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COVER

The quality of the urban environment is not beyond rescue if Man begins now to correct the damage inflicted by waste, negligence, and poor planning. The problems are not insurmountable; corrective programs exist; planning will prevent future mistakes.

LOOKINGAHEAD

The first new community to be developed with HUD assistance is underway in Jonathan, Minn., 20 miles southwest of Minneapolis. The 5,000 acre site will include residential, educational, civic, and commercial facilities for 50,000 people in an environment preserving the area's rolling hills, woods, creeks, and lakes. Residents and business firms are already moving in. Under HUD's New Communities Program, Jonathan Development Corporation received a commitment to guarantee a loan of up to \$21 million. The New Communities Program provides Federal guarantees on loans up to \$50 million for private acquisition and development of land for a new community. Supplemental grants for public development of water, sewer, and open space provisions are also available under the program.

A recent decision of the Pennsylvania Supreme Court holds important implications for certain zoning techniques used to exclude low- and moderate-income people from suburban towns. A zoning ordinance in Nether Providence Township, a Philadelphia suburb, was ruled unconstitutional because it did not include "reasonable provisions" for apartment building construction. In effect, the Court said, this was an attempt "to zone out the people who would be able to live in the township if apartments were available." The Court cited with approval an earlier Pennsylvania case that rejected the use of zoning by officials "as an instrument by which they may shirk their responsibilities." It stated that "zoning is a means by which a governmental body can plan for the future—it may not be used as a means to deny the future."

City streets of the future may contribute more to their environment than simply serving transportation. HUD has granted more than \$300,000 to The Institute for Architecture and Urban Studies in New York City in order to find more livable designs for urban thoroughfares. The Institute, a nonprofit, educational corporation, will analyze physical and social problems created by urban street design in residential, commercial, and mixed-use areas.

A new precast gypsum floor-plank system reduces shipping costs and construction time over traditional units. It is lighter (17-29 lbs. per sq. ft.) and thinner (two-inch slabs) than traditional concrete flooring (usually 50 lbs. per sq. ft. and four inches thick). A tongue-and-groove, galvanized steel edging enables easy and quick welding to supporting steel joists. The total system contains finished flooring and a sound deadening underlay. The manufacturers say this noncombustible, dry system provides a rigid, stress-resistant unit.

NEW COMMUNITIES PROGRAM

EXCLUSIVE ZONING RULED OUT

LIVABLE STREETS

LIGHTWEIGHT FLOOR SYSTEM



President Nixon, spearheading our national concern for the rescue of the environment and the renewal of its quality, has stressed the importance of recognizing the full scope and complexity of what we call "environment." For our environment is a system in the truest sense: a set of interrelated, interlocking, interacting factors, each part of which influences every other part and has its impact on the total system.

Three major components of our environment are fixed in quantity but not in quality. We cannot increase them, but we can improve or degrade them: the earth, the air, and the water. The four other major environmental factors are variable both in quantity and quality: vegetation, animal life, man-made artifacts and structures, and man himself with his human relationships.

The key to the environment-and the source of our environmental problems-is, of course, the activity of man himself. To preserve and improve the environment in which we all must live, we must learn to discipline our activities and our appetites. We must, or we will perish.

PROBLEMS OF THE CITIES

By Jerome P. Pickard, Director of Program Analysis and Evaluation Staff, Office of Deputy Under Secretary

Once the city was a well-defined place, with boundaries that contained its people and activities.

That concept of the city no longer holds. As cities have expanded and fused with suburb and roadside development, boundaries have become blurred; place has become area-urban or metropolitan. People today move back and forth across official boundaries. Activities-education, employment, housing, transportation, pollution, and crime -are interrelated, interlocking, and interacting; each part influences every other part and creates impact on the total area. Washington, D.C., for example, cannot be thought of without thinking also of Arlington, Va., across the river, and Bethesda, Chevy Chase, and Silver Spring in neighboring Maryland, parts of a suburban ring whose people enter and leave the city each work day in numbers approximately equal to Washington's 800,000 people.

The nature of our cities' environmental problems differs from city to city. The older cities, required to accommodate populations and traffic their founders never dreamed of, face monumental tasks of rebuilding and re-creating to overcome shortcomings of age and obsolescence as well as accommodating new population. Relatively new cities could to a greater extent determine their future environment by directing and controlling the growth forces that are rapidly molding their future. Of the 119 central cities which had a population of 100,000 or more in 1960, 23 had achieved half of their urban growth by 1900. Most of these are in the Northeast, none in the West. On the other hand, 21 of these cities had less than onefourth in 1920-only 40 years before the last Census. None of these are in the Northeast or North Central states. Twelve are in the South and nine in the West. The remaining 75, mostly in the North Central states and the South, grew as the nation grew, but had most of their present urban growth in this century.

AGE GROUP OF LARGER CENTRAL CITIES IN THE UNITED STATES (based on 1960 population) BY MAJOR REGION.

	Number of Larger Central Cities			
Region	Total	Old	Medium- Aged	New
Northeast	24	17	7*	0
North Central	34	5	29	0
South	41	1	28	12
West	20	0	11	9
United States, Total	119	23	75	21

NOTE: Definitions: Old Cities: had ½ of their 1960 population by 1900. New Cities: had less than 1/10 of their 1960 population by 1900 AND less than ¼ of their 1960 population by 1920. Medium-Aged Cities: in between the extremes.

* Manhattan Borough classifies as "old" but the other four boroughs and New York City as a whole are "mediumaged."

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PHYSICAL PROBLEMS

Congestion

Perhaps the greatest problem of the cities today is the large-scale congestion which results

from overgrowth of urban areas and the consequent burden imposed upon the central parts of these areas. Few cities were planned for the population which now lives in their urbanized areas. Noise pollution; problems of traffic on narrow streets; impacts of freeways; decay of housing in older neighborhoods; and pollution of the air and of the water, all result from the large concentration of population in urban areas. Since population is generally more dense in the central cities, the problems are felt more keenly there, especially in poorer neighborhoods where there is little "cushion" for the impacts.

In the American city, congestion of motor vehicles contributes heavily to air pollution, since emissions from the engines are much greater when they are idling or running slowly. Thus one problem contributes to another. This compounding of problems is typical of the larger cities.

Inadequate Housing

The problem of inadequate housing is both technological and economic. Housing built in the last century or early years of this century in large cities generally is poorly adapted to today's needs. In the older cities, such housing occupies narrow lots and encourages high densities with relatively little open yard space or neighborhood open space. In the new cities, housing which remains from this earlier period often consists of old, small, frame cottage-type housing which was originally located in a small city and now finds itself in a metropolis. In either case, older housing contributes to neighborhood decay which in some cities is extensive despite rehabilitation efforts in recent years.

Some of the better old housing survives in reasonably good condition, and, in a few communities, restoration has created charming old urban neighborhoods.

Neighborhood Decay and Deterioration

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The city ages through the natural process of obsolescence but also because of poor maintenance. Physical decay in many areas is further aggravated by vandalism, environmental pollution, and numerous other factors which have negative effects on the neighborhood environment. Within individual cities there is the greatest imaginable variation in the condition of neighborhoods. Neighborhood conditions have been significantly improved in particular areas, while more frequently progressive deterioration has continued in older neighborhoods.

Perhaps more than any other city problem, neighborhood decay needs to be dealt with through "urban management," including restructuring the efforts of local government, which has the responsibility of maintaining public services and providing neighborhood facilities as well as involving business and financial organizations in constructive improvement programs.

HUMAN PROBLEMS

Poverty

Poverty is a complex problem related to lack of skills and training, unemployment, ethnic and economic discrimination, and exploitation of the poor. It tends to feed on itself. Lack of educational



Cluttered inner city deterioration, traffic congestion, air polluting exhausts, and inadequate transportation systems take their toll on local inhabitants and those passing through.

opportunity and, in many cases, lack of urban experience among migrants from rural areas make it difficult for the poor to respond to the needs of an urban and technical society. Add racial and ethnic discrimination to this equation and the obstacles become formidable for the city poor.

Discrimination

In this sense, the problems of the poor in today's slums and ghettos, as well as in the barrios and on the reservations, differ from those of the European immigrants of the past. Certainly the Irish, the Italians, the Slavs, and many others faced discrimination—ethnic, economic, and religious when they first came to the cities of America. But once they and their children learned the language and gained new skills, they found no great difficulty in moving into the greater society and out into the suburbs.

It is not so with the non-white poor, this new generation of urban migrants, whether their skins be black, brown, or yellow. It is not so for the Puerto Ricans and Mexican Americans in the barrios or the Indians on the reservations. These families have been locked in poverty for generations. Discrimination-past and present-is a major factor.

Crime

Crime is not simply breaking the laws and violence associated with street crime. In "The Challenge of Crime In a Free Society," a report by the President's Commission on Law Enforcement and Administration of Justice, this point was made: "Many Americans think of crime as a very narrow range of behavior. It is not. An enormous variety of acts make up the 'crime problem.' Crime is not just a tough teenager snatching a lady's purse. It is a professional thief stealing cars 'on order.' It is a wellheeled loan shark taking over a previous legitimate business for organized crime. It is a polite young man who suddenly and inexplicably murders his family. It is a corporation executive conspiring with competitors to keep prices high. No single formula, no single theory, no single generalization can explain the vast range of behavior called crime."

There is also no doubt that ambiguities and lacks in our society have contributed to the kind of alienation, both on the part of individuals and among groups, that leads to hostility and crime. Poverty, racial discrimination, bad housing, commercial exploitation, the gap between American ideals and American achievements—these things have had a profound impact, particularly on youth.

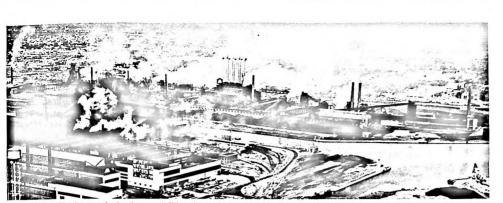
The Commission report also noted that crime has always been high in slums, but conditions become even more menacing as slums turn into ghettos for racial minorities. It said: "People who, though declared by the law to be equal, are prevented by society from improving their circumstances, even when they have the ability and the desire to do so, are people with extraordinary strains on their respect for the law and society."

This respect is further weakened by subtle "crimes"—"rent-gouging" of poor tenants by greedy landlords; inadequate administration of various programs to help the poor; demeaning regulations of bureaucracies; and the traditional American outlook on life that assumes, despite glaring inequities, that "anyone who has the ability can make it in this country."

URBAN SYSTEM PROBLEMS

Institutional Deficiencies

Urban systems are the integrated institutional and systemic facilities which provide money, services, investment, and utilities to the urban popula-



Factories heedlessly scar the landscape, defiling the environment with air and water pollution.

tion. These are essential for proper functioning. Institutional deficiencies and failures have only recently received attention along with physical and human problems in urban systems.

Some of the notable institutional deficiencies at the present time appear to be affecting public education and investment in the cities. Investment may be broken down into public investment (principally in housing but also in other areas of urban needs) and business investment. In both cases the suburbs beckon and the city suffers from deficient investment. In many areas housing investments are insufficient even to maintain the present condition of structures. Ribbon developments have been dying out for decades and this decay appears to be accelerating under present social conditions. At the same time the tax systems of cities are geared up to operate effectively only in a healthy urban economy. When investment withdraws, a certain illness sets in, resulting in higher taxes and even less investment.

At some point cities must conduct an intelligent and systematic battle to provide the infrastructure, the public leadership, and the facilities to break out of this cycle and to provide the decent and acceptable urban life and urban environment which is needed and demanded for survival.

Public Finances, Taxation, and Public Services

Cities have reached relatively high rates of taxation that adversely affect the maintenance of property. The quest for broader bases of financing has reached state legislatures and some relief has been granted. It is ironical that in many cities which have been great producers of surplus wealth and investment capital, the public treasury is now depleted and the demands of welfare, health, and urban services seem to overburden these cities to near breakdown.

One cannot discuss the problems of public finances without also looking at the problems of municipal services. Neighborhood decay may indeed be fostered by a municipal discrimination which provides better services to "good neighborhoods" than to "poor neighborhoods." This tendency for neglect compounds itself in the city.

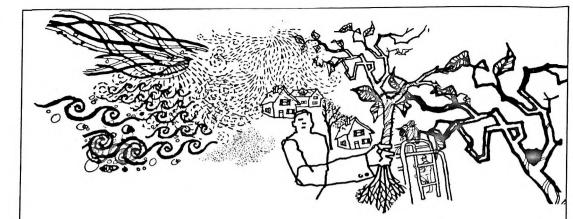
Problems of Overloading

Dramatic power failures and breakdowns in mass transportation and telephone communication have been widely publicized. They emphasize urban system problems which develop as the central parts of the system become overloaded beyond their capacity to respond. Here again we find that cities are suffering because the past patchwork has been "jerry-built" and now confronts cities with massive problems. Basically it appears that the dollars spent in new outlying urban development yield much better returns than the dollars spent in rehabilitating or renewing old urban development. Under these circumstances it is difficult to develop rational solutions to urban problems.

The cities might fear that the development of new communities will draw away even more investment and taxpaying employment from within the city limits. However, as an alternative to overloading, new communities may well help solve city problems rather than aggravate them.

Environmental Pollution

Urban environmental pollution appears to be proportional to two basic dimensions: (1) the intensity and density of human activities associated with population; (2) chemical and industrial pollution



which is concentrated at points of emission. Air pollution studies indicate that a substantial amount comes from motor vehicle exhaust fumes. In addition to noise pollution, jet aircraft add another layer of air pollution in the form of fine carbon particles carried by air currents over wide areas, including rural areas where air traffic is dense. Water pollution, although thought of as derived mainly from human sewage, is often more severely affected by industrial wastes. The effects of all this pollution on public health appear to be convincingly demonstrated, even though not precisely measurable. Recent rapid increases in air pollution have been of particular concern to health departments and medical authorities.

IN SUMMARY

The constellation of human problems in the cities has attracted far more attention in recent years, and demands for improvements and reform in both the physical structure of the city and its systems and institutions have tended to center around a major concern with people and their well-being. This healthy development has come about in conjunction with the realization that no group of problems is isolated. All three major problem groups-physical, human, and systemicneed to be dealt with simultaneously. Just as the problems reinforce and aggravate each other, so their solutions can be equally reinforcing and provide for relatively rapid improvement and progress.

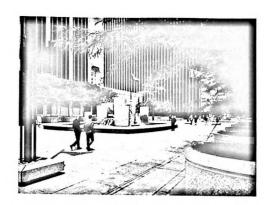
Urban problems are not confined to the central cities; indeed there are many problems developing in suburban areas which are related to the problems found in the central cities. Therefore, a step in the improvement of urban conditions is regional coordination or urban development and all of the processes related to physical, human, and system problems. Actually, there is a movement to develop areawide organizations such as regional councils of government and metropolitan planning commissions that bring together responsible authorities. By and large, these act essentially in an advisory capacity, and their ability to implement solutions has been limited. Without power to resolve cleavages between city and outlying communities, it becomes extremely difficult to gain agreement on specific measures and development policies. Nevertheless, these areawide organizations have provided a much needed public forum for confronting critical metropolitan development issues.

Environmental pollution is a major threat in urban life. There is need for strict pollution prevention and control. The full-fledged participation of regional councils and states as well as strong Federal leadership can prevent what may develop into disastrous, massive pollution of geographic and urban areas.

Better methods and mechanisms are needed to regulate land use in urban areas. Past and present zoning policies have not developed the optimal and most attractive urban environments. In fact, zoning has been widely misused as a tool of racial and economic discrimination.

It is clear that land use planning must encompass regional levels of development, that new planned communities are superior to random suburban sprawl, and that some parts of cities need to be totally replanned and redeveloped in order to solve their problems. All of these things are possible—the knowledge and social techniques exist. We need improved methods and mechanisms for implementation.

PROGRAMS AIDING ENVIRONMENTAL CONTROL



One of HUD's basic missions is to improve the quality of life of the urban dweller. To accomplish this, HUD programs must protect urban man from environmental hazards and encourage maximum beneficial use of environmental opportunities for beauty, open space, natural resources management, and recreation.

Essentially, HUD goals are concerned with the effect of the physical environment on the social environment, the community, and the individual citizen. Virtually all HUD programs contain safe-guards and requirements which implement these goals.

Model Cities is designed, as Congress states, to correct "a marked deterioration in the quality of the environment and the lives of large numbers of our people." The program undertakes to revitalize large blighted sections of our cities through coordinated use of programs for improving both physical and social deficiencies. The program includes such basic objectives as reduction of population density, revision of circulation patterns, and provision of open space and public facilities.

Urban Renewal for the past 20 years has been directed toward the physical replanning and redevelopment of slum and blighted areas, and toward their effective reuse for residential or commercial needs. Major emphasis is on improved environment, good design, beautification, provision of open space and parks in inner cities, and preservation of historic structures.

Open Space Land programs encourage preservation and creation of open space to enhance the environment in which a majority of Americans live and work. In the fast growing metropolitan areas, these programs help protect threatened lands having scenic, conservational, recreational, or historic





HUD's Urban Renewal program redevelops slums and blighted areas for productive residential, commercial, and recreational uses of the environment.





values. In inner-city neighborhoods, they assist in establishing parks, plazas, and recreational areas.

Housing programs provide financial and technical support for the general housing market and special assistance for low- and moderate-income housing. Virtually all HUD's housing-related programs require conformance with requirements designed to preserve the integrity of the environment. These requirements are concerned with locational factors, topography and subsurface conditions, impact of airports and highways on residential development, availability of open space, prevention of air-polluting generators in proposed residential areas, health factors such as assuring an adequate water supply and a safe sewage disposal system, development to minimize flood hazards, and prevention of water pollution.

New Communities regulations governing internal planning and design require preservation and enhancement of natural features such as water bodies and steep slopes; establishment and maintenance of an accessible open-space network for conservation, natural beauty, and recreation; and effective measures to prevent environmental pollution and problems such as flooding and soil instability. Land planning includes physical suitability of land, neighborhood design, community sites and open spaces, flooding, and storm water. Land use intensity ratings and community patterns set standards for livability space and recreational space.

Water and Sewer Facilities grants are predicated on the community's need for them and their contribution to improving peoples' health and living standards. The program is coordinated with the Federal Water Pollution Control Administration in conformance with the requirement that waste carried by the facility must be adequately treated before discharge into a public water way.



HUD programs for open space land use and for home rehabilitation and new construction help preserve our existing cities and create planned new development.

PLANNING THE ENVIRONMENT

By Richard H. Broun, Acting Director of Environmental Planning Division, Office of Planning Assistance and Standards, MPD

In his Message on Environmental Quality, February 10, 1970, President Nixon indicated that environmental problems can be solved "only by a full national effort embracing not only sound, coordinated planning, but also an effective followthrough that reaches into every community in the land." For HUD, this mandate attaches a new significance to our relationships with thousands of municipalities, counties, areawide planning organizations, and the states.

What is meant by the term "environmental planning"? Certainly it involves the abatement and prevention of many annoying and threatening nuisances—air pollution, water pollution, land pollution, noise—which impinge on our daily lives and which threaten to overwhelm us. But environmental planning also includes more positive aspects, such as the provision of open space, the maintenance of a balanced ecology, the development of aesthetically pleasing urban areas, and the proper juxtaposition of spaces for various human activities.

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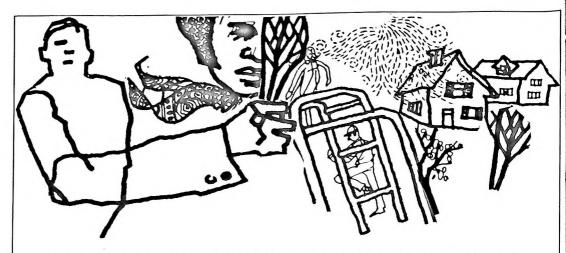
All of these factors must be cast within a framework of human social needs and must be responsive to those needs, both present and future. A socially responsive environment creates its own demands and requires its own kinds of institutional arrangements. These demands are central to the HUD mission, and the Department has a special role in bringing environmental considerations to bear on the cities and metropolitan areas of the United States. Indeed, since the great majority of the nation's population lives within the metropolitan areas, special emphasis must be given to the urban environment within the broader spectrum of the Federal Government's total attention to matters of environmental quality.

As a result of HUD's organizational structure announced in early February, an Office of Planning Assistance and Standards (OPAS) under the Assistant Secretary for Metropolitan Planning and Development incorporates within it three divisions concerned with planning standards, comprehensive planning assistance, and environmental planning, each with an important role in the environmental planning picture.

The Planning Standards Division administers the areawide planning requirements for the open space, water and sewer, and urban mass transit programs. As part of the areawide comprehensive planning process, recommendations for land use and densities are required, and these must include consideration of the location of public facilities. Since pollution is in part a result of density, the arrangement and intensity of land uses will have significant implications for many aspects of the environment.

The 701 planning assistance program is administered by the Comprehensive Planning Assistance Division and has encouraged numerous states, metropolitan bodies, and small communities to plan a rational urbanization policy and an improved general environment. Many special aspects of environmental quality are included within the 701 purview, such as in a solid waste disposal plan for Montpelier, Vt., a shoreline study in Hawaii, a natural resource study in Pennsylvania, and a study of the design of the urbanizing front range corridor in Colorado.

Through the Urban Systems Engineering Program, a special effort is made to plan for areawide public service systems in order to achieve greater efficiencies and broader coverage of the services. Typical projects under this function are grants to Cleveland for a water supply and distribution system, to Jacksonville, Fla., for a solid waste management system covering Jacksonville and Duval County, and to the Southern California Association



of Governments for a ten-county solid waste management system.

HUD's newly created Environmental Planning Division for the first time provides a focal point for environmental considerations throughout the Department's programs. This office is assigned responsibility for those aspects of environmental quality which include land use planning, urban design, transportation, and water resources. The division identifies environmental issues arising from these aspects of urban development, recommends ameliorative and preventive measures for use by State and local governments, and formulates policies and criteria for HUD and related Federal programs. One of its responsibilities is to insure that policies, criteria, advisory materials, and operations under HUD's Metropolitan Planning and Development programs and activities "reflect HUD policies and objectives for a high quality environment."

Among the issues facing the division is the mobility of the people who live and work in urban areas. The quality of life for people in cities depends in large degree upon the access they have to opportunities, services, and facilities available throughout the area. Transportation often determines whether citizens lead restricted lives, cut off from the mainstream of urban life, or are able to take advantage of opportunities for employment, medical care, education, cultural enjoyment, recreation, shopping, and other activities.

As one means of overcoming the environmental disadvantages of ghetto and slum areas, HUD has been seeking ways to widen the range of opportunities for residents of low-income areas. Under the Urban Transportation Technical Study program, grants have been awarded to a number of cities to analyze public transportation problems and

deficiencies and to develop transportation programs that will meet the mobility needs of residents of those areas.

For example, with a \$40,477 grant, the city of Dayton, Ohio, will study the transportation needs in its Model City area. The study will examine area residents' needs in terms of access to places of employment, health and recreation facilities, education, training, and community centers, and will recommend ways to improve the mobility of the people in the area.

Water and land resources development have had ever-widening impact on the environment with consequences often reaching far beyond immediate objectives. One city or industry on a river can pollute an entire watershed. A drainage and channelization project can permanently destroy fish and wildlife habitats along an entire stream. Such narrowly viewed developments have been a disservice to the community, depriving it of benefits.

Not so long ago, decisions about investments in water resource projects were reached largely on the basis of physical planning. Now considerations are weighted heavily towards social requirements, including the ecological.

Regional framework studies and river basin development plans under the aegis of the Water Resources Council pay special attention to the impact of urban growth on the aesthetics and amenities of water and related land uses. In some instances, two major efforts—flood control and urban redevelopment—have been joined into an integrated program which eradicates slum and blight, creates new public and private land uses, and restores to productive use the belt of deterioration along streams that cut through urban areas.



Technological Studies

Among the salient land use planning problems facing the nation are those introduced by the advent of new technologies. For more than three years, HUD has been actively involved in attempts to solve aircraft noise problems through both national and international organizations.

The Department's Environmental Planning Division is approaching this problem through a series of Metropolitan Aircraft Noise Abatement Policy Studies being carried out through joint HUD /DOT funding in four cities. These studies will define the magnitude and extent of existing and projected noise problems, will examine planning and development activities in the areas affected by these problems, and will identify various land use approaches for achieving compatibility together with an estimate of their costs and feasibility.

Two studies in this field are to be issued soon. One is a report on "Aircraft Noise and Airport Neighborhoods: A Study of Logan International Airport," a joint study made by HUD and the Department of Transportation. The other will initiate a new HUD series of Environment Planning Papers and will focus on "Airport Environs: Land Use Controls."

Whether from technological innovation, misuse of the natural environment, or simply the ongoing process of urbanization, the ramifications of environmental planning and development programs are, as illustrated above, tied to many aspects of HUD operations. In carrying out these programs, the Department has a special responsibility to exercise leadership for the nation in improving the urban environment and in directing its policies and programs towards that end for the benefit of all citizens.

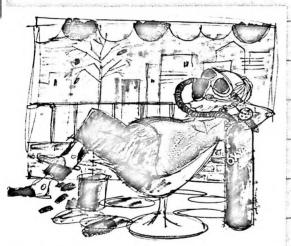




Neglected inner city land is transformed into vest-pocket parks and recreation areas through HUD programs.

editor's notebook

The first sale to a savings bank of the entire issue of more than \$5 million in GNMA mortgage-backed securities indicates the program's broad appeal to the investment community. National Homes Acceptance Corporation issued the GNMA mortgage-backed securities which were purchased by a mutual savings bank in March. GNMA has issued commitments totaling at least \$112.4 million and guaranteed outstanding securities amounting to \$14.6 million.



What do they mean, "The urban environment is becoming unbearable?"

Attention to the Fair Housing Law has generally centered on the issue of discrimination in the sale or rental of housing. But more obscure sections of the Act under Title VIII- are coming into focus. For instance, itis against the law to deny any person access to or membership or participation in any multiple-listing service or real estate brokers' organization on the grounds of his color or race. Discrimination in fixing the terms or conditions of a loan is also prohibited.

HUD's new program to reinsure losses resulting from inner city riots or civil disorders has been adopted by 25 states, the

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District of Columbia, and Puerto Rico. Designed to encourage insurance companies to provide basic coverage for businessmen in the core cities, this program so far has reinsured property worth more than \$7 billion.

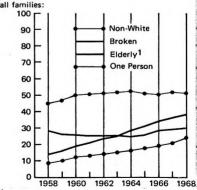
Twelve Philadelphia area savings and loan associations have formed a corporation to provide financing for low- and middle-income housing. Members of the Pennsylvania Savings and Loan Development Corporation will contribute to a pool of \$10 to \$12 million. Their first project will involve rehabilitating and building new housing for the elderly on a two-block area purchased from the Philadelphia Redevelopment Authority.

HUD spent \$44 million in fiscal year 1969 to assist 21,600 families and almost 18,400 single persons. More than 9,000 business firms obliged to relocate were also aided by HUD programs in the last fiscal year.

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In the March-April issue of *HUD Challenge*, the legend on the graph in Lines & Numbers was incorrect. The correct version follows:

Characteristics of Families in Low Rent Housing 1958 - 1968 Percent of



¹For 1965 to 1968, a family was counted as elderly if the head or spouse was 62 years old or older, was disabled as defined in the Social Security Act, or was handicapped. For 1961 to 1964, a family was counted as elderly if the family head or spouse was 62 years old or older or was disabled. For 1958 through 1964, a family was counted as elderly only if the family head was at least 65 years old.

HOME BUILDING TAKES LAND: WHERE TO GET IT By John B. Willman Real Estate Editor Washington Post

Whatever is wrong with housing cannot be pinpointed in the singular because the problems of the residential construction industry range from the land on which a dwelling is built to construction of the roof—and everything in between.

Ignoring inflation, record-high interest rates, the war in Vietnam, antiquated building codes and zoning restrictions—you can still diagnose the sickness affecting housing without even considering the house itself.

The residential dwelling of modest dimensions has often been relegated to a piece of land about 50 by 120 feet. In recent years, this basic lot has increased to about 60 or 70 feet by 150 or 200 feet. And the price of the ground has increased even more.

In most metropolitan areas with the vitality of Washington, D.C., Dayton, Ohio, or St. Paul, Minn., it has been common for the cost of a finished lot to increase by at least 11 percent a year-higher than the six percent rate of inflation in super-inflated 1969. And in Boston, Mass., and Charlotte, N.C., the rise in the cost of a finished lot was even greater.

In St. Paul, for instance, the lot that cost \$2,550 in 1960 rose to \$3,737 in 1964 and to \$5,592 in 1969. In Washington, D.C., the rate of increase was almost identical, except that the starting base was \$4,352 in 1960 and went to \$9,267 in 1969.

WINNING THE CODES BATTLE

Obviously, if the costs of doorknobs, brick, labor, and other housing ingredients had increased at that rate over the last decade, the house of 1970 would be considerably more out of financial sight of the median-income American buyer than it is today. The conservative estimate, unfortunately, is that almost 50 percent of American families-those with incomes of less than \$10,000 a year-cannot now find anything to suit their bankbooks in the private housing market.

Thus, there is considerable motivation for the Federal Government to support housing for low- and moderate-income families with rent or interest rate subsidies. But another challenge remains.

If the Department of Housing and Urban Development is able to win its battle to surmount local building and zoning codes that impede development of low- and moderate-cost housing by new industrialized methods, the Government should then study the possibility of obtaining land under the new codes for residential development in both cities and outer urban areas.

Land developers-speculators, if you will-conservatively estimate that they will double their investment in undeveloped land within less than 10 years, while paying taxes that are minimal but also interest rates that now are exorbitant. Thus, the normal market for development land seems to be ruled out for housing for families on the lower side of the economic scale.

NEW DEVELOPMENT CREATES ENVIRONMENT

But the U.S. itself is the nation's biggest landholder and HUD Secretary George Romney has looked for and found government-owned property that can become the location of new BREAKTHROUGH housing systems. President Nixon has called for examination of Federal property holdings that can be converted to better uses for larger numbers of Americans. Each State in the Union can examine its holdings and come up with many sites for new housing. And each city with inner core housing problems can find sites of marginal value or submarginal use on its own books and other sites that could be acquired for prices well below those asked for premium new development sites.

There is an old saying in real estate that there are three major criteria for the success of any project and all three are spelled L-O-C-A-T-I-O-N. Well, after 10 years of reporting on the realty and housing fields, this observer is not about to crawl out to the edge of a roofline to shout "Nay, nay." But there is evidence to support the viewpoint that the nature of new development creates environment and real estate desirability. Look at the Georgetown and Foggy Bottom sections of Washington, D.C. Both were almost blighted areas a decade or three ago. Today they are posh.

The contention here is that the sites are available, with competent real estate advice, for every metro area to provide new and low-cost housing sites in inner-city and suburban areas for rehabilitation and new development. These sites could produce amenable environments if the architectural style and construction quality are embellished with good land planning. Then current owners and tenants with ownership incentive can live in pleasant surroundings which they might recall as the former site of a gas works or glue plant, just as is now done in some redeveloped affluent neighborhoods.



The story started going around Denver, Colorado, that a group of vocational students from Manual High School were building a full-size, brick veneer, tri-level house. A lot of people were understandably rather skeptical. But the cloud of doubt had long since vanished by February 1970 when Tyler Walker, his wife, and their 10 children moved into a new home built by Manual students. The house consists of 1,272 square feet, four 'bedrooms, three baths, living room, dining area, full basement, and two-car garage.

Walker, a vending machine route man, is buying his new home under HUD's FHA mortgage interest subsidy program, which can reduce interest costs for low-income homeowners to as low as one percent. After the student-builders had voted to accept the Walkers' purchase offer, he made a down payment of just \$200 and his monthly house payment is \$106.72; HUD pays the balance of \$79.28 each month.

A MAD UNDERTAKING

The Manual High homebuilding project developed by chain reactions. Manual Principal James D. Ward hit upon the idea that Denver's renewal land could serve as a practice area for vocational students to learn bricklaying and work with concrete. But when he called Gerald H. Bradshaw, Real Estate Director of the local Urban Renewal Agency, his idea came back at him in an even more challenging form.

"Why not build a house or two on the land?" Bradshaw asked. "That would give your students plenty of practice."

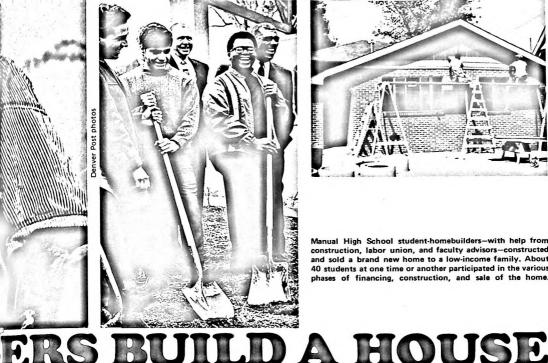
The delighted principal agreed at once. From this point on, the "mad undertaking" kept gaining momentum, in spite of warnings that it would be impossible to get educators, students, labor, business, Federal and private agencies to work together productively. A steering committee was organized to coordinate the efforts of school, business, and labor to produce and sell a full-size house. Arch H. Jefferies. Associate Coordinator of Vocations, headed the busy committee "that seemed to be everywhere at once." The steering committee in turn set up four student-operated companies, each with advisers from the faculty and Colorado business firms.

Manual High School Realty, Inc., was formally chartered as a Colorado corporation to handle land acquisition, financing, and sale. Also formed were Manual Architectural Services, for preparing construction plans and specifications; Thunderbolt Construction, Inc., for actual construction work; and Manual & Manual Accounting, to take care of bookkeeping and financial records. About 40 students at one time or another worked for these companies on planning and building the Walker home.

The Manual homebuilding program was conceived in terms of a student motivation project, especially directed toward rescuing potential school drop-outs through a work-study undertaking. The trainees' pride in their accomplishment suggests that the motivation worked. "This is ours," they said, referring to the project. "We're the ones doing it."

SPECIAL HELP

Manual's homebuilding companies received abundant professional help from both inside and outside their organization. Land for the Walker home was bought at a written-down urban renewal price of \$900 from Denver's Urban Renewal Agency (URA). A grant from the Construction Advancement Fund of Colorado's Associated Building Contractors





Manual High School student-homebuilders-with help from construction, labor union, and faculty advisors-constructed and sold a brand new home to a low-income family. About 40 students at one time or another participated in the various phases of financing, construction, and sale of the home.

made possible a \$640 down payment on the lot.

The First National Bank of Denver provided a \$16,000 construction loan, and later arranged for sale of the \$18,900, 30-year mortgage to Metropolitan Life Insurance Company. Although market interest rates on FHA-insured homes have since risen considerably, Metropolitan is sticking with its original commitment at 71/2 percent.

The Associated Building Contractors of Colorado provided constant construction advice. Many Denver companies cooperated by supplying Manual student builders with materials and machinery either free or at a discount.

The Northern Colorado Building and Construction Trades Council, representing 26 member unions, helped the project in a number of ways. When building plans and codes required labor, union journeymen performed the work at regular pay scales while also helping teach the youths about their trade. In addition, the unions participated with construction company representatives in vocational classroom sessions.

Although the Manual project did not originally include a program for pre-apprenticeship training, it soon acquired one. Colorado labor unions now credit the work done by Manual students as pre-apprenticeship training. Upon graduation, these students will be eligible for direct entry into official apprenticeship with the trade unions.

Manual student builders were financially rewarded for their efforts. The U.S. Office of Education granted almost \$6,000 under the Elementary and Secondary Education Act to pay student workers \$1.25 per hour last June and July. Other student work and adult services were donated to the project. An additional \$2,000 grant from Denver's Public Schools Administration helped with some bills.

JUST BEGINNING

Denver Mayor William McNichols officially expressed the Mile-High City's pride in Manual's homebuilding accomplishment. "This is one of the finest things I've seen happen," he said. "I congratulate the many people who worked to make it happen.'

At the Walker home dedication, Principal James Ward of Manual attributed part of the project's success to the fact that non-teaching people were able to work with student trainees within an educational framework. He particularly valued the project for developing greater "pride in the school, surrounding community and students."

The project took 15 months to complete. At one point, realty and architectural groups became embroiled in a sharply worded debate about house design and the amount of amenities that could be afforded within cost limitations. At another point, the student-builders were discouraged by difficulties the adults had in reaching decisions and by "bureaucratic" delays in getting things approved. Gerald Bradshaw of Denver's URA concedes the delays and occasional friction, but he explains that "the 'impossible does take longer."

And this completed home is just the beginning. Manual's student homebuilders have taken an option on another lot in Denver's renewal area and scheduled groundbreaking for a second home this spring. Current plans call for the program to branch out into rehabilitation work and perhaps even to provide residential redevelopment on a full block in northeast Denver.



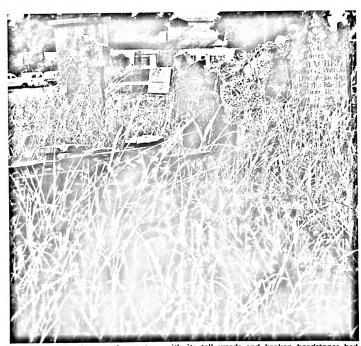
Carol F. Bickley, Program Officer for the Office of Metropolitan Planning and Development

New parks are the latest thing in old cemeteries. By turning an abandoned public cemetery into a public park, Pulaski, Tenn., completed one of the most imaginative projects in the country. It was done in seven months with a construction cost of \$90,000. HUD funded 90% of the total project cost under its Title VII Demonstration Grant Program.

This program, administered by the Assistant Secretary for Metropolitan Planning and Development, is designed to develop and demonstrate new and improved methods and materials for use in local beautification, open space, and historic preservation programs. Its purpose is to try out new ideas which, if they work, will have wide applicability in other communities.

The Problem

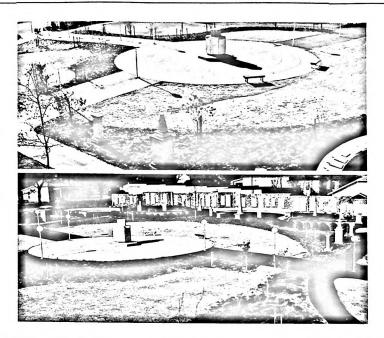
More and more communities are becoming concerned about the amount of space being used for cemeteries and the expense of maintaining old cemeteries which have been abandoned. The number of cemeteries in this country large enough to be counted has been estimated at 37,000, totaling approximately two million acres.



Pulaski's small, city-owned cemetery with its tall weeds and broken headstones had become a neighborhood eyesore.

The large markers, obelisks, and spires are used as sculptural elements which contribute to the historic flavor of the park.

The attractive open space is now an asset to the community and a place for neighbors to meet, sit, and stroll.



Those that appear overcrowded or are poorly maintained can greatly detract from the quality of the neighborhood. Yet, improving the appearance of a cemetery can be a sensitive subject and is one which many communities have been reluctant to raise.

Pulaski had such a problem in the form of an abandoned, publicly owned cemetery about a block in size and located in the middle of a largely residential neighborhood. The Old Pulaski Cemetery was an eyesore full of broken crypts and headstones, tall grass and weeds, and evidence of vandalism and litter. No one had been buried there since 1888, and it was difficult and expensive to maintain.

Creative Solution

With creativity and tact, Pulaski with HUD's assistance redeveloped the area into a park. By carefully landscaping, repairing and relocating markers, and building or rebuilding walls, the city turned a community liability into a community asset. All this was done without disturbing any graves. Moreover, this novel project gained the support of everyone, including relatives of those buried in the cemetery.

In the center of the park is a large monument which lists all the people known to be buried there. The list is keyed to a grid map which shows where the markers were found since no burial records could be located.

Grave markers in the old cemetery had been made from a relatively soft stone indigenous to the area. They deteriorated considerably over the years until names were largely obscured. Many of the headstones became chipped, cracked, and broken. These damaged markers were pieced together and carefully repaired.

They were then used as design elements in the new commemorative park. Headstones and a few trimmed vault tops were placed in five, low, curved, concrete marker walls. Large markers, such as obelisks and spires were clustered and used as sculptural elements throughout the park. Memorial slabs with inscriptions were mounted on a rubble stone wall.

Stone walls surrounding the cemetery are an attractive element

of the park. Flowers, such as daffodils, shasta daisies, and lillies, and trees, including oaks, dogwoods, and tulip poplars, are part of the attractive landscaping. Lighting fixtures and benches complement the overall design.

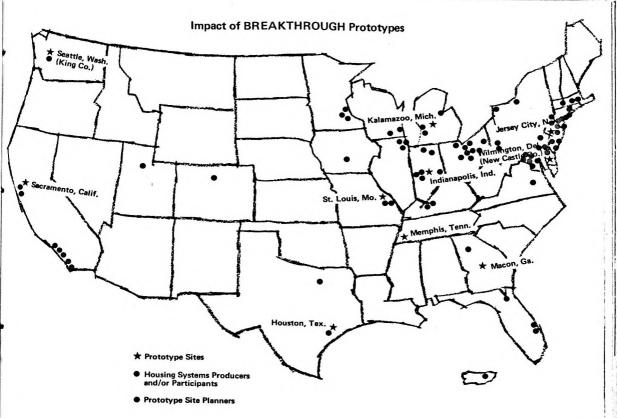
The park is a gathering place for friends and neighbors who sit or stroll.

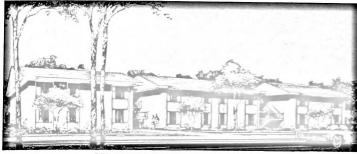
A National Example

Other communities might gain from Pulaski's unusual experience. As required under Title VII, the demonstration project included the preparation of a report. It describes the history of burial customs and cemetery designs, outlines problems of design and renovation, and gives examples of other cemetery projects. Although the legal and public opinion problems are difficult and timeconsuming, Pulaski has shown that resulting benefits to the community make the effort worthwhile.

Both the final report and a legal report are available on request from the Office of Community Resources, Department of Housing and Urban Development, Washington, D.C. 20410. «@

OPERATION Operation BREAKTHROUGH, conceived less than a year ago, is, in the words of HUD words of HUD rv George Romney, not a program designed to see just how cheaply we can build a Operation BREAKTHROUGH, conceived less than a Year ago, is, in the words of HU Secretary George Romney, into a program designed to see just how cheaply we can financing, house, but is a way to break through to total new systems of housing production, financing marketing, management, and land use. house, junior in through to total new systems of housing production, financing, nouse, but is a way to break through to total new systems will build their prototype models on Opera-house, management, and land use. marketing twenty-two producers of housing Systems will build their prototype housing units for various tion BREAKTHROUGH sites in 10 states. About 3,000 prototype housing units for second tion BREAKTHROUGH sites in 10 states at these sites. evels will be built and evaluated at these sites. 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It has a view of downtown Manhattan, 20 minutes away by rapid transit. KALAMAZOO, MICH 's wooded and rolling city-owned site of approximately 30 acres KALAMA in Spring Valley Park. Jks a lake in Spring Valley Park. urban renewal area. It nas a view y, wooded and rolling city owned site of approximation acres in KALAMAZOO, MICH's wooded and rolling city owned site of about two acres and KALAMAZOO, WICH's wooded and rolling city owned site of about two acres in work owned to spring work of search area is a combination consisting section of Searche, and overlooks a lake in Spring WASH, selected area is a combination consisting section of Searche, and the Veder Atlantic Neighborhood I improvement in Kinn County. the Yesler Atlantic Neighbor from a larger tract in King County. the Yesler Atlantic Neighborhood Improvement Project in the downtown section of Seattle, a a plot of approximately 30 acres for approximately of Tennessee Medical Center. 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The ST LOUIS, MO., prototype site occupies two neighboring parcels of 7.6 acres and The ST Mill Creek urban renewal area downtown. MENPHIS, TENN,'s site of approximately 15 acres is located in the MENPHIS, TENN,'s site of approximately 15 acres is located center. The downtown near the University of Tennessee Medical Center. The SACRAMENTO, CALIF., site is approximately 60 acres occi in the Mill Creek urban renewal area downtown. WILMINGTON, DEL.'s rolling, wooded suburban site is located in New Castle County WILMINGTON, downtown Wilmington. The site, approximately 30 acres of the 100 acres we miles from downtown Wilmington. WILMINGTON, DEL.'s rolling, wooded suburban site is located in New Castle County WILMINGTON, DEL.'s rolling, wooded suburban site is located in New Castle 100 acres about five miles from downtown Wilmington. The site, approximately 30 acres of the 100 acres offered, is part of the State-owned Ferris School for Boys. is part of the State-owned Ferris School for Boys. In MACON, GA., the 50-acre site, four miles from downtown, is an attractive pine state with a six-acre lake. estate with a six-acre lake. Nost of the selected producers will build their prototype housing units on at least two Nost of the selected producers of housing types and price levels. Id all sites will contain a variety of housing types and price levels. The ST. LOUIS, MO., prototype site occupies two The ST. Will Creek urban renewal area downtown. 7.9 acres in the Will Creek urban nFI 's rolling wooded suburban Most of the selected producers will build their prototype housing units on at least the housing types and price levels. Wost of the selected producers of housing types and price levels. Most of the selected new area of the housing types and price levels. 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When Operation BREAKTHROUGH is complete, HUD hopes to offer the housing to industry evidence of a market sufficient to justify a large capital outlay, HUD hopes to rent readily, to develop housing that the public will buy or rent readily, work with the housing industry to develop housing that the public will be housing industry to develop housing that the public will be housing industry to develop housing that the public will be housing industry to develop housing that the public will be housing industry to develop housing that the public will be housing industry to develop housing that the public will be housing industry to develop housing that the public will be housing industry to develop housing that the public will be housing industry to develop housing that the public will be housing industry to develop housing that the public will be housing industry to develop housing that the public will be housing industry to develop housing that the public will be housing industry to develop housing that the public will be housing industry to develop housing that the public will be housing industry to develop housing that the public will be housing industry to develop housing that the public will be housing industry to develop housing that the public will be housing industry to develop housing that the public will be housing industry to develop housing that the public will be housing that the housing industry to develop housing that the public will be housing that the housing that the public will be housing that the housing that the housing that the public will be housing that the housing that the public will be housing that the public will be housing that the housing that the public will be housing that the housing that the public will be housing that the housing that the public will be housing that the public will be housing that the housing that the public will be housing that the public industry evidence of a market sufficient to justify a large capital outlay. HUD is prepared to work with the housing industry to develop housing that the public will buy or rent reading of display various types of relatively new and innovative housing employing the latest display. Work with the housing industry to develop housing that the public will buy or rent readily; to display various types of relatively new and innovative housing employing the broader opportuni display various production; to improve land use and development; to develop industrialized production; to improve land use display various Wpes of relatively new and innovative housing employing the latest methods of relatively new and innovative housing employing the latest methods, regional, development, to develop broader opportunities and use and development, to develop production, to improve land use and to stimulate interest in greater local, regional industrialized production, to improve management; and to stimulate interest in greater local, regional ties for financing and improved management; and to stimulate interest in greater local industrialized production and improved management; and to stimulate interest in greater local industrialized production in the stimulate interest in greater local industrialized production in the stimulate interest in greater local industrialized production in the stimulate interest in greater local industrialized production in the stimulate interest in greater local industrialized production in the stimulate interest in greater local industrialized production in the stimulate interest in greater local industrialized production in the stimulate interest in greater local industrialized production in the stimulate interest in greater local industrialized production in the stimulate interest in greater local industrialized production industrialized production in the stimulate interest in greater local industrialized production in the stimulate interest in greater local industrialized production in the stimulate interest in greater local industrialized production industrialized production industrialized production in the stimulate interest in greater local industrialized production in the stimulate interest in greater local industrialized production industrialized industrialized production; to improve land use and development; to develop broader opportuni, industrialized production; to improve land use and development; to develop broader local, regional, ites for financing and improved management; and to stimulate interest in greater local, regional, ites for financing and markets for volume-produced housing. IN WAUNI BAN OF A CONTRACTOR BAR. ties for financing and improved management; and to stimu and even national markets for volume-produced housing.





GENERAL ELECTRIC COMPANY'S single-family attached dwellings and multifamily low-rise dwellings can be built from factoryproduced, metal-framed panels and submodule assemblies.

MODULE COMMUNITIES INCORPORATED features factoryproduced concrete panels and floor slabs that are particularly applicable to multifamily low-rise dwellings and multifamily highrise dwellings. This widely tested European system (Tracoba) is now being introduced for the first time to the U.S.





BALL BROTHERS RESEARCH CORPORATION'S townhouses, which utilize a foamed plastic core structural panel and kitchen and bath service-core module, illustrate a system applicable to single-family detached dwellings, single-family attached dwellings, and multifamily low-rise dwellings.



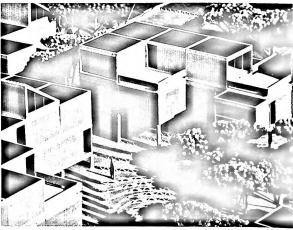
FOREST CITY ENTERPRISES INCORPORATED uses site-cast concrete bearing walls and floors, together with decorative precast concrete end walls for single-family, multi-level row or townhouses, multifamily low-rise dwellings and the high-rise type shown.

TRW SYSTEMS GROUP

The TRW "Fiber-Shell" system makes innovative use of structural sandwiches for floors, walls, and ceilings. The "sandwich" is fabricated from layers of fiberglas-reinforced polyester resin, cellulose honeycomb, and gypsum board sheets. A rotating mandrel permits the wrapping of the entire module with the woven fiberglas for the interior and exterior finishes. The system is proposed for single-family detached, single-family attached, and multifamily low-rise dwellings.



HERCULES INCORPORATED uses wood-framed, single-family units that are assembled from factory-made wood modules an accessory parts. Single-family attached and multifamily low-ris dwellings are also possible with this system.



PEMTOM INCORPORATED fabricates factory-produced, stressedskin, foam-core, plywood panels into three dimensional modules by polymer bonding. This permits the panels to act as a single structural unit in supporting loads for low- or high-rise dwellings.



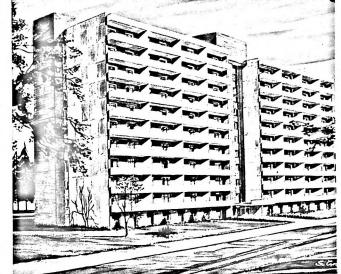


REPUBLIC STEEL CORPORATION'S single-family detached dwelling can be assembled on site from factory-fabricated panels and components. Using steel as the principal structural material, these components are formed into one or more modules with a selfcontained mechanical system.

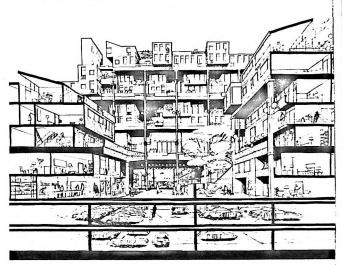


SHELLEY SYSTEM uses a factory-produced concrete modular system, in a multifamily low-rise building to demonstrate a system upplicable to multifamily low-rise dwellings, multifamily high-rise





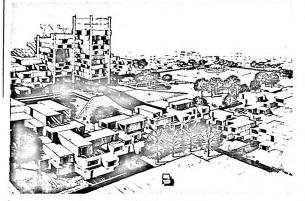
STIRLING-HOMEX CORPORATION demonstrates a new steelframed system, which is a departure from the firm's existing line of wood-framed modules. It can be used for townhouses and low-rise or high-rise apartment units.



KEENE CORPORATION'S structural frame made of precast, prestressed concrete components (columns, spandrel beams, deck slabs), supports tiers of three-story housing units. Each tier has its own "street" and "backyard" in effect creating "land in the sky." This is particularly applicable where land costs are very high, as in many center city locations.

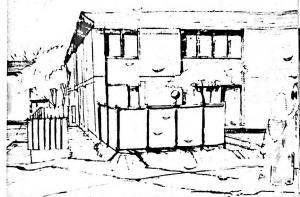
MATERIAL SYSTEM'S application of sprayed fiberglas reinforcing and resin compounds simulates whatever shape and texture the factory forms create; therefore, buildings produced may have a wide range of design styles, from the most traditional to the most contemporary. Panels and other building elements are fabricated for single-family detached, single-family attached, and multifamily low-rise dwellings. ALUMINUM COMPANY OF AMERICA'S two- and three-story units use factory-built, three-dimensional service cores in conjunction with floor, wall, ceiling, and roof panels utilizing metal and wood framing. The service cores contain kitchen, bathroom, stairway, utility areas, some closets, doors, and most of the heating, ventilating, and air-conditioning.

NATIONAL HOMES' factory-produced, metal frame volumetric module system can be used for multifamily low- and high-rise groupings. Multifamily high-rise applications will require a separate concrete structural system for support.



ROUSE-WATES is introducing a widely built English system (Wates, Ltd.) of precast concrete panels, which are applicable to multifamily low-rise dwellings and multifamily high-rise dwellings.







DESCON/CONCORDIA'S factory-produced, reinforced concrete panel system is the basis of this multifamily low-rise dwelling and is also applicable to townhouses and high-rise apartment units.

LEVITT TECHNOLOGY has a system for producing townhouses which uses factory-produced, volumetric modules made of wood, The system is also applicable to single-family detached dwellings and multifamily low-rise dwellings.





CHRISTIANA WESTERN STRUCTURES INCORPORATED will use shop-fabricated, wood-frame panels for walls, partitions, and roof construction in single-family dwellings, townhouses, and garden apartment units.



HOME BUILDING CORPORATION uses factory-built modular units made of wood, which are applicable to single-family detached dwelling units, single-family attached dwelling units, and multifamily low-rise dwelling units.





SCHOLZ HOMES INCORPORATED has a factory-built housing system of wood modules applicable to single-family detached dwellings, single-family attached dwellings, and multifamily lowrise dwellings.



HENRY C. BECK COMPANY is introducing to the American market the Balency precast concrete system which uses factoryproduced concrete floor and wall panels. The system can be assembled on site into all types of housing from single-family detached to townhouse, deckhouse, or high-rise dwellings.

BOISE CASCADE CORPORATION'S multifamily low-rise dwellings use factory-made, wood volumetric modules. This building system is applicable to single-family attached, and, with modifications, to single-family detached dwellings, as well as the multifamily units shown. Arcology: The City in the Image of Man, by Paolo Soleri. Massachusetts Institute of Technology Press, 1969, 4"x24", 256 pp. \$25.00.



Paolo Soleri Documenta, by Donald Wall. The Corcoran Gallery of Art, Washington, D.C., 1970. 10\4"x10\4"x10\4", 16 scroll drawings, 80 pp. \$3.50.

PAOLO SOLERI'S VISIONARY CITIES

Paolo Soleri is a visionary advocate of arcology: ecological architecture. In his words, arcology is "the definition of urban structures so dense as to host life, work, education, culture, leisure, and health for hundreds of thousands of people per square mile. The weak veneer of life... is thus transformed and miniaturized into a metropolitan solid, saturated with flux and liveliness." Soleri and his imaginative expressions of arcology are now the subjects of two major publications covering 20 years of work.

Soleri has organized *Arcology* into a detailed description of his major concepts, and a substantial presentation of 30 resulting urban systems. Part one, a clearly diagrammed concepts section, is introduced with a quotation from philosopher Teilhard de Chardin: "Man can be understood only by ascending from physics, chemistry, biology, and geology. In other words man is *first of all* a cosmic problem."

In the second part, magnificant Piranesi-like drawings presenting prototype megastructures are accompanied by a graphic scale: an outline of the Empire State Building that appears small by comparison with the arcologies. Soleri's sculptured models of futuristic cities-rising compactly skyward rather than sprawling horizontally-bear such intriguing names as Noahbabel, Arcosanti, Logology, Hexahedron, Stonebow, and Theodiga.

The Paolo Soleri Documenta is a unique biography presenting the historical development of Soleri's ideas in extensive and superb graphics. It consists of a book and scroll-package patterned on Soleri's own miniaturization principles.

HUD recently awarded a grant to the Corcoran Gallery of Art in Washington, D.C., to assist in publishing the *Paolo Soleri Documenta*, issued as a catalogue of the first major retrospective exhibition of Soleri's theoretical work. In the galaxy of HUD's interests, this level of work has an important place.

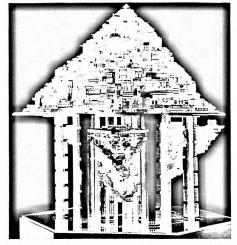
As Secretary Romney recently wrote: "It is a pleasure for HUD to support this Corcoran exhibit of the work of Paolo Soleri, which initiates what I plan as a continuing HUD endeavor to support institutions in their efforts to bring outstanding new design work to the attention of the public."

Soleri's mind-expanding work is not a routine projection of the land-devouring patterns of the past which have produced megalopoli. The prototypes presented are, as Soleri says, "phantoms, the beginning of a process." That is, these development diagrams, which follow the basic arcology concept, are not to be taken literally in every detail. A substantial social and economic evolution and much new technology would be required to carry these designs through to actual construction.

The viewer and reader of these two publications will benefit in several ways. First, there are certain inherent and perhaps timeless qualities involved in the phantom prototypes which are worth exploring. For example, many ancient and modern concepts of spatial planning-symmetry, domed sequences of rooms, tent-like suspended structures-are embodied in interesting ways at varying scales.

Second, and perhaps more important, the reader will be invited to consider seriously this alternative for future living. This challenge, and the discussions it may elucidate on many levels, will help him to shape more effectively his own concepts of the potentials. And he may then be more prepared to welcome advanced, yet practical, housing and urban development ideas. Perhaps the reader will be inspired to participate more actively in helping shape his own environment into a design of ordered variety which can truly elevate society.

By Ralph Warburton, AIA, AIP Special Assistant for Urban Design



HEXAHEDRON. Total population: 170,000, Population density: 1,200 people per acre. Height: 3,600 feet. Site: anywhere.

William B. Ross, HUD's Deputy Under Secretary for Policy Analysis and Program Evaluation, has received a major award for his service.

He was named as one of 10 Federal officials to receive a 1970 Career Service Award of the National Civil Service League. The award includes a gold watch and \$1000 cash.

In announcing the winners, the League said that Mr. Ross has played "a major role in shaping new directions within housing and related fields. At various times last year, Mr. Ross served in three other capacities in addition to the position he now holds. This fact offers just one indication that his excellent grasp of housing economics has made him invaluable."

His positions last year included: Acting Secretary for Mortgage Credit and Federal Housing Commissioner, Acting Federal Insurance Administrator, and a member of the Board of Directors of the Federal National Mortgage Association, on which he has been recently serving as Chairman.

The League noted that Mr. Ross has "served with talent and diligence in forming new ideas for drafting and carrying out subsequent housing legislation and related programs of the (1968) Housing Act."

He was instrumental in developing the 10 year housing goal concept adopted by Congress. The concept established a target for the nation to provide "a decent home and a suitable living environment for every American family."

Mr. Ross also played an important role in guiding the development and early operations of the National Flood Insurance Program and the Urban Property Reinsurance Program. He helped prepare legislation which established the secondary market operations of the Federal National Mortgage Association, making it a separate privately owned corporation regulated by HUD. The legislation also established HUD's Government National Mortgage Association.

Commenting on his 16 years of government service, Mr. Ross said it has been a "rewarding career. There has been much satisfaction in making a contribution to the development of policy of crucial importance to the nation as a whole." His comments referred to his HUD service and work at the Bureau of the Budget, where he served 11 years before coming to HUD in 1966.

Mr. Ross, 42, is a native of Lawrenceburg, Ind. A graduate of Indiana University, he received a Masters in Economics from Princeton University. He served from 1952 to 1954 in the Army and saw service in Korea and Japan.

Deputy Under Secretary Ross Receives 1970 Career Service Award





MODEL COT LOI

A bearded, long-haired art professor in Holyoke, Mass., wanted to use his talent and his summer vacation last year in a way that would serve a useful public purpose. So he, designed and built a play lot of strikingly original sculptured forms that draw children the way a magnet attracts steel filings.

The professor, Jerold Wyman, is Chairman of the Art Department at Holyoke Community College. He planned to offer his summer students an unconventional sculpture course with the major project of building an "aesthetic play area" which could then be donated to the City.

TIMELY COMBINATION

As Wyman was setting up his course, Holyoke's Model Cities program entered the first month of its planning year and wanted to encourage just this kind of beneficial, highly visible project. Funds for cultural and recreational improvements in certain disadvantaged areas of Holyoke were available through "Hike for Holyoke," a privately sponsored, money-raising venture. One of these areas was the "Flats" which included the Model Cities neighborhood.

This three-way combination of individual initiative, government backing, and private funds won approval for Wyman to build the play lot on a site immediately adjacent to Holyoke's Model Cities headquarters.

LOVE BEADS, ICE CREAM CONES

Complications plagued Wyman from the start. His summer course was cancelled, depriving him of his anticipated task force of students. But he had friends who could win local youth support and who, like their mentor, were not averse to wearing student love beads. One of them, Richard Dubuc, ended up as "unofficial assistant director" of the project.

About 50 neighborhood youngsters made the project site a workplay area. Mike McCartney, who works under Henry E. Ramsey, Holyoke Model Cities Director-and who knows now to get the best out of the young-provided ice cream. Together, the adults and youngsters made as unusual a clean-up and construction crew as could be imagined -especially when the kids were licking ice cream cones.



Planning and building the play lot helped make local political history and demonstrated how Model Cities guidelines can be implemented. The evolving project supported Mayor William S. Taupier's theory that planners must try not to isolate themselves from politics, because such aloofness can imperil or defeat needed municipal projects.

The devotees worked like beavers on the job. They got important assistance from the Daniel O'Connell's Sons Construction Company and its employees, who donated material,



skilled labor, and the services of an engineer. Other local firms donated equipment.

Soon after the dirt began to fly, rumors and doubts sprang up. The unusual forms developed by Wyman baffled parents who conceived of a playground as necessarily including swings and see-saws. The sculptor described his wood and concrete forms as "privacy-intimacy shelters," a climbing maze, and toadstools.

And, as Mayor Taupier pointed out, there was a Bohemian atmosphere about the project so that "mothers became suspicious that their children were being introduced to a hippie culture." There was mounting fear of an imagined beatnik influx, the Mayor also recalls.

REASON AND POLITICS

All this took place in an election year. Consequently, the alderman representing the "Flats" sought to have the project stopped. The Board of Aldermen even conducted an investigation.

Nonetheless, the park was officially opened in October 1969, about five months after work began. The alderman who opposed it was defeated in his bid for re-election. Wyman, who set out to make the park "a

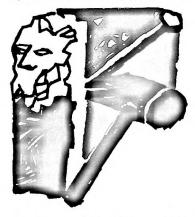


symbol to the local people, giving evidence that things can happen in the 'Flats,'" won plaudits from the Mayor and others for his dedication. And judging from the children's reactions, "Hike for Holyoke" made a wise \$15,000 contribution, indeed.

MODEL PROJECT

Mayor Taupier noted how the project followed all the Model Cities guidelines and "some besides. It brought about an immediate improvement in the neighborhood," he said. "It involved neighborhood residents, since it became a sort of day camp for dozens of youngsters.

"It was financed jointly by government and citizen groups. It solicited and got contributions of manpower, machinery, and materials from private industry. It was accomplished mainly by volunteer labor. And, it utilized



the talents of the local academic community."

The Mayor also addressed himself to the question of why the project had been so controversial. He said there were failures to persuade the Ward Alderman, at an early stage, of the advantages of the project and to involve more fully the Council of Neighborhood Residents and the Model Cities Policy Board. He concluded that planners and elected officials should work together more closely.

POLITICAL SAVVY

"Failure to lay sound political groundwork emerges again and again. HUD CHALLENGE/May-June 1970 Although not in this case, it often results in resounding defeat of badly needed municipal projects," the Mayor said. "This is where the politician and the planner must learn to work together more effectivelyThe notion that planners must be above politics, remain completely aloof from all political activity is, I think, nonsensical.

"I do not advocate carrying banners and swapping favors... I mean political savvy, knowing what makes a politician tick, what motivates him, how he evaluates a proposal... I mean extending certain courtesies that go with elective office without which the politician's nose tends to get out of joint...."

Thus, out of the unusual concept and execution of an art professor's summer project, comes support for the proposition that planners should play a role in the decision-making process...and also a lot of fun for Holyoke children.



Neighborhood children help local art professor, Jerold Wyman, build a play lot next to the Model Cities headquerters in Holyoke, Mass. These imaginative, highly popular, wood and concrete playforms are the results of their summer labor.





lines&numbers

The following table shows 1971 estimated levels for selected HUD programs compared with both the 1969 actual levels and the 1970 estimates. As part of HUD's Actual 1971 budget proposal, these program funding levels were 1969 submitted to the Congressional appropriations committees. Dollars in These figures are, of course, subject to change based on Thousands) Congressional action and the progress of the programs, **Neighborhood Facilities Grants** 35,473 Urban Renewal Programs (Title I) 1,073,253 Rehabilitation Loans (Section 312) 25,981 Low Rent Public Housing Annual contributions appropriations: 366,000 Proposed supplemental for 1969 0 Proposed supplemental for 1970 0 Tenant Services Grants 0 College Housing Loans (both public & private) 299,816 Comprehensive Planning Grants (701) 43,757 Community Development Training & Urban Fellowships 3,500 New Community Assistance Programs Amount of guarantee commitments 0 Assistance grant approvals (net) 0 **Open Space Land Programs** 75.052 Grants for Water & Sewer Facilities 149 613 Public Facility Loans (PFL) 39,886 Model Cities Programs Supplementary grants 228,616 Urban Research & Technology 10,584 Rent Supplement Program Approval of contract authority 30,000 1972 advance authority requested 0 Homeownership Assistance Program (235) Approval of contract authority 70,000 Proposed 1970 supplemental 0 1972 advance authority requested 0 Rental Housing Assistance Program (236) Approval of contract authority 70,000 Proposed 1970 supplemental 0 1972 advance authority requested 0 Federal Housing Administration Fund Title I loans insured 679.000 Insurance in force (end of year) 63,002,000 Special Assistance Functions Reservations and commitments 639,203 Management & Liquidating Functions Mortgage purchases 272,569 Mortgage sales n Guarantees of Mortgage-Backed Securities Guaranteed securities outstanding (end of year) 0 Fair Housing & Equal Opportunity 2,000

Politikanse N		
stimate 1970 Dollars in housands)		Estimate 1971 (Dollers in Thousands)
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50,105		60,000
3,500		3,500
150,000 2,500		250,000 10,000
75,277		75,000
150,407		150,000
40,000		40,000
553,028		640,000
25,000		55,000
50,000 0		75,000 (75,000)
90,000 25,000	213	140,000 0
0		(140,000)
85,000 25,000		145,000
0		(145,000)
855,000 203,000		990,000 76,080,000
456,000		801,000
60,000 0		50,000 102,500
500,000		1,500,000
6,287		11,300

a/Excludes additional amounts for equal opportunity activities which were funded from a number of other appropriations in FY 1969. 68,

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