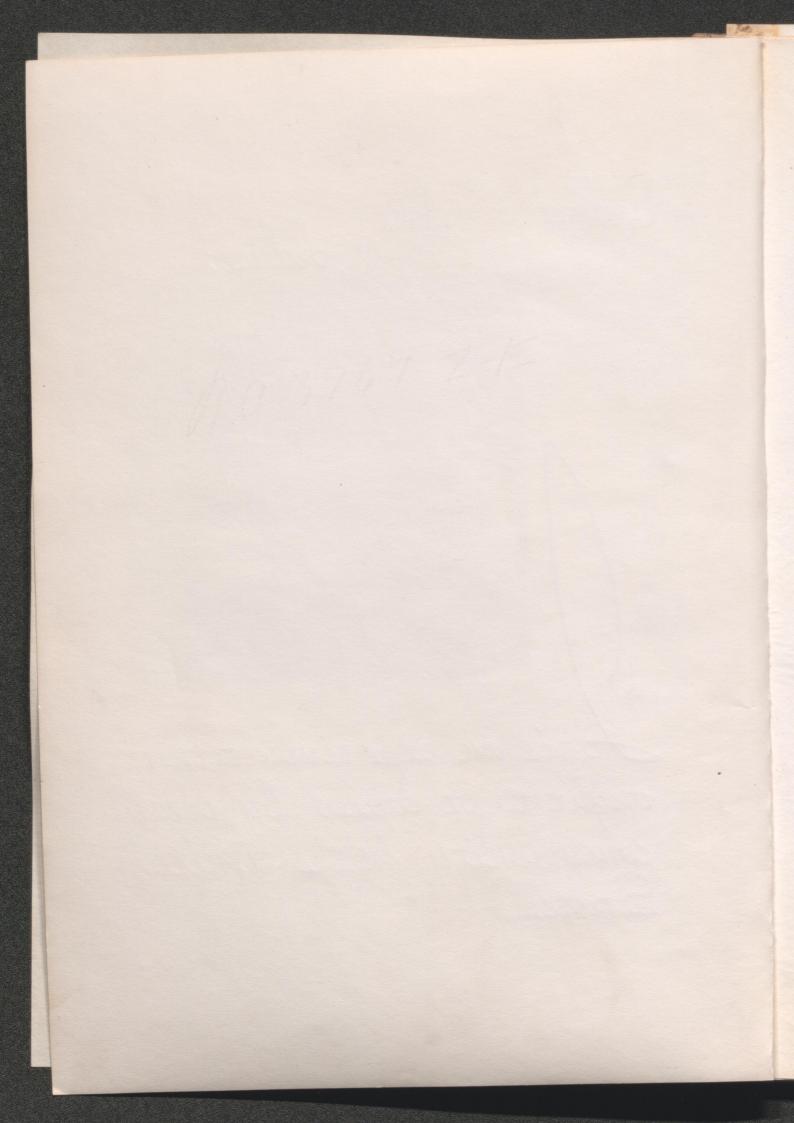


President Roosevelt on visiting Greenbelt

declared ..



It is an experiment that ought to be copied by every community in the United States...



GREENBELT

"I have seen the blueprints of this project and have been greatly interested, but the actual sight itself exceeds anything I dreamed of. This is a real achievement and I wish everyone in the country could see it. It is a splendid thing to have near Washington and Baltimore.

"Best of all, it will afford the people a splendid opportunity to get out into the country. The homes being built here are to serve primarily the low-income group of citizens. It is an experiment that ought to be copied by every community in the United States."

Franklin Delano Roosevelt, November 13, 1936.

This statement was made by President Roosevelt, following a personal inspection of the town of Greenbelt, Maryland, planned, designed and constructed by the Federal Government with the use of relief labor.

1935 - 1937 and Beyond

till

In 1935 the country was suffering the greatest unemployment crisis in its history. The building trades were at a standstill, which meant that not only the men in those trades were out of work, but also the men in the vast industries which supply the materials of which buildings are made.

There had been no building since 1930 so with the need for employment, therefore, was coupled a need for a million dwelling units a year. A disastrous housing shortage was impending, particularly for the lower income groups, for whom nothing was ever built, only handed down.

To supply dwellings would not only help solve the unemployment problem, but it would help remove a serious social menace, and the real wealth of the nation would be increased.

Two methods of doing this were adopted: Government aid to private enterprise through the F.H.A. and the H.L.B.B.. and direct Government building for the lower income groups which had never been within the profit range of private enterprise.

The Housing Division of the Public Works Administration attacked the latter problem in the cities. Substitute

The Suburban Resettlement Division of the Resettlement Administration, attacked it by initiating four industrial suburban projects providing a new community pattern, the satellite or "Greenbelt" town.

Today, in 1937, private enterprise construction has increased four fold.

25,000 low-income families will soon be living in public housing projects.

Thousands of men have been tided over the worst period of unemployment. Moreover, by being given work in their
trades, they have re-acquired their lost skills, regained
their morale, been saved from human defeat.

Technical staffs have been created and personnel assembled. They have been trained in solving the complex interweaving of the social, economic and technical factors that make up large-scale housing.

A way for the future has been pointed out.

The Greenbelt Program of the Suburban Division of the Resettlement Administration has made one of the most important of these contributions to the future, and with this program the balance of this report will deal. 1937

ln unemployment and the need for housing mere problems.

THE GREENBELT PROGRAM

THE BEGINNING

The primary necessity in 1935 was to make jobs, and quickly.

The Emergency Relief Appropriation Act of 1935 was created for that purpose. Under its provisions useful projects were to be set up which would employ as many people as possible.

Housing in its many aspects provided an opportunity not only to make jobs, but to make an attack on a vital social problem:- to follow the example of England, Germany, Holland, Austria and Sweden where Government housing, long successful, is taken for granted as a function of the state.

Ideally, such a program should have been long prepared, carefully planned, expertly built. Normally, to plan
a town complete, from raw land to finished plans and specifications, would have meant a year's work. For this there
was no time, it was an emergency, men had to be put to work.
To delay would have been to disqualify the project under
the terms of the Act.

PROCEDURE UNDER PRESSURE Land had to be acquired, technical staffs assembled, a program outlined, plans drawn and construction started all at once. Contracts could not be let, because the plans had

method. That meant unknown costs, doubly unknown because the quality and quantity of the relief labor was unknown.

All that was certain was that costs would be higher than under normal conditions.

Nor was the labor question the only reason for that certainty. Materials had to be purchased through Government procedure, a procedure geared to the ponderous and long-planned construction of great buildings and major engineering works, very different from house building requirements, very different from the hand-to-mouth necessities of building-as-you-plan. Costly delays were inevitable.

The proponents of the Greenbelt Program were under no illusion about the costs. The question was, even with the high costs, did the program promise enough in the way of public benefits to offset those costs?

All planning must start with the land. Lack of recognition of that simple fact is responsible for the chaos, blight and economic deterioration of our cities. It has long been recognized in Europe, it is gaining belated recognition here.

LAND

FREDERIC A. DELANO, PROMINENT PLANNING AUTHORITY, HAS SAID:

"During the summer, I have had the opportunity not only of seeing with my own eyes actual experiments in housing, but of reading some of the very voluminous reports that have been prepared as to the housing practice in this country and abroad, and I have come to the conclusion that the actual building of a cheap house is not by any means the whole problem. Cheap houses, however good, in isolated lots would certainly be a hazardous investment for any working man, and in order to reduce that hazard, it has become increasingly evident to me that the houses must be so associated and related to the city plan as to be protected against neighborhood deterioration. And I have reached the conclusion that the fundamental requisites of houses for people of moderate income must be:

space on page of the state

- 1- Control of the use of the land in the neighborhoods where the houses are located must be in the hands of the community. Such control, in cases of houses for low-income families, may often be maintained more effectively by municipal ownership of the land.
- 2- The housing development must cover a sufficient area to form a self-sustaining community with necessary schools, playgrounds, shops, etc.
- 3- Whether absolute ownership of the house is preferable to lease is a question to be worked out; both methods are workable, but in any case, the ownership or long-time tenure of a house is not safe for the small investor except under municipal protection.

THE NATIONAL
HOUSING COMMITTEE OF
GREAT BRITAIN
IN A RECENT
INTERIM REPORT
STATED:

"It is not enough to provide a very large number of dwellings, even if it be assumed that they are sufficiently low-rented and satisfactorily designed and managed. It is at least equally important that these right dwellings should be built in the right places and in the right relationship to transport facilities to places of employment and recreation and to all other elements which compose the physical pattern of the country's development. Funless the provision of houses is closely interlocked with an efficient system of town and country planning, the national housing campaign may, by its very urgency create as many problems as it solves."

double space on



GERMANY 2,500,000

QUERNMENT Aid to housing



GR.BRITAIN 1,200,000



FRANCE 429.000



HOLLAND 300,000

U.S.A 31.000

NUMBER OF HOMES BUILT WITH STATE AID 1918 TO 1934

The town common in Bournville, an English garden city founded in 1879. This community contains 2,000 homes, and is administered by a village trust. All land is kept under a single ownership.

Welwyn Garden City, England, a model of scientific planning. The parks, farms, and woodlands which surround the town are publicly owned, forming a protective belt of permanent open space.





THE GARDEN CITY The Greenbelt Program provides the answers to the fundamental problems outlined by Mr. Delano and the British Housing Committee. They are not new; it is only in this country that they are new. In England, the answers can be found in the "Garden cities" of Welwyn and Letchworth, first planned by Ebenezer Howard, and the cottage estates built by the London County Council; in Germany, the suburbs of Praunheim and Roemerstadt near Frankfort and the land policies of the city of Berlin; in Holland, the re-housing program of Amsterdam and Rotterdam, Hilversum and the Hague. All these are actualities. All these are communities, planned from the land up, integrated into the regional picture, built by the state, owned by the municipality, lived in by the people.

> The Greenbelt Towns -- they take their name from the encircling belt of farms and woodland that protect them from encroachment -- look forward to these new patterns, away from old confusions.

GREENBELT, MARYLAND

Under the pressure of time, the Greenbelt Program was launched on the first obviously available site; a tract near Berwyn, Maryland, twenty-five minutes from Washington in the direction of Baltimore. Here, adjacent to the Agricultural Experiment Station, was acquirable land. In Washington were 138,000 commercial workers and Government employees, paying as surveys had shown, the highest rents for inadequate accommodations paid in any city in the United States, not excepting New York. Washington has grown greatly in the past fifteen years; the ever-increasing functions of the Federal Government seem to assure its increase for many years to come. The selection of such a site seemed unassailable.

100 CITIES TO CHOOSE FROM While the land for Greenbelt was being assembled and preliminary planning staffs assembled, an investigation of a hundred cities was made. All pertinent facts were gathered relating to housing conditions, industrial employment, variety of industry, real estate fluctuating, wages, population curve, municipal responsibility and indebtedness. From these hundred cities six were selected, and land acquisition was commenced near three of them. These three were Cincinnati, Ohio (Greenhills); Bound Brook, New Jersey (Greenbrook) and Milwaukee, Wisconsin (Greendale).

All of these localities showed an acute housing shortage for the lower-income groups; varied and growing industry; a good wage-scale; and other elements contributory to the continued success of a satellite town, and in each of these places were large numbers of unemployed families on relief, increasing misery from lack of work.

ASSEMBLING LAND

Land optioning proceeded at the rate of many hundreds of acres a day. Local brokers, under the supervision of the Land Section, performed this feat without raising the price of land unduly or wasting the Government's money by building up a large force of field men. Extraordinary results were obtained in title clearing, in obtaining entry permits, appraisals (by two separate groups of appraisers) in all phases of the problem, which was complicated not only by Government procedure, but by the fact that while the land was being thus acquired the planners were at work and indispensible constant contact and cooperation had to be maintained.

In two and a half months approximately the following acreage was assembled:

For	Greenbelt	11,200	Acres
	Greenbrook	3,900	Acres
	Greenhills	5,930	Acres
	Greendale	3,400	Acres

PLANNING

While this was going on, a technical staff was being gotten together. The four projects were in widely differing parts of the country: local habits, usages, preferences were divergent, and would have to be considered. Two alternatives were possible, a single, centrally controlled staff

vised. The first presented the advantage of theoretical economy, control, standardization, avoidance of duplication.

Objections to it were that in the interest of speed the economy was highly problematic, that standardization was highly undesirable because in the first place too little was known about the problems involved and it was advisable to try many solutions, and in the second place there were the regional considerations already referred to.

STAFF

Four planning groups were therefore set up, with a technical Chief of Planners to coordinate the work, to reduce duplication where possible, and to correlate and explain policy and technical procedure. The staff included the best available talent in the fields of town and site planning; architecture; structural mechanical and utility engineering; and landscape design. Many were nationally, even internationally known. Their judgment was reinforced by a group of outside consultants, specialists in their fields. It can be safely said that the Planning Staff of the Suburban Resettlement Division represents the most complete and comprehensive planning organization ever gotten together in this country, and should be kept intact under some Government agency.

FACTORS IN PLANNING

The acquisition of land and the technical planning of a project and the construction, are not all that is necessary, however. After it is built, it must be lived in. If it does not meet the needs of the people, if it is not managed wisely, it will be a failure. The creation of a town involves three closely related fields:- technical, social, economic. The function of the technician is to interpret the social needs in economic terms. To help in this the Research Section sent out thousands of questionnaires to people in the cities where the towns were to be built; the Management Division worked closely together with the planners on all sorts of related problems; other Government Bureaus, such as the Bureau of Sandards and the Bureau of Home Economics, contributed valuable information and comment. Local assistance was varied and of the greatest importance. County and State authorities, school boards, the agricultural departments of state universities, these and others were necessary aids to a proper integration of the Greenbelt Towns to their environment.

The towns meet the local needs:- planned in Washington, they are regionalized, not standardized.

substitute

X

The planning had to comprehend all of the following:-

PROBLEMS TO BE CONSIDERED The location of the site within the area selected.

The plan of the town on that site, in relation to all existing topographic and regional considerations of drainage, traffic, industry, land use, recreation.

The arrangement of buildings within the town; houses, schools, shops, industry, farms, sewer plants.

The determining of the number of houses of varying types for families of varying size, dependent upon the local typical industrial family distribution within the selected income range.

The determining of the number of the school population, of recreation needs, and of the probable necessary commercial facilities for the community.

The design of houses and non-residential buildings, with consideration of the way people live, their habits, likes, dislikes, all constantly in the balance with costs, simplicity, ease of construction. This phase included choice of materials, heating systems, grouping of houses, and many other things, such as orientation for sunlight, breeze, and view, all to produce a community not only livable, but safe, pleasant, and permanent in its characteristics.

ONE OWNERSHIP

Because of the one ownership policy established in the Greenbelt Program it was possible to do many things not usually possible:— to save on the cost of utilities by running them regardless of "lot lines", to double on plumbing stacks; to provide heating for groups of houses; above all to create the "super-block", reducing the amount of street pavement, concentrating open space for common use in the interior

FUTURE GROWTH of the blocks, allowing pedestrians to use safe foot-ways with fewer street crossings, giving the children a "break".

Nor was this all. It is to be expected that the towns will grow. Careful studies have been made for this future growth, for continued proper relationship with the First Unit, with the surrounding farms and greenbelt, with possible future industry. There can be no blight, no dislocation of values because of haphazard growth or dangerous speculative activity.

CONSTRUCTION

Construction was under way on three of the towns while the ink was still wet on the first tracings. Greenbrook, the fourth, was stopped by injunction proceedings, and has not been proceeded with although the planning was sixty per cent completed. Despite the terrific difficulties of building with relief labor and the complications of Government purchasing procedure, all the other towns will be ready for occupancy this year.

THE FUTURE

They will be three towns as well planned as the best technical talent can make them:- pleasant, permanent, safe.

They will start life as self-governing communities, paying taxes, owning their own land and controlling their own destinies in a way that no community in the United States has

done or has been able to do since the first little towns were founded in Virginia, Massachusetts and Connecticut. They are a return to the first American way of life.

William Penn, when he founded Philadelphia wanted it to be a "place where every man would live in the peace and comfort of his own garden".

Only Government could create the Greenbelt Town,

to be loped that

which is in the Spirit of Penn; it is beyond the province or

hay follow the lead.

the capability of private enterprise. If the pattern of our

cities changes, if the smoke and grime and disease of blight

and slums give way to sunlight, health and safety, it will be

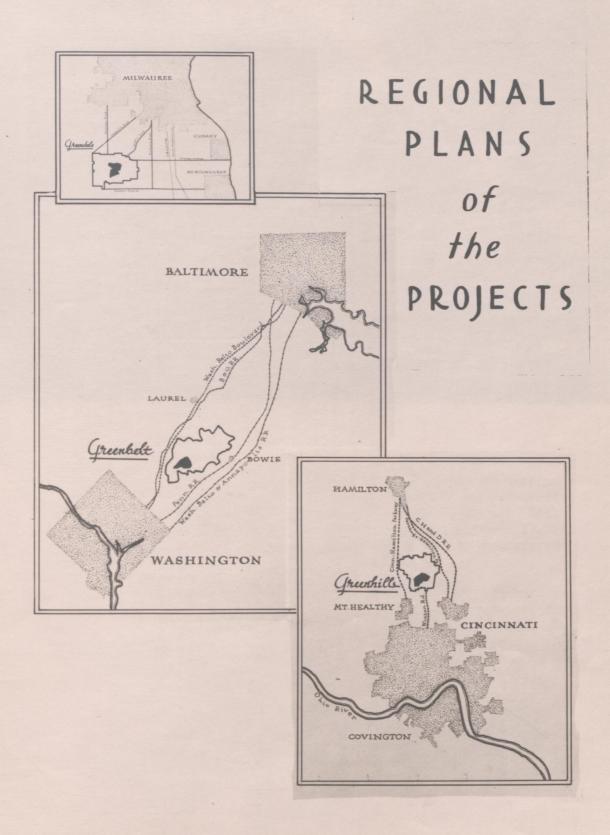
and slums give way to sunlight, health and safety, it will be through the same kind of inspired and far seeing planning demonstrated in the because of the example of the Suburban Resettlement Greenbelt

Program.

And to as has President Roosevelt, said:

"It is an experiment that ought to be copied by every community in the United States."

2





GREENBELT, MARYLAND

Greenbelt is ten miles from the center of Washington, and within twenty-five minutes travel time by automobile from the majority of Federal office buildings via the Washington-Baltimore Boulevard. The project tract comprises 12,259 acres, of which approximately 5,400 acres are to be transferred to the National Agricultural Research Center.

The construction program calls for the erection of one thousand houses; a commercial center containing stores and offices; an inn and restaurant; a Community Building to serve as the center of educational and social activities; administrative offices and town service buildings. All facilities required in a complete, modern community are provided.

Adaptable portions of the tract are reserved for possible future residential development and for a protective greenbelt. Recreational developments planned in the rural area will be beneficial to the entire Washington-Baltimore region. The remaining area of the tract will be divided into dairy and pasturage, orchards and woodlands.



GREENHILLS, OHIO

Greenhills is located twelve miles north of the business district of Cincinnati. The project tract, containing 5,930 acres, is situated in attractive rural country. Existing highways provide convenient access to the metropolitan area to the south with its many diversified industries and commercial enterprises. Smaller communities surround the town at varying distances.

One thousand low-rent homes are planned for immediate construction in the community area of the project tract. Stores, school and recreational facilities will provide all amenities of a complete modern town. Space is reserved for expansion of the first town, and for possible future construction of one or more additional communities.

A portion of the area of the project tract will be devoted to recreational development in cooperation with local governmental agencies. One tract will be reforested and maintained for public purposes. The remaining acreage will be divided into livestock, dairy and poultry farms, making use of existing farm residences and outbuildings.



GREENDALE, WISCONSIN

Located eight miles southwest of the center of Mil-waukee, Greendale is within thirty minutes travel time of 140,000 industrial jobs. The project tract comprises 3,410 acres of land, situated in a highly developed agricultural region. The terrain is well adapted to project purposes. Level building sites are available; meadows, woods, streams and lakes provide attractive natural park areas.

The program of immediate construction includes building of 750 homes; a commercial center with shops, professional offices and service establishments; and a community building with facilities for educational and cultural activities.

Space is available for expansion of the present town and for possible construction of an additional community. Development of a connecting regional parkway has been started along the course of a stream traversing the tract. A Substantial acreage is planned for use in dairy farming and provision is made for smaller poultry, fruit and truck farms. Existing farm buildings will be used in rural areas.

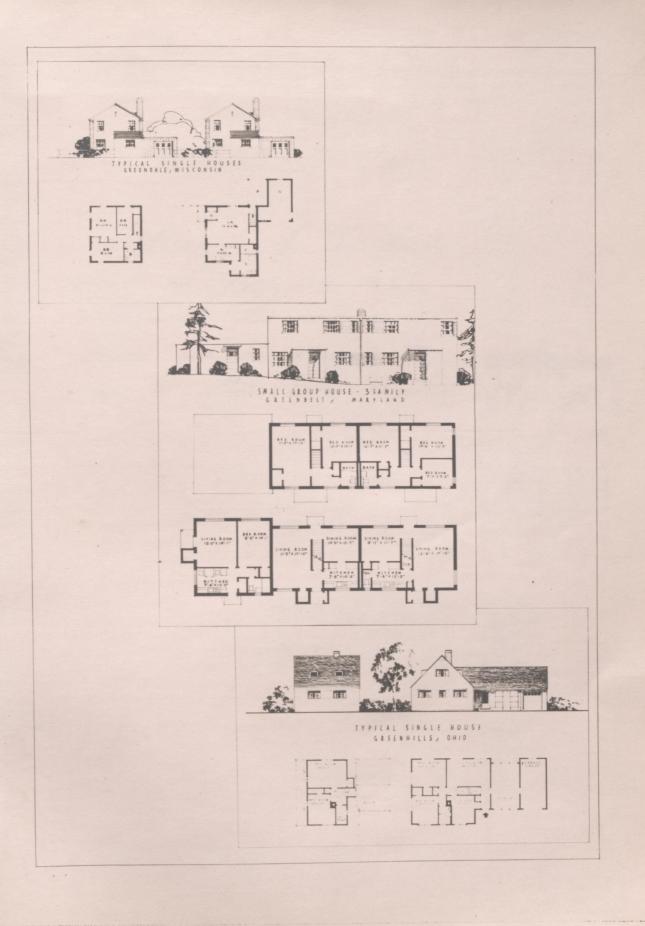


GREENBROOK, NEW JERSEY

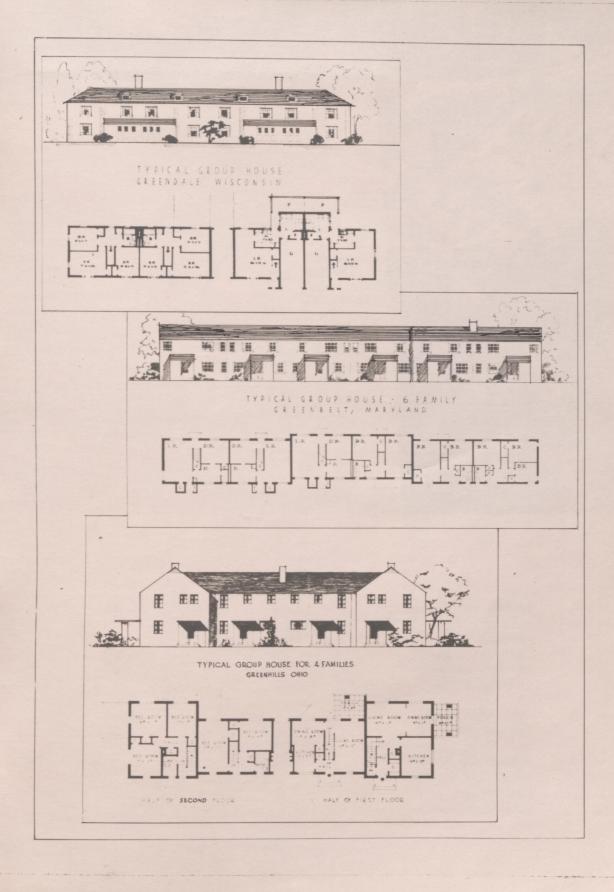
The site chosen for Greenbrook is situated in the growing region extending southwest from metropolitan New York into New Jersey. New York City is within an hour's travel time by rail; Trenton is but twenty minutes away. Towns in the adjacent Bound Brook area have shown rapid industrial growth during recent years. Purchase of approximately 3,900 acres of rural land was contemplated in plans for development of the project.

Homes for 750 families were to be constructed on the site, together with a commercial center, community building and recreational facilities. Areas were designated for future community expansion, allotment gardens and full time farms. Detailed planning had reached 60 per cent of completion upon suspension of the activities.

A temporary injunction restraining acquisition of land by the Resettlement Administration was issued on January 9, 1936 by the United States Court of Appeals in the District of Columbia. A decision of the same court on May 19, 1936, declared the project unconstitutional. Project development has been held in abeyance since that date.



and dicision of the sale court on may 19, 1936, continued the restraining order and remanded to case to the lower court.



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GREENBELT NEARS COMPLETION

Greenbelt was the site of first field operations and is furthest advanced of the Suburban Resettlement Communities. Construction of residential buildings and installation of utility services are being finished rapidly. The present status of the construction program for the project as a whole is better than 50 per cent complete.

Finished demonstration units have been comfortably furnished and opened to public inspection. Non-residential buildings are well under way; a recreational lake has been formed by damming a stream traversing the tract. Progress in road construction and landscape treatment has given sections of the town a finished appearance presaging the pleasing character of the ultimate community.



HOMES RISE AT GREENHILLS

The informal but carefully studied design of the Greenhills town plan is well illustrated in the aerial photograph reproduced above, which shows only the southwest section of the community. Here one third of the thousand homes planned for Greenhills are now being brought to completion.

Wooded ravines of the exterior greenbelt provide a pleasing and protective setting for residential blocks; houses front on open spaces and interblock play areas.

There are at present 477 residential units in various stages of completion. Construction is in progress on the Community Building. Nearly one half of the necessary utility service lines has been installed. The project construction program is estimated to be 30 per cent completed.

Better frotene - looks very happand or unflammed.

more than 37'2 to captate.

Loose Item(s)

REVIEW OF ACCOMPLISHMENTS

The Division of Suburban Resettlement was formed shortly after the Resettlement Administration was created by Executive Order Number 7027 on April 30, 1935. Under supervision of an administrative staff, research precedent to selection of project sites was carried on, and preliminary town planning and architectural studies were undertaken.

In accordance with a letter of authorization signed by President Roosevelt on September 23, 1935, funds were specifically allocated for Suburban project development.

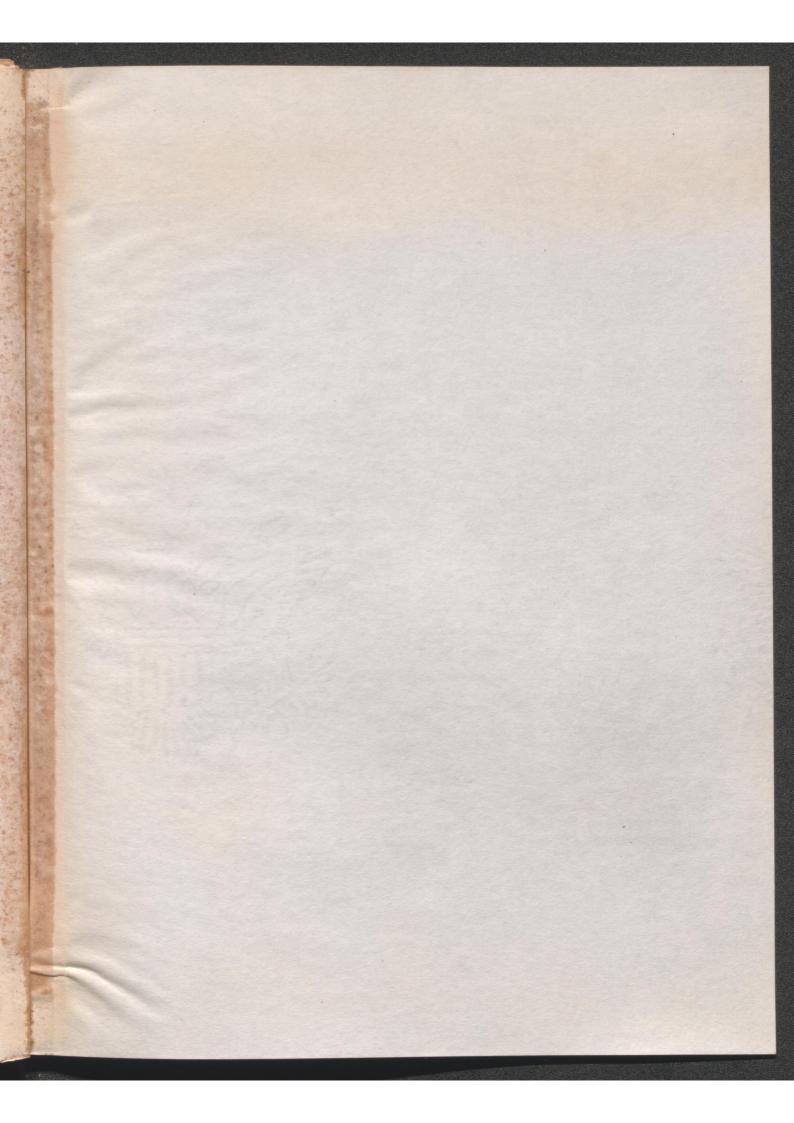
Employment: As of January 15, 1937, \$21,258,000 had been encumbered for Suburban projects. 12,000 persons hitherto without jobs have had employment during the peak construction period. As a result of direct wage payments, local relief rolls have been lowered; men have been employed at constructive labor; demoralization of direct relief has been prevented. Furthermore, funds expended for the purchase of materials have given indirect employment to many thousands of men and have stimulated basic industries heretofore stagnant.

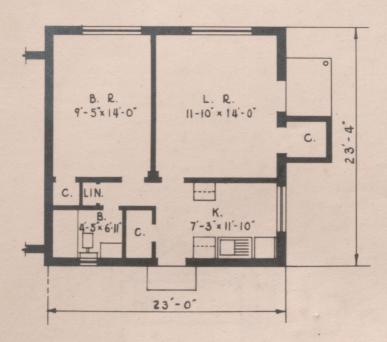
Land: To accomplish this purpose, a land section sent trained agents into the field; appraised properties in the areas; and acquired options for the purchase of 25000 acres in a period of two and one half months.

Planning: A technical section (including national planning authorities) prepared community lay-outs and architectural drawings. Under extreme pressure construction plans were drafted and sent to the field. A volume of work normally requiring months of preparation was compressed into weeks.

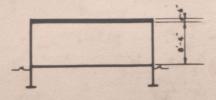
Construction: On October 12,1935, nineteen days after the President authorized the project funds, field operations were started at Greenbelt. Field work on other projects commenced prior to December 15, 1935. Work has progressed rapidly and without interruption in spite of severe obstacles.

Homes: The residential units included in the present program will relieve housing shortages in their respective localities; social costs of slum maintenance will be reduced; families will enjoy the pleasure of life in healthy, uncongested, safe surroundings.





FLOOR PLAN



SCALE 1/6 = 1'

DEPARTMENT OF AGRICULTURE
RESETTLEMENT ADMINISTRATION
DIVISION OF

SUBURBAN RESETTLEMENT

GREENBELT

HOUSE TYPE

DATA			
GROSS AREA	555		
USABLE AREA	447		
USABLE AREA GROSS AREA	80%		
AVERAGE GROSS AREA PER ROOM	185		
CUBAGE	5,181		
NET AREA OF LIVING ROOM	166		
AVERAGE BET AREA OF BED ROOMS	132		
NET AREA OF KITCHEN	86		
CLOSET AREA PER ROOM	- 11		
CIRCULATION AREA	14		
BEMARKS			

3 ROOM HOUSE.

DEPARTMENT OF AGRICULTURE
RESETTLEMENT AGMINISTRATION
DEVIATION OF
SUBURDAN RESETTLEMENT

BREEMBELT

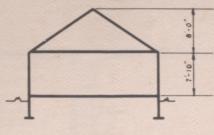
HOUSE TYPE

DATA			
GROSS AREA	785		
USABLE AREA	664		
WEARLE AREA	85%		
AVERAGE GROSS AREA PER ROOM	262		
CUBAGE	6,523		
BET AREA OF LIVING ROOM	166		
AVERAGE BET AREA OF BED ROOMS	132		
HET AREA OF KITCHEN	86		
CLOSET AREA PER ROOM	- 11		
CIRCULATION AREA	14		

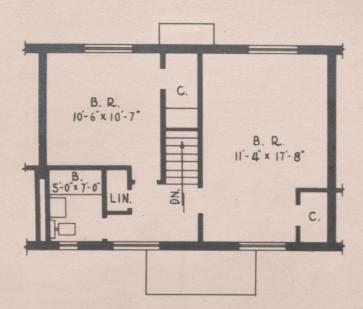
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3 ROOM HOUSE.

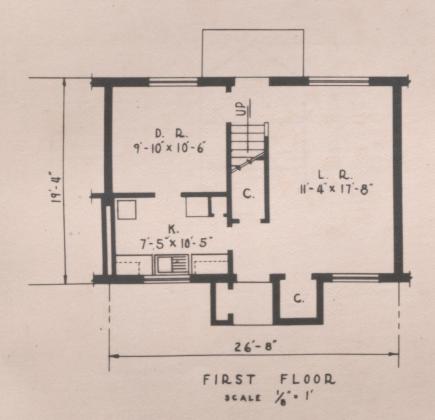
STORAGE SPACE IN ATTIC217 Sq. Ft.



SCALE 1/6 - 1'



SECOND FLOOR



DEPARTMENT OF AGRICULTS RESETTLEMENT ADMINISTRATION Division of SUBURBAN RESETTLEMENT

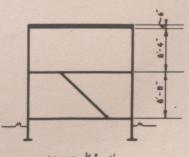
GREENBELT

HOUSE TYPE C 2 -1

DATA	
GROSS AREA	1,073
USABLE AREA	783
USABLE AREA GROSS AREA	73%
AVERAGE GROSS AREA PER ROOM	215
CUBAGE	9,672
HET AREA OF LIVING ROOM	200
AVERAGE BET AREA OF BED ROOMS	148
NET AREA OF KITCHEN	77
CHOSET AREA PER ROOM	14.
CIRCULATION AREA	92

5 ROOM HOUSE.

REMARKS



SCALE 1/6 - 1'

DEPARTMENT OF AGRICULTURE RESETTLEMENT ADMINISTRATION DEVIATION OF

SUBURBAN RESETTLEMENT

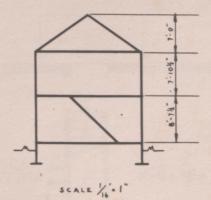
GREENBELT

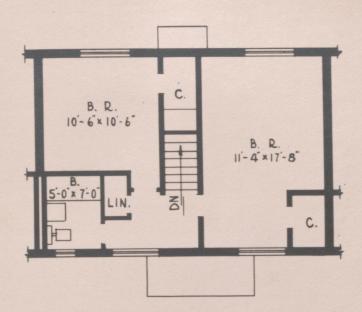
HOUSE TYPE

DATA	
GROSS AREA	1,313
USABLE AREA	1,023
MEABLE AREA	78%
AVERAGE GROSS AREA PER ROOM	263
CUBAGE	11,024
HET AREA OF	200
AVERAGE BET AREA OF BED ROOMS	148
HET AREA OF KITCHEN	77
CLOSET AREA PER ROOM	14
CIRCULATION AREA	92

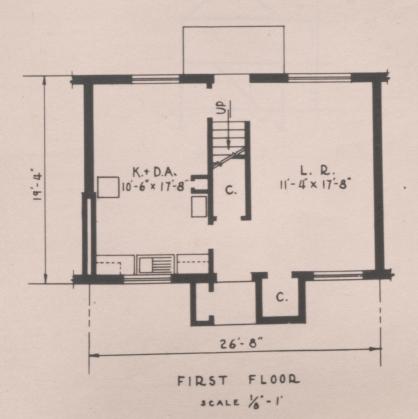
REMARKS

5 ROOM HOUSE. STORAGE SPACE IN ATTIC 240 SQ.FT.





SECOND FLOOR



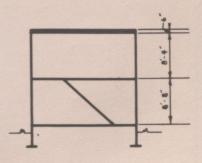
DEPARTMENT OF AGRICULTURE
RESETTLEMENT ADMINISTRATION
DLV1sion of

SUBURBAN RESETTLEHENT

GREENBELT

HOUSE TYPE

DATA	
GROSS AREA	1.073
USABLE AREA	788
USABLE AREA GROSS AREA	73%
AVERAGE GROSS AREA PER ROOM	268
CUBAGE	9,672
HET AREA OF	200
AVERAGE BET AREA OF BED ROOMS	148
NET AREA OF KITCHEN	95
CLOSET AREA PER ROOM	18
CIRCULATION AREA	92



SCALE 1/6 -1'

DEPARTMENT OF AGRICULTURE
RESETTLEMENT ADMINISTRATION
DEVIATION OF
SUBURBAN RESETTLEMENT

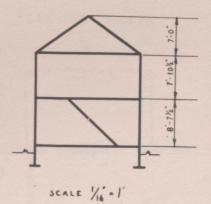
GREENBELT

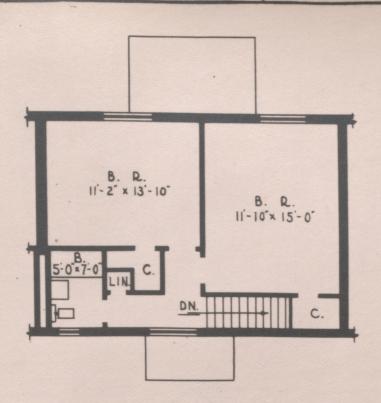
HOUSE TYPE

DATA	
GROSS AREA	1,313
USABLE AREA	1,028
USABLE AREA GROSS AREA	78%
AVERAGE GROSS AREA PER ROOM	328
CUBAGE	11,024
HET AREA OF LIVING ROOM	200
AVERAGE BET AREA OF BED ROOMS	148
NET AREA OF KITCHEN	95
CLOSET AREA PER ROOM	18
CIRCULATION AREA	92

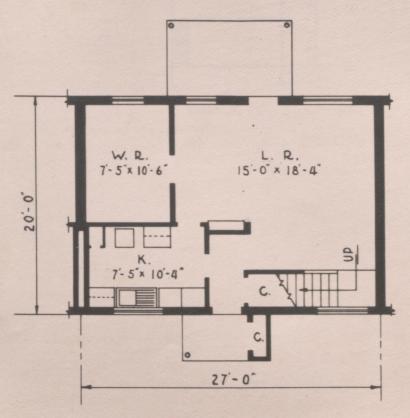
4 ROOM HOUSE. STORAGE SPACE IN ATTIC 240 SQ.FT.

REMARKS





SECOND FLOOR



FIRST FLOOR SCALE 1/8 - 1'

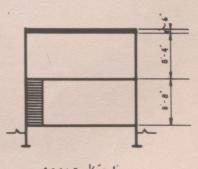
DEPARTMENT OF AGRICULTURE RESETTLEMENT ADMINISTRATION Division of

SUBURBAN RESETTLEMENT

GREENBELT

HOUSE TYPE C 2-4

DATA	
GROSS AREA	1,081
USABLE AREA	806
MSABLE AREA GROSS AREA	75%
AVERAGE GROSS AREA PER ROOM	216
CUBAGE	9,730
HET AREA OF LIVING ROOM	242
AVERAGE BET AREA OF BED ROOMS	166
NET AREA OF KITCHEN	77
CLOSET AREA PER ROOM	9
CIRCULATION AREA	94
200000	



SCALE 1/6-1

DEPARTMENT OF AGRICULTURE
RESETTLEMENT ADMINISTRATION
DEVIATOR OF
SUBURDAM RESETTLEMENT

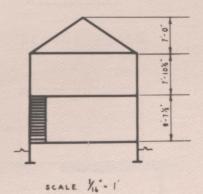
GREENBELT

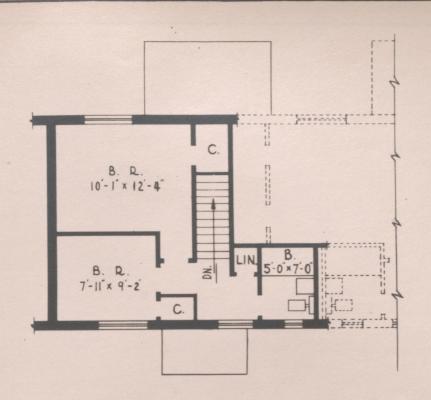
HOUSE TYPE

DATA	
GROSS AREA	. 1324
USABLE AREA	1,049
MARAE AREA	80%
AVERAGE OR OSS	265
200.000	11,081
BET AREA OF LIVING ROOM	242
AVERAGE BET AREA OF DED ROOMS	166
HET AREA OF KITCHER	77
CLOSET AREA PER ROOM	9
CIRCULATION AREA	94

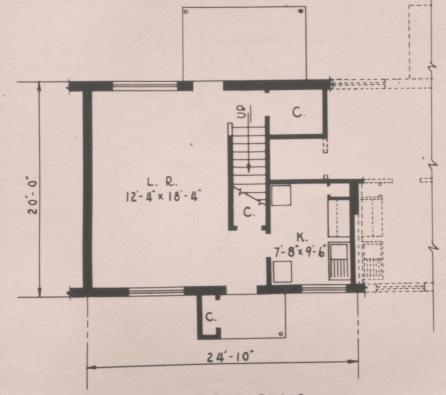
REMARKS

5 ROOM HOUSE. STORAGE SPACE IN ATTIC 243 Sa.FT.





SECOND FLOOR



FIRST FLOOR. SCALE 18'- 1"

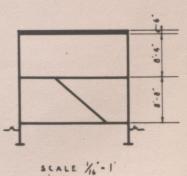
DEPARTMENT OF AGRICULTURE RESETTLEMENT ADMINISTRATION Division of

SUBURBAN RESETTLEHENT

GREENBELT

HOUSE TYPE
C 2 - 6
INTERLOCKING C3-9

DATA	
GROSS AREA	836
USABLE AREA	573
USABLE AREA GROSS AREA	69%
AVERAGE GROSS AREA PER ROOM	2.09
CUBAGE	7,523
HET AREA OF LIVING ROOM	226
AVERAGE HET AREA OF BED ROOMS	98
HET AREA OF KITCHEN	73
CLOSET AREA PER ROOM	- 11
CIRCULATION AREA	108
REMARKS	



DEPARTMENT OF AGRICULTURE
RESETTLEMENT ADMINISTRATION
Division of

SUBURBAN RESETTLEMENT

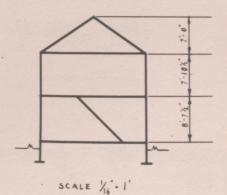
GREENBELT

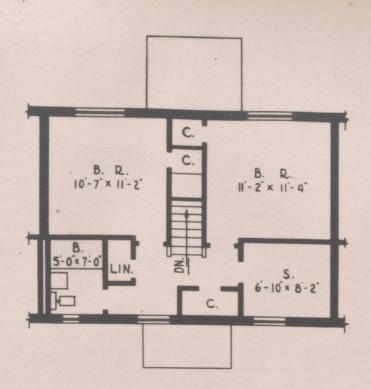
HOUSE TYPE

DATA .	
GROSS AREA	1,059
USABLE AREA	796
USABLE AREA GROSS AREA	75%
AVERAGE GROSS AREA PER ROOM	265
CUBAGE	8,617
NET AREA OF LIVING ROOM	226
AVERAGE NET AREA OF BED ROOMS	98
NET AREA OF KITCHEN	73
CLOSET AREA PER ROOM	11
CIRCULATION AREA	108

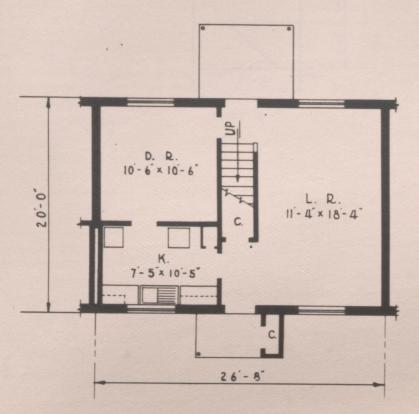
REMARKS

4 ROOM HOUSE. STORAGE SPACE IN ATTIC 223 SQ.FT.





SECOND FLOOR



FIRST FLOOR SCALE 1/8 - 1'

DEPARTMENT OF AGRICULTURE RESETTLEMENT ADMINISTRATION Division of SUBURBAN RESETTLEMENT

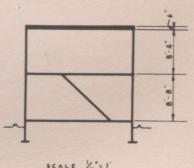
GREENBELT-

HOUSE TYPE C 2 - 7

### 1,066 ##################################	DATA	
## 14% ## 14%	OROSS AREA	1,066
### 14% AVERAGE GROSS MEA PER ROOM CUBAGE 9,598 BET AREA OF LIVING ROOM AVERAGE BET AREA 122	USABLE AREA	78.9
CUBAGE 9,598 DET AREA OF LIVING ROOM 208 AVERAGE BET AREA 122		74%
DET AREA OF LIVING ROOM 208		213
AVERAGE BET AREA 122	CUBAGE	9,598
		208
M. 020 H 0000	AVERAGE BET AREA OF DED ROOMS	122
NET AREA OF KITCHEN 95	NET AREA OF KITCHEN	95
CLOSET AREA PER ROOM 14	CLOSET AREA PER ROOM	14
CIRCULATION AREA 105	CIRCULATION AREA	105

REMARKS

5 ROOM HOUSE. STORAGE SPACE 56 SQ.FT.



SCALE 16'=1'

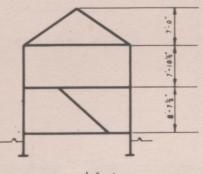
RESETTLEMENT ADMINISTRATION
DIVISION OF
SUBURBAN RESETTLEMENT
GREENBELT

DEPARTMENT OF AGRICULTURE

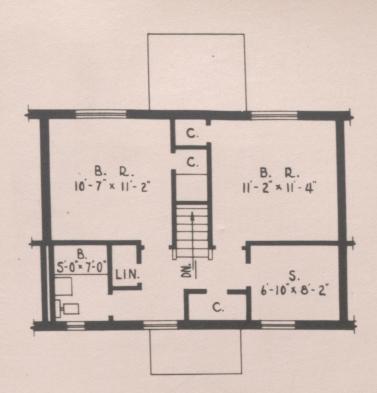
HOUSE TYPE

DATA	
GROSS AREA	1,306
USABLE AREA	1,029
USABLE AREA GROSS AREA	79%
AVERAGE GROSS AREA PER ROOM	261
CUBAGE	10,931
HET AREA OF LIVING ROOM	208
AVERAGE NET AREA OF BED ROOMS	122
HET AREA OF KITCHEN	78
CLOSET AREA PER ROOM	12
CIRCULATION AREA	105
BEMARKS	

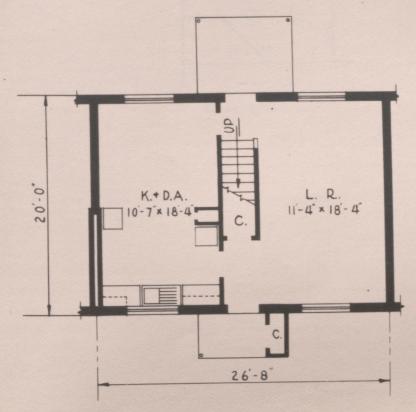
5 Room House. STORAGE SPACE-296 SQ.FT.



SCALE 1/6-1



SECOND FLOOR



FIRST FLOOR

DEPARTMENT OF AGRICULTURE RESETTLEMENT ADMINISTRATION DEVISION OF

SUBURBAN RESETTLEMENT

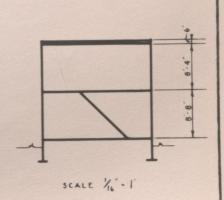
GREENBELT

HOUSE TYPE

DATA	
GROSS AREA	1,066
USABLE AREA	794
USABLE AREA	74%
AVERAGE GROSS AREA PER ROOM	213
CUBAGE	9,598
HET AREA OF	208
AVERAGE BET AREA OF DED ROOMS	122
NET AREA OF KITCHEN	95
CLOSET AREA PER ROOM	14
CIRCULATION AREA	105

REMARKS

STORAGE SPACE - 56 SQ.FT.



8-7½ 7-10½

SCALE 16-1'

DEPARTMENT OF AGRICULTURE
RESETTLEMENT ADMINISTRATION
DEVISION OF

SUBURBAN RESETTLEMENT

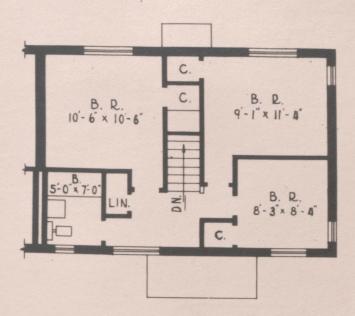
GREENBELT

HOUSE TYPE

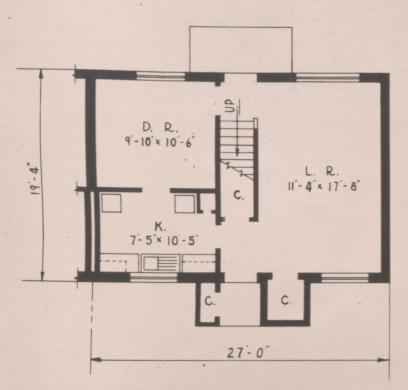
DATA	
GROSS AREA	1,306
USABLE AREA	1,034
USABLE AREA GROSS AREA	79%
AVERAGE GROSS AREA PER ROOM	327
CUBAGE	10,931
HET AREA OF LIVING ROOM	208
AVERAGE NET AREA OF BED ROOMS	122
HET AREA OF KITCHEN	95
CLOSET AREA PER ROOM	15
CIRCULATION AREA	105

REMARKS

4 ROOM HOUSE. STORAGE SPACE-296 SA.FT.



SECOND FLOOR



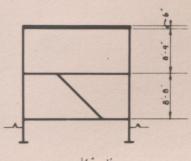
FIRST FLOOR
SCALE 18:1'

DEPARTMENT OF AGRICULTURE
RESETTLEMENT ADMINISTRATION
DEVISION OF
SUBURBAN RESETTLEMENT

GREENBELT

HOUSE TYPE

DATA	
GROSS AREA	1,086
USABLE AREA	764
USABLE AREA GROSS AREA	70%
AVERAGE GROSS AREA PER ROOM	181
CUBAGE	9,785
NET AREA OF LIVING ROOM	200
AVERAGE NET AREA OF BED ROOMS	94
NET AREA OF KITCHEN	79
CLOSET AREA PER ROOM	- 11
CIRCULATION AREA	98



SCALE 16 - 1'

DEPARTMENT OF AGRICULTURE
RESETTLEMENT ADMINISTRATION
DIVISION OF

SUBURBAN RESETTLEMENT

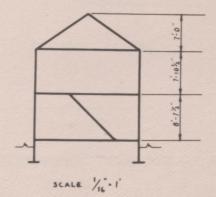
GREENBELT

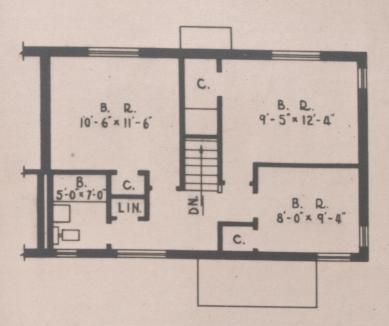
HOUSE TYPE

DATA		
GROSS AREA	1,329	
USABLE AREA	1,007	
USABLE AREA GROSS AREA	76%	
AVERAGE GROSS AREA PER ROOM	222	
CUBAGE	11,147	
NET AREA OF LIVING ROOM	200	
AVERAGE NET AREA OF BED ROOMS	94	
NET AREA OF KITCHEN	79	
CLOSET AREA PER ROOM	- 11	
dIRCULATION AREA	98	

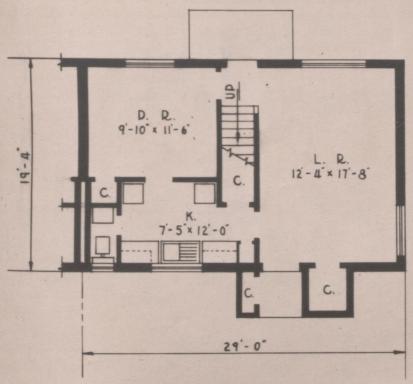
REMARKS

6 ROOM HOUSE. STORAGE SPACE IN ATTIC - 243 Sa.FT.





SECOND FLOOR



FIRST FLOOR

SCALE 1/8 - 1

DEPARTMENT OF AGRICULTURE RESETTLEMENT ADMINISTRATION Division of

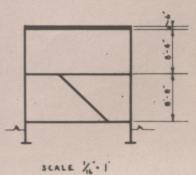
SUBURBAN RESETTLEHENT

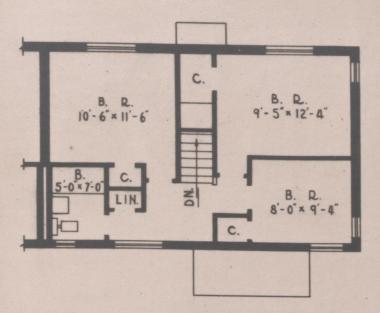
BREENBELT

HOUSE TYPE C 3-2

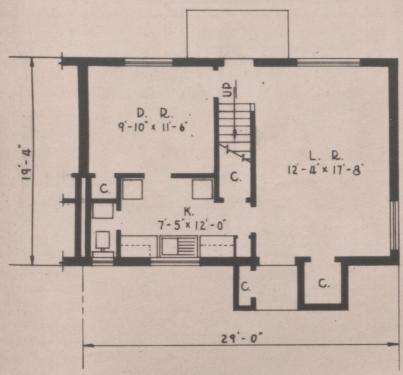
DATA		
GROSS AREA	1,169	
USABLE AREA	850	
USABLE AREA	73%	
AVERAGE GROSS	195	
CUBAGE	10,527	
HET AREA OF LLVING ROOM	218	
AVERAGE BET AREA OF BED ROOMS	107	
HET AREA OF KITCHEN	81	
CLOSET AREA PER ROOM	12	
CIRCULATION AREA	87	

REMARKS 6 ROOM HOUSE.





SECOND FLOOR



FIRST FLOOR

SCALE 1/8 - 1

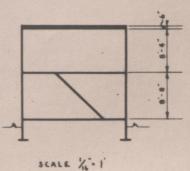
DEPARTMENT OF AGRICULTURE RESETTLEMENT AGMINISTRATION Division of SUBURBAN RESETTLEMENT

BREENBELT

HOUSE TYPE C 3-2

DATA		
GROSS AREA	1,169	
USABLE AREA	850	
USABLE AREA	73%	
AVERAGE GROSS	195	
CUBAGE	10,527	
HET AREA OF LLVING ROOM	218	
AVERAGE BET AREA OF DED ROOMS	107	
NET AREA OF KITCHEN	81	
CLOSET AREA PER ROOM	12	
CIRCULATION AREA	87	

REMARKS 6 ROOM HOUSE.



6.7% 7.0% 7.0%

SCALE 1/6 . 1'

DEPARTMENT OF AGRICULTURE
RESETTLEMENT ADMINISTRATION
DLV18100 of

SUBURBAN RESETTLEMENT

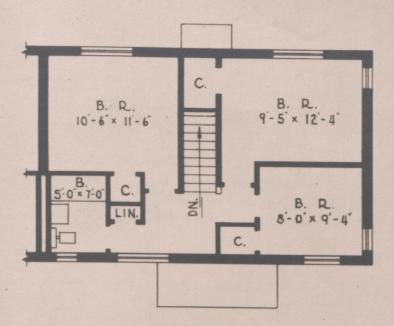
GREENBELT

HOUSE TYPE

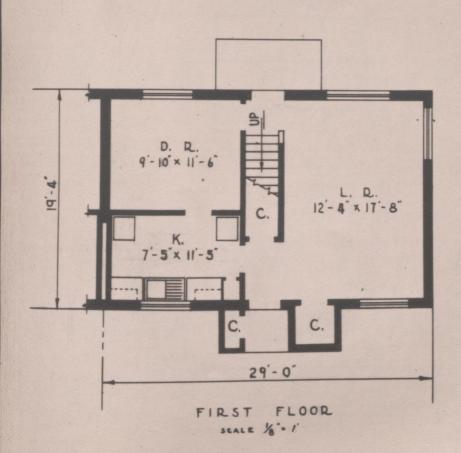
USABLE AREA 1,111 MEABLE AREA 78% AVERAGE GROSS AREA PER ROOM CUBAGE 12,000	DATA		
WEADLE AREA GROSS AMEA AVERAGE GROSS AMEA PER ROOM CUBAGE 12,000	GROSS AREA	1,430	
AVERAGE GROSS AMEA PER ROOM CUBAGE 12,000	USABLE AREA	1,111	
CUBAGE 12,000		787。	
		238	
BET AREA OF	CUBAGE	12,000	
LIVING ROOM 218	BET AREA OF	218	
AVERAGE BET AREA 107		107	
NET AREA OF KITCHEN 81	NET AREA OF KITCHEN	81	
CLOSET AREA PER ROOM 12	CLOSET AREA PER ROOM	12	
CIRCULATION AREA 87		87	

REMARKS

6 ROOM HOUSE. STORAGE SPACE IN ATTIC - 261 Sq.FT.



SECOND FLOOR



DEPARTMENT OF AGRICULTURE
RESETTLEMENT AGMINISTRATION
DEVISion of

SUBURBAN RESETTLEMENT

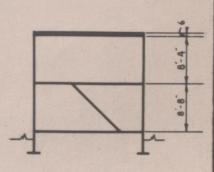
GREENBELT

HOUSE TYPE

-	-	
п.	•	

UATA	
GROSS AREA	1,169
USABLE AREA	838
MEAGLE AREA	72%
AVERAGE GROSS AREA PER ROOM	195
CUBAGE	10,527
HET AREA OF LIVING ROOM	218
AVERAGE BET AREA OF BED ROOMS	107
HET AREA OF KITCHEN	85
CLOSET AREA PER ROOM	- 11
CIRCULATION AREA	112
SHOW AND SHOULD REPORT OF THE PARTY OF THE P	

REMARKS
6 ROOM HOUSE.



SCALE 16 - 1

SCALE 16.1

DEPARTMENT OF AGRICULTURE RESETTLEMENT AGMINISTRATION DEVIATION OF

SUBURBAN RESETTLEMENT

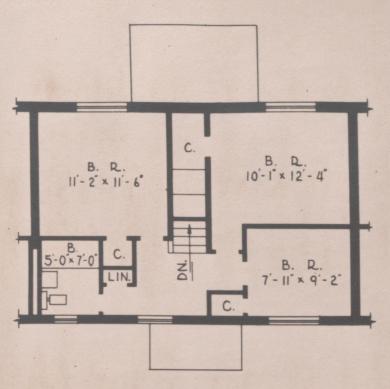
GREENBELT

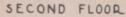
HOUSE TYPE

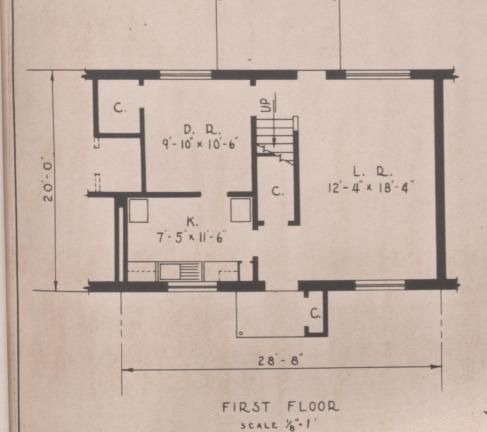
DATA		
GROSS AREA	1,430	
USABLE AREA	1,099	
USABLE AREA	77%	
AVERAGE GROSS	238	
CUBAGE	12,000	
BET AREA OF LIVING ROOM	218	
AVERAGE BET AREA OF BED ROOMS	107	
HET AREA OF KITCHEN	85	
CLOSET AREA PER ROOM	11	
CIRCULATION AREA	112	

REMARKS

6 ROOM HOUSE. STORAGE SPACE IN ATTIC - 261 Sq. FT.







DEPARTMENT OF AGRICULTURE RESETTLEMENT ADMINISTRATION Division of

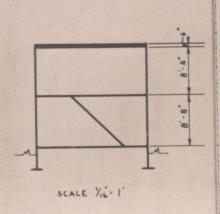
SUBURBAN RESETTLENENT

GREENBELT

HOUSE TYPE

DATA	
GROSS AREA	1,146
USABLE AREA	854
MEADLE AREA	75%
AVERAGE GROSS	191
CUBAGE	10,318
BET AREA OF	226
AVERAGE BET AREA OF DED ROOMS	108
BET AREA OF KITCHEN	85
CLOSET AREA PER ROOM	13
CIRCULATION AREA	101

REMARKS



8.7% 7:0%

SCALE 16 - 1

DEPARTMENT OF AGRICULTURE RESETTLEMENT ADMINISTRATION DIVISION OF

SUBURBAN RESETTLEHENT

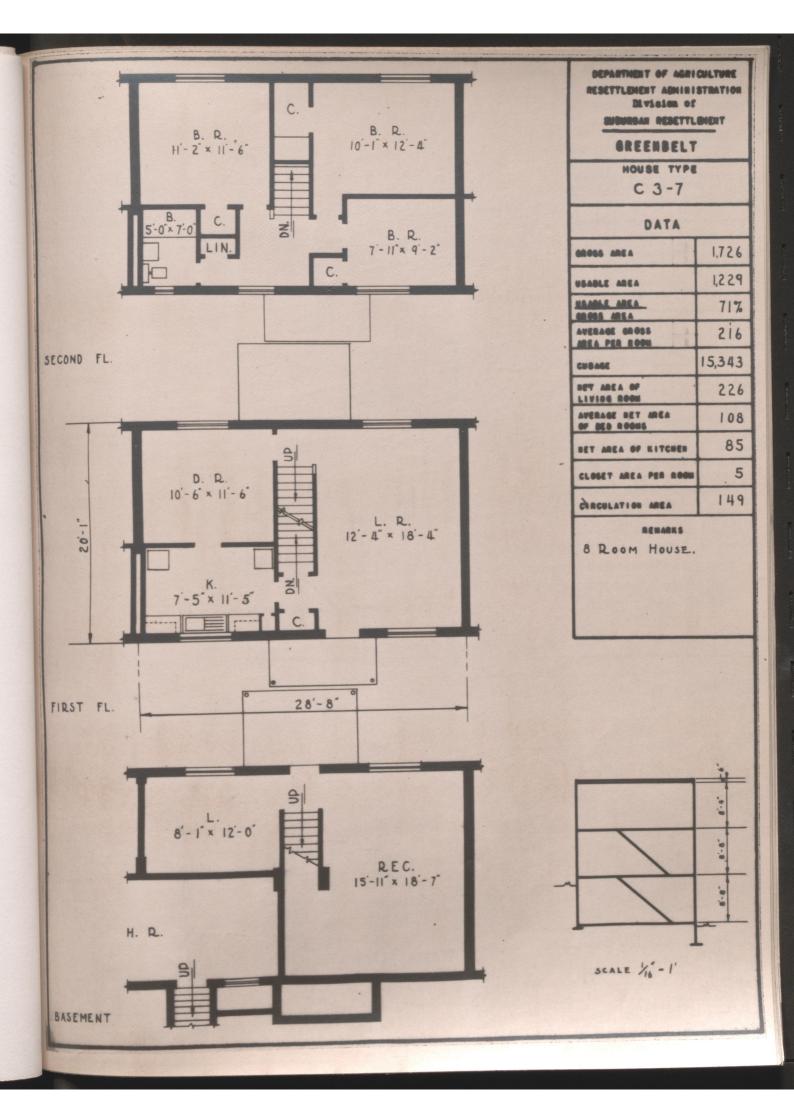
GREENBELT

HOUSE TYPE

DATA		
GROSS AREA	1,404	
USABLE AREA	1,112	
USABLE AREA GROSS AREA	79%	
AVERAGE GROSS AREA PER ROOM	234	
CUBAGE	11,751	
HET AREA OF	226	
AVERAGE NET AREA OF BED ROOMS	108	
NET AREA OF KITCHEN	85	
CLOSET AREA PER ROOM	13	
CIRCULATION AREA	101	

REMARKS

6 ROOM HOUSE. STORAGE SPACE IN ATTIC - 258 SQ.FT.



SCALE 1/6 = 1'

DEPARTMENT OF AGRICULTURE RESETTLEMENT ADMINISTRATION Division of

SUBURBAN RESETTLEMENT

GREENBELT

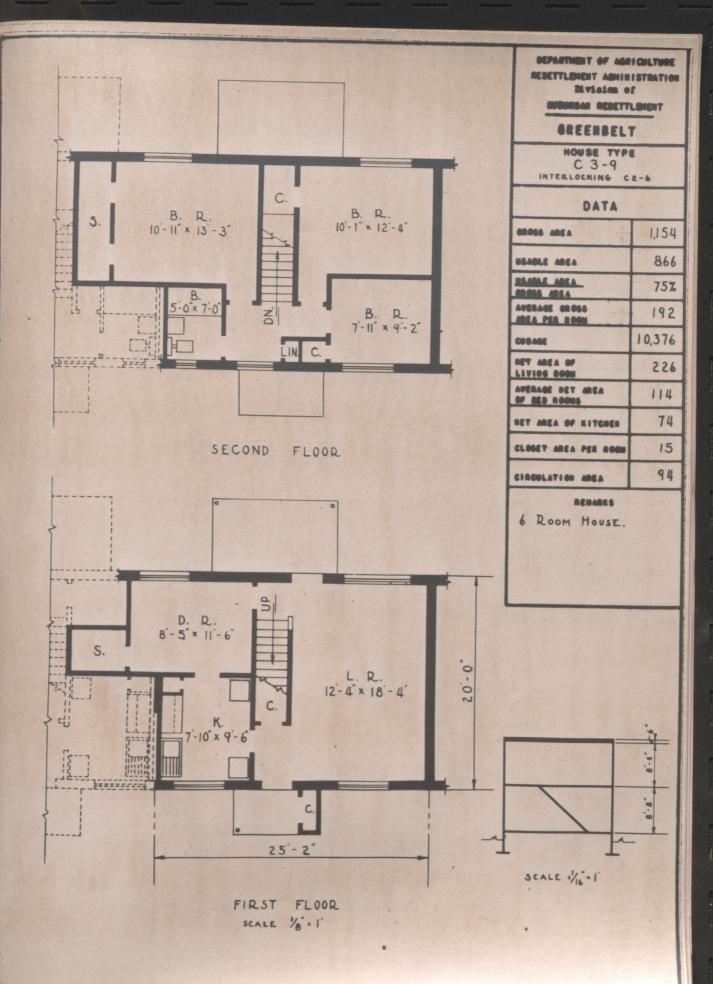
HOUSE TYPE C 3-7

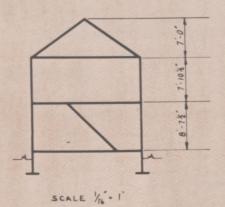
DATA GROSS AREA

GROSS AREA	1,984
USABLE AREA	1,487
MEANAE AREA	74%
AVERAGE GROSS	248
CUBAGE	16,781
BET AREA OF LIVING ROOM	226
AVERAGE BET AREA OF BED ROOMS	108
NET AREA OF KITCHEN	85
CLOSET AREA PER ROOM	5
CIRCULATION AREA	149

REMARKS

8 ROOM HOUSE. STORAGE SPACE IN ATTIC - 258 Sa. FT.





DEPARTMENT OF AGRICULTURE RESETTLEMENT ADMINISTRATION SEVECION OF

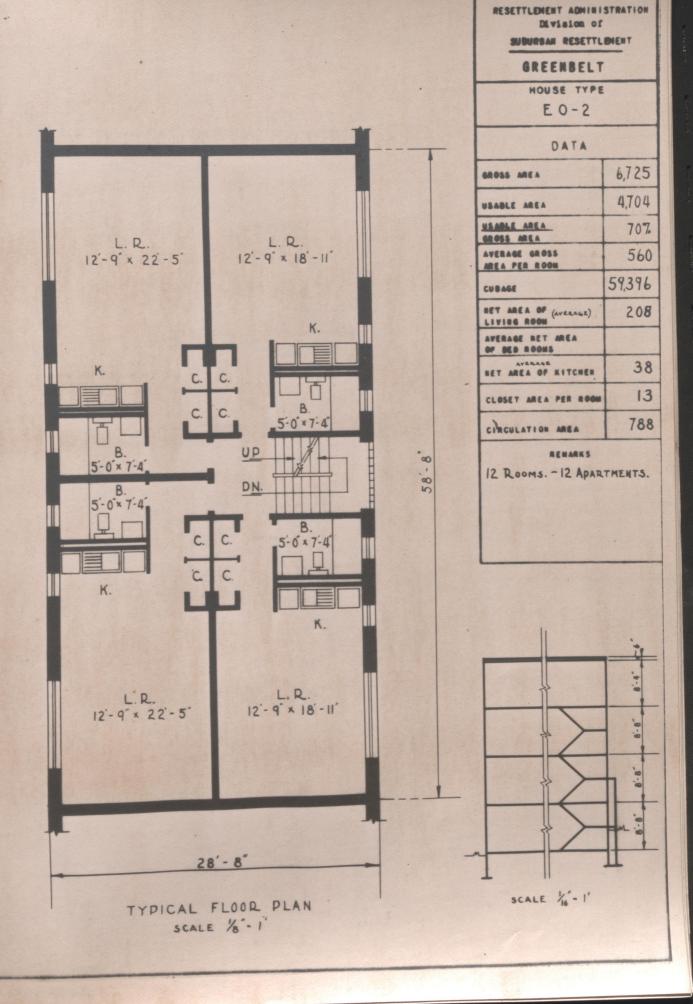
SUBURGAN RESETTLENENT

GREENBELT

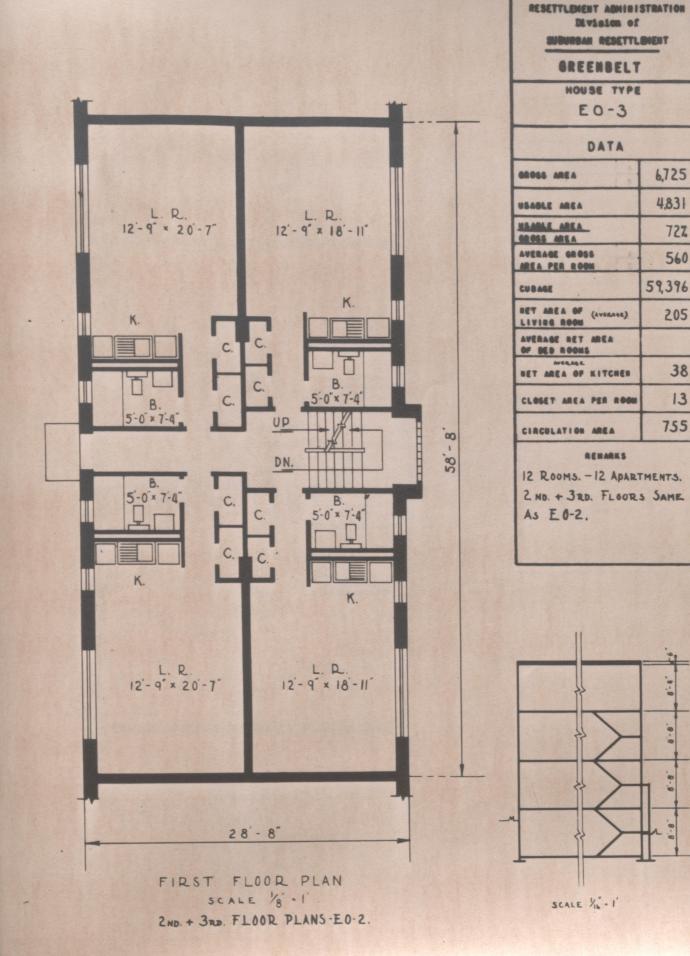
C 3-9

DATA	
CROSS AREA	1,381
	1,092
MAARA ARKA	79%
AVERAGE GROSS	230
SPACE	11,882
BET AREA OF	226
AVERAGE BET AREA OF DED ROOMS	114
NET AREA OF KITCHEN	74
CLOSET AREA PER ROOM	15
CIRCULATION AREA	94

REMARKS
6 ROOM HOUSE.
STORAGE SPACE IN
ATTIC - 226 Sa. Ft.



DEPARTMENT OF AGRICULTURE



DEPARTMENT OF AGRICULTURE

DEPARTMENT OF AGRICULTURE RESETTLEMENT AGMINISTRATION Division of

SUBURBAN RESETTLENENT

GREENBELT

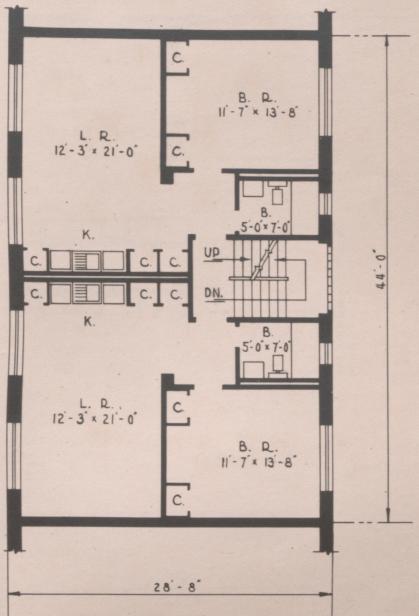
HOUSE TYPE E1-6

DATA

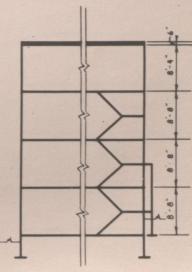
GROSS AREA	5,044
USABLE AREA	3,532
USABLE AREA	70%
AVERAGE GROSS- AREA PER ROOM	420
CUBAGE	44,553
HET AREA OF LIVING ROOM	196
AVERAGE BET AREA OF BED ROOMS	146
NET AREA OF KITCHEN	36
CLOSET AREA PER ROOM	- 11
CIRCULATION AREA	640

REMARKS

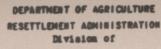
12 ROOMS. 6 APARTMENTS.



TYPICAL FLOOR PLAN SCALE 18:1



SCALE 16 . 1'



SUBURBAN RESETTL BIENT

GREENBELT

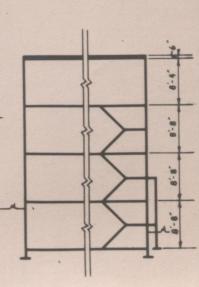
HOUSE TYPE

E1-7

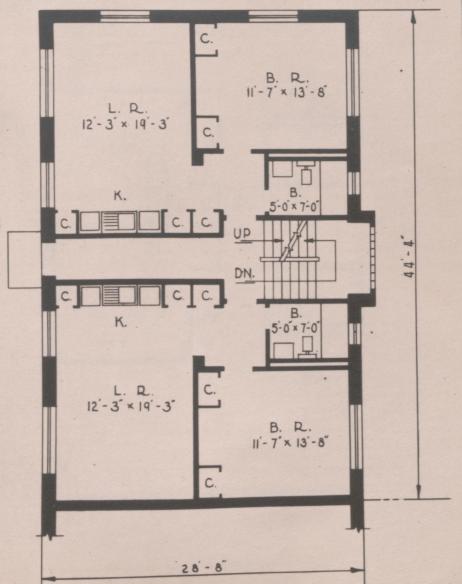
GROSS AREA	5,044	
USABLE AREA	3,628	
MEAGLE AREA	72%	
AVERAGE GROSS	420	
CUBAGE	44,553	
HET AREA OF LIVING ROOM	188	
AVERAGE BET AREA OF BED ROOMS	146	
BET AREA OF KITCHEN	36	
CLOSET AREA PER ROOM	11	
CIRCULATION AREA	640	
Street, and discussions, which the party of	THE RESERVE OF THE PERSON NAMED IN	

REMARKS

12 Rooms. - 6 APARTMENTS. 2NO. + 3RD. FLOORS SAME As E1-6



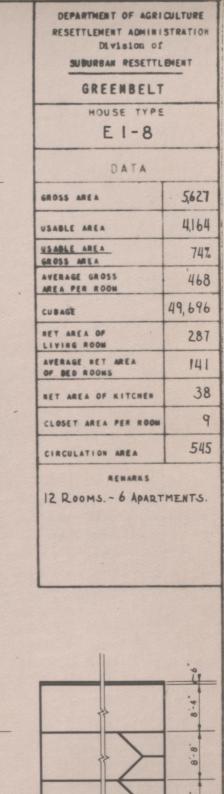
SCALE 1/6 - 1'



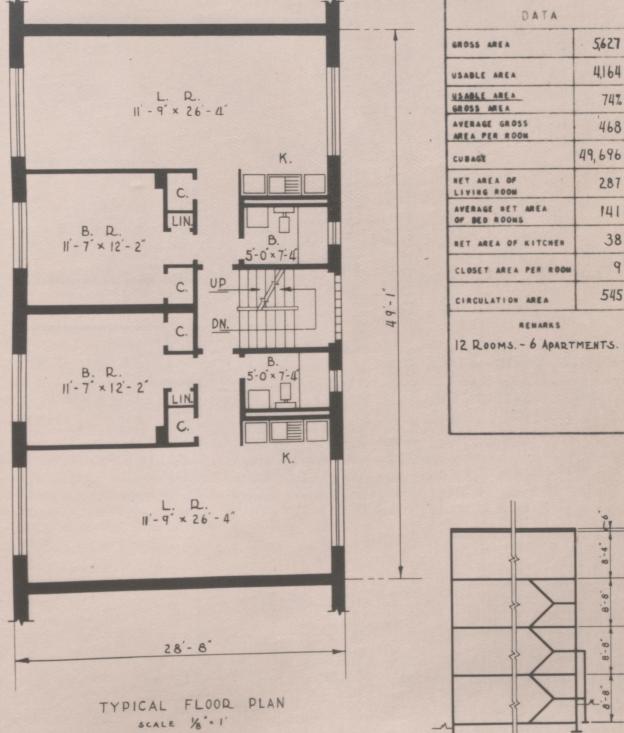
FIRST FLOOR PLAN

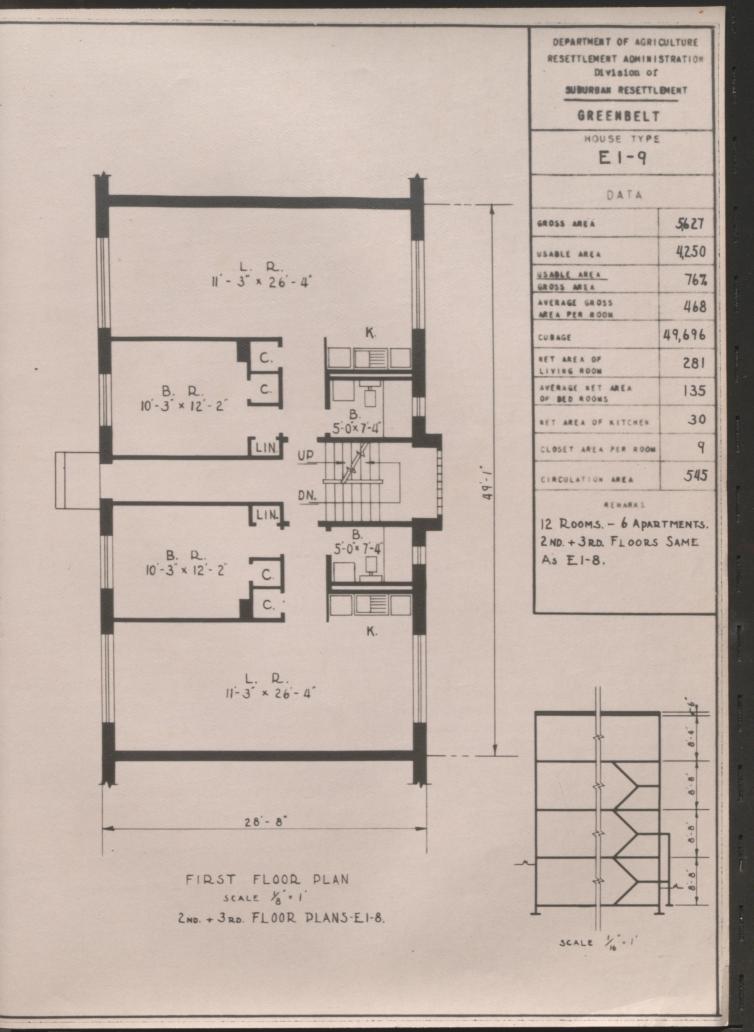
SCALE & -1'

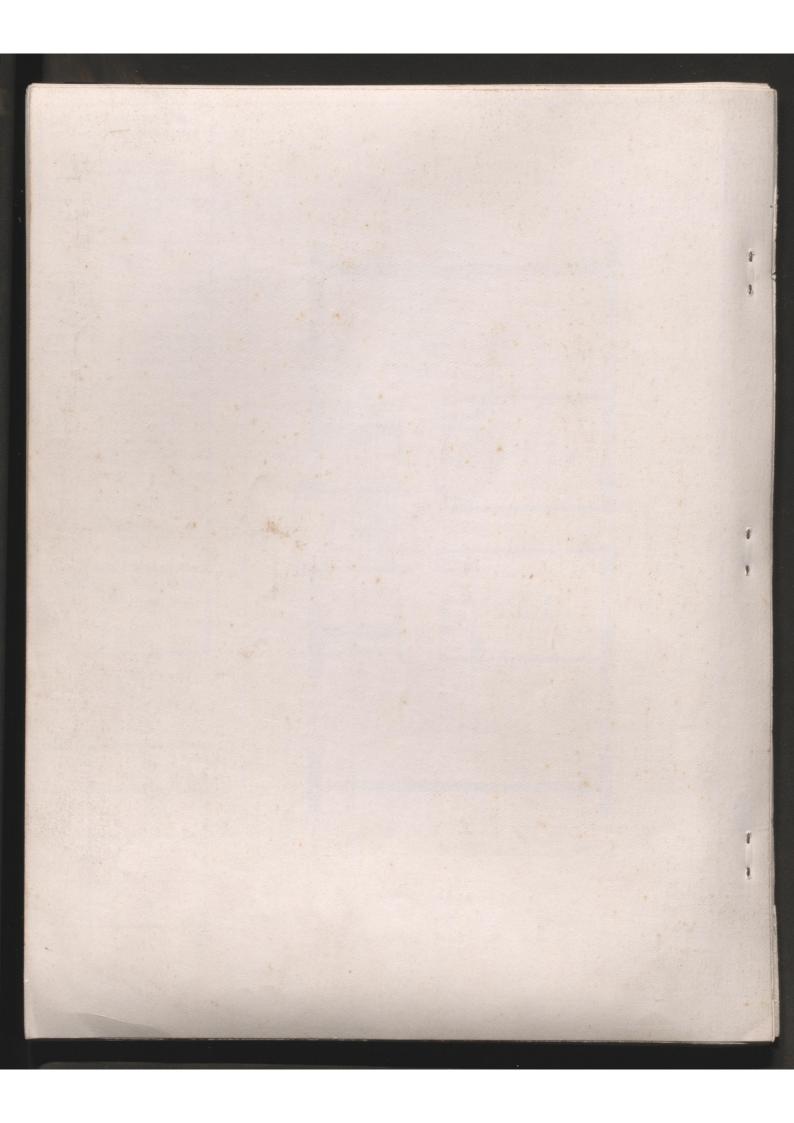
2ND. + 3RD. FLOOR PLANS-E1-6.

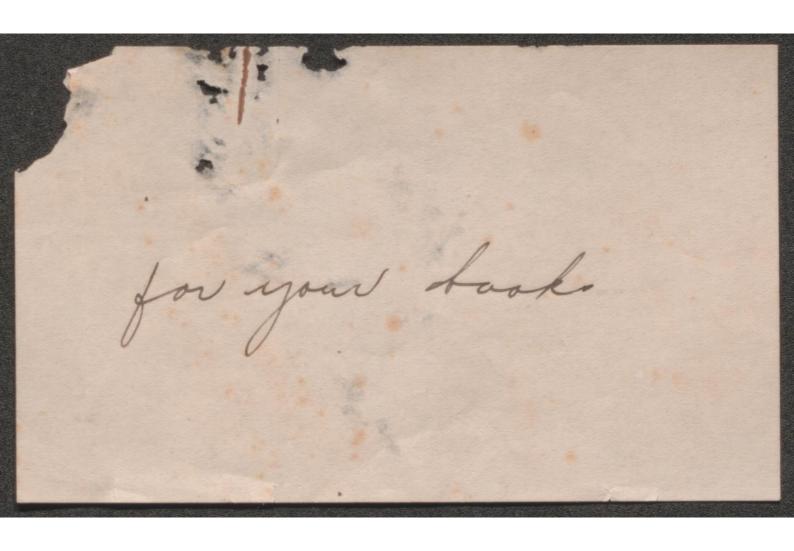


SCALE 16 :1'











Form RA-Gen 4 Revised 7-18-35 INTER-OFFICE COMMUNICATION RESETTLEMENT ADMINISTRATION (REFER TO ONLY ONE SUBJECT IN EACH COMMUNICATION) Mr. John S. Lansill DATE December 5, 1935. Clarence S. Stein COPIES TO FROM Studies of operation-maintenance costs in 90 16-4201 SUBJECT Suburban Resettlement communities. I am herewith submitting a series of reports in connection with the communities that are to be built by the Division of Suburban Resettlement of the Resettlement Administration. These consist of the following: Operation-Maintenance Costs of Local Government and Community Activity. 2. Operation-Maintenance Costs of Houses. 3. Shopping Centers: principles of planning and possible income to be derived from rental of stores. 4. Analysis of Family Budgets. 5. Amortization and Interest Chart. The purposes and methods of these studies are explained in the Introduction which follows. It is hoped that they may serve as a means of arriving at basic conclusions in the work of your Division. Certain questions that are self-evident from the studies are: 1. Education is the largest single factor in operation-maintenance cost. However, it is most subject to probable economies or reduction, and appears to be the pivotal point on which Suburban Resettlement communities will reach closer to or away from low income groups. The actual cost per pupil will vary in each project with -(a) The standard of education in each state on which state assistance is based. (b) Extent to which the program of education in each community exceeds this minimum standard.

(c) Extent of State aid.

- 2. The transportation factor will be a most important item of cost in the family budget in Suburban Resettlement communities. A base figure of 10¢ per trip has been figured in these studies, which brings the total family expenditure for transportation at the \$1,250 income level to double the customary amount. This cost should be considered an integral part of the rent and no rents are comparable unless weighted with transportation costs.
- 3. Unless radical savings can be made in the costs of education or transportation, the \$1,250 income group can pay a rental equal only to the cost of operation-maintenance in towns of 4,000 population and over. For families below this level operation-maintenance costs exceed the ability to pay except at the expense of minimum requirements for food, clothing, etc.

I wish to emphasize the fact that the estimates of costs given do not include all of the items that are normally calculated as rental. They deal only with the operation-maintenance costs and make no allowance for amortization or interest on capital investment. The amount to be charged for this will depend on the policy to be determined by the Administration. For example, on the Table on page 5 showing the Annual Operation-Maintenance Cost per Person or per Room, after reducing allowance for returns from stores for communities of 4,000 rooms, the total is \$79 per person per year, or \$6.60 per person per month. If the capital cost per room, including allowance for public improvements and public buildings is figured at \$1,250, and this amount were amortized over a period of sixty years, approximately \$1.90 per room per month would have to be added to the operation-maintenance cost in figuring the total rental. If 2% interest were added to this, the total for operation-maintenance, plus amortization and interest, would be approximately \$9.60 per room per month.

I have received assistance in the preparation of these studies from many sources. Much of the data in the study of the Operation-Maintenance Costs of Government was supplied by Major J. O. Walker and Mr. Ralph Eberlin. Miss Agnes K. Inglis of the Education and Training Section of the Resettlement Administration assisted by Mr. H. F. Alves, Mr. Blair, Mr. Stephens, and Dr. Oleson also gave valuable help on schools and health. Mr. Frank Vitolo of this office, and Mr. C. S. Carlson and Mr. Ralph Eberlin of the City Housing Corporation assisted in the study of the Operation-Maintenance Costs of Houses. Dr. Day Monroe of the Bureau of Home Economics of the Department of Agriculture prepared the study of family budgets. I was also greatly assisted by Samuel Ratensky, William H. Ludlow and Milton Lowenthal and others of the Research Section of your Administration.

lanences Stein per SPC INTRODUCTION TO THE STUDY OF OPERATION-MAINTENANCE
COSTS OF GOVERNMENT AND HOUSING

PURPOSE OF STUDY

As a basis for planning Suburban Resettlement communities, the following study of operation-maintenance costs was undertaken for the purpose of -

- 1. setting up minimum desirable standards of housing and community equipment.
- 2. estimating the costs of operating and maintaining the facilities and services required.
- 3. measuring these costs of operation-maintenance against the ability to pay of families at various income levels.

ASSUMPTIONS

The following general assumptions relating to the planning of Suburban Resettlement communities have been accepted in connection with this study:

- 1. That all equipment and buildings to be supplied under the original investment shall be adequate to meet the requirements of good housing and good community living: moreover, that they shall be adequate to compete with the neighborhoods from which the inhabitants of the new towns will be drawn not only from the point of view of experts, but of the families themselves.
 - 2. That the communities will consist mainly of families of

low incomes. Therefore, they must be planned, constructed, and managed so that operation-maintenance costs will be as low as possible.

- 3. That the communities will house as large a number of families as possible within the limits of the appropriation.

 Therefore planning and construction must be as economical as possible without increasing operation-maintenance costs or lowering standards.
- 4. That rentals of residential and commercial property within the communities must cover all costs of operation-maintenance. (These may be decreased by such assistance as State aid for education, etc.). In addition, rentals should pay as far as possible for amortization of capital costs and interest on money invested.
- 5. That the entire community plant land, buildings, and equipment will be held in single ownership and under unified control.
- 6. That the communities will be incorporated into the local governmental framework as soon after completion as seems feasible.

SCOPE AND LIMITATIONS

For the purposes of this study a median family income of \$1,250, an average family of four (consisting of 2 adults, 1 child of 10, 1 child of 8), and occupancy at one person per

room were assumed.

The study deals only with operation-maintenance costs of government and housing. These costs are basic and must be met by the inhabitants. Additional amounts to be paid as amortization and as interest on capital invested are matters of policy to be determined by the Administration. The study differs from statements of operating costs in existing communities in that it does not include the factors of payment on capital outlays or debt service.

The study is organized in such a way as to show the relative effect of change of policy or of cost of any single factor such as education, type of house, grouping of houses, manner of disposing of waste, income group to be housed, portion of income that can be afforded for rent, distance and cost of transportation, etc.

SPECIFIC APPLICATION

Any application of the method or findings of this study to a specific problem must take into account -

- Extent to which the nature of the site affects the character of the town plan and its services. (a close knit, economical plan is assumed here).
- 2. Methods of financing and sources of revenue of the governmental units - state, county, and township under whose jurisdiction the community will operate.

should be used so as to further the objectives of develop-

ment at minimum cost of operation-maintenance and capital?

(See Studies of the Relative Improvement Costs of Various

Schemes of House Grouping, dated Nov. 19, 1935 and Studies of Relative Costs of Construction and Improvements, dated Nov. 23, 1935).

ANNUAL COST PER PERSON FOR OPERATION-MAINTENANCE OF COMMUNITIES OF VARIOUS SIZES

Population of Town	3,000	4,000	6,000	7,000
O. M. Local Government (Excl. Nursery School)	\$ 50.09	\$ 45.18	\$ 41.35	\$ 39.61
Levies for State and County Govt.*	5.00	5.00	5.00	5.00
O. M. House (Incl. Heating)	34.60	33.06	32.28	31.76
Total	\$ 89.69	\$ 83.24	\$ 78.63	\$ 76.37
Return from Stores	4.00	4.15	4.30	4.35
Cost per Person (D minus E)	85.69	79.09	74.33	72.02
Cost for Family of Four (Four times F)	342.76	316.36	297.32	288.08

^{*} Based on an assumed average of \$5 per person, and \$1000 of assessed real property per person. The actual figure will vary in each locality, and from year to year. e.g., in Hamilton County in 1934 the total levy for state purposes was 0, for County Purposes \$3.08 per \$1000 of assessed valuation, for County park purposes \$.04 per \$1000 of assessed valuation.

LOCAL GOVI

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OPERATION-MAINTENANCE COST OF LOCAL GOVERNMENT AND COMMUNITY ACTIVITY

Population	3,000	4,000	6,000	7,000
Administration	\$ 8,000	\$ 8,000	\$ 9,000	\$ 10,000
Education (excl.				
Nursery School)	67,500	90,000	135,000	157,500
Recreation and Community				
Activities	21,000	24,000	30,000	31,500
Protection (Fire & Police)	13,300	13,300	14,750	14,750
Public Works & Services				
Sewage Disposal	5,500	5,500	5,500	5,500
Street Maintenance	1,500	2,000	2,500	3,000
Street and Park Lights	3,000	4,000	5,000	5,500
Refuse collection, etc.	3,000	4,000	6,000	7,000
Water Supply	5,800	5,800	6,400	6,400
Health	10,000	10,000	15,000	15,000
Parks	4,000	5,000	6,500	7,250
Fire insurance	500	500	650	650
	143,100	172,100	236,300	264,050
Vacancies or Non-Payment				
Five per cent	7,155.	50 8,605.5	0 11,815.50	13,202.5
POTAL	\$150,256	\$180,706	\$248,116	\$277,253
Nursery School	6,750	9,000	13,500	15,750
Total incl. Nursery	₱157 006	\$180 7 06	\$261 616	#207 00 7
	\$157,006	\$189,706	\$261,616	\$293,003
Cost per person, exclusive				
	\$ 50.09	\$ 45.18	\$ 41.35	\$ 39.61
Cost per person, including	Nursery :	School		
		\$ 47.43		

1. Figures are based on \$90 a year for each student, and the school population estimated at 25% of total population, exclusive of Nursery School. This is the average cost for all types from Kindergarten through High School, assuming a relatively high standard. The actual amount spent per student varies greatly with (a) standard of education in each state upon which assistance is based, (b) the extent to which the program in each community exceeds this standard, and (c) the extent of aid from State or other exter-

nal governmental unit. The relative amounts paid in charges (taxes) for this purpose, and received as support of local schools, will affect the budget more than any other factor. Studies are now being made under the direction of Miss Inglis, Chief of the Education and Training Section of the Management Division, which will correct this figure for the specific conditions in each project.

- 2. The costs of Nursery School have been listed under Recreation and Community Activities as they are not ordinarily part of the education system supported by governmental funds.
- for State assistance may be lower than a standard desired by the communities, the school facilities or their operation-maintenance costs may have to be supplemented by the community. As many of them as can be brought under the school roof and budget should be put there-library, auditorium, work rooms and meeting rooms, and emergency aid-room. This consideration and the building regulations of the County and State Boards of Education will be controlling factors in the design of the school buildings. An alternate possibility is the location of additional facilities in the community building which may be so designed and situated that it will directly supplement the school facilities.

4. Based on the experience of other communities which offered more than normal healthful, safe, and pleasant conditions the proportion of children, particularly those of younger ages, will be very high. This may decrease in time and a continuously smaller proportion will be in the lower school and an increasing proportion in the Junior High School and High Schools.

RECREATION AND COMMUNITY ACTIVITIES

- 1. This includes recreation indoor and out; adult education; organization of clubs, dances, etc., as well as organization and operation of the Nursery School.
- 2. The Nursery School may derive its support from direct charges to those using it or from the budget for Recreation and Community Activities. Costs of Nursery School may vary from \$50 to \$150 per pupil per year, depending on (a) whether the school is run on half day or whole day schedule, (b) whether it includes the noon meal, and (c) the extent of volunteer service. Costs in this study are assumed at \$75 per pupil per year, with attendance assumed at half of the total population in the 2-4 year group or 3% of the total population.
- 3. All of the community and recreation activities should be related as closely as possible to the school building. Additional building facilities will be needed for some of these, such as -

Office for management

Special club rooms

Library

Special game rooms such as bowling alleys, depending on habits of the future inhabitants

Playfield of five acres or more for children up to

14 years of age adjacent to school

Larger recreation area elsewhere for adults and older children.

4. Costs assumed are based on experience at Radburn (1,600 population) where community activities cost about \$10 a person a year. (This includes a small allowance for Nursery School). If the population were doubled this might be cut to \$7. As the population increases the cost per individual will decrease. A minimum number of workers, one full time man and woman, or equivalent - is required. They can make use of lower paid or volunteer assistance as as the size of town increases.

For 3,000 town - one worker and two half time assistants

4,000 " - two full time and one half time workers

6,000 " - four workers

7,000 " - five workers

Costs are based on \$7. per inhabitant for 3,000 town

\$6. " " 4,000 "

\$5. " " 6,000 "

\$4.50 " " 7,000 "

PROTECTION

- 1. This includes police and fire. At least five men will be required for the 3,000 or 4,000 town. The number will be increased by one for towns of 6,000 to 7,000.

 Allowance has been made for maintenance of equipment of \$500 in the case of the two smaller towns, and \$750 in the two larger ones.
 - 2. No allowance has been made for police courts.

PUBLIC WORKS AND SERVICES

- 1. This includes sewage disposal, street maintenance, street and park lighting, refuse collection and water supply.
- 2. The costs given are basic and will be affected in the case of each development by the nature of the site, the compactness of the town plan, and the character and soundness of the original installment of plant and equipment.
- 3. The cost of sewage disposal will not vary greatly in towns between 3,000 and 7,000.

Breakdown of Costs of Sewage Disposal System

Chief operator	\$2,400	
Assistant for night operation	1,800	
Electric power, etc.	800	
Maintenance	500	\$5.500

4. Other public works including street lighting, street maintenance, refuse collection, and street clean-

ing will vary in accordance with the size of the community as shown in the Table. The figures are based on an open but compact plan for the portion of the town that is to be developed.

5. Estimates are based on water supplied to houses at cost, charges to be divided equally per family or per room.

Breakdown of Costs of Water Supply System

Population	3,000	4,000	6,000	7,000
Chief	\$2,400	\$2,400	\$2,400	\$2,400
Assistant	1,800	1,800	1,800	1,800
Additional help	600 Part time	600 Part time	1,200	1,200
Purification	1,000	1,000	1,000	1,000
TOTAL	\$5,800	\$5,800	\$6,400	\$6,400
Per Person	\$1.94	\$1.45	\$1.07	\$.91

Figures do not include metering for residences. If
houses are metered add: Assistant for reading meters \$1,800
Billing 1,200 \$3,000

6. All of the functions here listed as Public Works and Services should be managed as one department with an efficient engineer at its head. Fewer skilled assistants can then be put in charge of the various functions.

with an increased number of nurses in the larger communities.

4. Such functions as protection of water supply and safe disposal of human wastes will best be carried on under the guidance of the State and County Health Services. It will probably be advantageous to place the nurse under the jurisdiction of the County Health Service, thereby permitting the Community to participate in the benefits of such service (laboratory facilities, sanitary officer, etc.) The cost of hospitalization is not included and is assumed to be contained in State or County levies. It is not proposed to erect a hospital in any of the towns as part of first construction.

5. Although the adequate provision of medical care

is a serious problem for low-income groups, any provision for it is beyond the capacity of this basic budget. It is recommended that the problem be given consideration and discussed with the County Medical Society in each case.

PARKS

- 1. Figures are based on estimates of operation-main-tenance costs at Radburn and are assumed at approximately \$250 an acre for park and play areas, with 16 acres in 3,000 town, 20 acres in 4,000 town, 26 acres in 6,000 town, and 29 acres in 7,000 town.
- 2. Costs will be somewhat higher per person for the smaller communities and lower for the larger.

INSURANCE

- 1. Only fire insurance is calculated. Liability insurance is not included, although it may be required if the agency to which management authority is delegated is legally held to be a non-public agency.
- 2. Estimates include only the Community building, at the rate of \$.24 per \$100 per year, and Stores, at the rate of \$.33 per \$100 per year. School buildings are assumed to be under the jurisdiction of the County School Board.

STORE INCOME

assuming \$1250 median income group and local expenditures at \$155/capita "food " at 118/capita

Population	3,000	4,000	6,000	7,000
Gross annual income of stores at \$155 per person	465,000	620,000	930,000	1,085,000
Rentals at 3% of gross income (all stores)	13,950	18,600	27,900	32,550
Maintenance cost of all stores	2,000	2,000	2,000	2,000
Net income from all stores	11,950	16,660	25,900	30,550
Gross annual income of food stores at \$118 per person	354,000	472,000	708,000	826,000
Rentals of Food Stores at 2.5% of gross income	8,850	11,800	17,700	20,650
Maintenance cost of food stores	1,200	1,200	1,200	1,200
Net income from food stores	7,650	10,600	16,500	19,450
Per capita net income from all stores	\$4	4.15	4.30	4,35

ESTIMATE OF OPERATION-MAINTENANCE COST OF 3,000 to 7,000 ROOMS LOW-COST ROW HOUSES

Occupa	ncy Assumed	at One Person	per Room	
	3,000	4,000	6,000	7,000
MANAGEMENT	Per Year	Per Year	Per Year	Per Year
Manager	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000
Asst. Managers, \$2500 ea		5,000	5,000	5,000
Clerks, \$1000 ea.	3,000	3,000	4,000	4,000
Bookkeeper	2,500	2,500	2,500	2,500
Asst. Bookkeeper			1,000	1,000
Office: telephone etc.	1,500	2,000	3,000	3,500
TOTAL	\$16,000	\$16,500	\$19,500	\$20,000
Per room per year	\$5.33	\$4.13	\$3.25	\$2.86
REPAIRS: Plumbing, heat	ing, carpent	ry, electric,	masonry, roo	fing, etc.
Labor -	4 3 500	# 3 500	4 7 000	A 7 000
Plumbers, \$1500 ea.	\$ 1,500	\$ 1,500	\$ 3,000	\$ 3,000
Carpenters, \$1500 ea.	1,500	1,500	1,500	1,500
Handy Man	1,200	1,200	1,200	1,200
Handy Man			1,000	1,000
	4,200	4,200	6,700	6,700
Materials \$1 per rm. per	yr.3,000	4,000	6,000	7,000
TOTAL	\$ 7,200	\$ 8,200	\$12,700	\$13,700
Per room per year	\$2.40	\$2.05	\$2.12	\$1.96
PAINTING				
Painting room and exteri every two years \$7 per r per yr. includes labor a	m.			
		\$28,000	\$42 000	\$49,000
materials	\$21,000 \$7.00	\$28,000 \$7.00	\$42,000 \$7.00	\$7.00
Per room per year	φ1800	Ψ1.000	W1.000	\$1800
PORTERS				
Building Porters	2 porters	3 porters	5 porters	6 porter
at \$900. each	\$ 1,800	\$ 2,700	\$ 4,500	\$ 5,400
Per room per year	60¢	68¢	75¢	78¢

GARDENING	3,000 rooms Per Year	4,000 rooms Per Year	6,000 rooms Per Year	7,000 rooms Per Year
House Gardener \$1 per rm. per year Per room per year	\$ 3,000 \$1.00	\$ 4,000 \$1.00	\$ 6,000 \$1.00	\$ 7,000 \$1.00
MISCELLANEOUS				
Shades, house supplies, exterminating, etc. \$1. per room per year Per room per year	\$ 3,000 \$1.00	\$ 4,000 \$1.00	\$ 6,000 \$1.00	\$ 7,000 \$1.00
INSURANCE				
Fire and Liability \$1.25 per rm. per year (Constant) Per room per year	\$ 3,750 \$1.25	\$ 5,000 \$1.25	\$ 7,500 \$1.25	\$ 8,750 \$1.25
DEPRECIATION	Cost	Years Co	ost per Year	Per Rm. per YR.
Refrigerators Gas Ranges Plumbing Fixtures Heating System	\$ 75 25 80 200	15 10 20 25	\$ 5.00 2.50 4.00 8.00	\$ 1.25 .60 1.00 2.00
	For an ave	rage four roo	om apartment:	\$ 4.85

HEATING

Private Plant, each house - Fuel \$10. per room per year

SUMMARY AND NOTES ON OPERATION-MAINTENANCE COST OF 3000-7000 ROOMS LOW-COST ROW HOUSES

	3,000 rooms	4,000 rooms	6,000 rooms	7,000 rooms
	Per rm. per yr	. Per rm. per yr	. Per rm. per y	. Per rm. per yr.
Management	\$ 5.33	\$ 4.13	\$ 3.25	\$ 2.86
Repairs	2.40	2.05	2.12	1.98
Painting	7.00	7.00	7.00	7.00
Porters	•60	•68	•75	•78
Gardening	1.00	1.00	1.00	1.00
Miscellaneous	1.00	1.00	1.00	1.00
Insurance	1.25	1.25	1.25	1.25
	\$18.58	\$17.11	\$16.37	\$15.87
Depreciation	4.85	4.85	4.85	4.85
TOTAL	\$23.43	\$21.96	\$21.22	\$20.72
Vacancies and Non-payment 5%	1.17	1.10	1.06	1.04
GRAND TOTAL	\$24.60	\$23.06	\$22.28	\$21.76
Heating	10.00	10,00	10.00	10.00
GRAND TOTAL (Incl. heating	\$34.60	\$33.06	\$32,28	\$31.76

This estimate is based on substantially built houses of approximately six in a row, with room sizes of about 210 sq. ft. gross area per room, averaging four rooms to a house with specification similar to that used in the Study of Relative Cost of Construction and Improvements as submitted on November 23, 1925.

The use of different materials or different sizes of rooms or different grouping will affect the operation-maintenance costs. For example, free-standing houses will have a larger operation-maintenance cost because of the necessary increase in heating and additional exterior painting.

CENTERS

and the existing nearby industrial towns have established shopping centers.

2. The proportion of family expenditures made locally.

This is affected by the income group, the family size and family composition. Higher income groups are inclined to go to larger shopping centers for clothing, house furnishings, and certain other items which the low-income families must do without. The needs of small children will be met locally, whereas the needs of grown children are met better in the large center, where it is possible to shop for style and quality.

3. The family income

Analysis of expenditures for various income groups, when related to local family expenditures and annual sales of different types of stores, give us a fairly definite indication of the number and types of stores that might be supported.

The accompanying charts indicate -

- 1. Estimated local expenditures.
- 2. The types of stores that could be supported.
- 3. The income that could be derived from stores in towns of 3,000, 4,000, 6,000, and 7,000 population.

We are estimating rentals at 3% of gross sales. These we believe are conservative as the number of stores will be restricted so as to increase as far as possible the gross sales of each store. It is apparent that in towns of 1,000 families having incomes of \$1,250, the estimated expenditures will provide adequately for food stores. One variety store which carries apparel and all sorts of household needs could exist on the expenditures for such items. There does not seem to be sufficient expenditure to maintain a typical chain drug store. However, independent stores are often operated on smaller margin and a drug store carrying on other types of business might be operated successfully.

Recreation needs outside of those supplied as part of the community facilities should be limited to a small movie house. A careful study should be made in regard to the possibility of successful operation in a small community and of the probability of increasing the patronage from outside of the town.

A combined filling station and auto accessory and repair shop could operate within the town independently of transient trade.

Expenditures for fuel would not maintain a commercial coal company. This could be bought through outside dealers or by setting up a cooperative.

A laundry service would probably be from a nearby town, although an agent might have space in the shopping center.

4. General Policy in regard to stores

Store properties will be owned by the town and income from stores will be used to decrease dwelling rentals.

The stores must therefor be efficient units, prices must be low and service at least as good as in neighboring

communities. This will guarantee a large proportion of residents' expenditures to the local shopping center.

5. Planning Requirements

One shopping center is sufficient for a 4000 population town. This center ought to be within one-half mile of all dwellings. In larger towns of 6,000 or 7,000 population, there should either be two separate complete centers, or better still, one major center and several neighborhood food stores. The number of centers may be affected by contour conditions.

6. Location of shopping center

Locations are affected by the contours and the relation to the residence areas and the main approaches to the town - it is important that residents pass the center on the way in or out of the town. However it is even more important that shopping centers be placed within easy and safe walking distance of all dwellings. As the approach usually should be through the park areas, access should be possible from park walks, without crossing vehicular roads. Adequate parking space for cars should also be provided.

7. Store Areas and layout

The layout and size of the stores is affected by the method of merchandizing. The following estimates of

space requirements for towns of 3,000 - 4,000 population are based on the experience of certain chain stores:

Store areas

Grocery and Meat (2 or 3 stores) 3000-3500 sq. ft.

Variety

6000 sq. ft.

Drug

2500 sq. ft.

Movie House

500-600 seats

Gas station and minor repairs

ESTIMATED LOCAL STORE FAMILY EXPENDITURES Based on \$1250 income budget for a family of 4 persons

Item	Total Annual Expenditure	Local Store Expenditure	Per Capita Expenditure
Food	\$475-520	\$475	\$118.75
Clothing	\$145	\$ 50	\$ 12.50
House operation Coal \$53 Oil 8 Electricity 12 Household supplies 8 Ice 9	\$ 90	\$ 17	\$ 4.25
Furnishings & Equip.	\$35-55	\$ 45	\$ 11.25
Recreation and Education School supplies \$5 Newspapers, etc. \$8-10 Recreation (movies, trips, children's toys) \$22-45	\$35-60	\$ 10 (not incl. movies)	\$ 2.50
Personal Tobacco, soft drinks, etc. \$10.00 Barber shop, toilet needs \$12.50	\$22.50	\$ 11	\$ 2.75
Medical Care First aid supplies, medicines \$15 Services \$15-35	\$30=65	\$ 10	\$ 2.50
		\$618	\$154.50

NOTE on Transportation Expenditures. Amounts provided are only adequate where 5 cent fare transportation is available. The \$45 transportation allowance plus the \$50 provided for savings will be necessary to meet the extra costs of transportation in Suburban Resettlement towns. Local conditions will have to be studied carefully in relation to this item. Further data on automobile expenditures is being prepared.

NOTE on Motion Picture Expenditures. Most of the recreation item will probably be spent in the local movie house. However this item is not included in the estimate of store expenditures as our shopping facilities are not affected by it. A town of 4,000 population can support a 500-600 seat movie house.

ESTIMATED ANNUAL STORE EXPENDITARES BY TYPES OF STORE--NUMBER OF STORES SUPPORTED BY 1000 FAMILIES Based on \$1250 income budget for a family of 4 persons

STORE	ITEM	PER	PER 1000 FAMILIES	AVERAGE SALES PER CHAIN STORE 1921-1930 (varies irregularly with size of chain)	APPROXIMATE NUMBER OF STORES
Frocery and meat	Food \$475 Household sup.	\$483	\$483,000	\$45,000 to \$170,000	3 Large stores
Wariety Ory goods and apparel	Clothing \$50 Furnishings & Equipment 40 Barbering 4 Personal care 1 School supplies 5	100	100,000	\$50,000 to \$250,000 \$30,000 to \$150,000	1 combination
Drug	Medical care 10 Books, newspapers, etc. 5 Household appliances 5 Tobacco 3 Soft drinks 3	26	26,000	\$60,000 to \$150,000	A small independ- ent drug store could operate.
Filling Stations Accessories Repairs	Automobile	25	25,000		Would depend on number using autos for transporta- tion to work.
Coal, oil	Fuel 40 Ice 9	49	49,000		Would depend on policy
Movie, etc.	Recreation	20	20,000	ccommodated, there will be	Further study required to determine if town can support a small movie house

NOTE: As the town grows and/or as higher income groups are accommodated, there will be need for other type as well as more stores. These would include service stores e.g., tailor, laundry & cleaner, barber & beauty shop and, also such retail stores as shoe, millinery, electrical supply, hardware.

FAMILY BUDGETS:

United States Department of Agriculture Bureau of Home Economics Economics Division

Tentative budgets for a year for families of four persons in a Suburban Resettlement Community*

Note: These budgets are based upon prevalent ways of spending as shown by studies of family expenditures. For food, adequacy as measured by nutritional standards, is used as a basis for the suggested budget. For the remaining items of the budget, adequacy can be determined only by studies of the consumption habits and needs of families in each of the localities. These budgets suggest what may be the broad spending patterns of a group of families at each of the three income levels; they are not presented as examples of desirable spending plans for all families. A family budget, to be suited to a specific family must be planned to meet its needs and desires under existing conditions. Each budget is set up with a range in expenditures for most items. Since the low total is in each case somewhat less than the suggested income level, there can be a little leeway in spending on some items. Obviously, a family cannot spend the top figure for many items without spending less than the bottom figure for others, if it is to keep within its income.

Item	Level A \$900 yearly income	Level B \$1,250 yearly income	Level C \$1,600 yearly income
Food	\$400 - 475	\$475 - 520	\$560
Clothing	100 - 125	135 - 165	165 - 200
Housing	180	280	330
House operation (fuel, light, household supplies)	70 - 80	90 - 115	125 - 155
Furnishings and equipment (replacements)	20 - 35	35 - 55	45 - 75
Transportation	35 - 40	40 - 50	45 - 60
Recreation and education	20 - 30	35 - 60	55 - 75
Personal	10 - 25	20 - 30	30 - 45
Medical care	25 - 45	30 - 65	45 - 100
Community welfare (church, gifts, charity)	0 - 15	10 - 35	25 - 75
Savings Total	0 - 10	50 - 100 \$1,200-1,475	75 - 125 \$1,500-1,800

Family includes: husband, wife, boy aged 10, girl aged 8.
Suggestions for expenditures are based upon 1935 price levels.
For details and explanation of each expenditure item see following pages.

^{*} Charts referred to as "hectographed" are reproduced on pages 29,37, 38. and 39.

Discussion of Tentative Food Budgets

The hectographed table which follows shows the proportion of its income a family of four might spend for food, according to the diet chosen and the amount of income. Referring to this it will be seen that a minimum-cost adequate diet is suggested as a possible and perhaps a suitable choice for the family of four having from \$800 to \$1,800 per year for all expenditures. The three tentative expenditure levels -- \$900, \$1,250, and \$1,600 -- all fall within this range. However, it is possible that in actual practice a family with a \$900 income will spend a little less than the "minimum-cost adequate diet" might cost, while the family with a higher income probably would spend more for food. We have, therefore, worked out two possibilities for the \$900 income family, two for the \$1,250 income, and one for the \$1,600 income.

For some time this bureau has used the term "an adequate diet at minimum cost" to describe a rather specific dietary plan and has computed its cost from time to time, using average retail food prices as collected in a number of cities by the Bureau of Labor Statistics. The cost of this suggested diet for a family of four (two moderately active adults, a boy aged about 10 years, and a girl aged about 8) is now about \$475 a year according to average prices in the United States. In some localities this assortment of foods might cost less; in other more. The cost might be increased or decreased according to the stores the buyer patronized and the forms and kinds of foods she chose within each group.

An expenditure of \$475 for food represents almost 53 percent of an income of \$900. If this sum seems too high, it might be reduced to about \$400. This could buy a diet that lies in cost and in nutritive value about half way between the bureau's suggested minimum-cost and the suggested restricted diets. A description of each of these plans is attached.

The family of four with \$1,250 for all expenses might spend \$475 for food and obtain an adequate diet at minimum cost. If it increased its food expenditures to \$520 a year it could have a variety of foods somewhat better in nutritive value than the minimum-cost adequate plan.

The family with \$1,600 might spend \$560, and have a diet that in cost is half way between the bureau's suggested minimum-cost adequate and the suggested moderate-cost adequate plans. Sheets describing each of these plans are enclosed.

So much depends, however, on what a family buys for its food money that expenditures alone do not measure the nutritional adequacy of diets. It is for this reason that the bureau has set up several suggested diet plans that differ in nutritive value and in cost, and for each plan has worked out the quantities of different kinds of food needed for a week and for a year by individuals and by family groups. The costs of these commodity budgets (arrived at by pricing the quantity lists, at average United States retail prices) may be compared with actual food expenditures at different income levels. However, the bureau food plans give much higher nutritive value in return for the money spent than families obtain from an identical expenditure when selecting food in accordance with practices commonly followed.

United States Department of Agriculture Bureau of Home Economics

Family of four Proportion of its income this family might spend for food, according to the diet chosen and the size of income

Camily of incom approxim		Might select this kind of diet		Costing at average United States Prices May 7, 19352	
Per week	Per year		Per week	Per year	annual income
\$115 100 75	\$6,000 5,000 4,000	Liberal Liberal or moderate-cost Liberal or moderate-cost	\$16.50 16.50 or \$12.50 16.50 or 12.50	\$860 860 or \$650 860 or 650	14 17 or 13 22 or 16
60 50 40	3,000 2,500 2,000	Moderate-cost Moderate-cost Moderate-cost or minimum-cost	12.50 12.50 12.50 or 9.15	650 650 650 or 475	22 26 33 or 24
35 30 25 20 15	1,800 1,500 1,200 1,000 800	Minimum-cost Minimum-cost Minimum-cost Minimum-cost Minimum-cost or restricted	9.15 9.15 9.15 9.15 9.15 or 6.15	475 475 475 475 475 475 or 320	26 32 40 48 59 or 40
12	700 or less	Restricted	6.15	320	46 or more

^{1/} Two moderately-active adults, boy 10 and girl 8.

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For further descriptions of these diets see pages 37, 38, 39.

 $[\]frac{2}{}$ Based on average retail prices in the United States for May 7, 1935, as reported by the U. S. Bureau of Labor Statistics

	Voowler	Approxi-	Approxi- mate per-	What the proposed expenditures may buy in terms of Bureau of Home Economics suggested diet plans
Yearly income	Yearly cost of food	mate monthly cost of food	0	would obtain (at present average retail food prices in cities in the U.S.) a diet somewhat below generally accepted standards for nutritional adequacy. With this amount of money it is difficult to obtain a sufficient surplus of such protective foods as milk, eggs, ci-
				trus fruits, tomatoes and green vegetables to insure good health over an indefinite period of time. With wise selections, \$400 could pro-
Level A	\$400	\$33.35	44	vide an assortment of food somewhat better in nutritive value than
\$900	to 475	to 39.60	to 53	the Bureau's restricted diet suggested for emergency, but not quite so good as the Bureau's minimum-cost adequate diet. (See hectographed descriptions of restricted plan and of minimum-cost adequate plan).
				With careful selections, \$475 for a family of four can buy (at present average food prices) an assortment of food typical of the Eureau's suggested adequate diet at minimum cost. This is the cheapest combination of foods that it is desirable to use for an indefinite period of time. In order to meet all nutritional needs as cheap-
Level B	\$475	\$39.60	34	ly as possible, this diet has a large quantity of cereal products and
\$1,250	to 520	to 43.35	to 42	milk as its basis. Just enough of vegetables, fruits, eggs, and lean meets are used to supply vitamins, minerals, and protein not adequately furnished by bread and milk, and enough of fats and sweets are included to round out the calories. The choice among the different kinds of foods is considerably limited by cost, and careful selection among the most nutritious of the less expensive kinds is essential.
				With wise selections, \$520 to \$560 a year for a family of four can buy a diet that provides all of the different nutrients in sufficient quantities to keep adults and children in good nutritional
Level C \$1,600	\$560	\$46,65	35	condition, with a reasonable surplus for safety. Such a diet should include a generous amount of milk and slightly more than a minimum adequate supply of vegetables, fruits, eggs, and lean meat. Such an expenditure could obtain, them, a diet a little better in nutritive value and in pleasing variety than a minimum-cost adequate one, but not quite so good as the Bureau's suggested moderate-cost adequate plan. (See hectographed descriptions of these two plans for comparison of their content.)

Description of Budget Items Other Than Food

CLOTHING

Estimated annual expenditure for clothing (1935 prices)

Family member	Level A \$900 yearly	Level B \$1,250 yearly	Level C \$1,600 yearly	
Father	\$35	\$50	\$60	
Mother	30	35	40	
Boy aged 10	25	35	45	
Girl aged 8	20	25	30	
Total	\$110	\$145	\$175	

Clothing expenditures at all three levels are less than are estimated in the budget prepared by the Council of Social Agencies, Washington, D. C., for "a standard of living which would assure a maintenance of health and the minimum essentials of wholesome social life." There is likelihood that the families spending the low amounts may be inadequately clad, if the climate is cold. The adequacy of the clothing at all three levels will depend upon skill in buying, care of garments, health and vigor of family members, occupation of husband, climate, etc. It is assumed that the wife does not work outside her home. If she is employed, her clothing expenses will be increased and those of other family members may rise, due to her lessened time for mending and other care of garments.

For suggestions as to items of clothing which might be included in low-cost clothing budgets, see "Clothing the family at minimum cost," a pamphlet prepared by the Clothing Section of the New York Budget Committee.

HOUSING

Figures for housing were furnished by the Suburban Resettlement Administration. No data are available as to what housing can be purchased for these sums of money.

HOUSEHOLD OPERATION

Estimated annual expenditures for household operation, including fuel, electricity, cleaning and laundry supplies, bathroom supplies, etc.:

Item		Level B (\$1,250 yearly)	
Coal (soft coal) Dil for cooking in summer, and at Level A	\$45	\$53	\$60
for lighting	17	8	10
Electricity	-	12	22.50
Nousehold supplies	8	8	18.50
ce	5	9	15
	\$70	\$90	\$125.00

No allowance has been made for expenditures for telephone or water. If water must be bought, other budget items will have to be pared. It is assumed that no laundry will be sent out and no paid help will be employed in the household, at Levels A and B.

Fuel and light

According to estimates made for the City of Washington, approximately $6\frac{1}{4}$ tons of soft coal (costing about \$53) are needed for heating a 5-room house and for cooking during winter months. The amount allowed for heat at Level A might be inadequate unless heating appliances were efficient and were carefully used, or the construction of the dwelling was such as to lessen fuel requirement. If kindling is bought, coal expenditures must be decreased, or economies must be made elsewhere.

Kerosene for cooking during summer months is allowed at all three levels. The estimated expenditure of \$17 at Level A (which also includes kerosene for lighting), is approximately \$2 less than the amount estimated as necessary by the Washington Council of Social Agencies.

Electricity is not included in the estimated expenditures of families at Level A. The amount given for Level B would call for strict economy, and would not permit use of an electric iron. The amount estimated for Level C allows for use of electric iron, but necessitates economy in use of lights.

Household supplies

Household supplies include cleaning and bathroom supplies such as soap and brushes; postage, stationery; matches; electric light bulbs; supplies for sewing and for canning; yard supplies, as grass and flower seeds; etc. The amount allowed at Level C permits sending out some laundry, at a cost of not more than 30 cents a week. This pays, at commercial laundry rates in Washington, D. C., for a little more than a 3-sheets a week bundle.

Ice

If the city family does not use ice, its food expenditures in summer will be increased, because butter, milk, and many other foods can only be bought in small quantities for daily use. The \$5 estimated for Levels A and B would allow for purchase of ice for seven weeks during hottest summer weather at 10 cents per day and the allowance of \$15 would permit use of same quantity for 22 weeks or more for a shorter time. Temperature of locality will determine adequacy of these estimates, but there are few localities where the estimate of \$5 would be adequate.

FURNISHINGS AND EQUIPMENT

The estimates given for Levels A and B (\$20 to \$35 for Level A; \$35 to \$55 for Level B) allow for replacements of bedding, towels, cooking utensils, jars for canning, dishes, cleaning and laundry equipment, and for repairs of furniture. No allowance is made for buying additional furnishings and equipment. The estimate for Level C might permit occasional purchases of additional furnishings and equipment, if carefully budgeted.

TRANSPORTATION

The estimate of \$35 to \$40 for Level A is as follows:

For husband:

600 carfares @ 5 cents, to and from work

\$30.00

For wife and other family members:
2 carfares weekly (10 cents) for
household errands

\$35.00

No allowance is made for carfares for children, it being assumed that they will walk to school, and to shopping centers when they go. This estimate would be inadequate in localities where carfare is more than 5 cents, or where children have to ride to school. The estimate for the wife and other family members might be inadequate if the wife has to go far to a shopping center, or if family members have to pay transportation costs to obtain medical services, etc.

Estimates for Levels B and C are more generous but might be inadequate if 5 cent transportation is not available.

RECREATION AND EDUCATION

This item includes school supplies for the children, newspapers and other reading matter, occasional recreation such as attendance at movies, outings in the country; playthings for children. Estimated annual expenditures are:

Item	Level A \$900 yearly	Level B \$1,250 yearly	Level C \$1,600 yearly \$5 \$10 - 15 \$40 - 55	
School books	\$7	\$5 \$8 - 10 \$22 - 45		
Total	\$20 - 30	\$35 - 60	\$55 - 75	

At all levels, it is assumed that school books will be furnished without charge but that school supplies such as tablets, pencils, etc., must be bought, at an estimate of \$2.50 for each child (\$5 for both).

At Level A, a daily newspaper (including Sunday) will cost about \$7 per year. After paying for school books and newspapers there remains \$8 to \$18 for occasional attendance at movies, trips to the country, or other family recreation, for playthings for the children, etc. Social agencies have estimated that an urban family of this composition should have as a minimum about \$36 a year for recreation (10 cents per child per week and 25 cents per adult) for a "normal standard of living." The estimates for Level A and the lower estimate for Level B are both too small to permit an expenditure of this amount. Toys for the children will take a part of the recreation money, thus reducing the amount for commercial recreation.

At the lowest level, books must be borrowed from and periodicals read at public libraries if the family is to enjoy any reading material except the daily paper.

PERSONAL

Personal expenditures include: services of barber and beauty parlor; toilet supplies, such as tooth brushes, tooth paste, razor blades, cosmetics; tobacco; any personal "treats" such as soft drinks and other beverages. Estimates are as follows:

Item	Level A	Level B	Level C	
	\$900 yearly	\$1,250 yearly	\$1,600 yearly	
Tobacco, soft drinks, etc Barber shop and toilet needs	\$5.00	\$10.00	\$15.00	
	7.50	12.50	20.00	
Total	\$12.50	\$22.50	\$35.00	

At Level A, an estimate of \$5 per year (10 cents per week) for tobacco and drinks is low. In actual practice, if the husband smoked, he probably would spend much more than this sum, cutting expenditures for food or other items. The estimate of \$7.50 for personal care and toilet articles would permit one 25 cent hair cut per month for the husband (\$3.00) if hair cut can be obtained at this price. The children's hair will have to be cut at home, since the remaining \$4.50 must buy razor blades, tooth brushes, cosmetics, and all toilet supplies. If the wife has short hair, money for her haircuts will have to be obtained by reducing expenditures for some other item in the general budget.

MEDICAL CARE

This budget item includes all expenditures made for medical care, in its broad sense, such as expenditures for the home first aid and medicine chest; fees of doctor, surgeon, oculist, dentist, nurse; hospital care; laboratory work and X-rays; eyeglasses; surgical appliances, special treatments.

In these three budgets, however, it is assumed that some medical care is provided by public funds; that free or low-cost clinics are available for the lowest income level; that reduced rates are given for services of physicians and surgeons and for hospital care, even at the highest of the three levels. Families at the lowest level could not meet the costs of adequate medical care in a year when there were no serious illnesses. At the highest of the three levels, the family might provide adequate medical care as long as the members had only minor ailments, but could not meet costs of serious illness involving prolonged hospital care, services of surgeon or physician over a long period, or other heavy expenses. Estimated expenditures are as follows:

Item	Level A \$900 yearly	Level B \$1,250 yearly	Level C \$1,600 yearly	
Supplies for first aid, and for home medicine chest; medicines	\$10	\$15	\$20	
dentists, nurses, etc	\$15 - 35	\$15 - 50	\$25 - 80	
Total	\$25 - 45	\$30 - 65	\$45 - 100	

At level A, the \$15 to \$35 allowed for services might be spent largely at clinics which may charge fees ranging from 25 cents each for children to 50 cents or more for adults. Dental clinics usually charge for supplies used, in addition to a basic fee. Except for a minimum number of free visits from a public health nurse for certain types of care, a family usually is expected to pay a small fee for her services.

At the upper range of level C, a family might be able to pay the prevailing rate for the service of a physician, dentist, or nurse, provided there were only a small humber of visits to the doctor's office, routine dental examinations, and a short period of nursing care.

COMMUNITY WELFARE AND GIFTS

This expenditure item includes contributions to church and charity, personal gifts to relatives and others, contributions to the support of relatives, and dues to such organizations as unions. Estimated expenditures are as follows:

Item	Level A \$900 yearly	Level B \$1,250 yearly	Level C \$1,600 yearly	
Church and charity	0 - 7	\$5 - 10 3 - 20 2 - 5	\$10 - 15 13 - 55 2 - 5	
Total	\$0 - 15	\$10 - 35	\$25 - 75	

At Level A, the family might contribute 10 cents per week or about \$5 per year to the church. Gifts to parents of the husband and wife, or contributions to neighbors in distress might amount to \$7, and organization dues to \$3. Such expenditures would be at the upper limit estimated for this budget and would necessitate economy on other items. Data from various studies indicate that many families will be called upon to help in the support of relatives and that expenditures higher than those estimated above may be necessary, unless State provision is made for care of the aged.

At the higher income levels, (B and C) the family may contribute more to church, charity, and relatives. Few families having an income of \$1,600, however, would spend the upper limit suggested (\$75) except when contributions were needed to help relatives unable to support themselves.

SAVINGS

Life insurance is likely to be the form of saving most commonly used by these low income families. Some may contribute to group pension funds for old age and illness; and some, especially at the two upper levels, may have small savings accounts, or other investments. Estimated disbursements for savings are as follows:

Item	Level A	Level B	Level C	
	\$900 yearly	\$1,250 yearly	\$1,600 yearly	
Life insurance policies Other savings	\$0 - 10	\$20 - 40	\$45 - 75	
	0 - 0	30 - 60	30 - 50	
Total	0 - 10	50 -100	75 -125	

Since a family at Level A can scarcely achieve a health and decency level of living with its income, savings would not be recommended. However, many families at this level carry industrial life insurance policies, at a cost of about 10 cents per week per policy.

Some families at Levels B and C may be able to build up small savings accounts in years when there are no demands upon their incomes except for family living expenses estimated in these tentative budgets. However, the family is rare that does not have to meet, during the year, emergency expenses for which no allowances have been made, such as costs of moving to a new location, replacements of furnishings due to fire, flood, or other accidents, unexpected requests from relatives for help, or the costs of serious illness, accident, childbirth, or death.

-37-United States Department of Agriculture Bureau of Home Economics RESTRICTED DIET The restricted diet plan is suggested only for emergency use. because it may not provide a sufficient surplus of protective foods (milk, eggs, citrus fruits, and green vegetables) to insure good health over an indefinite period of time. Because of the very limited quantity of the protective foods it contains, very wise choice from among the cheapest most nutritious foods must be made for this diet. Even with its shortcomings, it is a better diet for the amount of money it costs than would be obtained by choosing foods at random, and it does allow for some variety as the following list shows: Milk: 1 pint daily for each child) to drink or in cooked food 1 cup for each adult Vegetables and fruits (some raw): about $2\frac{1}{2}$ to 3 servings daily 8 to 9 servings a week of potatoes and sweetpotatoes (once a day, sometimes twice) 2 to 3 servings a week of tomatoes (or of citrus fruits in season) for each adult and child over four; 4 tablespoons of tomato juice or 2 tablespoons of orange juice daily for each child under four 3 small servings a week of leafy, green, or yellow vegetables 2 to 3 servings a week of dried beans, peas, or peanuts 3 to 4 small servings a week of other vegetables or fruits Eggs: once a week for adults, twice for children under four Meat or fish: 2 servings a week (more frequently if the meat dish is often a meat and cereal combination so that the weekly meat allowance is not exceeded) A cereal dish at least once a day, usually twice Bread in some form at every meal, butter at some meals Dessert occasionally; cereal pudding, gingerbread, or one-egg cake, and dried fruits or other inexpensive kinds are suitable This diet could be purchased September 10, 1935 for about \$3.25 a week or \$170 a year for two moderately active adults; for about \$6.10 a week or \$320 a year for a family of four (two moderately active adults, boy 10 and girl 8); for about \$10.50 a week or \$545 a year for a family of seven (two moderately active adults, girl 15, boy 13, boy 10, girl 8, and child 3). 1/ Based on average retail prices in the United States for September 10. 1935, as reported by the U. S. Bureau of Labor Statistics. RSC 6-27-35

-38-United States Department of Agriculture Bureau of Home Economics MINIMUM-COST ADEQUATE DIET The minimum-cost adequate diet is the cheapest combination of foods that it is desirable to use for an indefinite period of time. In order to meet all nutritional needs as cheaply as possible, this diet has a large quantity of cereal products and milk as its basis. Just enough of vegetables, fruits, eggs, and lean meats are used to supply vitamins, minerals, and protein not adequately furnished by bread and milk, and enough of fats and sweets are included to round out the calories. The choice among the different kinds of foods is considerably limited by cost, and careful selection among the most nutritious of the less expensive kinds is essential. The list which follows indicates the number of servings of different foods per person for the day or the week: Milk: 1 quart daily for each young child To drink or in 3/4 of a quart daily for each child over four) cooked food 1 pint for each adult Vegetables and fruit (some raw): from 3 to 4 servings per person daily 8 to 9 servings a week of potatoes and sweetpotatoes (once a day, sometimes twice) 2 to 3 servings a week of tomatoes (or of citrus fruits in season) for each adult and child over four; 4 tablespoons of tomato juice or 2 tablespoons of orange juice daily for each child under four 5 to 6 servings a week of leafy, green, or yellow vegetables 2 to 3 servings a week of dried beans, peas, or peanuts 1 serving daily of fruit or an additional vegetable (including some leafy, green, or yellow kinds) Eggs: 2 to 3 times a week for adults; 4 to 5 times for young children; a few in cooking. Meat or fish: 3 to 4 times a week (more frequently if the meat dish is often a meat and cereal combination so that the weekly meat allowance is not exceeded). A cereal dish once a day, sometimes twice. Bread at every meal; butter at some meals. Desserts about once a day if desired; cereal pudding, cookies, simple cake, shortcake, and inexpensive pastries and fruits are suitable. This diet could be purchased September 10, 1935 for about \$4.85 a week or \$250 a year for two moderately active adults; for about \$9.15 a week or \$475 a year for a femily of four (two moderately active admlts, boy 10 and girl 8); for about \$15.60 a week or \$810 a year for a family of seven (two moderately active adults, girl 15, boy 13, boy 10, girl 8, and child 3). 1/ Based on average retail prices in the United States for September 10, 1935, as reported by the U. S. Bureau of Labor Statistics. RSC 10-14-35

United States Department of Agriculture Bureau of Home Economics

MODERATE-COST ADEQUATE DIET

The moderate-cost adequate diet is well described by its name. For a reasonable amount of money it provides all of the different nutrients in sufficient quantities to keep adults and children in good nutritional condition, with a surplus for safety. It contains a generous amount of milk and plenty of vegetables, fruits, eggs, and lean meat so that it allows for considerable variety from meal to meal and from day to day, as the following list shows:

Milk: 1 quart daily for each child) to drink or in cooked food

Vegetables and fruits (some raw): $4\frac{1}{2}$ to 5 servings per person daily

1 serving daily of potatoes or sweetpotatoes

1 serving daily of tomatoes or citrus fruits

1 serving daily of leafy, green, or yellow vegetables

3 to 5 servings a week of other vegetables

1 serving daily of fruit

Eggs: 2 to 3 times a week for adults: 4 to 5 times for young children; a few in cooking

Meat, fish, or poultry; about 5 times a week. (Once a day if the meat dish is sometimes a meat and cereal combination so that the weekly meat allowance is not exceeded.)

A cereal dish daily.

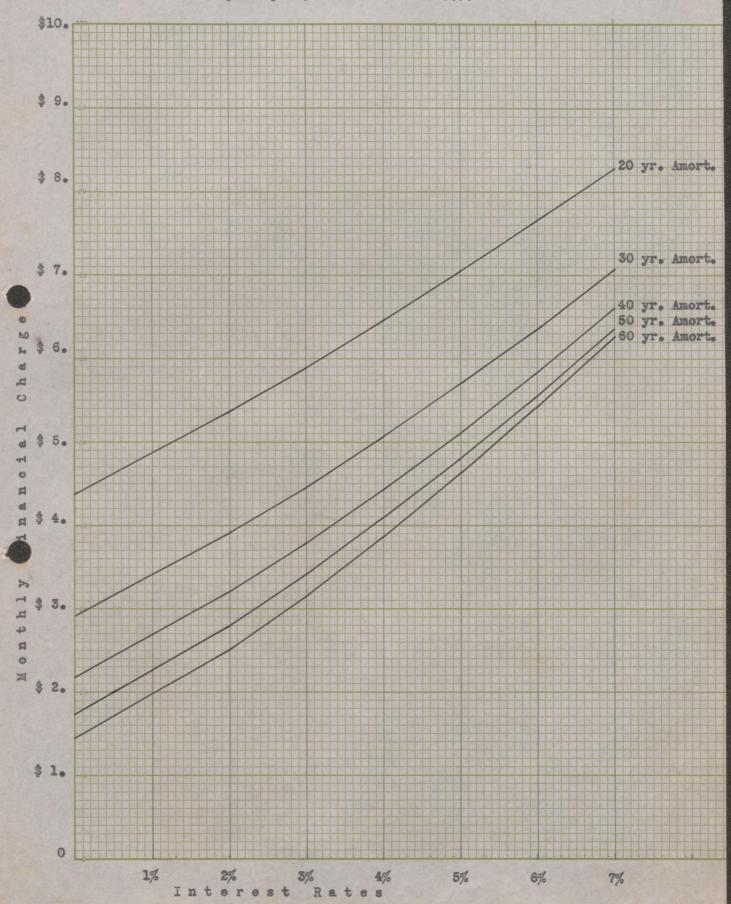
Bread and butter at every meal.

Dessert once a day, sometimes twice, if desired

The cost, about \$6.50 a week or \$335 a year for a family of two at prices as of September 10, 1935, is well within the reach of many families in this country. For a family of four (two moderately active adults, boy 10 and girl 8), the cost of this diet was about \$12.40 a week or \$640 a year; for a family of seven (two moderately active adults, girl 15, boy 13, boy 10, girl 8, and child 3), about \$21.25 a week or \$1,100 a year.

^{1/} Based on average retail prices in the United States for September 10, 1935, as reported by the U. S. Bureau of Labor Statistics.

AMORTIZATION and INTEREST CHART Relation of Amortization Periods, Interest Rates, and the Rents Due to These Financial Charges - per \$1000. of Initial Cost



RENTAL CHARGES DUE TO AMORTIZATION PERIOD AND INTEREST RATES PER \$1000 OF FIRST COST (5% vacancy factor included in monthly charge)

INTEREST RATES

	0%	1% 2%	3%	4%	5%	6%	7%
60 yr. Amort.							
Yearly Monthly	\$16.66 1.46	\$28.80 2.52	\$36.10 3.16	\$44.20 3.88	\$52.80 4.63	\$61.90 5.43	\$71.20 6.25
50 yr. Amort.							
arly	20.00	31.80 2.79	38.90 3.41	46.60 4.09	54.80 4.81	63,40 5,56	72.50 6.36
40 yr. Amort.							
Yearly Monthly	25.00 2.19	36.60 3.21	43.30 3.80	50.50 4.43	58.30 5.11	66.50 5.83	75.00 6.58
30 Yr. Amort.							
Yearly Monthly	33.33 2.92	44.60 3.91	51.00 4.47	57.80 5.07	65.10 5.71	72.60 6.37	80.60 7.07
20 Yr. Amort.							
Yearly	50.00 4.39	61.20 5.37	67.20 5.89	73.60 6.45	80.20 7.04	87.20 7.65	94.40 8.28

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