the neighbourhood. From this point of view there is
a certain advantage with individual units, for we are thus able to treat the most severe cases.

Another distinction is that renewal of a neighbourhood enables us to include those improvements which exceed individual renewal; that is, infrastructural and service facilities. This is in contrast with the process of individual renewal, wherein we must resign ourselves to poor facilities or move to a new place and lose whatever advantages existed in the old.

The final advantage in applying urban renewal to neighbourhoods is that the process allows for the determination of land use in the neighbourhood in relation to the urban environment. This possibility is of very great value. Thus, in dealing with an entire neighbourhood one can provide benefits to sectors in the city other than the poor sector. We can build a new road through the neighbourhood for the benefit of the city, or provide a new access to the seashore, or raise property values in the surrounding area, or other such goals which cannot be achieved through individual treatment. Some of these external consequences can bring financial gain, thus enabling the city to expand its renewal activities.

E. Funding Different Renewal Activities

A public authority with limited resources faces the problem of how to divide its resources among the various possible activities - investment in pre-planning in order to prevent future problems, investment in maintenance so as to halt the process of deterioration while it is still possible, and investment in radical renewal on the neighbourhood or individual level. A rational approach to this dilemma calls for an analysis of the cost and benefit to be derived from each possible activity. The results of this calculation will determine the allocation of resources among the various activities (it should be remembered that relative worth is a matter of political values). It seems to me that this subject has not yet been adequately dealt with but I shall not go into the matter here.

These, then, are the alternative activities open to a renewal authority from the point of view of housing. The subjects of "housing culture", which has been mentioned before, is connected with the previous two subjects
in all their forms.

RENEWAL INSTITUTIONS IN ISRAEL

Having portrayed at some length the various fields of activity in renewal, we shall go on to survey the groups working for renewal in Israel; such enumeration is likely to provide somewhat of a surprise at the beginning. For, at first glance, one may imagine that only the Urban Renewal Authority, and perhaps the Ministry of Housing, deal with the subject. However, from our general starting-off point, which regards as renewal all those activities which have an effect on the degree to which the physical infrastructure supports the needs of the population, it appears that the number of agencies dealing with renewal is large indeed. One can say, in the most general terms, that every Government office participates in the process; for they determine living standards, development, direction of development, etc., and as such each affects the changes in the urban structure and the relationship between the infrastructure and human needs. I do not suggest following up on this generalization but rather, I shall go over those instances wherein certain agencies were set up in order to resolve very specific and critical problems and in order to act directly to correct these problems.

A. Agencies Dealing with Renewal

Here again, we shall find that all Government offices participate in the game. Some of them influence the relationship between the infrastructure and human needs directly: The Ministry of Health, in addition to building infirmaries and hospitals, is concerned with preventing air pollution and wiping out health hazards, etc; The Ministry of Education and Culture, in addition to building schools and educationa facilities, also restores ancient sites; the Ministry of Communications installs a network of services where necessary; the Ministry of Religious Affairs repairs synagogues; the activities of the Ministries of the Interior, of Tourism, of Transportation and of Public Works in improving the environment need no elucidation.
The Ministry of Housing, on the other hand, merits a special short account. It deals with changing apartments or improving and enlarging defective housing directly, or through the provision of housing by means of the regional offices or joint Government-Municipal companies. The second kind of activity carried out by the Ministry of Housing is that of monetary aid to the residents, in other words — encouraging the residents to help themselves through loans and grants. The residents make repairs or move to another apartment on their own. Within the framework of general encouragement we may also include the "Repair Fund", for although it was set up in 1967 with the purpose of providing jobs, it introduced the concept of government intervention for maintenance repairs as a side effect. The technique used was to encourage property owners to undertake repairs through a special fund for loans or grants.

A significant portion of the resources of the Ministry are devoted to resolving the problems of individual families according to the severity of their housing situation. These cases aside, however, there are instances where the renewal activity concentrates on a specific area and results in the complete renewal or evacuation of the neighbourhood. In general, activities on these scales are carried out by the renewal companies in the cities, by Amidar, or by the regional offices of the Ministry of Housing in the development towns.

In addition to Government departments, there are other authorities that also deal with renewal. The Urban Renewal Authority acts on the basis of a specific law (the Reconstruction and Evacuation Law of 1965). Its realm of activity is the neighbourhood and only that neighbourhood which is in such critical condition that radical action is mandatory. Thus its sphere of activity is highly restricted in relation to the whole phenomenon of renewal. The Renewal Authority receives funds from the Ministry of Housing, although the Renewal Law allows other ministries, as well as other bodies, to contribute.

*See p.23 below (ed.).
to the Authority's budget (until now contributions have not been forthcoming to the proper degree). The Israel Land Authority influences renewal in its own way, as does the National Park Authority - though to a lesser degree.

There are departments maintaining "reverse" relationship to renewal; i.e., they do not participate in the positive process of repairing the environment but, as it were, are "sustained" by the fruits of the negative conditions. Such departments include the Ministries of Welfare, or Police, or Employment, etc.

B. The Problem of Division of Responsibility among Renewal Bodies

All the organizations I have enumerated suffer from specialization of function, or the fragmentation of activities into the narrow realms of each specific Ministry.

For example, a certain slum suffers from the harmful effects of heavy smoke, spewed out from the chimneys of a near-by factory. The price to be paid for eliminating this problem is higher than the factory can afford. There can be no question of wiping out the factory because wider sectors will suffer from the loss of work and the decrease of exports.

There are two possible alternatives for the neighbourhood: the first is to clear out the neighbourhood and resettle the residents elsewhere. The second, which is cheaper and easier to carry through, includes repair and additional construction in the same place. However, the second alternative does not provide enough money to eliminate the problem of the smoke, and since it makes no sense to bring in more families to live in the shadow of the heavy smoke, there is no other alternative but to wipe out the neighbourhood.

However, if we examine this same situation on a wider scale we shall find that the chimneys damage not only the renewal project itself but also the better neighbourhoods in the wide surrounding area. The chimneys also do harm to the Israel Land Authority, in its
capacity as land-owner, for lowering the value of its property. Indeed, it is possible to add a long list of damage caused by the pollution.

If we were to make an all-encompassing analysis of these factors, we would likely find that it was worthwhile for all the sectors to contribute to the cost of cleaning the chimneys, and all would gain more than it cost them. Each individually, however, cannot afford to cover the expenses. As a result, because of the inability of people to regard things, analyze them and act co-operatively, the harmful effects remain and each suffers privately.

These, in sum, are the kinds of problems that arise when there is an overly rigorous division of labour among government departments and other authorities.

C. Local Renewal Companies

If we continue our survey of the bodies dealing with renewal, we shall find, that in addition to the government offices there are public companies as well. These public companies are organized as a partnership between the Ministry of Housing and the local authorities and, in some cases, other Government Ministries or bodies, public or semi-public. Some were established with the express intent of dealing with slums - for example "Halamish" in Tel-Aviv, "Prazot" in Jerusalem and "Shikmona" in Haifa. Some companies were established as urban development companies such as the "Lod Development Company", the "Renewal Afridar Company", the "Eilat Development Company", the "Company for the Development of Old Acco", and the Coastal Area" in Tel-Aviv. These Companies were formed for various development purposes but in passing they also deal to some extent with slum clearance.

Because they are more directly connected with the cities where they have been formed, these companies tend to weigh the impact of their activities on the various sectors of the city more carefully. As a result, they face a more difficult problem in defining their goals and determining the set of preferences among the various sectors - but this is a subject in itself and not to be considered here.
D. Renewal through Municipal Governments

We must include the local organizations among those dealing with renewal. They may act through public companies or in an independent and direct manner (by preparing the infrastructure and other related tasks), or in an indirect manner by giving incentives for private actions. We pointed out that bodies in the private sector will weigh the profitability of an activity from the point of view of the costs and benefits accruing to that sector alone. When the cost that it must pay exceeds the expected return it does not pay the private body to proceed. However, if the local authority makes up the differences between the cost and the profit for the private agency, it will then become a worthwhile proposition for the latter. The local councils often do this by granting the investor permission to construct at a higher floor-area ratio than the norm, in order to raise the profit of the proposed project. We ought to determine whether such a permit does not have harmful side-effects and what its social cost. The first precedent may lead to more "special permits!", thus imposing a heavier load on the highways, on the public infrastructure and all of its components. If the infrastructure cannot bear this extra load, difficulties will arise in circulation and parking, in faulty provision of services, etc. If not corrected, this kind of problem imposes hardship on the public; if corrected, it costs the public money.

On the other hand, the policy may provide benefits for certain sectors of the population, such as increased services, increased value of the surrounding properties, etc.

In most case, if I am not mistaken, permits of this sort are awarded without attempting to predict their consequences.
SUMMARY: PRINCIPLES WHICH SHOULD GOVERN THE ACTIVITIES OF PUBLIC BODIES DEALING WITH RENEWAL

The following represents a summary of the conclusions reached in this paper. An organization dealing with renewal must act according to those principles which distinguish public institutions. It must take into account both the positive and the negative consequences of the activity to the various sectors of the population, and must take advantage of the possibility for co-ordinated activity in various areas. The public body can act on various levels which the private sector cannot reach - the apartment, the house, the neighbourhood and, finally, the city. Furthermore, it can act in areas other than the physical alone and can achieve greater effectiveness by co-ordinating its activity with other bodies and institutions.

In order to do so effectively, the public organization must plan its activity as a "development project", related to the city's development plan. Such a project does not deal with land use in the restricted sense of the physical appearance of the area after renewal; it includes consideration of social activities, economic activities, and the timing and budgeting of the activities. The goal is always to be thought of in terms of the benefits to the population concerned. Put in these terms, it is clear that even though the emphasis in renewal activity must be placed on its physical aspects, an analysis of the problem and the provision of solutions obliges the planning body to take the entire urban environment into consideration and to evaluate alternatives on this basis.
URBAN CONSERVATION IN THE CONTEXT OF LOCAL IMPROVEMENT AND DEVELOPMENT STRATEGIES FOR THE TOWNS OF ISRAEL

Joseph L. Slyper
Irwin Mussen

In attempting to fulfill its responsibilities for housing the population, the Ministry of Housing has long been aware that this enormous task could not be carried out adequately on the basis of simply providing units of shelter. Thus, from the earliest days of the State, those who built housing were also building whole neighbourhoods and, indeed, whole new towns. As mentioned in the previous discussion, the Ministry now recognizes that it must broaden its interests even further if it is to make the most effective and efficient use of the scarce resources available for housing the population. Better methods must be found for assuring that each investment is the best thing, in the best place, at the best time - delivering the maximum public returns for the costs involved. And specific measures must be applied for protecting the great investment that has already been made in public and private housing and the building of cities, towns and neighbourhoods.

These kinds of concerns have not been adequately taken into account in past efforts at town planning in Israel. Perhaps nowhere in the world do traditional Master Plans pay enough attention to such questions of priorities, on-going urban functioning and the other matters discussed below.

Therefore the Programming Division of the Ministry of Housing has begun to take the first tentative steps towards the formulation of an approach which would be quite new to the local methods of urban planning and development. The framework of the approach might be entitled "Local Improvement and Development Strategies." Such Local Strategies would consist of integrated sets of action programs aimed at helping each community to attain the highest feasible level of environmental, social and economic viability at each stage of the community's existence. One sub-system that might be contained in these Strategies is that of Urban Conservation - a program geared to maintaining the quality of the housing stock, other buildings, and the environment of neighbourhoods that
are still serviceable but are threatened with deterioration. Some of our first thoughts about these approaches will be discussed in this paper.

LOCAL IMPROVEMENT AND DEVELOPMENT STRATEGIES

The basic goal of the Strategy concept is the production of short-range and middle-range guides to action programs. Ideally, each locality would be aided in maintaining a state of proper functioning and attractiveness of the households, firms and institutions that occupy and use it, at cost which the society can afford, even as the community grows and changes.

It should be stated at the outset that the areas of concern and the programs that will be discussed in this paper reach beyond the present-day activities of the Ministry of Housing. Nevertheless, the Ministry does have an urgent interest in introducing the first stages of a new system because it realizes that existing planning and control procedures are not adequate for the tasks of creating and maintaining housing and town structures - tasks for which the Ministry of Housing has been assigned leading responsibility. The Strategies might thus first be worked out for those communities where the Ministry of Housing plays the dominant development role - especially the so-called Development Towns and Immigrant Towns of Israel.

Eventually the strategy concept could be broadened to involve virtually every aspect of urban management. Then the very formulation of the expanded strategies, and the actions that will be needed to implement the programs, will require intense coordination between many institutions, to a degree hitherto unknown in Israeli urban development activities.

However, for the sake of practicality, the start should be much more modest. Even those aspects most clearly within the responsibilities of the Ministry of Housing should perhaps not be incorporated all at once. The next steps of investigation into the Strategy System will hopefully indicate which aspects are truly worthy of inclusion, which can be incorporated at early stages, which will have to wait until later, and which might best be left aside
altogether.

The points following represent our present thinking about the characteristics of a relatively ideal, broad Strategy System, appropriate to Israeli conditions. It is from this admittedly too broad base that the first practical Local Strategies would be derived.

1. Characteristics of the Strategy System:

   a) Local Strategies would differ considerably in scope, emphasis and time considerations from the Town Physical Master Plans (and from Outline Schemes and Detailed Schemes) as found in present-day Israeli Town Planning. Strategies would complement, relate to, and incorporate, elements of physical plans. But there would be much more emphasis on the on-going processes of urban growth and change and on programming responses to these processes. Especially in Israel, where growth and change are so rapid, it seems important to focus on the dynamics of urban functioning. The concept thus shifts away from the focus on the static endstate prescribed in traditional urban plans. (3)

   b) Local Strategies would incorporate - but not be limited to - newer approaches of Development Programming in the sense of efficient phasing of new construction. (4) They would be equally concerned with the needs of existing built-up areas of towns and the needs of the existing occupants. Environmental concerns would thus include town and neighbourhood improvement, maintenance, conservation, revitalization, renewal etc. The focus would be as much or more on the existing form and structure as on new additions to it.

   c) The time horizon for the Strategy Plan would likely be five to ten years. Detailed techniques and budgets would be worked out for "Tactical Programs" that would be derived from the Strategy Plan just prior to each succeeding annual implementation period. Strategies would be continuously revised. Urgent action programs may be encouraged to begin even before the first Strategy Plan is worked out. In a sense there would never be a final Strategy Plan. (5)
d) The focus would be on activities of households, firms, and institutions - and on services for them - as well as on the traditional physical planning concern for land uses, buildings, transportation and public facilities. (6)

e) Attention would be centered on the economic, social (even psychological), institutional, administrative and budgetary aspects of urban development, as well as on efficient functioning and visual attractiveness of the physical environment.

f) Emphasis will be placed on the decision-making processes in urban development and on the institutional machinery needed in order to effectively guide or control urban growth and change.

g) There would have to be improved techniques for pulse-taking or monitoring urban change so as to be able to anticipate or detect problems at the earliest possible moment. (7) Data would be selectively gathered and analyzed depending on its relevance to the requirements of planning and implementation. (8)

h) There would be much more precise definitions and measurements of what constitutes "the successful community." This, in turn, would entail more research into attitudes, preferences, motivations and behavior of the various sectors affecting - or affected by - the development process. There would have to be a fuller understanding of desires for choice and variety by urban residents and the ingredients and mixes of ingredients that produce human satisfaction in the urban setting. The whole system of Strategies would be designed so as to be flexible and subject to alteration in response to new knowledge about community and individual needs, changes in living and life styles, social and economic changes, etc. Consequently there would be less reliance on the planners' pre judgements of what constitutes "the good community." (9)

i) The Strategies would focus on the full cycle of a development system: problem identification, goal and objective setting, data collection, analysis, forecasting, plan formulation, decision-making, budgeting, programming the implementation, carrying out the implementation actions, evaluating
successes and failures, and feeding back the information in order to improve the process.

j) The Strategies would attempt to cope realistically with existing problems, resources, and practical limitation or constraints. They would try to exploit existing and potential opportunities and positive characteristics of the place and the situation. There would be less concentration on planning for an abstracted image of some idealized future state. Nevertheless, long-range goals, such as those set in any Master Plan, would still provide guidance. The best creative energies of environmental designers, as well as social and economic planners and other specialists, will be needed for formulating the programs that will produce continually improving communities.

k) The Strategies are meant to become more effective devices than Master Plans have been for integrating public development actions and for positive guidance of private development. Thus, the Strategies might well include programs for recruiting private and institutional developers, and incentives for inducing them to develop where and when it best serves the community interest. The need for intense coordination between governmental bodies and with other interested parties will become especially urgent when scope expands beyond the recognized responsibilities of the Ministry of Housing.

l) In addition to considerations of special local conditions, each Local Strategy will obviously have to be sensitive to the special Israeli conditions that determine the course of development here.\textsuperscript{(10)}

m) While this paper focuses on local (town-wide) strategies, efficiency will demand that some of the component action programs be detailed and implemented at a smaller territorial scale - functional sub-areas such as neighbourhoods (e.g. urban conservation and most types of urban renewal actions). Other sub-programs may be inter-neighbourhood in application. Some will, of course, be town wide or may simply not be related to specific spaces or locations.\textsuperscript{(11)} On the other hand, certain relevant sub-programs may require a context larger than that delimited by town boundaries (e.g. balanced housing and economic and social development programs may best be designed in metropolitan or
regional areas where there exist functional inter-relationships among towns). The Strategy Plan will have to differentiate between these levels of operation for various sub-programs. An advantage of the relatively strong development role of such a Central Government agency as the Ministry of Housing is that, at least in theory, Strategies can more easily cross town lines.

II. Action Elements of the Strategy System

The essence of the Local Improvement and Development Strategies will be the independent ingredients which they will contain. The next task in formulating the Strategy System will be to establish just which elements should ideally be included, which elements are practical for inclusion at the first stages (allowing for variations between individual localities) and in which towns the approach should first be applied.

A very tentative list of ingredients is outlined below. As mentioned earlier, the Strategy Concept could theoretically cover virtually every sphere of urban functioning. But practical limitations must be set, at least at first, lest an overambitious program sink of its own weight. Therefore, this preliminary list begins with those elements which seem closest to the essential concerns of the Ministry of Housing. The list does go on to mention elements which might be developed and integrated if, and when, the institutional machinery has been adjusted to incorporate them.

Among the possible elements might be:

a) Site Selection for new residential areas and other new developments to be built by the Ministry of Housing and its affiliated agencies. The Strategies would consider priorities of selection among:

i. sites beyond the present built-up area (urban expansion);

ii. sites that could be "intensified" by adding housing units and improving infrastructure to existing sites with incomplete infrastructure and low density;
iii. "infilling" by developing sites previously untouched;

iv. rebuildable sites where urban redevelopment might provide land for many more units than the existing obsolete units (eventually the expanded Strategies should try to control priorities of site development regardless of the type of developments).

b) Local Housing Element: programs for the number, distribution and mix of housing types, sizes, prices and tenure arrangements; and programs for inhabiting the units designed to fulfill social goals (such as immigrant assimilation and social integration) as well as to provide adequate shelter. (Even this difficult task could conceivably be extended eventually to include controls over private housing developers.)

c) Urban Renewal Actions: clearance and rebuilding, rehabilitation, new techniques and mixes of techniques as appropriate to each location and to the welfare of its population.

d) Urban Conservation (discussed below) and other efforts to maintain the quality of the existing stock of buildings and the environment.

e) Programming Public Developments (Capital Improvements Program) for community infrastructure (public facilities, utilities, roads, transportation, etc).

f) Special elements for special places - e.g. concentration of urban design to conserve and enhance the form and functioning of localities with religious, architectural, archaeological, historical or environmental significance (or potential significance).

g) Relocation Service - to aid in finding adequate substitute shelter and rendering needed service to households (and eventually perhaps to business, industries, and institutions) displaced because of public actions such as urban renewal, expansion of public facilities, road building, etc.
h) Economic Development Programs: cooperation in site location and the formulation of programs for encouraging, guiding and providing incentives for commercial and industrial enterprises that are best suited to fulfilling the economic base and employment needs of each locality.

i) Social Development Programs: creation of facilities (and eventually cooperation in the formulation of service programs) for cultural integration, job training, coordinated social services, special and general education, recreation, culture, town maintenance, and all other services required in a viable community.

j) Programs for disseminating information, generating community participation, recruiting private and public investment, and other such efforts for obtaining cooperation from all parties in development and improvement activities.

Other elements may be added to the above list and perhaps some of the above modified as need and feasibility dictate.

III. Form of the Documents and Files for the Strategy System

The form of the "Strategy Plans" and the annual or biennial "Tactical Programs" will also become more precise with further exploration. The continuously evolving Strategy Plan would probably look ahead five to ten years for each community. It would generally outline each action sub-program, set priorities, recommend times for action and indicate how each sub-program is integrated into the comprehensive package.

The annual or biennial Tactical Program would be derived from the middle-range Strategy Plan. It would detail the analysis, planning, time and money budgeting, and the specific formal political and administrative decisions for action. At the same time, each Technical Program would reinvestigate and suggest revisions to the Strategy Plan.
The next task of the Ministry of Housing is to refine these concepts and suggest the first towns in which to attempt Strategy formulation.

**URBAN CONSERVATION**

Urban Conservation is discussed in this paper to give a more detailed illustration of one element (or sub-program) as yet untried in Israel - that should probably be integrated into most of all Local Improvement and Development Strategies. Urban Conservation involves a comprehensive public program aimed at reversing the normal processes of deterioration of existing serviceable housing stock and the neighborhoods of towns - and even non-residential buildings and districts. In Europe and America such programs are seen by some urban analysts as effective and efficient measures for guarding the immense public and private investments that have been made in housing and urban infrastructure. In the long run they lessen the need for the expensive, drastic solution of neighborhood clearance and development which can cause so much social and economic displacement and personal trauma.

Like many of the action program in Local Strategies, Urban Conservation could be implemented in urgent areas even before the first Local Strategy is worked out. But its application would obviously be more efficient and effective within the context of a broad Strategy.\(^{(14)}\)

The Urban Conservation approach also focuses on neighborhood units rather than on scattered structures. This is based on the experience which demonstrates that the loss of serviceability and value of housing stock is usually much more related to neighborhood decline than to simple deterioration of individual structures.\(^{(15)}\) The techniques of Urban Conservation are discussed in terms that would especially apply where most of the property is in private ownership. Yet, in Israel many of the areas where conservation would be most appropriate are under control of Amidar, the public housing company. It would be hoped that the standards for the maintenance of public housing would be not lower than those legally required for private housing areas. Amidar may have inherited some of the most difficult housing neighborhoods to maintain.\(^{(16)}\) But, at least theoretically, it is advisable to coordinate all of the necessary steps for effective Urban Conservation and to devise measures similar
or equivalent to those used for private housing areas.

Among the key tools (or sub-elements) that would have to be coordinated in neighborhoods are:

a) Housing Code (or "Occupancy Code" or "Building Maintenance Code"): minimum standards to which all existing housing must comply by Law. Codes may set standards for such conditions as habitable space required per occupant; minimum size of rooms and dwelling units; light and ventilation; internally-located private toilets, baths (or showers) and kitchens for each unit; electricity, water supply, hot water, plumbing (and heating where needed); structural soundness; condition and type of structural and finish materials; fire protection; and even exterior and interior maintenance, etc. Some ingredients of such controls do exist in various laws in Israel, especially in the larger established cities. But there is need for a basic, comprehensive code which would have a uniform base of minimum standards for at least urban settlements. Variations because of local conditions could be introduced as needed.

b) Tactics for inspection, code enforcement and related actions: effective and efficient housing inspection and code enforcement will involve a "concentrated area approach" which acts on each building in a selected neighborhood. Such an approach will be especially effective if the Local Strategy indicates that in the foreseeable future all appropriate areas in the town will be filled. Then all affected parties will perceive Urban Conservation as an equitable program.

The Local Strategy would try to pick out the best time to work in any particular neighborhood in order to achieve optimum effects on the subject area, the surrounding areas or the whole town. Long-term effects can be further assured by a follow-up program of lighter periodic reinspection to make sure that the properties do not slip back into the deterioration cycle.

In such a concentrated area approach each occupant and owner comes to realize that any invest-
ment he makes is complemented by the investments of his neighbors. Knowledge that the neighborhood as a whole is being improved is an important incentive to investment—countering the usual situation wherein an owner or occupant feels that any improvements he makes will be wasted because the area is declining into slum condition. (19)

c) Loans and Grants: a modest program of loans and grants for property improvement does exist in Israel. But this has not been linked to any code enforcement program. The loans and grants supplied by the Ministry of Housing do sometimes favor chosen areas—such as Hayarkon Street in Tel-Aviv. When an enforcement program is begun, occupants and owners of property in the Conservation Areas should be given preference in receiving loans and grants. (20)

d) Coordinated public improvements of neighborhood environments: public developments and improvements could be directed through the Local Strategy so as to favor neighborhoods at the very time they are being subjected to code enforcement programs. Improvements might include road and pavement repairs, street trees planted, utility improvements and additions, modernizing schools and other neighborhood public buildings, parks, playgrounds, etc. Not only do such investments directly improve environmental conditions, but they also encourage the private property owner to invest in his structure and yard. He is given proof that his neighborhood has not been abandoned by the public authorities. (21)

e) Citizen Participation: since the usual intention of Urban Conservation is to retain the existing population of the neighborhood, it is important that the occupants be involved in every phase of the operation. Citizen involvement may be more critical to the success of urban conservation than to other types of urban renewal.

As with other elements of Local Improvement and Development Strategies, fully developed urban conservation programs will require coordination between government ministries and municipalities and local councils. At the present time it may well be that the Ministry of Housing is in the best position to promote such programs, especially in development
towns and immigrant towns.

In conclusion, it must be stated that in addition to requiring more coordination of existing efforts, urban conservation and the other elements of the Local Improvement and Development Strategies will require at least some modest additional expenditures of scarce financial and labour resources. But the questions that must now be answered are: How much more must be spent relative to what is being invested today? What will be the pay-off in public benefits? And, especially, what will it cost Israel in the long run if such measures are not introduced to extract the maximum benefits out of each public investment, and to preserve the vast investments already made? Even if all the action steps cannot now be afforded, it seems to us mandatory at least to begin the formulation of strategies for producing ever-improving communities in Israel.
NOTES

1. Strategy formulation and execution within the Ministry of Housing might best be shared between the Programming Division and the Physical Planning Division of the Ministry, and with affiliated agencies such as the public housing company, Amidar, the public development company, Shikun ve Pitouach, the Israeli Urban Renewal Authority, and the Association for Better Living.

2. Eventually, broad strategies could involve the Ministries of Interior, Finance, Immigrant Absorption, Transport and Communications, Labour, Commerce and Industry, Social Welfare, Health, Agriculture, Education and Culture, Tourism, Defence and special units of government such as the Economic Planning Authority and the Israel Lands Authority. Public non-governmental agencies such as the Jewish Agency, the Histadrut, and even the political parties may play a role because of their interests in community well-being; similarly, business and professional associations of developers, contractors, architects and engineers may be of importance as well as national, local, neighborhood and ethnic citizens' groups and other concerned organizations. Municipalities and Local Council (and perhaps Regional Councils) may actually assume the leadership roles in formulating and coordinating expanded Local Strategies.

Promotion of broad strategies could conceivably become a task of the National Planning Board or a similar roof organization which would include: representatives of all the ministries concerned with local affairs; representatives of local government (representatives of the mayors of Jerusalem, Tel-Aviv-Jaffa, Haifa, chairmen of some local councils and regional councils, other mayors, rural institutions, etc.,); professionals in planning, architecture, and the social sciences, and the other concerns mentioned above. Perhaps only after some experimentation will it be known whether or not it would be best to codify the Strategy Concept formally into such regulations as the Planning and Building Law.
3. Such a switch in focus—from the end state and to the process of development—is recommended for American metropolitan planning in: Robert Mitchell, "The New Frontier in Metropolitan Planning," Journal of the American Institute of Planners, August 1961. The concept conveyed in this paper is based on an appropriate synthesis for the Israeli context of the above article, other papers mentioned in these notes, and recent British and American planning and development programs—e.g. "Community Renewal Program," "General Neighborhood Renewal Plan," "Model Cities Program," "Neighborhood Development Program," the "Workable Program for Community Improvement" and the plans for the proposed English new town of Milton Keynes.

4. The recent "Carmiel Development Plan, Stages and Investments" (by the Town Planning Unit, Physical Planning Division of the Ministry of Housing, State of Israel, Tel-Aviv, 1970) suggests a system for expansion through phase construction of "development packages," with types and quantities at least theoretically related to community service needs. The recent Master Plans of Jerusalem, Tel-Aviv, Haifa, Acre, Beersheba, Kiryat-Gat and other towns also suggest stages of construction, taking even urban renewal into consideration.

5. Those who have written about similar concepts have spoken of "closing the middle-range gap" between urgent development decisions that must be made immediately and the longer-range desired state, such as envisioned in a Master Plan. See: Martin Meyerson, "Building a Middle-Range Bridge," JAIP, Spring, 1956; and Ira Robinson, "Beyond the Middle Range Planning Bridge," JAIP, Nov. 1965.


8. McLoughlin, *op. cit.* The beginnings of a continuously up-dateable system concerning housing stock in many urban settlements has been introduced with the current Housing Needs Study being undertaken in the Programming Division of the Ministry of Housing.

9. Melvin Weber, *et al., Explorations Into Urban Structure*, Philadelphia, Pa: U. of Pennsylvania, 1964; and McLoughlin *op. cit.* Where feasible, alternative strategies could be formulated, rather than one "best strategy," so that political decision-makers and the citizenry would be in a better position to exercise their democratic prerogatives. This implies the utilization of techniques to compare the costs and benefits of the alternatives to various sectors of the society.

10. Among the determining conditions of Israeli urban improvement and development are: the still very rapid pace of development of the economy and of settlements; the dominant role of the central government in constructing, owning, maintaining, and/or regulating building and town growth; the divisions of responsibilities and power between ministries and other public bodies, and the deficiencies in coordinating machinery; the history of "high-pressure" planning and building and the resultant hurried site planning, low standards in earlier construction, and neglect of maintenance; the severe limitations of financing, construction and maintenance labor and other resources; the continuing overriding priorities that must be given to security needs, immigrant absorption, and production of new housing units; social phenomena such as intergroup relations between Israeli Arabs and Jews, Eastern and Western Jews, the religious and non-religious and other ethnic and cultural groupings; special Israeli institutions such as those dealing with property - the vast land holdings of the Land Authority, the Tenants' Protection Law, the pattern of ownership of individual apartments (condominium); the emergence of concerned citizen groups on the national, local and neighborhood levels; and official policies and plans related to population dispersion, cultural integration, education, social welfare, housing subsidy, etc.
Each Local Strategy will, in addition, have to be sensitive to local conditions: status of development, local population characteristics, social functioning, economic base and potentials, geography (climate, topography, etc.), condition of buildings and infrastructure, local political and bureaucratic factors, relationship to other localities, to the region and to the nation; existing local programs, existing services, and outstanding problems.

11. Webber, et al (op. cit.) explore these non-spatial aspects of development, especially as related to social or "human development."

12. The concept of strategies may, of course, also apply on the national level. To some degree such thinking is found in: the "National Renewal Priorities Study" of the Israeli Urban Renewal Authority (Tel Aviv, 1968), the National Housing Study being undertaken by the Programming Division of the Ministry of Housing, and the study of Israel's New Towns: A Strategy For Their Future, by Prof. N. Lichfield and his colleagues (vol. 1, Institute of Planning and Development, Tel Aviv, 1970). Recent efforts at regional planning and, as mentioned earlier, some of the recent master planning efforts in cities and towns, do contain strategy elements.

13. In the long run, the problem of Strategy Planning which crosses territorial and jurisdictional lines may best be resolved within the framework of new institutional arrangements for coordinating the planning work of concerned bodies. The same problems, of course, hamper effective planning and development of many types - in Israel and abroad.

14. Within the broad framework of the Local Improvement and Development Strategy, conservation may be applied in a chosen neighborhood in order to complement the redevelopment of an adjoining neighborhood which must be cleared and rebuilt. One purpose of Urban Conservation is to guard buildings against illegal conversions and overcrowding, a process which
is sometimes precipitated when many families in an adjacent neighborhood are forced to find new housing.

15. Exactly which neighborhoods could most benefit from Urban Conservation programs is a problem best worked out within the Local Strategies. The next Census will help in solving the problem if it repeats the 1961 classification system which divided urban settlements into neighborhoods or districts of "good", "medium" and "poor" conditions. In 1961 almost 270,000 households in 227 census districts were classified to be in "medium condition" in the thirty urban settlements investigated. These may well be the districts most able to benefit from conservation - bad enough to warrant serious attention, but not so deteriorated as to require drastic clearance and rebuilding. The centers of the older established cities and towns mostly fall into this "medium condition" category. They contain many structurally sound buildings, some of architectural importance in the style associated with the great architect, Eric Mendelsohn. Further neglect could cause a great national loss.

The data of the recent study of housing deterioration, undertaken as part of the National Housing Needs Study, has not been analysed for neighborhood considerations. We assume that the 30% of the national urban housing stock which it categorized as in medium condition at this time is, for the most part, concentrated in definable areas which could be subject to conservation treatment.

16. The 1961 Census findings also reveal that most of the areas classified as being in medium condition were built after the founding of the State. These were the minimum-standard new areas built mostly by public authorities. Most of these are still under the control of Amidar.

17. Codes could be made to include "retroactive" features - requirements that are legally demanded today even if the dwellings were legally built without them, e.g. in-house private toilets, baths and kitchens. Responsibility for compliance with Codes can be assigned to property owners and perhaps to "protected" and long-lease tenants in some equitable distribution of liability.
18. Housing codes can be enforced using a number of different approaches. In addition to the Concentrated Area tactic, inspection and enforcement can also take place in response to individual complaints from tenants, neighbors, or even passers by; on random inspection by the town engineer or his inspectors; on periodic inspections throughout the town. Today town engineers in most Israeli communities restrict their attention to buildings considered dangerous - which would be beyond feasible conservation in most cases. Though the Concentrated Area approach is probably most efficient, it might be argued that any tactic is better than neglect.

19. It is in the context of area-wide enforcement of code compliance that a number of background studies would be most useful as part of the Local Strategy studies. Such studies would help to discover which areas of the locality are "hard" - relatively well functioning and stable - and which are "soft" - subject to changes in use which might cancel the benefits of urban conservation programs. Feasibility studies could answer such questions as: How much will code compliance cost owners and occupants in various areas and types of structures? (Some of the costs have already been estimated as part of the Housing Deterioration Study of the National Housing Needs Study.) How can the costs be distributed optimally? These questions seem particularly relevant in Israel where private resources are limited and where such institutions as the "Tenants Protection Law" affect the sharing of costs between owners and tenants. From the point of view of the Government and the municipalities, the feasibility studies should discover what subsidies are needed and how the loans and/or grants should be distributed to achieve optimum effect and social equity.

20. In American Urban Conservation Programs enforcement was introduced in many localities before special financial aids to property owners were available. There were successes even then but the program was significantly improved when financial assistance became available to those who were required to improve their properties.
21. Public services in a neighborhood, such as coordinated municipal cleaning, garbage collection and other operating and maintenance services, may be as important for conditioning neighborhood habits as are the physical facilities. Occupants will not be encouraged to clean and repair their homes and yards if the public agencies neglect the public ways and spaces that surround them. Except for neighborhoods controlled by Amidar, however, such services are the functions of local government or are privately contracted for.
PLANNING THE NACHLAOT RENEWAL SITE IN JERUSALEM:

A MULTI-DISCIPLINARY EXPERIMENT

Joseph Shweid

Much has been said of the importance of inter-disciplinary teams, yet little has been done, and even less has been reported to the public. Experience gained in certain places was not implemented in other places or by other planners. I would like to attempt to relate to you some of the experiences gained in planning the Nachlaot neighbourhood in Jerusalem.

As a professional planner, I see great importance in the technical aspect of planning. What differentiates a planner from the person rehabilitated, the taxpayer financing this rehabilitation, and the public official making the decisions, is only the planner's proficient technical judgement. Therefore, there is great value to the technical quality of our work as professional planners. This quality is influenced by the makeup of the teams and the work procedure - subjects which I shall develop below.

However, I would first like to clarify something which was not clear even to those closely involved with the planning of Nachlaot, and still not completely clarified even after the work has been completed. Our task was not the preparation of a renewal plan. We defined our task as the preparation of a planning analysis needed for developing a renewal program. Our work constitutes only one stage of a long and complicated planning process. This stage derives its somewhat peculiar form from the Reconstruction and Evacuation Law of 1965. *

The planning process, as I see it, is largely determined by the particular problems of renewal within the Israeli society and as a result of the limits set in the Urban Renewal Law. If we disregard the first criteria by which an area is selected for renewal by the Renewal Authority and concern ourselves

*This Law will hence be called the Urban Renewal Law.
with the process only from the moment the planner is invited to inspect the area, the first step would be to determine whether the area (by "area" I refer to both the population and the physical characteristics of the area) in fact requires renewal in accordance with the Urban Renewal Law. It should be noted that the renewal of certain areas can be accomplished without the aid of the Urban Renewal Law. In such instances there is no reason for using the Law.

The second phase of the process includes an examination of the alternatives for renewal and an evaluation of these alternatives. The opinion accepted by all the members of the team was that there is a range of possibilities for renewal of any given site. These possibilities could be given different values in different circumstances.

The third phase is the basic decision by the Renewal Authority and related bodies whether or not to renew the area.

The fourth phase—which was not clear to many of those involved in the planning of Nachlaot—consisted of a series of meetings with the residents themselves in order to find out what they want in light of the information gathered in the first stages of planning. Here I must admit that with all the professional knowledge available to planners, it is difficult to present the residents with all the realistic possibilities open to them before the analysis of the plan is completed. Until that stage, a clear understanding of the possibilities is not possible. Therefore, when the residents were asked about their opinions, they were not aware of many of the facts that later emerged. Their responses should thus not be regarded as final or complete. Only after the possibilities and constraints will be clearly understood, can the population be approached and interviewed once more; this time on a more realistic basis.

The next phase is the actual consolidation of the plan. Even then I would not say that the plan constitutes a final version which may be applied without additional evaluation. In my opinion, even when dealing with a limited area, it is necessary to do an experimental partial implementation, to evaluate the results, to study the reactions of the residents and to repeat the process
once again.

Unfortunately, some of the renewal done to date was sporadic and incompletely planned. Moreover, it was not carried out in a sufficiently consistent manner, it was not followed-up adequately, nor were enough lessons learned from it.

Within the framework of the team in Nachlaot, no more than two phases were included: the decision that the area should be renewed in accordance with the Urban Renewal Law, and the examination of the scope of possibilities for renewal and the repercussions of each, along with the indications of any possible solution.

The time available for the work was necessarily short, because of the provision in the Urban Renewal Law that the decision whether or not to declare an area a renewal site must be made no later than 9 months after initial notice had been legally given. Since some time elapses after the early notice, and since the decision necessitates full evaluation by the authorities and the government, the time available to planners is very short. In effect we had only seven months available; this limitation affected the manner of work.

The planning team was quite diversified. If we consider basic education and formal academic degrees, the team included architects, a landscape architect, several economists, sociologists and an urban geographer. If we consider experience accumulated after finishing formal schooling, especially in terms of personal specialization, I would say that in every field there was at least one person whom it is possible to call a planner or city planner - one who is able to speak freely the language of those working in various fields and to understand the interrelationships of each sphere with the other spheres. This is not to say he must be an expert in all areas.

Common language is basic to all team work, but is not the only necessary condition. I think good teamwork requires agreement on the relevancy of facts regarding the possibilities of renewal under the given framework. There is no doubt that many complicated and interesting social problems are to be found in a renewal site. But not every activity which can be carried out, and certainly not every piece of information, has practical implications for the planning process. The practical framework determines our possibilities for action. We can well imagine that within another legal, social or
ideological framework, the degree of intervention may be deeper or less deep, the degree of concern for the residents larger or smaller etc.

In order to guarantee that a multi-disciplinary team will work as a team rather than as a group of people each involved in his own separate field, we must first provide the basic condition — beyond that of a common language — that all members of the team must be in agreement about what is irrelevant in carrying out renewal within the existing framework.

Aside from those who were actually members of the team, there was an auxiliary group of people who were associated with the team's work. First there were the employees of the Renewal Authority, of various professions and backgrounds. There were the employees of the Ministry of Housing, people likely to get the lion's share of implementing the renewal. There were also contacts with City Hall, with those responsible for planning in City Hall and those responsible for the political and public aspects. We also maintained close contact with the man who was to be put in charge of implementing the project in the future, in order to assure that he would be in the picture from the very beginning. We were also in contact with two special groups of community workers, one of which carried out an assessment of what it considered to be the most critical problems for the renewal of Nachlaot simultaneously with our own examinations; the other team took upon itself the clearly defined task to examine the condition of the elderly in the Nachlaot and to present recommendations for treatment.

In addition, the team employed an appraiser, and to some extent, through the mediation of the Authority, a legal expert as well. As far as formal organization is concerned, the team worked through periodic meetings. Discussion of critical problems and general work patterns was carried out in meetings of all members of the team; sometimes the auxiliary members were invited as well. At the end of such meetings, tasks were assigned in each area of specialization and those who were expert in each area were made responsible for perfecting and then undertaking their assignment. Personal reports on the progress of the work were given by each member during the plenary meetings of the team, enabling decisions to be made
regarding the stages to follow and new assignments to be distributed. This is the technical side; however, teamwork also has a substantive side.

Multi-disciplinary teamwork has two advantages: the first stems from the fact that it brings together specialists from various fields. If the members of the team are accustomed to working together they constitute an efficient mechanism which can handle the complex developments quickly and competently. This, however, is not an internal or substantive advantage. The team also has a certain qualitative advantage brought about by the fact that a specialist in one field becomes involved in one or several other areas. It is natural, under such circumstances, for debates to arise among the different specialists, when each claims that his is the most relevant knowledge for the matter at hand.

An argumentative team prevents simplistic decisions from being made. We avoid a situation where the architect declares "this cannot be done because it does not look nice;" just as no economist will be able to say "this cannot be done because it is too expensive." Each person faces the criticism of others who come from completely different fields, and he must be able to explain and justify his stand to their satisfaction. He must be able to recognize that if he did not succeed in convincing all his associates that what he sees as a categorial limitation is in fact so, then perhaps it is only a relative limitation - i.e., one with a different value for each field - the aesthetic, social, economic, political etc. If the team functions as it should, nothing is clear a priori; facts are understood and accepted only after discussion.

This inter-disciplinary dialogue enriches and deepens the work. Since things are not accepted at face value by all, every stand must be supported by a detailed, careful analysis. It happens that when someone comes to defend his position, attempts to clarify it, or goes into greater detail, he discovers that his position is in fact not as strong as he thought. In such cases he may well give it up.

For this reason, this kind of work takes much time and is far more costly than the work of a conventional office.
Our work in Nachlaot did not permit this complex dialogue for two reasons: one, the tight time-table; two, prior acquaintance of the members, a fact at the same time advantageous and disadvantageous. Most of the people, and all of those directly in the team, had prior experience in working as a team. This undoubtedly makes the work easier. It is possible to shorten the evaluation process since people understand one another better and agree more readily; they have already reached accord on many matters in the past. However, it is a disadvantage in terms of the final outcome of the work, since a priori consensus is likely to prevent a deep analysis of commonly held subjects. In our case, this weakness was partly rectified by the presence of the auxiliary members of the team. These people had no previous experience in teamwork and the mere necessity to explain to them what the team is doing, to answer their questions, or to explain why they were asked to obtain certain information, compensated to some degree for the familiarity among team members.

In light of my experiences in this work, I would like to warn that we commit a serious mistake in not making sufficient use of the appraiser and others expert in the field of real property for planning purposes. When we set up the team we felt that the appraiser need not be part of the team; it was our view that he would simply provide information. We would need data on present-day land values, land values in the neighbourhood after improvement, and land values after building. These are dry statistics, and so we felt it reasonable to expect that if we ask the assessor precise questions we would receive the proper information. However, having posed our questions we discovered that they were often simplistic or even incorrect. It was thus necessary to clarify concepts and ask again.

These questions could only be answered after the appraiser had the necessary statistical information, including survey and planning data. The appraiser, the real estate agent and all those involved in the land market, not only possess important information, but they also have a way of looking at things different from our own. And indeed, one of the major advantages of an interdisciplinary team is its capacity to view the same problem from various points of view. In the case of
those involved with the land market, theirs is a particularly important point of view.

It has been my experience that consultation with an appraiser or others in the field of real property is likely to help us understand developments and determine the quantitative importance of phenomena which our education as architects, city planners, economists and sociologist has not yet provided.

We are unsure as to whether or not it is possible to attach economic value to social phenomena or preferences. We have no simple way to do this; however, if you examine how the appraiser evaluates a property, you will find that the householder who is prepared to choose an apartment in the Nachlaot, prefers one with a separate entrance, and that there is a clearly-marked price that he is willing to pay for it. In essence, the appraiser is assigning a monetary value to a preference which is apparently social.

We had another enlightening experience. Anyone who has prepared a city building plan at any time is full of bitterness at the delays of the institutions responsible for planning. In general, the process whereby a plan is authorised is long and drawn out. However, we found, in our work in Nachlaot, that it is possible to obtain decision from the responsible institutions with the necessary speed. In examining various planning alternatives we did not wish to restrict our range of possibilities to the relatively narrow and simple range designated by the existing Jerusalem Master Plan, to the customary patterns adopted by the Jerusalem Regional Council, or to the traditional building habits of the Ministry of Housing in Jerusalem. On the other hand we did not wish to risk working on alternatives that would later be confronted with insurmountable opposition from one or another of the above bodies. We felt the need to establish preliminary clarification with all those planning bodies in Jerusalem with a decisive voice, and to attempt to see whether or not there was basic agreement on several subjects which appeared to us to be of particular importance.

I can tell you that within the seven months of work, as a result of our need to obtain preliminary decisions, we were able, thanks to these institutions, to assemble the various agencies having some bearing on planning, to hold meetings and to obtain fundamental decisions on very complex matters and with great speed. Furthermore, after a very short period
of work we reached the conclusions that it was necessary to alter the borders of the renewal area. Such a decision involves a complex process. A preliminary notice on selection of a site involves a decision in principle by the Renewal Authority, a formal decision in the city council, a formal decision by the plenary session of the Renewal Authority and ratification by the Government. Nevertheless, when the authorities involved were convinced that a modification of the original boundaries was necessary, the legal process was carried out with exceptional speed and the official change was made while the work was still being carried on.

I would say that if the planning team is convinced of the importance and the justification of a given matter, it can find the way to discuss the matter with the planning authorities responsible and to make policy decisions quickly.

In order to demonstrate the many-sided structure of the work - a structure which is the natural result of combining several disciplines - I shall briefly survey the planning goals we set up and the limits we imposed upon ourselves. These decisions defined, in essence, the sphere of activity which we regarded as appropriate for urban renewal.

We defined two goals for the proposed task: first, improvement in the economic condition of the population, and, above all, improvement in housing condition; second, improvement in the physical environment of the renewal site.

Three physical limitations were imposed upon the possible solutions:

a) We took into account the one major proposal of the Jerusalem Master Plan, which calls for the major boulevard of Jerusalem to pass through the site.

b) We worked on the principle that whatever physical changes are wrought upon the site should fit well into both the pre-renewal and post-renewal environment. In essence, this implies continuity in the transportation and sewage systems: any planned road system must coincide with the existing system
on the assumption that the latter will not be changed for a long time; on the other hand, it must not prevent changes that might take place in the future. This constraint dictated a more or less fixed model of roads in the area.

c) The third constraint pertained to anticipated demand for accommodations during the planning period itself - a period estimated at about ten years. One might suggest that the site be turned into a commercial or office centre. However, if we limit the possible functions of the site to those which are likely to be in demand while renewal is actually going on, we will find that the demand is primarily for residential use. This, however, does not mean that within a period of three or four years there may not develop a demand for offices or businesses which will encroach upon the residential areas.

Regarding the population, we set for ourselves the following constraint: we must not cause a decline in the total welfare of the population. In the economic sphere, this constraint has obvious ramifications: i.e., nothing will be done to affect the family's budget; the residents should not have to pay any extra costs for housing, transportation, or goods as a result of relocation away from the inexpensive consumption centre.

In the social sphere, the situation is far more complex and we had to define several alternative constraints, stemming from psychological, social or even socio-political considerations. For every constraint we obtained one or more solutions and we were able to give each solution an economic-aesthetic-functional value, and, to a certain extent a social value as well, though we were well aware of the complexity and uncertainty of the latter. We then presented the alternatives along with our estimation of them to the policy-makers.

I should like to comment on one final observation based on our experience in the planning of Nachlaot. We carried out our work in Jerusalem, as close to the planning site as possible. We did not want to set up an office in Nachlaot itself for fear of being disturbed by the population; however, the office was established close enough so that whenever a problem arose we were able to go directly to the site and get a fresh and accurate impression. Moreover, we were not
only interested in statistical or geographic accuracy, but in the deeper understanding that comes from human contact with the residents of the Nachlaot.

It seems to me that there is no substitute for the sense of personal identification which the planner develops for the area with which he deals. The interpretation of questionnaires and the analysis of the role of various groups within the neighbourhood are examples of the subtle and delicate judgements that a planner must make and for which he must, to a large extent, rely upon his own impressions. This may be a faulty technique; however, I feel that if these impressions are properly tempered with the information obtained in the surveys, they are very valuable for the planning stage. We had information regarding the families. We had information from community workers and residents of the area regarding community life. However, we had, in addition, our own feelings and impressions about life in the area.

There is a big difference between the statistics from a survey, describing the attitudes of residents towards urban renewal, and the actual expression of these attitudes in direct discussion. We were confronted with the elderly, particularly the old and solitary women, who are the personification of despair and loneliness, and we heard them ask, with no hope: "tell us, will they give us help?" They could not articulate any specific request for physical, economic, or social aid, but it was clear that they sought support and hoped that renewal would somehow provide it.

We had an altogether different type of confrontation with the children of the neighbourhood. When they saw us walking around in the neighbourhood they asked us when we would tear down the neighbourhood. When I asked once a group of children why they asked about destroying the area, one child responded: "these houses are very tired." It appears that the children have a different attitude altogether.

In Nachlaot one must recognize two radically different groups - those who pay rent, and those who own the property (and usually reside in it as well). The attitude of the property owners is different from that of the residents. One woman said: "true that the neighbourhood
isn't pretty and maybe they should take it down, but as for my house, they better not dare, they'll destroy it over my dead body." It is not easy to formulate planning proposals after fully understanding the deep emotional impact they have on those living in the site. However, in my opinion, the planner must not make things easy for himself by reaching conclusions and suggesting solutions solely on the basis of his maps and charts. Only by recognizing the human implications of his work and by dealing directly with those who are to be affected by it, does a planner gain the right to plan.
KFAR SHALEM - THE REHABILITATION OF A POPULATION IN THE
PROCESS OF URBAN RENEWAL

Aharon Farber

The claim has been made that the lessons learned to date in urban clearance and population rehabilitation have not been publicized. This claim is true regarding the seminar discus-
sions which have been centred mainly on the theoretical aspects of the problem; on the other hand, much information has accumulated regarding the work of the renewal companies dealing directly with urban renewal. In light of these facts we have decided not to spend time discussing the renewal plan for Kfar Shalem but rather to concentrate on an analysis of the experience itself and to try and draw the proper conclu-
sions.

Kfar Shalem is the only one of the three areas officially designated for renewal, where renewal is actually taking place. The project has already been going on eight years and we feel that it will continue another five years. The material that has accumulated so far enables us to uncover the problems involved in renewal activity of this sort, and to work out an operative plan which will include the solu-
tions proven to be necessary by past mistakes.

It is easy to explain why the authorities responsible for urban renewal chose Kfar Shalem as the first renewal site in Tel-Aviv proper. A glance at the map of Tel-Aviv will show that this area, situated on the south-eastern approach to the city, does not blend well into the existing urban pat-
tern and blocks the development of the city by cutting off the main transportation arteries from the centre and south towards the east. The rural nature of the area, the poor housing conditions and the condition of the population it-
self, were other factors which strengthened the decision in favour of renewing the neighbourhood. Outline plan No.460 was authorized covering an area of 1500 dunam (375 acres).

The first activity in the clearing and rebuilding of Kfar Shalem took place in 1962. During the past eight years, 1200 families have been evacuated and rehoused, and by now 630
remain. Until now, the process of evacuation and rehabilitation has taken place on the basis of voluntary negotiations between the two sides - on the one hand the population, and on the other the "Halam'ish" Company representing the municipal authority. In the absence of a legal framework, we left the initiative for clearance and rehabilitation in the hands of the population itself. In addition, efforts were made to ease the impact of clearance on the surroundings so that no pressure would be created for the population that chose to remain; among these efforts were clearing sites of rubble, connecting all houses to the sewage system, improving the roads and lighting etc.

Thus despite the fact that the decision to renew the area was reached without consulting the population, the fact that 1200 families have left Kfar Shalem bears witness to the readiness of the residents for renewal. Even when the preliminary announcement regarding the future intent to declare Kfar Shalem a renewal area was made, and 400 of the 700 families announced their opposition to the plan, their opposition was directed at the conditions of relocation as they knew them from past experience, rather than at the renewal activity itself. That is, most of the remaining population declared that they knew it was a bad place to live and were ready to leave, but the terms offered them for evacuating their homes did not permit re-establishment elsewhere.

It appears therefore, that it is not enough to simply prevent pressures; such an act can merely make the process easier. For in the very act of clearing an area, certain pressures exist which force renewal on those who neither want nor can afford it. The imposition of one will - that of the Authority - over the individual will, manifests itself above all in the imposition of the provisions for renewal in such a way as often presents an unbearable burden on those families who, contrary to their will, are swept along by the general tendency to leave their old home and find a better one.

In order to deal with the processes that took place in the planning site, we must first look at the terms offered to the population for improving their housing. The family's property rights are restricted to the value
of the "key money". The company announced that it acknowledges the property rights of all those who held property in 1962, without taking into account whether or not the property was held by legal contract or not. In order to enable large families to improve their housing conditions, an additional sum was granted in accordance with a scale of density per room.

Every family that expressed interest in leaving its property was offered two possibilities:

a) To seek another apartment in exchange for the one abandoned, on condition that the new apartment fulfills certain accepted conditions - the house must not be designated for clearance, nor may it be in an area marked for renewal. In such cases, the family was offered the full value of the key money, plus a long-term loan at low interest.

b) To buy an apartment in one of the neighbourhoods built by the Renewal Company. In this case, aside from the loan which the purchaser receives for a period of twenty-five to thirty years, a subsidy is also granted by including a token value for the land in the cost of the apartment and by waving profits and capital costs.

As already mentioned, we established a framework for renewal but left the actual initiative in the hands of the residents. During the eight years that have passed, 1200 families have left the neighbourhood, half through their own arrangement - i.e., they chose an apartment for themselves but the purchase

"Key money" refers to a relatively large initial payment a tenant makes to his landlord under the Israeli "Keymoney" rental system, after which the tenant only pays low monthly rents. The tenant is legally protected from eviction or unauthorized rent rise. This rental system prevails among older lower-quality housing (ed.).
was financed by the compensation grant and the accompanying loan - and half to apartments in subsidized housing, generally in Kfar Shalem.

The first phenomenon we discovered was that the number of families designated for evacuation increased while the process of clearance was in progress. This was caused by the immigration of families from outside Kfar Shalem and particularly by the creation of new families within Kfar Shalem. Furthermore, it seems that by virtue of the fact that an area is marked for renewal, some residents of the area develop unusual hopes which cause them to carry on illegal construction or to illegally occupy land.

From a glance at the data of the 1966 census, describing the population and the sub-groups remaining in Kfar Shalem, it appears that despite the intense clearance activities, the general balance of the population has been preserved, and the changes are very small. This result was achieved thanks to the selective activities among the various groupings.

Despite all, it can be said that the plight of the population in 1969 is worse than that of 1966 in Kfar Shalem. The ratio of large families within the over-all population has increased over the past three years, along with a parallel rise in the percent of Asian-African-born family heads. The average income decreased parallel to a rise in the proportion of heads of households over sixty years of age.

Comparison of the demographic and social statistics for the group that left Kfar Shalem through its own arrangements vis-a-vis the group which purchased apartments through the Renewal Company, shows that the first group consisted of families of higher status who had lived under better conditions in the neighbourhood (and therefore received a larger compensation grant upon leaving). The only outstanding difference between the two groups was the fact that the first participated in the cost of purchasing a new home. For while the first group invested an average of IL11,000 of their own money in the purchase of a home, the latter group paid only IL850.
emotional and a material attachment to the neighbourhood.

The process of clearance and rehousing, as we have already seen, is very complex. The readiness to leave and the choice of type of rehabilitation are influenced by various factors, some of them objective and some subjective. Among the objective factors we can include the economic capability of the family, the debts on the apartment, the amount of the subsidy, and the burden of monthly payments involved in rehousing. Among the subjective factors there are: proximity to work, closeness to relatives, neighbourhood ties, proximity to the synagogues, etc.

In general we have found that most people balance these two types of considerations and generally pay more heed to the former. Therefore, we can assume that a change in the terms of clearance, or rehousing, or in the location and type of new construction, will affect the readiness of the population to leave.

One might have expected that the renewal activity, on account of its special nature, might have spurred the community to organize in order to represent its interests; however, not once did we meet a group which truly represented the interests of the community at large. In fact, I discovered that there was a great deal of mistrust between the public representatives (or, more accurately, those who called themselves representatives of the people) on the one hand, and the people themselves on the other. In my four years of work there, I never met a group which had been established as a representative body of the community. All of our contacts were with groups who claimed the right to represent all of the population but which, in the long run, were only interested in solving their own problems. In contrast with the lack of organization regarding renewal, there do exist several well-defined organized groups around the many synagogues. There are twenty-five synagogues in Kfar Shalem each ethnic group and each clan having its own synagogue. The ethnic group which centres around the synagogue develops a many-faceted social organization for mutual aid, and the influence of the leaders of such groups is large indeed. We have not yet made use of such groups, but if we decide to resort to an intensive information campaign, we shall surely have to enlist their help.
Having analysed the results of the renewal and rehousing process, I shall try to examine the results for the Renewal Authority itself. If we compare two aerial photographs of Kfar Shalem - one taken at the beginning of 1963 and the other in April 1969, we would see that the process of site clearance is already evident in the second picture: the centre of Kfar Shalem is almost completely empty, and there are many areas which have been evacuated. Still, typically there is almost no continuous area that is absolutely empty. This directly reflects the policy we adopted whereby the initiative for moving out was left to each family. We adopted this method for two reasons: we did not wish to create pressures on the population, and we did not wish to pay higher compensation as we would have had to pay had renewal been imposed.

The economic justification for this policy has not been examined. We may ask how the total unattainable interest on the invested capital compares with the amount saved on subsidies using the present method; furthermore, we ought to ask by how much clearance time would be shortened if the subsidies were increased.

It seems that the time factor plays a decisive role in renewal, for the reasons mentioned above. These are:

a) pressures for the continual increase of subsidies, either as a result of the increase in the cost of housing in the private market or as a result of the need to meet the demands of the more needy families;

b) The ever increasing number of families who re-construct homes from the rubble.

An interesting phenomenon that we have discovered in our experience so far has been that the key to completing the process of site clearance lies with those families whom we have labeled "indifferent." It is already clear that the rehabilitation of this group is the responsibility of the Renewal Authority and we must determine the proper time for carrying out this point, so as not to jeopardize the process concerning the rest of the population.
The evacuation did not seriously shatter the population structure, and, contrary to what was expected, there was no flight of the well-to-do or the young; nor, on the other hand, were the only people to remain those who lived in relatively good conditions. As mentioned, this development is the result of planned activities among the various groups, and of the adjustments made in the compensation grants in accordance with the changing conditions of the market.

As in other renewal sites, a polarization exists between the different groups of the population. On the one hand there is a group of elderly, consisting of single people or couples; on the other hand, there is a group of large families each headed by a relatively young person. In order to enable both groups to take advantage of renewal, larger apartments were built for the large families, and special apartments for the elderly. Furthermore, the subsidies for these groups were raised, in order to enable them to find a new home on their own elsewhere. The subsidy was increased continually in order to keep pace with housing prices and in order to encourage more people to leave Kfar Shalem. As the statistics clearly show, we succeeded in achieving our aim: Subsidies were raised from an average of 5400 for a dwelling in 1963, to an average of 9,000 at present; as a result, the pace of clearance has been uniform. We can say with certainty that in the future we will have to continue increasing the subsidy in order to maintain the same pace and complete the project within three or four years.

Until now we have discussed the physical, demographic and economic changes involved in renewal; now I would like to turn to the social implications. Those who have made their own arrangements have been quite satisfied; one indication of their satisfaction is the fact that most make their monthly payments on the loans on time and have not maintained any contact with the Renewal Company. On the other hand, those families who moved into housing built by the Renewal Company remained, for the most part, in Kfar Shalem itself. This concentration of poor families plus their continuing contact with that part of the population which has not yet been affected by renewal, have created tension and dissatisfaction with renewal. Since this topic will be taken up later in greater detail, I shall just say here that the population which has already been rehoused presents a negative influence for those who are awaiting their turn.
Those who have not yet moved learned from experience. From their observation of others, they have reached certain conclusions and developed certain expectations. I am not sure that the families waiting for renewal know exactly what they want. However, they are certain of what they don't want.

We can divide those who have not yet participated in the renewal process into four categories, according to their attitude towards renewal. The first is the group of "indifferents" comprising 25% of the total population, and including the elderly, large families mainly supported by welfare, the chronically sick - in a word, all those who cannot articulate their desires and who have, in essence, abandoned all hope of improvement. The initiative for the rehousing of such people must come from the authority itself, as must the funds to finance this step. This group is the key to completing the rehabilitation of the neighbourhood.

The largest group, including up to 50% of those who remain, is the "hesitants." This group includes families of all types and social standings. Basically, they have decided to leave the neighbourhood, but are uncertain as to whether or not such a step is to their benefit. They understand clearly that the amount of time they have left in Kfar Shalem is limited. Yet, on the one hand they are put off by the high price of homes in the regular market, while on the other hand, they are aware of the unhappy experience of those living in the neighbourhoods built by the authorities. They also hope that if they wait a little longer they will get higher subsidies either as a result of our desire to see them leave, or the fact that the area will be officially designated a renewal site.

The third group which by my estimation, numbers 20% of the remaining population, is the "tough guys," which includes those living on the margin of society. They only recognize the law of force and they use the area not only for living quarters but also as a hide-out.

The final group is also the smallest and can be classified as "the refusers." It includes families living in relatively good conditions who occupy land for cultivation or home industry. These people have both an
Our activities to date have involved a great deal of effort and expense. The investment involved in clearing the area has been estimated at IL.12 million. In order to evaluate 1200 families we have paid, aside from the subsidies, various items such as family allowance and, for those who have purchased homes in our buildings, a grant estimated at an average of IL.10,000 per family.

Has the investment been worthwhile? As already pointed out, it is too early to realize our major investment since we have not yet assembled a tract of land large enough to sell or build upon. As long as the process of clearance continues, the conflict with the candidates for rehousing will presevere and even intensify. Despite the subsidies granted, the process of relocation has caused financial burdens with which most families cannot cope. The concentration of re-located families and the manner whereby they were rehoused in a neighbourhood near the old site, created social tions and had a reciprocal undesirable influence on those families awaiting relocation or those having already undergone it.

To sum up, I would say that we have learned the following lessons from our experience in Kfar Shalem:

a) The renewal process should be undertaken in the shortest possible period of time.

b) All the necessary financial and administrative tools should be made available in order to guarantee the suitable relocation of the families.

c) A legal framework must be adopted which will clarify the process for all concerned.

d) The renewal process must be accompanied by a campaign to inform residents of what is taking place.
RENEWAL OF THE JEWISH QUARTER IN SAFED - AN ECONOMIC STUDY

Itamar Galitz

1. **GENERAL**

Let me note at the outset that the economic aspect is one of the facets which an inter-disciplinary team for urban renewal planning should take into consideration. In this paper I shall present the economic considerations in urban renewal in general, and in the renewal of Safed in particular.

The area specified for renewal in Safed comprises 143 dunams, where approximately 600 individuals reside. By 1968, Safed had a population of 13 thousand, of which 4.5% resided in the area under study; this number constitutes 70% of the area's population in 1948. These figures indicate the deterioration process of the Jewish Quarter which resulted both from physical aging of the structures and from the out-migration fostered by the expansion of new residential areas.

Aided by a model developed by the Urban Institute, a team of 5 economists worked on the project. The goal was to attain optimal residential land use when other land uses were determined by conventional methods.

One of our main goals was the utilization of available land within the quarter. The current population density is 4.2 persons per gross dunam (compared with 11 in 1948). After renewal we estimate that the equivalent density will be 21 persons (43 persons per net dunam).

**Land Use**

As a major Jewish historic site, Safed has become an important tourist and recreation center. Therefore, we tried to realize the possibilities of expanding the utilization of land for both residential and commercial use.
The first question we asked ourselves was whether there is competition among possible land uses. In other words, do alternative uses exist, or is competition among land uses unlikely because of limited needs. After examination, it became clear that land use competition is in fact lacking. Thus, we undertook to prepare a land use program and to select the dominant land use which would maximize the economic return. The return was defined as the difference between the market cost of the land and the cost of development when a number of fixed costs independent of renewal were not included in the plan. For example, the renewal of the infrastructure could not be considered a varying cost and was therefore regarded as a fixed cost.

Renewal of an area may be achieved in two ways: rehabilitation of the population and rehabilitation of the site itself. In reality most attention is usually focused upon the population while the site itself remains of secondary importance. In the case of the Old Jewish Quarter of Safed, rehabilitation of both the site and of the population received equal importance because of Safed's importance as an historic and tourist center.

By combining renewal of the area with rehabilitation of the residents, it is possible to give a financial evaluation of renewal through its cost to the public, i.e., the cost of the subsidy for the rehabilitation of the site and the population.

2. THE POPULATION

A socio-economic survey undertaken in 1969 enumerated 176 families. Of that total, 123 families expressed a desire to remain in the quarter, while 53 families wanted to leave. Of the 53 families reporting the desire to leave, fourteen considered remaining if the area was renewed. It seemed, therefore, that due to economic opportunities resulting from renewal, we could hope for an increase in the number of families willing to remain. However, we assumed in our work that only 123 families would remain and that 53 families would leave the quarter. We also studied the
possibilities of attracting a different population to the quarter. One of the major problems facing us was finding a source of data. I think that one of the major problems confronting the economist concerned with urban renewal, especially with projections of future land use, is how to find the necessary background material. Even if the data exist, projections become increasingly unreliable as the projection period increases.

When dealing with an area the size of Safed, little or no data is usually available. For example, the Economic Planning Authority and the Ministry of the Interior have prepared projections for the dispersal of the 4 million people planned for 1980. This projection was made public in late 1966, and by 1969 it was evident that the projected trends for Safed were inaccurate. Thus, we had to prepare our own population growth projections for Safed in the 1980's.

Using this example it is possible to show the problematic aspects of the subject. As was mentioned, 176 families presently live in the area. After renewal we hope to settle 600 additional families in the area - a total of 780 families. The problem was to measure the sources and the rate of future growth in the quarter. The population of Safed in the 1961 census was 10,710 people, and at the end of 1968, 13,100 people.

A look at past data indicates an average annual growth of the city's population of 2.6% between 1961 and 1969, with an estimated 6% grow for 1961-1964, and only 0.8% for 1964-1968. If we add to these figures the 2% natural increase of Safed's population in recent years, we arrive at a negative migration balance of approximately 1.2% per year during 1964 to 1968.

On the other hand, the Economic Planning Agency estimated in 1966 that the rate of growth will be 3% for the years 1965-1985. Even though we projected a negative migration balance, our basic assumption was that by 1980 the population growth would equal that of the current natural increase, i.e., 2% per year.
3. **ESTIMATING HOUSING NEEDS**

Based on the one hand on projections of population growth, on estimates of new family formation in Safed and on changes in housing needs, and on the other hand on the economic cost for housing, we determined the future housing stock needed for the first half of the next decade. From the projected total housing stock we assumed that fifty percent of the building activity will be concentrated in the new quarter.

We estimated that by the end of 1985 it would be possible to add 650 families to the 123 residents of the area who are expected to stay. It was estimated that approximately 25 new families would be added per year in the early years, and 70-80 families would be added in the latter years of the renewal programs.

As mentioned, the quarter's population was merely 4.5 percent of the total population of the city in 1969. After renewal, it is expected to be 13% of the population in 1980 and 18% in 1985.

### POPULATION OF SAFED AND THE JEWISH QUARTER 1948 - 1985

<table>
<thead>
<tr>
<th>Year</th>
<th>Pop.of Safed</th>
<th>Pop.of the Jewish Quarter Total</th>
<th>Percent of total Pop. of city</th>
</tr>
</thead>
<tbody>
<tr>
<td>1948</td>
<td>2,300</td>
<td>1,600</td>
<td>70.0%</td>
</tr>
<tr>
<td>1968</td>
<td>13,100</td>
<td>600</td>
<td>4.5%</td>
</tr>
<tr>
<td>1980</td>
<td>(projection)</td>
<td>15,400</td>
<td>13.0%</td>
</tr>
<tr>
<td>1985</td>
<td>(projection)</td>
<td>17,000</td>
<td>18.0%</td>
</tr>
</tbody>
</table>

One economic implication of population growth in the quarter would be better use of existing land because of the greater intensity of land use planned.

The following are existing and projected uses of land in the quarter.
Land Uses in the Jewish Quarter of Safed at the time of Survey (1969) and the Projected Uses After Renewal (1985)

<table>
<thead>
<tr>
<th>Designated Land Use</th>
<th>Present Situation</th>
<th>Projected Situation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>total dunam %</td>
<td>total dunam %</td>
</tr>
<tr>
<td>residential</td>
<td>37 25.8</td>
<td>70 49.0</td>
</tr>
<tr>
<td>roads and parking</td>
<td>32 22.3</td>
<td>43 30.1</td>
</tr>
<tr>
<td>public areas (including commercial</td>
<td>18 12.6</td>
<td>22 15.3</td>
</tr>
<tr>
<td>uses)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tourist &amp; recreation</td>
<td>-- --</td>
<td>8 5.6</td>
</tr>
<tr>
<td>ruins</td>
<td>17 12.3</td>
<td>--</td>
</tr>
<tr>
<td>vacant areas</td>
<td>39 27.0</td>
<td>--</td>
</tr>
<tr>
<td>total</td>
<td>143 100.0</td>
<td>143 100.0</td>
</tr>
</tbody>
</table>

These data reveal that residential land use was, and will continue to be, of major significance (we expect it to double in percentage). We also expect a related growth of tourist and commercial areas along with an additional expansion of public areas, of roads and of parking in accordance with present standards. This expansion will be achieved through the development of ruins and vacant lots.

Land for tourism was one of the uses that could have been expected intuitively. However, we found that we could expect only 360 additional rooms for tourists by the end of 1985. This low potential for tourism dictated the designation of the quarter mainly for residential purposes. However, the renewal of the area as an historical site through the restoration of 16 ancient synagogues and other buildings of architectural value, will undoubtedly contribute to the tourist potential. One of the major problems facing an economic study is how to give quantitative expression to these influences.

*One would expect that tourism-associated uses would be planned to be dominant in an area such as the Jewish Quarter.
One of the methods used today in measuring the economic value of seashore areas or summer resorts, is to measure the amount a person is willing to spend for the use of these facilities (including travel expenses). It stands to reason that in the future we will be able to use this technique in situations such as ours, but as of now this is not possible from a technical standpoint (mainly due to the lack of data).

4. REHABILITATION OF THE POPULATION OF THE JEWISH QUARTER

Rehabilitation of a geographic site as a unit is a new concept, one which has in effect not yet been implemented in Israel. The problem lies in the conflict between the desire to improve the housing condition of the population in accordance with some imposed criteria adopted by the decision-makers and the ability of the resident to pay for the improved housing services.

In Safed as compared to other places, we did not have the problem of overcrowding since housing density in the quarter was relatively low. The average density is 1.17 persons per room.

One suggested standard for housing improvement is as follows:

- single persons - 30 square meters
- older couple - 36 square meters
- family of 2-3 persons - 52 square meters
- family of 4-5 persons - 60 square meters
- family of 6 persons - 72 square meters
- family of 7-8 persons - 82 square meters
  for each additional person per family, 6 additional square meters.

I give this example in order to show that the norms are based on a pattern of family growth. Obviously, if we supply an apartment of 72 or 82 square meters, someone must cover the costs. In effect, there are two basic sources for covering these costs: the agency renewing the area; or the resident of the area. The problem before us was a lack of clear norm as to the burden of payments which we can ask the population of
a renewal area to bear. The team planning the site was not given any guidelines in this matter. By weighing several alternatives, each team sought to identify which costs should be covered by public subsidies and which should be the responsibility of the population.

We should note in passing that the socio-economic survey indicated that the average income of residents in the quarter was 1L.465 per month, with a sizeable portion of families (51%) earning less than 1L.200 monthly. Of the latter category, most receive some kind of social welfare, mostly old-age insurance.

Returning to the subject of subsidies, we selected four among a wide range of alternatives for imposing payments on the population. Our basic premise was that the number of relocated families should be minimized as much as possible. For in Safed, the renewal of the site is no less important than improvement in the living conditions of the population. The two should be complementary or overlap.

This approach dictated a solution which was unique to the renewal of the old Jewish Quarter of Safed (and not characteristic of other renewal areas). The difference lies in the relatively low density in the Quarter. Only 20% of the families had over two persons per room (as compared to the national average of 30%) while the majority of families lived at lower densities.

The survey undertaken in the area revealed that 44% of the families lived in housing of unacceptable standard - i.e., toilet facilities either non-existent or outside the apartment, a kitchen outside the apartment, or a flat that is small or dilapidated and slated for demolition. It is clear that although the definition of unacceptable housing varies, this notion does point out the complexity of the problem.

In the economic study we presented four alternatives for the extent of the subsidy. The first assumed that the housing costs could be financed by loans at the accepted format for poverty housing, i.e., 2/3 from governmental budget sources and 1/3 from a bank fund. The second possibility is that the bank fund not exceed a certain limit (approximately 1L.16,000 per family) with all additional
funding coming from budgetary sources. All the families earning under 1L.200 per month would not be expected to participate in the financing of housing improvements since such families probably could not afford additional expenses.

The alternative we suggested was the minimal charge of 1L.85 a month during the first two years, rising to 1L.120 per month during the ninth and tenth year. These figures are nominal charges since loans would not be tied to the cost of living index.

A payment of 1L.85 per month would comprise approximately 19% of the average income of 1L.465. In relation to the average family income among those earning 1L.200 or more (1L.600 per month on the average) this cost constitutes approximately 14.5%.

For comparison let us note that according to a 1968/69 survey of family expenditures, the percentage spent on housing is about 13% of the gross family income. In a 1968 survey of Amidar residents, we found that on the average they spent 14% on housing services. While the comparable statistic for Safed is 10%, the standard of services was lower than the standard planned for the renewed old Jewish Quarter.

It should be noted that the burden of payments as here presented is based on the existing system of granting loans from the two sources of funds noted above. The present value of these subsidized loans (where the ratio of government funds to bank funds is 2 to 1) can reach 42% of the total loan in development areas or 38% in other parts of the country; this, while the capital costs is 12% a year. With a capital cost of 16%, the subsidy would be 53-56% respectively. The size of the subsidy is a result of the effective interest on renewal loans—approximately 6% in development areas, and 6.5% in other areas of the country.

5. RETURN ON LAND USES

The main point in economic examination of the renewal of the Old Jewish Quarter of Safed is in viewing the project as a single unit. In effect we attempted to
identify those land uses which would be most economically sound in view of the projected needs. Our goal was to bring the public expenditures on population rehabilitation and physical renewal to a minimum standard of housing for the population.

As we have already noted, three land uses were assumed: commercial, tourism and residential, each having a different expected return. The highest expected return was for commercial uses which were expected to have a present value of IL.130,000 (assuming 1000 sq.m. net to be needed). On the assumption that the ratio between gross and net area will be 1:5, the anticipated return per dunam will be IL.86,000. For tourism the return will be IL.30,000 per dunam, and for residential uses IL.38,000 per dunam. However, the present value of the residential land to be developed in 1981-1985 would be on the average only IL.15,000 per dunam.

These data are a result of a system of assumptions and projections, and like all projections, they contain much uncertainty. It is possible that the assumptions which seem logical at present, will be in need of modifications in the future. In such instances the results would also differ. The advantage of our method is that through the use of an optimization model developed by the Urban Institute it is possible, at relatively low cost, to evaluate or change assumptions while still using the original data. Through feedback, we can arrive at a revised plan.

The model mentioned above was used in order to identify the optimal configuration of residential uses only. One alternative course of action tested was to tear down the Quarter and build it anew. There was an architectural constraint that at least a small proportion of buildings with architectural value must be preserved as a nucleus while the rest could be demolished and rebuilt. A second course of action tested was to renovate and reconstruct the entire quarter on the basis of existing photographs and blue-prints. A combination of the method of rehabilitation, reconstruction and new construction, was a further possibility that proved to be the optimal one.
Using the model we were able to express each factor quantitatively. We tried to localize factors of demand which could affect each one of the alternative plans. If we could define the demand functions, life would be simpler and the evaluative component would be narrower. However, since it was as yet impossible to define the demand function, we at least attempted to delineate a number of spheres of possible activities. We based these attempts on forecasts of housing standards for the years 1970-1980 on the "desired" character of the neighbourhood from the standpoint of age composition after renewal (on this matter we were greatly assisted by the team's sociologist, Yona Ginsburg), and so forth.

Relatively speaking, we operated in a rigid system of constraints, resulting mainly from the character of the area and its architectural limitation. Thus, for example, the height of buildings were limited to three stories with an average height of approximately 1.6 stories. In any case, there were still many variations in types of apartments possible.

**Housing Composition**

In order to suit the housing to the anticipated population, limitations were set as to the minimum and maximum number of apartments of each type.

<table>
<thead>
<tr>
<th>Area (sq.m)</th>
<th>lower limit (%)</th>
<th>upper limit (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td>8</td>
<td>17</td>
</tr>
<tr>
<td>70</td>
<td>10</td>
<td>23</td>
</tr>
<tr>
<td>80</td>
<td>10</td>
<td>30</td>
</tr>
<tr>
<td>90</td>
<td>12</td>
<td>25</td>
</tr>
<tr>
<td>100</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>110</td>
<td>5</td>
<td>10</td>
</tr>
</tbody>
</table>

In addition to the limit regarding each type of flat, a limit was set for each of the standards.
### Constraints on Housing Compositions by Standard (percentages)

<table>
<thead>
<tr>
<th>Standard</th>
<th>lower limit (%)</th>
<th>upper limit (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>B+</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td>C</td>
<td>13</td>
<td>35</td>
</tr>
<tr>
<td>C+</td>
<td>25</td>
<td>48</td>
</tr>
</tbody>
</table>

It should be indicated that at least part of the constraints purport to be a substitute for a definite demand function, which had not yet been given quantitative expression. The advantage of this approach was that it enabled us to examine the shadow prices* of the constraints. Let us suppose that we set a limit of 10% for housing of 80 sq.m. and that our estimates were wrong. In that case, the shadow price obtained for the given data set should have been high from an economic standpoint. In such a situation, it would be necessary to re-examine either the data or the constraints.

Let us illustrate the meaning of "shadow price." If we increased the residential area by one dunam, the shadow price of this constraint would be obtained as approximately IL.2,700; i.e., if it were possible to increase the amount of land in the area by one dunam, it would have been possible to raise the objective function by IL.2,700. Increasing the amount of area may be achieved, for example, by moving parking sites from the area under study to another. Such an action would be worthwhile only if it were possible to acquire land in another area at less than IL.2,700 per dunam. It is also necessary to bear in mind that increasing the distance between the residential and parking areas would inconvenience the residents.

After receiving the economic data, it was necessary to insert the data supplied by the other disciplines which were considered by us as fixed costs, for example, a consultant was requested to undertake surveys of the

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*A Shadow Price refers to the economic value obtained if we alter the value of the constraint by a single unit.*
existing infrastructure and to submit recommendations on rehabilitation and reconstruction.

After receiving the date from all the sources, we estimated the subsidy necessary for rehabilitating both the area and the population simultaneously. On the one hand were the costs of renovation and new construction, and on the other hand, was the projected income from selling or renting the subsidized land which had been planned for Safed independently of the renewal project. For example, for every additional family arriving in Safed, there is a basic participation of IL.4,500 in the infrastructure. Each new family coming to live in the renewed Quarter, whether at the expense of other areas within the city or with the specific intention of settling in the renewed area, is a source of income for the project.

Our total balance of expenditures over income was approximately IL.3.2 million (present value), comprised of IL.1.5 million for rehabilitating the population (i.e., approximately IL.8,750 per family), and IL.1.7 million for renewing the area. This is also our estimate of the approximate net public subsidy which will be needed to renew the Jewish Quarter of Safed.

In addition to the above expenditures, another IL.500,000 will have to be invested to reinforce the slope of the city, which is now being damaged by sliding.

Against the cost of IL.3.2 million, there are advantages which it is difficult to express quantitatively. For example:

1. As a result of renewal it is assumed to be possible to slow down or even to stop the process of negative net migration; in other words one could expect an increase in the rate of growth of Safed's population due primarily to renewal and to national allocation of immigrants to Safed.

2. We may expect a significant growth in tourism as a result of the reconstruction and renovation of historic sites.

3. A final advantage is the preservation of areas of historic value as well as of economic value (which is hard to measure).
In summary, I would like to reemphasize the economic value which will be derived from renewal of the area. The present gross density is 4.2 persons per dunam. By adding 780 families it would be possible to reach a density of 21 persons per dunam by 1985. In terms of net density, the equivalent figures are 16 to-day and 43 after renewal.

It can be seen that as a result of the renewal project the area will be utilized much more economically through more intensive land use and various proportions of uses. The residential area could increase from 26% to 49% of the total area. The percent of land devoted to roads and parking will increase from 26% to 30%, public uses (open space, institutions and commercial uses) will increase from 12.6% to 15.5%, and land areas devoted to tourism will also increase. Thus 40% of the area will be economically utilized. We should keep in mind that to-day the area is composed largely of ruins and open spaces - i.e., it is in effect uneconomically used, especially if we consider its proximity to the city centre.
DECLINING NEIGHBOURHOODS

Ya'akov Ben-Sirah

We are witnessing today an ongoing process of decline in Israel's older neighbourhoods, particularly in houses falling under the jurisdiction of the Tenant's Protection Law. There is no reason to expect that in the near future the property owners will make any genuine efforts to halt this process unless they receive subsidies. This is a broad topic which includes residential neighbourhoods that were inhabited at first by the wealthy and then passed on, in time, to poor families with many children who can hardly keep up the apartment, and relatively new neighbourhoods in development areas which were poorly constructed to begin with, and have also been poorly maintained.

It is not possible to discuss all housing types simultaneously; I shall therefore limit myself to two.

The first example is of an area which has not yet become entirely commercial. It is still a quiet area but because of its proximity to the centre, has begun to decline. No one yet knows how long it will be before commercial uses begin to predominate. Even after this occurs, people will occupy the floors above the stores; by this time the apartments will generally be occupied by the poor. As a second example I shall choose a neighbourhood which was built in the midst of an old settlement - Rishon-le-Zion. This neighbourhood is not in high demand, for the town is developing westwards towards the sea, whereas this neighbourhood is located east of the town and is constructed at a relatively low standard. This area is not overly dense, and permits further development.

*This law protects the tenant from eviction and rise in rent. Recently-constructed houses may, under certain conditions, be exempt from the Law (ed.).
Where a neighbourhood is situated within the zone of influence of the city centre, it will begin to take on commercial or public functions on street-level floor, while the other floors will continue to be in residential use by people without cars or by those who prefer not to spend too much on transportation. Indeed, even with such savings, these residents will still need subsidies of various sorts to supplement their income. I mean, in effect, to describe areas such as the Yemenite market in Tel-Aviv, certain neighbourhoods in Jaffa, particularly along the outskirts of Manshiyeh, and similar neighbourhoods in other towns. These neighbourhoods are residential area and no one knows what will be their fate. It is inconceivable at this time to transfer the residents to other areas or to restore the quality of the neighbourhood to a purely residential one.

Thus we are compelled to act on the basis of the existing population in order to guarantee a reasonable standard of living to those who depend on the neighbourhood for their livelihood. We can reduce the density of the apartments, build playground areas for the children, enlarge some apartments and improve the general living conditions. By doing these things, those who remain in the area will be better off. Under these circumstances, the program will be slow and drawn out. The commercial function will be limited and the process of decline will be halted.

We must remember that the people living in these conditions cannot obtain a suitable apartment through their own means alone. This does not mean that such individuals do not work, or cannot provide for their families. However, by virtue of their salary and occupational status, they belong to that sector of the population which society must help to obtain proper housing. It can be assumed that they have money neither for shouldering part of the cost of a new home nor even of improving the present one.

The apartment these people occupy must be enlarged. Mostly they prefer to stay in the neighbourhood with which they are familiar while we, under the present commercial-industrial framework, need them as well, for without them we cannot maintain the excitement and motion of the city. We must make certain that they will live
in better conditions, and that a continuous process of improvement will be maintained so as to give the residents hope for further improvements in the future.

The intent is, therefore, to develop the means whereby it will become easier for those remaining in such a neighborhood to improve their apartments. In other words, the body responsible for rehabilitation, whether it be the City Hall or a renewal company, must provide the funds for granting subsidies large enough to give the residents a feeling that they are properly treated, yet that they are not receiving social welfare, for in the final analysis, the residents themselves will repay most of the cost of adding a room or repairing the apartment. However, the cost of demolishing in order to decrease the over-all density, of constructing play and sport areas or youth clubs, as well as of improving the infrastructure, will have to be borne by the municipality or the urban renewal company itself.

In this way, an atmosphere of calm will be created. The people will remain in the area by their own choice while the responsible bodies improve the general environment and infrastructure. Loans will be granted to the residents for the purpose of undertaking improvements in their apartments.

In the case of the East neighbourhood of Rishon-le-Zion, there is, of course, the possibility of leaving the place; however, those who leave will not have enough money to buy an apartment elsewhere, let alone improve it. On the other hand, those who remain will be able to improve their apartments or add extra rooms by means of loans made available to them. They will also be able to benefit from public improvements in the neighbourhood.

Thus, so long as there is little hope of new housing being made in the near future, I suggest that we deal with this type of housing problem in the above way for the time being at least.

There are only two types of renewal area which I would exclude from the above treatment:

a) Residential area which have already been earmarked for a change in function in the near future, and whose present use hinders the over-all aims of the city.
In such cases care must be taken to determine how long it will take before the development plans are implemented. If, let us say, it will take five years or less, the residents ought to be transferred right away and the area cleared. However, if it is to be ten years or more before a practical programme is developed, it may be advisable to clear part of the area and use it for public services while improving the homes of those who remain. We must not leave vacant areas behind, which may become sources of juvenile delinquency and crime.

b) Areas which have become dominated by the underworld and are a source of crime.

In such cases we must take preventive measures by clearing the neighbourhood and dispersing its residents, while making certain to separate the negative elements from the socially desirable ones; this is to be done with the help of the police and the proper authorities.

This, then, is the programme for Rishon-le-Zion: The area of the town - 44,000 dunam - may legally contain 189,000 residents; while according to the demographic forecast, the population will only reach 73,000. To-day the population is 42,000. In the area discussed - the East neighbourhood - there are the following types of structures:

Section 1 - 162 two-family block houses;
Section 2 - 69 Amidar wooden structures - 4 units per structure;
Section 3 - 105 two-family Finnish wooden structures;
Total - 336 buildings containing 810 housing units.

Eighty percent of the apartments are owner-occupied. The buildings are in poor condition and the yards are neglected; however, there are sufficient public areas.

Our program calls for undertaking repairs to 580 apartments of the 680 occupied in the neighbourhood, and for payment of compensation to the 100 families who leave the area.
The total investment in housing improvement will be IL.350,000 for the block houses, IL.500,000 for the Amidar houses and IL.7,000 for the Finnish houses. The money will be used to enlarge the homes, either by taking over one of the vacated apartments or by adding on extra rooms with the occupants paying for these improvements with the aid of a government loan. Furthermore, the investments in the infrastructure, mounting to IL.1.5 million, will be made by Amidar or the City through a government loan. Loans to the residents will be offered for a period of 25 years at an interest rate of 4%; the amount of the subsidy will be determined by the difference between the capitalized expenditures already mentioned and a non-linked interest payment. The payments to be made by each family will not exceed IL.60 per month, a reasonable amount for a family earning an average of IL.500 per month. The subsidy for the 100 families living at a density of over 2.5 people per room, and for those whose monthly income is less than IL.500, will be included within the general expenditure.

We can thus estimate that the residents will be able to stand up to the payments demanded by the suggested solution.