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Group Homes for the Developmentally Disabled: Case Histories of Demographics, Household Activities, and Room Use

A. M. Ramey-Smith
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Consumer Sciences Division
Center for Consumer Product Technology
National Bureau of Standards
Washington, D.C. 20234

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Final Report

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Prepared for the Center for Fire Research, in support of:
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Table of Contents

Acknowledgments

The staff of nine group homes volunteered to participate in this study. Although they shall remain anonymous to respect the privacy of their residents, we offer our sincere appreciation to all the staff involved in supplying the data and to the administrators who allowed the group homes to participate. Without the cooperation and patience of these individuals, this investigation would not have been possible.

Thanks also to Jennifer Gagnon, Barbara Stanton, and James Cole whose assistance in data reduction was invaluable in the preparation of this report. And lastly, thanks to Kim Leaman and Bonnie Matteson for their secretarial support.

List of Tables

Abstract

This document is the final report to the National Bureau of Standards' Center for Fire Research as part of their support to the Office of Human Development Services of the U.S. Department of Health, Education and Welfare. The major objective of the present study is to provide data necessary for the development of life safety codes appropriate for group homes for the developmentally disabled. Survey techniques were used to compile summary data on residents' room use and activities, characteristics of the group home facilities, and demographics of the supervisors and residents. Data are presented for room use and activities of developmentally disabled residents and these data are compared to results available for the normal population. Recommendations are presented regarding fire safety for developmentally disabled residents of group homes.

Introduction

The major objective of the present study is to provide data necessary for the development of life safety codes appropriate for group homes for the developmentally disabled. The current trend in housing of the developmentally disabled is away from institutions and toward community-based group homes. Hence, appropriate fire protection for these homes has become a major consideration of life safety professionals. Due to budget constraints which exist within organizations operating group homes, it is important that "excessive" fire protection not be mandated. Also, fire protection features detract from the desired home-like ambiance. In order to determine what constitutes appropriate fire protection, it is necessary to determine what the capabilities and activities of developmentally disabled residents are and how the developmentally disabled differ from the normal population. With this information, safety codes may then be modified so that the developmentally disabled are not exposed to a level of risk thought unreasonable by code writers and regulators. The present study was performed to obtain case history information on a sample of group homes for the developmentally disabled.

Historically, developmental disabilities have been poorly understood. In 1672, Thomas Willis provided one of the first classification systems of mental deficiency.

> "Some being holy fools in the learning of letters, of the liberal sciences, are yet able enough for the mechanical arts. Others, of either of these incapable, yet easily comprehend agriculture or husbandry and country business. Others, unfit almost for all affairs are only able to learn what belongs to eating or the common means of living; others, merely dolts or driveling fools, scarce understand anything at all, or do anything knowingly." (Cranefield, 1961)

Since that first attempt at defining mental retardation, a better understanding has been achieved of this and other disabilities considered developmental in nature. Evidence of this better understanding of developmental disabilities is the Developmentally Disabled Assistance and Bill of Rights Act of 1975 (P.L. 94103). This law defines developmental disability as a disability which:

> "(A) (i) is attributable to mental retardation cerebral palsy, epilepsy, or autism; (ii) is attributable to any other condition of a person

found to be closely related to mental retardation because such condition results in similar impairment of general intellectual functioning or adaptive behavior to that of mentally retarded persons or requires treatment and services similar to those required for such persons; or (iii) is attributable to dyslexia resulting from a disability described in Clause (i) and (ii) of this subparagraph; (B) originates before such person attains age eighteen; (C) has continued or can be expected to continue indefinitely; and (D) constitutes a substantial handicap to such person's ability to function normally in society." [P.L. 94-103, Section 102(7)][1]

Many cerebral palsied and epileptic individuals are not necessarily developmentally disabled. This Act includes only those cerebral palsied and epileptic individuals with impairment of intellectual functioning or adaptive behavior resulting in a substantial handicap to normal functioning in society. Dyslexia was also named in P.L. 94-103, but "since it is limited to those who are also considered under mental retardation, cerebral palsy, epilepsy and/or autism, it is, in effect, excluded as a separate category." (Overboe and Wang, 1978, pg. 2)

For the benefit of those readers unfamiliar with the four developmental disabilities (mental retardation, autism, epilepsy, and cerebral palsy), brief definitions of each of the developmental disabilities are presented below. A detailed description of the specific disorders resulting from these conditions is provided in Overboe and Wang (1978).

Developmental Disabilities Defined

Mental Retardation "...significantly subaverage general intellectual functioning existing concurrently with deficits in adaptive behavior, and manifested during the developmental period." (Grossman, 1977) Mental retardation is usually divided into four levels--mild, moderate, severe, and profound (Overboe and Wang, 1978).

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[1]P.L. 95-602 (November, 1978) redefines "developmentally disabled" by functional impairment, deleting references to etiological categories of disability. The new definition of DD is: "a severe, chronic disability of a person which (a) is attributable to a mental or physical impairment or combination of mental and physical impairments; (b) is manifested before the person attains age twenty-two; (c) is likely to continue indefinitely; (d) results in substantial functional limitations in three or more of the following areas of major life activity: (1) self-care, (2) receptive and expressive language, (3) learning, (4) mobility, (5) self-direction, (6) capacity for independent living, and (7) economic self-sufficiency; and (e) reflects the person's need for a combination and sequence of special, interdisciplinary, or generic care, treatment, or other services which are of lifelong or extended duration and are individually planned and coordinated.

Autism "...a behaviorally defined syndrome. The essential features are typically manifested prior to 30 months of age and include disturbance of (1) developmental rates and/or sequences, (2) responses to sensory stimuli, (3) speech, language, and cognitive capacities, and (4) capacities to relate to people, events, and objects." (Overboe and Wang, 1978, p. 32) "It is probably the most severely handicapping condition of the developmental disabilities." (ibid, p. 39)

Epilepsy "...a disorder of the central nervous system marked by sudden and periodic lapses of consciousness (seizures) and unusual electrical discharges within the brain. ...The three major seizure classifications are (1) petit mal, (2) grand mal, and (3) psychomotor." (Keller, 1977)

Cerebral Palsy "The primary manifestation of the condition is a deficit in motor functioning. One or more of the following may be present: posture disorders, awkward and involuntary movements, poor balance, gait irregularities, muscle tightness, and speech or articulation problems. (Overboe and Wang, 1978, p. 15)

Deinstitutionalization and Normalization

As mentioned previously, the current trend in housing of the developmentally disabled is away from institutions and toward community-based housing. Deinstitutionalization involves the "return to the community of all residents who have been prepared through programs of habilitation and training to function adequately in appropriate local settings." (Paul, Stedman, and Neufeld (eds.), 1977, p.3) Nirje (1976) views an appropriate local setting as embracing the normalization principle. According to Nirje, "the normalization principle means making available to all mentally retarded people patterns of life and conditions of everyday living which are as close as possible to the regular circumstances and ways of life of society. ...Normalization also means that if retarded persons cannot or should not any longer live in their family or own home, the homes provided should be of normal size and situated in normal residential areas, being neither isolated nor larger than is consistent with regular mutually respectful or disinterested social interaction and integration." (Nirje, 1976, p. 231-232) The present study describes a sample of such homes and the characteristics of their developmentally disabled residents.

Procedure

Case history information was obtained from a sample of nine group homes for the developmentally disabled. The homes selected to participate in the study were chosen to provide variability within each of the following parameters:

location--including geographical location, rural versus urban setting, and city size;

resident population characteristics--including resident population size and developmental disability representation;

dwelling type--that is, single-family unit, apartment building, etc.; and,

resident independence--based on supervisor availability and resident responsibility.

The data reported in this document were obtained from 1) on-site observations at each group home; and, 2) information provided by the supervisors and staff of the homes. Data provided by personnel of the group homes can be divided into eight categories:

1. Description of Group Homes--including funding, number and sex of residents, dwelling type, floor plan, remodeling, heating system, and unique features;

2. Demographic Information on Group Home Staff--including number, age, sex, education, and staff scheduling;

3. Resident Characteristics-Demographics--including chronological age, mental age/level, number of years institutionalized, and disabilities;

4. Resident Characteristics-Adaptive Behavior Scale--residents' test scores for the AAMD Adaptive Behavior Scale;

5. Room Use--number of residents in each room of the group home, recorded every 30 minutes, night and day, for one continuous week;

6. Resident Activities--type of activities that occurred and the number of residents that were involved, recorded every 30 minutes for one continuous week;

7. Appliance Usage by Residents--a listing of electrical appliances within the group homes that residents use; and,

8. Fire Incidents--summaries of any fire incidents which had occurred in the group home.

During on-site visits to the group homes, discussions were held with supervisors and administrators regarding the tasks to be completed by them. The ninth category of data reported here is the Fire Drill Observations made by the authors during on-site visits.

Results

Data gleaned from the on-site visits and those supplied by the group home staffs are presented in this section. In order to facilitate use of this report by readers interested in particular segments of the data collected, each type of data collected is reported separately regarding the procedures used, the results achieved, and the conclusions and inferences drawn.

Description of Group Homes

Staff of the nine group homes sampled provided information describing the group homes with regard to geographical location, type of funding, number of residents, type of dwelling, remodeling done, heating system present, and any unique physical features. A summary of these characteristics are presented in Table 1. An inspection of Table 1 illustrates the cross-section of attributes that can be expected to exist among group homes for the developmentally disabled.

Generally, little in the physical structures and interiors of the group homes differentiated them from normal dwellings. Consequently, architectural design itself imposes no more fire hazard than normal homes. The differences which do exist are due primarily to features added to the group homes (such as fire escapes and sprinkler systems) in order to comply with mandatory local codes. Group homes housing physically handicapped residents also have devices such as hand rails and ramps, not generally found in normal homes. Floor plans and pictures of the group homes sampled are presented in Appendices A through I.

Structures which are presently being used as group homes can be reasonably predicted to vary greatly in terms of the attributes presented in Table 1. Fire safety professionals interested in creating a special section of the life safety code that reflects the unique needs of this population should consider the feasibility of implementing each suggestion in light of the wide variety of structures existing.

Table 1

Description of Group Homes

Group Home Location	Funding	Number of Residents	Dwelling Type	Remodeling	Heating System	Unique Features
North Carolina	Private, Non-Profit (state & federal funds)	5 males	Detached, single family	Added bathroom	oil	Older home in established residential neighborhood
Washington (A)	Private, Non-Profit (state funds)	4 males 2 females	Detached, single family	Added bathroom Finished basement	oil	Temporary facility while awaiting construction of permanent facility
Wisconsin	Private, Non-Profit (state & federal funds)	4 males 4 females	Detached, single family	Specially built for Group Home	bottled gas & electric	Modern home in rural setting
Florida	Private, Non-Profit (state & federal funds)	10 females	Detached, single family	Added two showers Added kitchen cabinets Remodeled laundry room	electric	Home is part of larger campus facility
New York	Private, Non-Profit (state funds)	8 males 4 females	Public Apartment Building	Connected adjoining apartments; widened bathroom doors	natural gas and oil	Six residents/double apartment two double apartments in facility
Georgia	Private, Non-Profit (state funds)	8 males 4 females	Cottages	Specially built for Group Home	natural gas	Rural setting; separate recreation and dining hall
Washington (B)	Private, for Profit (state & federal funds)	20 females	Detached, single family	Added fire escape Enlarged kitchen	natural gas	Large residence but retaining home-like atmosphere
Minnesota	Private, for Profit (state funds)	26 males 14 females	Private Apartment Building	Specially built for Group Home	natural gas	Facility contains 11 apartment units suitable for normal occupancy
Iowa	Private, Non-Profit (state & federal funds)	8 males 8 females	Cottages	Specially built for Group Home	natural gas	10 cottages and Training/ Recreation Building; all wheel-chair accessible.

Demographic Information on Group Home Staff

Group home staff provided information on the number, age, sex, education level, and availability of supervisors. As shown in Table 2, there is a wide range of ages and formal education among supervisors in the sample of nine group homes. In each home, supervisors are available during times when residents are in the facility. Without exception, the supervisors expressed their commitment to create and maintain a home-like environment conducive to the development of the individual residents. However, they also felt that with the trend towards an increased number of community-based group homes, it is possible that people working in group homes will have more limited experience with the developmentally disabled. For both present and future group homes, concern exists for training of staff in fire safety itself and teaching residents fire safety and evacuation; no widely accepted training requirements now exist.

Resident Characteristics-Demographics

Capabilities of developmentally disabled residents vary greatly among visited group homes. While some facilities house "cream of the crop" residents, others accomodate those more severely disabled, both mentally and physically. Table 3 summarizes data provided on residents' characteristics, including: chronological age, mental age/level, number of years institutionalized, and types of disabilities.

Future research should address the correlation between intellectual functioning and successful fire evacuation. Anecdotal evidence suggests that a linear relationship cannot be described by IQ and successful evacuation behavior. One group home supervisor offered that "in our experience residents who are less successful in evacuating are those which fall on the extreme ends...; that is, both very high and very low residents." With an increasingly large number of residents expected to come to group homes directly from the community (where little fire evacuation training usually occurs) rather than from institutions (where evacuation training is generally emphasized), fire evacuation training in group homes will become more crucial.

Resident Characteristics-Adaptive Behavior Scale

The American Association on Mental Deficiency (AAMD) Adaptive Behavior Scale (Nihira, Foster, Shellhaas, and Leland, 1975) was used as an index of adaptive behavior of the residents of the group homes in this sample. McDevitt

TABLE 2

Demographic Information on Group Home Staff

Group Home	Number of Staff	Average/ Median Age	Highest Education Level Attained	Staff Availability	
North Carolina	1 female 1 male	25.5/ 25.5	1 Technical Institute 1 Bachelors	Midnight - 6 am 6 am - 10 am 10 am - 4 pm 4 pm - 10 pm 10 pm - Midnight	Supervisor available but sleeping Supervisor available in dwelling Supervisor available on call Supervisor available in dwelling Supervisor available in dwelling
Washington (A)	5 females 2 males	28.1/ 25.0	1 Masters 3 Bachelors 2 High School 1 None	Midnight - 6 am 6 am - 10 pm 10 pm - Midnight	Supervisor available but sleeping Supervisor available in dwelling Supervisor available but sleeping
Wisconsin	5 females 1 male	41.0/ 47.5	Associate 3 Bachelors 2 High School	Midnight - 6 am 6 am - 10 pm 10 pm - Midnight	Supervisor available but sleeping Supervisor available in dwelling Supervisor available but sleeping
Florida	2 females	66.0/ 66.0	1 High School 1 None	11 pm - 6 am 6 am - 10 am 10 am - 4 pm 4 pm - 11 pm	Supervisor available but sleeping Supervisor available in dwelling No supervisor available in dwelling Supervisor available in dwelling
New York	14 females 7 male	29.6/ 25.5	1 R.N. and Masters 1 Masters 2 Bachelors 17 High School	Midnight - 6 am 6 am - Midnight	2 Supervisors available but sleeping 2 Supervisors available in dwelling
Georgia	4 females 3 males	34.1/ 27.0	1 Bachelors 2 High School 4 None	10 pm - 6 am 6 am - 10 pm	Supervisor available but sleeping Supervisor available in dwelling
Washington (B)	5 females	52.6/ 58.0	2 Bachelors 3 High School	Midnight - 6 am 6 am - 10 pm 10 pm - Midnight	Supervisor available but sleeping Supervisor available in dwelling Supervisor available but sleeping
Minnesota	4 females 3 males	26.7/ 26.0	4 Bachelors 3 High School	Midnight - Midnight	Supervisor available in dwelling and on call
Iowa	6 females 2 males	55.4/ 58.5	3 Bachelors 1 Bible College 3 High School	Midnight - Midnight	Supervisor available in dwelling

TABLE 3

Demographic Characteristics of Group Home Residents

GROUP HOME LOCATION	CHRONOLOGICAL AGE	MENTAL AGE/ LEVEL	NUMBER OF YEARS INSTITUTIONALIZED	DISABILITIES
North Carolina				
Mean	32	6 yr	13 yr	MR[1]
Range	26-40	4.6-8.0 yr	8-25 yr	
Median	31	6 yr	9 yr	
Washington (A)				
Mean	17	4 yr	3 yr	MR
Range	14-20	2.0-8.0 yr	0-7 yr	
Median	16	5 yr	2 yr	
Wisconsin				
Mean	32		15 yr	MR
Range	21-52	6 sev., 2 mod.	0-33 yr	MR (and Epilepsy)
Median	29		17 yr	
Florida				
Mean	24	10 yr	3 yr	MR
Range	17-29	7.5-13.6 yr	2-6 yr	MR (and CP[2] or dyslexia)
Median	24	10 yr	3 yr	Emotional Disturbance
New York				
Mean	15	5 yr	11 yr	CP
Range	10-19	1.7-7.1 yr	6-18 yr	CP (and legally blind)
Median	16	5 yr	10 yr	
Georgia				
Mean	28	10 yr	2 yr	MR
Range	18-48	6.0-13.0 yr	1-12 yr	Emotional Disturbance
Median	30	12 yr	2 yr	Mental illness
Washington (B)				
Mean	44	7 yr	25 yr	MR
Range	25-61	4.1-11.6 yr	3-52 yr	
Median	46	6 yr	21 yr	
Minnesota[3]				
Mean	34	MA 5 yr	14 yr	MR
Range	19-64	2.8-12.4 yr	0-60 yr	MR (and Epilepsy)
Median	30	4 yr	5 yr	
		IQ 55 yr		
		34.0-76.0 yr		
		54 yr		
Iowa				
Mean	32	--	7 yr	MR
Range	21-47	3 border, 4 mild, 4 moderate, 6 severe	0-30 yr	CP Emotional Disturbance MR (and CP, Epilepsy, Blind, or Amputation)
Median	28	--	6 yr	

[1]MR - Mental Retardation
[2]CP - Cerebral Palsy
[3]All demographic characteristics were not reported for all residents. Values are based only on actual numbers reported.

and McDevitt, 1977, provide a discussion of what the AAMD Adaptive Behavior Scale is and some limitations on its effectiveness. They state that:

> "Adaptive behavior is operationally defined by 110 behavioral items that reflect environmental demands placed upon mentally retarded individuals in personal and social functioning. The scale is divided into two parts. Part I was designed to assess 10 behavior domains considered important in the development of independence in daily living. Part II deals with the frequency of inappropriate behavior exhibited by the individual. Both are scored as norm-referenced tests, with decile ratings based upon a standardization sample of mentally retarded persons grouped by age... Several deficiencies in the design of the Adaptive Behavior Scale, Part II, ...seriously limit its effectiveness in some clinical and research applications... Unlike Part I where the standardization data appear roughly to approximate a normal distribution, scores for Part II are markedly skewed... Both the spurious elevation of profiles and the lack of sensitivity of decile rankings to extreme maladaptiveness present major difficulties in interpretation... Differences in severity of maladaptiveness are ignored. An individual who receives ratings for many kinds of mildly inappropriate behavior will have a higher score than the individual who is rated on one or more kinds of severely anti-social behavior." (p. 210-211)

Staff of the group homes were provided with copies of the AAMD Test Booklet (1974) which they administered to the residents in their respective homes. Although data are presented below in Tables 4 and 5 for Part I and Part II, considerable care should be taken in interpreting the results for Part II. The variability of scores indicates the wide range of capabilities in the nine different group homes. It can be assumed then that residents of group homes covered under a revised life safety code will run the full gamut of adaptive behavior capabilities.

The relationship between adaptive behavior scores and successful fire evacuation is unclear. Preliminary data on evacuation times during fire drills indicate short evacuation times regardless of adaptive behavior scores. However, the correlation between responses during fire drills and actual fire emergencies is unknown. In addition, data do not exist to allow comparisons of group home evacuations to evacuations

TABLE 4

AAMD Adaptive Behavior Scale, Part I
Average Percentile Ranks, Ranges, and Medians by Group Home*

GROUP HOME	INDEPENDENT FUNCTIONING	PHYSICAL DEVELOPMENT	ECONOMIC ACTIVITY	LANGUAGE DEVELOPMENT	NUMBERS & TIME	DOMESTIC ACTIVITY	VOCATIONAL ACTIVITY	SELF-DIRECTION	RESPONSIBILITY	SOCIALIZATION
North Carolina										
Average	48.40	99.0	95.8	63.6	51.4	92.6	29.8	22.8	89.2	44.6
Range	29-80	99**	90-98	51-79	18-78	82-99	25-34	12-40	71-99	40-55
Median	43	99	97	60	60	96	31	22	90	40
Washington (A)										
Average	34.17	79.0	36.83	48.83	43.33	68.17	40.50	24.50	70.0	23.17
Range	22-46	43-99	30-48	28-79	15-65	40-82	29-52	6-51	46-80	12-31
Median	34	84.5	33	47	46	76	38.5	21.5	72	25
Wisconsin										
Average	27.25	66.63	33.0	44.5	46.13	55.63	33.50	32.88	65.50	35.88
Range	20-50	21-98	22-70	22-87	24-98	22-80	21-70	19-51	31-90	3-85
Median	24	75.5	30	25	39.5	54.5	24.5	29.5	70.5	35
Florida										
Average	70.7	96.2	89.2	74.8	69.5	99.4	79.6	66.2	73.9	89.8
Range	51-85	71-99	59-95	52-99	53-99	94-99	55-99	42-99	70-99	69-99
Median	71.5	99	81	69	69	99	84.5	56	71	96
New York										
Average	15.58	4.58	52.17	45.92	45.17	40.42	52.75	40.33	77.92	74.92
Range	1-37	1-8	41-79	19-64	31-66	25-59	25-93	3-79	39-99	3-99
Median	9.5	4.5	49	52.5	42.5	49.5	66	48	91.5	99
Georgia										
Average	50.08	67.25	73.75	71.58	79.0	71.58	50.33	41.75	76.67	52.42
Range	11-97	20-99	28-99	29-99	3-99	21-99	26-99	3-99	22-99	4-99
Median	49	66.5	83	75	99	84.5	38.5	35.5	94.5	71
Washington (B)										
Average	52.90	46.30	56.55	35.50	46.95	83.50	60.30	35.0	71.95	69.90
Range	24-86	7-99	39-88	10-73	10-99	55-99	29-99	9-68	35-99	28-99
Median	53.5	48	53	25	45.6	89	71	34.5	71	75.5
Minnesota										
Average	49.90	58.18	67.63	59.00	57.00	83.68	53.90	48.04	73.04	67.59
Range	17-78	10-99	35-95	10-99	11-99	47-99	21-99	10-68	32-99	21-98
Median	49.5	54.5	69.5	53.5	59	91	49	50.5	86.5	68.5
Iowa										
Average	31.18	33.29	64.59	59.47	63.0	61.71	49.76	37.82	70.29	60.29
Range	4-66	3-99	30-91	27-99	11-99	27-96	21-99	4-99	35-99	1-97
Median	29	16	78	55	69	59	42	39	70	65

*The higher the percentile score, the more acceptable the behavior exhibited.

**All residents ranked in the 99th percentile.

TABLE 5

AAMD Adaptive Behavior Scale, Part II
Average Percentile Ranks, Ranges, and Medians by Group Home*

Group Home Location	Violent Destructive Behavior	Antisocial Behavior	Rebellious Behavior	Untrustworthy Behavior	Withdrawal	Stereotyped Beh. Odd Mannerisms	Inappropriate Interpersonal Manners	Unacceptable Vocal Habits	Unacceptable or Eccentric Habits	Self-Abusive Behavior	Hyperactive Tendencies	Sexually Aberrant Behavior	Psychological Disturbances	Use of Medications
North Carolina														
Average	43.20	48.40	60.00	44.80	54.00	59.80	70.80	74.00	64.00	76.00	74.00	74.20	52.80	53.40
Range	42-45	40-65	51-85	4-55	15-85	14-85	70-72	60-90	60-80	70-80	70-90	65-79	25-85	50-56
Median	43	45	52	55	50	70	70	70	60	80	70	76	45	55
Washington (A)														
Average	60.17	54.33	69.00	66.00	69.33	82.83	79.67	80.50	80.00	80.33	73.83	75.67	64.83	50.00
Range	40-83	15-80	53-81	50-95	50-99	60-95	70-94	64-95	60-96	70-90	65-99	55-96	30-96	50
Median	63.5	59	70	58	66	85.5	75	87.5	82	80	70	71.5	74.5	50
Wisconsin														
Average	62.50	75.87	85.50	64.87	80.00	77.12	79.12	92.00	83.00	77.50	87.50	78.75	75.12	64.75
Range	33-97	40-98	71-97	54-94	50-94	60-96	70-97	70-99	70-95	70-90	70-99	65-97	30-97	50-86
Median	55.5	77	88.5	58	89.5	81.5	77	96	82	80	90	80	87	61
Florida														
Average	43.00	53.70	51.30	61.10	60.20	59.00	70.00	70.10	64.00	70.50	73.60	74.40	52.00	57.60
Range	41-64	34-79	44-65	55-81	50-85	50-60	65-75	65-75	60-80	70-75	66-80	65.89	25-66	50-86
Median	42	59	47.5	57.5	54.5	60	70	70.5	60	70	70	76.5	53.5	50
New York														
Average	39.67	35.17	41	51.43	56.25	60.17	67.86	64.43	56.75	76.17	60-67	67.43	33.83	63.25
Range	38-43	31-39	35-46	50-55	50-80	60-62	64-76	62-65	39-79	70-80	39-70	55-89	25-42	50-87
Median	40	33.5	41	50(7)	53	60	65(7)	65(7)	60	75	61	65(7)	30	60
Georgia														
Average	49.58	69.75	64.67	64.50	56.42	70.75	70.08	78.58	67.08	75.50	79.42	75.00	59.03	58.00
Range	41-83	41-90	44-93	51-90	49.85	60-85	70-90	65-95	60-90	70-91	70-97	65-85	30-87	50-86
Median	43	75	60	58	50	70	75	80.5	60	72.5	80	77	56.5	52.5
Washington (B)														
Average	46.60	43.70	61.50	58.45	56.85	71.85	74.50	76.35	62.00	80.30	74.85	75.65	67.05	58.85
Range	41-90	35-95	45-97	53-80	50-97	70-97	71-95	70-98	60-80	70-96	70-96	65-80	30-98	55-85
Median	43	40	51	55	50	70	72	70	60	80	70	75	76	55
Minnesota														
Average	60.13	71.27	69.9	71.59	67.72	72.9	77.59	81.13	73.77	76.9	75.45	74.86	65.04	68
Range	41-97	35-97	45-97	54-96	50-95	60-91	70-95	65-97	60-96	70-95	70-95	65-90	30-97	50-90
Median	51.5	78	71	70	64.5	70	71.5	80	70	80	70	75	65	67.5
Iowa														
Average	66.06	68.65	74.12	67.47	71.29	82.82	76.82	85.41	75.18	81.06	77.47	76.94	68.71	67.12
Range	41-97	41-96	44-97	54-91	50-96	60-97	70-96	65-97	60-95	70-97	70-95	65-95	48-93	50-97
Median	70	73	80	65	75	85	72	85	80	85	70	75	70	65

*The higher the percentile score, the more unacceptable the behavior exhibited.

of normal homes. Persons considering life safety codes are in the best position to decide whether a "worst case" or "average case" approach should be taken when considering safety codes in which adaptive behavior plays an important role.

Room Use

Staff of the group homes recorded resident room use information according to a pre-arranged format. Forms used in recording data are illustrated in Appendix J.

Room use data for each of the nine group homes are presented individually and averaged across homes in Table 6. Percentages are based on person-hours, where person-hours equal the number of residents occupying each room of the group home multiplied by the hours of occupancy. The percentages were computed by dividing the number of person-hours reported by the total possible person-hours for the seven-day reporting period.

Room usage data for a sample of eleven Japanese-American families which included no developmentally disabled members are also reported in Table 6. These data are presented here so that room use of developmentally disabled residents of group homes may be compared to a sample of the normal population. Although Kimura's (1970) sample was small and involves a particular ethnic segment of the normal population, her study provides the only known data on room use by normal families.

Kimura reported the percentages of time during which various rooms in a house were used. Bedrooms were used for the largest percentage of time (49.7%), followed by the living rooms and family rooms (12.3%), kitchens (7.6%), bathrooms (3.2%), dining rooms (2.0%), recreation rooms (1.3%), and laundry rooms (0.4%). Residents were outside the dwellings 20.6% of the time.

As compared to Kimura's data on normal families, developmentally disabled residents of the group homes studied here tended to have more limited use of the kitchen since meals are often prepared by staff members. When kitchen and dining room use are combined, residents occupy this area about the same percentage of time as normal families. Group home residents spend more time outside the dwelling (assuming that the percentage of time for which activities are not recorded in the present study is due to activities outside the group home). The implication of these comparisons for safety code development seems to be that, based

TABLE 6

Percentage of Total Person Hours of Use for Each Room

Group Home Location	Living Room	Kitchen	Dining Room	Bath Room	Bedroom	Recreation Room	Other	Outside Living Unit[a]
North Carolina	5.7	3.5	5.2	2.5	41.7	2.8	--	38.6
Washington (A)	8.9	1.9	4.8	2.3	41.9	0.2	0.1	39.9
Wisconsin	10.9	1.5	8.4	2.7	50.4	2.6	0.2	23.3
Florida	6.6	1.5	6.0	3.3	36.9	--	1.0	44.7
New York	5.1	0.05	16.5	5.6	46.6	--	--	26.2
Georgia	6.6	1.9	--	1.6	46.3	2.1	0.04	41.5
Washington (B)	5.2	1.3	8.7	6.3	49.7	--	0.8	28.0
Minnesota	11.4	4.4	--[b]	2.0	37.8	--	--	44.4
Iowa	5.4	1.9	14.7	2.9	45.9	--	0.3	28.9
Average Percentage	7.3	2.0	7.9[c]	3.2	44.1	1.9	0.4	34.3[c]
Kimura (1970) data	12.3	7.6	2.0	3.2	49.7	1.3	0.4	20.6

[a]Computed as 100% minus percentages of recorded room use.

[b]Minnesota facility has a combined living and dining room.

[c]Does not include data from Georgia since that facility has a separate dining hall where residents eat lunch and dinner.

on the limited samples involved, residents of group homes and residents of normal households do not differ appreciably in their use of rooms within the respective households. Room use data indicate that, generally, the entire home is used by group home residents. Extra fire protection for any particular room may be appropriate only for sleep areas since both normal and developmentally disabled individuals are at greatest risk while sleeping.

Resident Activities

Group home staff recorded resident activities at the same times and on the same forms as they recorded room use by residents. (Refer to Appendix J) The activities noted were coded into nine categories as follows:

- sleeping
- eating
- sedentary leisure activities--including watching TV, playing cards, listening to radio, reading, talking, using the phone, passive games, sitting, waiting, smoking, and resting
- active leisure activities--including ping pong, walking, exercising, pool, and active games
- personal care--including using the bathroom, showering, shampooing, dressing, grooming, and taking medication
- food preparation--including preparing meals or snacks
- kitchen chores--including doing dishes, cleaning counters, clearing or setting tables, and storing groceries
- household chores--including straightening, dusting, vacuuming, washing, putting away or folding clothes, doing laundry
- other--including outdoor chores, employment, school, or recreation.

Resident activity summaries are presented separately by group home and collectively across the sample in Table 7. Percentages are calculated as noted for Table 6. Note that

TABLE 7

Percentage of Total Person Hours of Activity Occurences

GROUP HOME LOCATION	SLEEPING	EATING	SEDENTARY LEISURE ACTIVITIES	ACTIVE LEISURE ACTIVITY	PERSONAL CARE	FOOD PREPARATION	KITCHEN CHORES	HOUSEHOLD CHORES	OTHER[a]
North Carolina	38.0	3.8	9.4	0	4.5	1.7	2.5	1.3	38.8
Washington (A)	35.3	2.8	11.4	1.3	4.8	0.2	1.3	2.1	40.8
Wisconsin	39.0	5.8	19.6	1.5	8.1	0.1	1.2	1.9	22.8
Florida	29.9	3.4	12.2	0	6.6	0.6	0.8	2.4	44.1
New York	35.9	9.4	19.2	2.0	9.3	0	0.05	0.07	24.1
Georgia	38.0	1.0	13.4	0	2.9	0	0.1	3.2	41.4
Washington (B)	32.3	7.7	16.9	0.1	12.1	0.3	2.1	1.6	26.9
Minnesota	28.1	3.4	16.2	0.06	4.2	0.9	1.4	0.9	44.8
Iowa	33.3	7.7	20.8	0.5	5.7	0.4	1.5	1.2	28.9
Average Percentage	34.4	5.5[b]	15.5	0.6	6.5	0.5	1.2	1.6	33.9[b]
Kimura (1970) data	38.8	5.3	19.9	0.1	4.3	3.8		1.1	20.2

[a] Computed as 100% minus percentages of recorded activities.

[b] Does not include data from Georgia since that facility has a separate dining hall where residents eat lunch

the "Outside Living Unit" values in Table 6 and the "Other" values in Table 7 were calculated independently and minor differences exist.

Kimura's (1970) data are also included in Table 7. Compared to the present study, Kimura's data were broken down into more discrete categories. For purposes of comparison, then, the "Eating" category for the present study is compared to Kimura's combined eating and snacking categories. "Sedentary Activities" is comparable to Kimura's categories of hobbies, study, leisure, reading, resting, TV viewing, interaction, telephone, and religious activities. "Active Leisure Activity" is comparable to Kimura's exercising category, while "Food Preparation" and "Kitchen Chores" are not differentiated by separate categories in Kimura's research. The remaining categories were similarly defined for the present study and Kimura's study.

When compared to Kimura's data, results of the present study show that residents of group homes spend more time outside the facility, spend more time involved in personal care, spend less time involved in kitchen-related activities, but are very similar to the normal population for other activity categories. Whether engaging in these activities poses a significantly higher risk of hazard or injury to the developmentally disabled than to the normal population is an empirical question warranting future research.

Appliance Usage by Residents

To give an indication of potential fire hazards, group home staff were asked to provide data on the kinds of electrical appliances that were used in the home. Residents of the group homes were reported as users of the following appliances: kitchen range, electric fry pan, slow cooker, can opener, dishwasher, deep fryer, electric griddle, coffee maker, broiler oven, iron, TV, stereo, radio, clothes washer, dryer, vacuum cleaner, hairdryer, toaster, electric shaver, curling iron, lamps, fans, air conditioner, rug shampooer, mixer, heating pad, clock, humidifier, vaporizer, and garbage disposal. From the above list of appliances used by group home residents, it appears that the residents are likely to be exposed to the hazards conventionally related to the use of these products. Data do not exist to determine whether these products pose a greater hazard to the developmentally disabled residents of group homes than to the normal population.

Fire Incidents

Although none of the group homes reported experiencing a major fire, several minor incidents were reported that

represent potential hazards to the developmentally disabled in group homes. These incidents are summarized below.

1. Dirty burner pan in kitchen caused a small fire with no damage. Staff instructed residents on proper cleaning of burners after spillage occurred.

2. Spillage in oven caused small fire with no damage. Staff instructed residents on cleaning oven and use of exhaust fan.

3. Wastebasket caught fire due to disposal of match. Residents instructed in proper disposal of matches.

4. Appliance cord lying on stove burner caused small fire. Cord was subsequently repaired.

5. A trash fire was extinguished with water by a resident. A supervisor was notified. No evacuation was necessary.

6. Pipe ashes caused a smoldering fire in a trash can. A supervisor was alerted by a resident. Residents were instructed to evacuate when they believe there is a fire even though an alarm has not sounded.

7. An overheated clothes dryer caused a small fire. There were no injuries or damage.

8. A smoldering fire on a couch had an unknown origin. There were no injuries or damages or major property loss. Staff handled the situation without panic.

9. A grease fire in a frying pan caused no major damage. Staff on duty handled the situation.

10. Toast stuck in a toaster created enough smoke to set off a smoke alarm. Supervisor advised residents to notify staff any time an alarm sounds.

The specific fire hazards which developmentally disabled individuals seem most likely to encounter while living in a group home include: 1) smoking--several critical incidents were reported; 2) cooking--generally confined to residents with higher level functioning involved in meal preparation as opposed to occasional or late-night snack preparation;

and 3) arts and crafts equipment such as kilns. It has not been determined whether the hazard to developmentally disabled individuals while engaging in these activities is higher than the hazard to normal individuals.

Fire Drill Observations

Fire drills were observed by the authors at eight of the group homes. The evacuation times are presented in Table 8. In all cases the evacuation times were less than three minutes. Data do not exist to allow comparison to residents of normal homes.

Additional data were provided for one of the participant group homes that supplied its fire drill log for a period of one month. For 27 drills, evacuation times ranged from 30 secs. for a drill held at 7:20 PM involving 18 residents to 4 mins. 30 secs. for a drill at 1:00 AM involving 16 residents. The average evacuation time was 2 mins. 20 secs. and involved an average of 15 residents whose disabilities include mental retardation, paraplegia, quadraplegia, blindness, cerebral palsy, and epilepsy.

Based on discussions with group home staff, observations made during fire drills, and the relatively short evacuation times, the following recommendations are made.

Fire safety and evacuation are learned responses and as such, involve training and education. Evacuation training is crucial. Even profoundly retarded individuals have been trained to evacuate when a fire alarm is sounded.

Practice in fire evacuation is essential and should involve experience with multiple escape routes, blocked exists, and meeting at an assigned area outside the facility. Appropriate behavior when confronted with blocked exits can be taught and learned. With reference to alternate escape routes, staff of one facility stated that "in our experience, as residents begin to learn to use a greater number of available or alternate exit routes, the evacuation time is very definitely improved." Innovative designs of facilities can allow even a wheelchair-bound resident to evacuate effectively. One wheelchair resident went out a first-floor window upon confronting an artificially blocked exit route. Windows designed so that the lower sill is no more than one foot from the floor allowed the resident to "tumble forward" from the wheelchair to the ground outside. It was noted that bedroom windows should never be blocked by dressers, mirrors, etc. as these obstruct a potentially necessary escape route.

TABLE 8

Evacuation Times of Observed Fire Drills

Group Home Location	Time to Total Evacuation
North Carolina	15 sec.
Washington (A)	57 sec.
Wisconsin	73 sec.
Florida	25 sec.
New York	75 sec.*
Georgia	No drill
Washington (B)	45 sec.
Minnesota	140 sec.
Iowa	56 sec.

*Time shown is time to pass closest fire door

Group home supervisors offered that training is essential to ensure that residents do not re-enter a facility should a fire actually occur. Residents should be drilled on the necessity of remaining at the assigned area until instructed to re-enter the facility so as to reduce the possibility of re-entry during an actual fire emergency.

A point of diminishing returns may be reached when fire drills are held too frequently. One group home supervisor observed that "when fire drills are conducted too frequently you begin to desensitize people to the necessity of immediate evacuation." However, when fire drills are held, no evacuation assistance should be offered by staff or visitors not usually available in the group home. Fire drills should be conducted as they would be if minimum staff requirements were met.

Some group homes employed a "buddy system" in which one resident would assist another resident who needed help during the evacuation. The "buddy system" received mixed reactions by group home staff. "Under many situations we have seen the "buddy system" work to a definite advantage. However, there are times when the missing "buddy" creates a bit more added confusion and panic in the process of evacuating." It seems that if a "buddy system" is employed, residents should be trained to help others in the same area as opposed to searching through the facility for their particular "buddy."

Thoughtful consideration should be given to whether large group home facilities should have an interconnected early warning fire detection system so that all residents are aware of a fire alarm which may go off in another part of the dwelling.

Early warning fire detection is directly related to the evacuation time available. The feeling of the supervisors interviewed can be summed up as "People cannot be replaced. Buildings can." Consequently, perhaps the emphasis should be placed on fire prevention training, fire detection, and fire evacuation rather than fire containment or fighting.

Summary

Major findings of the present study and the authors' recommendations are summarized below:

- Nothing was found in the physical structures or interiors of the group homes that differentiated them from the variability expected in normal dwellings. Consequently, the facilities themselves impose no more fire hazard than would normal homes. Fire safety professionals interested in creating a special section of the life safety code that reflects

the unique needs of the developmentally disabled population should consider the feasibility of implementing each suggestion in light of the wide variety of structures existing.

° There is a wide range of ages and formal education among supervisors in the sample of nine group homes. In each home, supervisors are available during times when residents are in the facility. Staff should be given fire training as well as training on how to teach fire safety and evacuation to residents.

° Mental and physical capabilities of residents vary greatly within and among group homes. Future research should address the correlation between intellectual functioning and successful fire evacuation. Anecdotal evidence suggests that a linear relationship cannot be described by IQ and successful evacuation behavior.

° As an increasingly large number of residents are expected to come to group homes directly from the community (where little fire evacuation training usually occurs) rather than from institutions (where evacuation training is emphasized), fire evacuation training in group homes will become more crucial.

° It can be assumed that residents of group homes covered under a revised life safety code will run the full gamut of adaptive behavior capabilities. The relationship between adaptive behavior scores and successful fire evacuation has not been empirically tested at this time.

° Residents of group homes and residents of normal households do not differ appreciably in their use of rooms within the respective households. Room use data indicate that, generally, the entire home is used by group home residents. Extra fire protection for any particular room may be appropriate only for sleep areas since both normal and developmentally disabled individuals are at greatest risk while sleeping.

° The developmentally disabled engage in the same general types of activities as the normal population. Whether engaging in these activities poses a significantly higher risk of hazard or injury to

the developmentally disabled than to the normal population is an empirical question warranting future research.

- The specific fire hazards which developmentally disabled individuals seem most likely to encounter while living in a group home include smoking, cooking, and arts and crafts equipment.

- In all cases the evacuation times associated with fire drills held at the group homes were less than three minutes.

- Practice in fire evacuation is essential and should involve experience with multiple escape routes, blocked exits, and meeting at an assigned area outside the facility.

- Anecdotal evidence suggests that a point of diminishing returns may be reached when fire drills are held too frequently, with residents becoming desensitized to the necessity of immediate evacuation.

- Group home staff felt that perhaps the emphasis should be placed on fire prevention training, fire detection, and fire evacuation, rather than fire containment or fighting. It was their contention that given this emphasis, their developmentally disabled residents would be at no greater fire risk than normal residents in private dwellings.

The staff and administrators of the group homes visited were very receptive to supplying input to the standard development process. The authors recommend that an informal review board composed of staff and administrators from a cross-section of group homes be asked to supply comments, suggestions, and criticisms of proposed life safety codes affecting facilities for the developmentally disabled. Serious considerations should also be given to including representatives of group home supervisors as voting members on standards adopting boards.

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Appendices A through I

Summary Data, Floor Plans, and Photographs

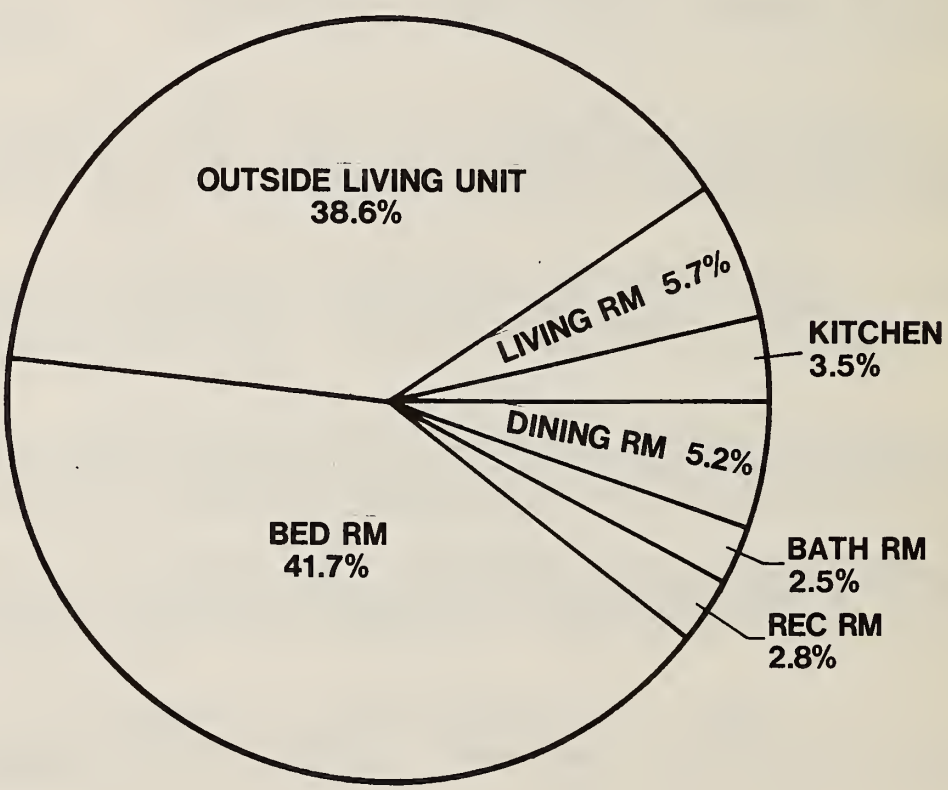
The following case history summaries are provided so that those involved in life safety code development can determine the effects that proposed revisions or additions to existing life safety codes would have on the operation of a sample of group homes currently in operation across the country.

APPENDIX A

Summary Data--North Carolina Group Home

Heating System	Oil
Number of Residents	5
Range of Chronological Age	26 years - 40 years
Range of Mental Age	4.6 years - 8 years
Disabilities	Mental Retardation

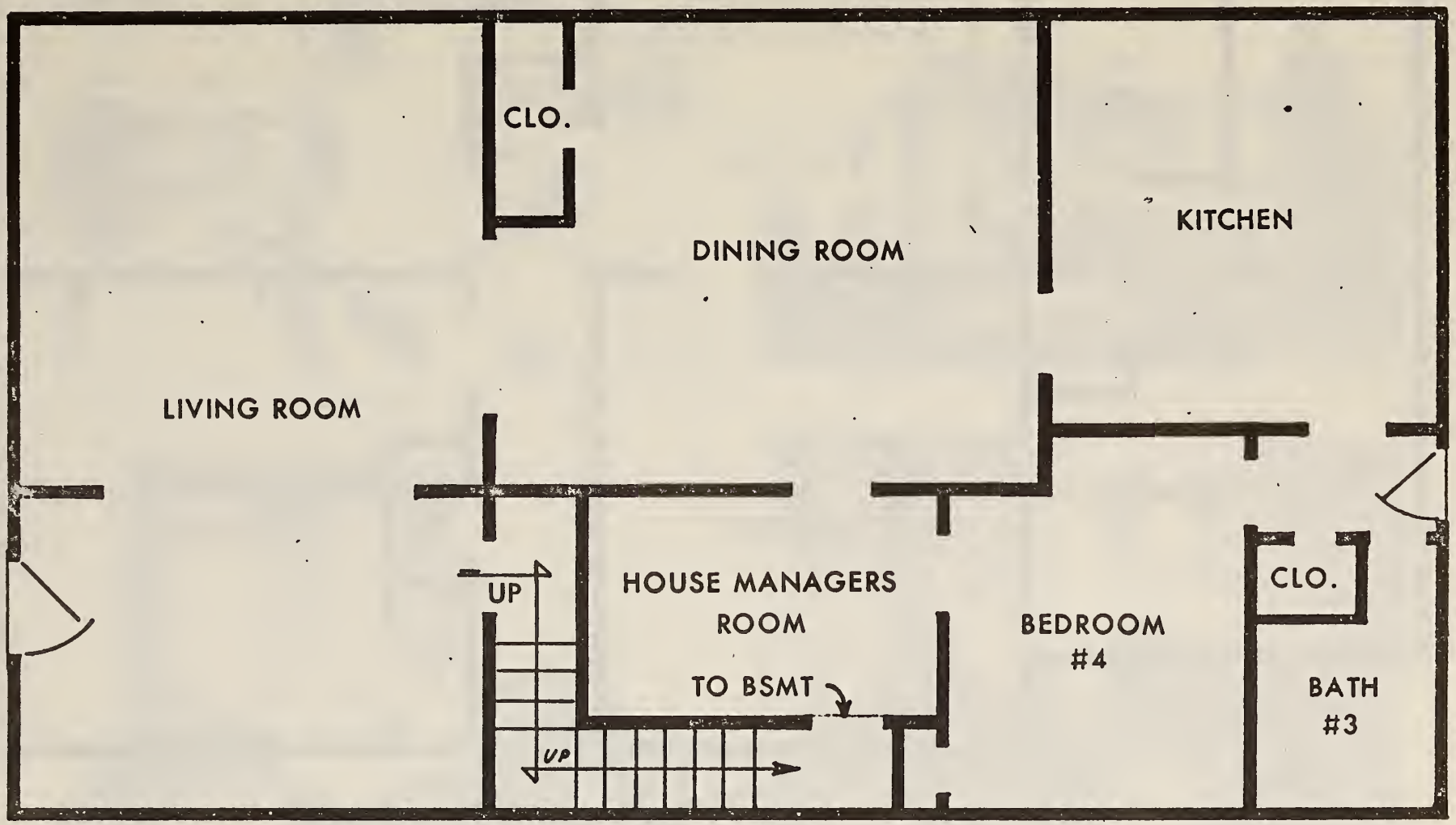
Percentage of Total Person Hours of Use for Each Room



Average number of hours per day in which no residents are reported to be in home = 8.7.

Appendix A Continued

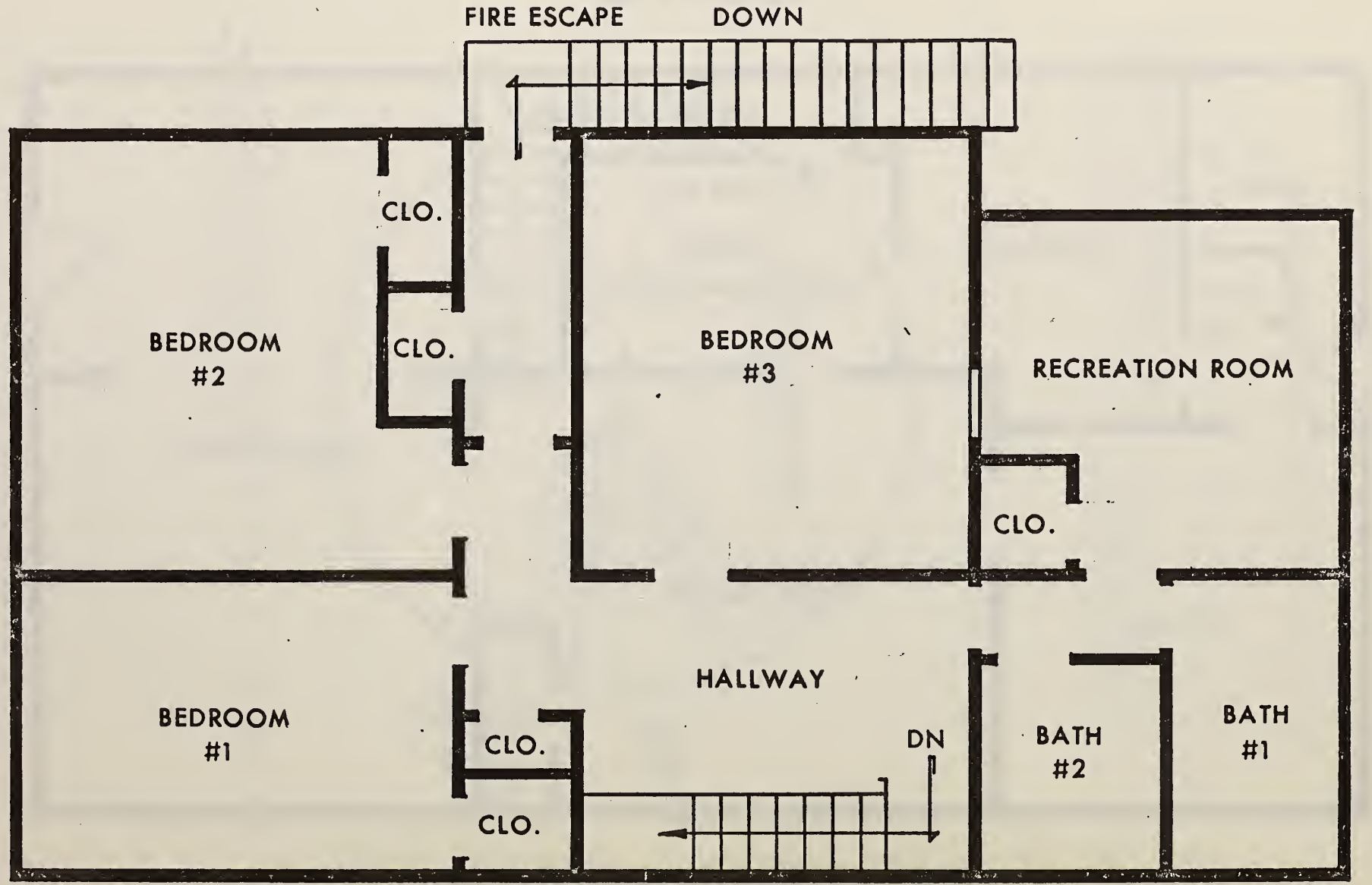
Floor Plan--North Carolina Group Home



FIRST FLOOR

Appendix A Continued

Floor Plan--North Carolina Group Home

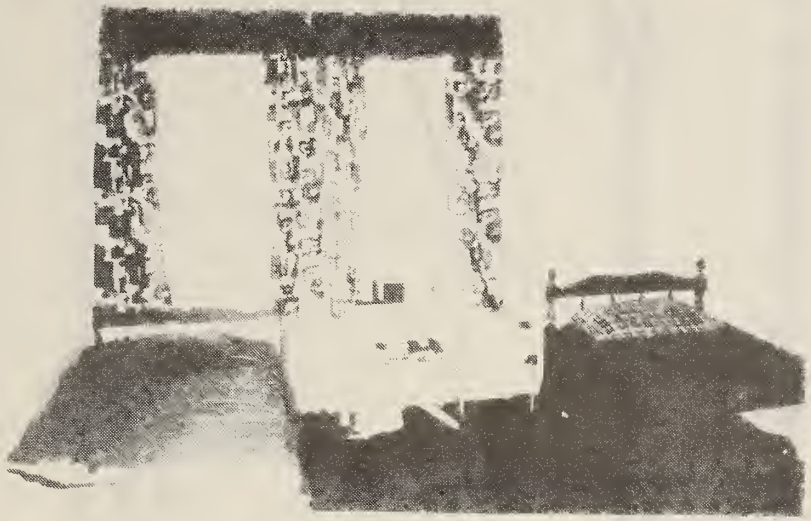


SECOND FLOOR

Photographs--North Carolina Group Home

Kitchen

Exterior



Bedroom

Living Room

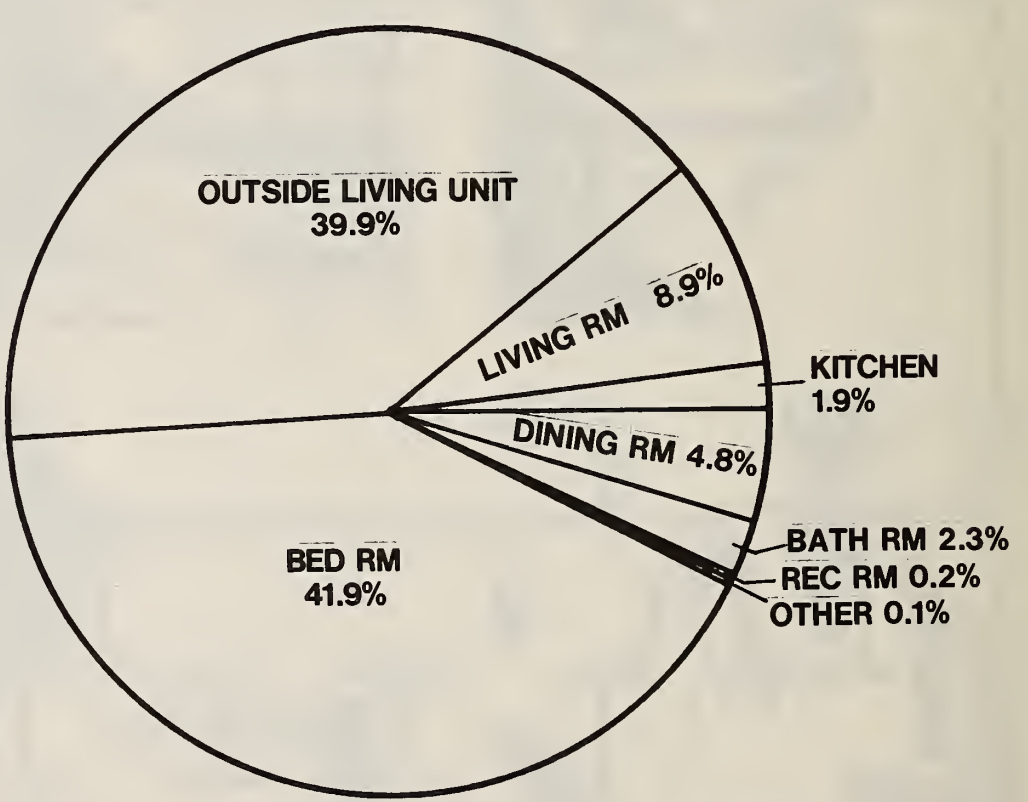
North Carolina

APPENDIX B

Summary Data--Washington A Group Home

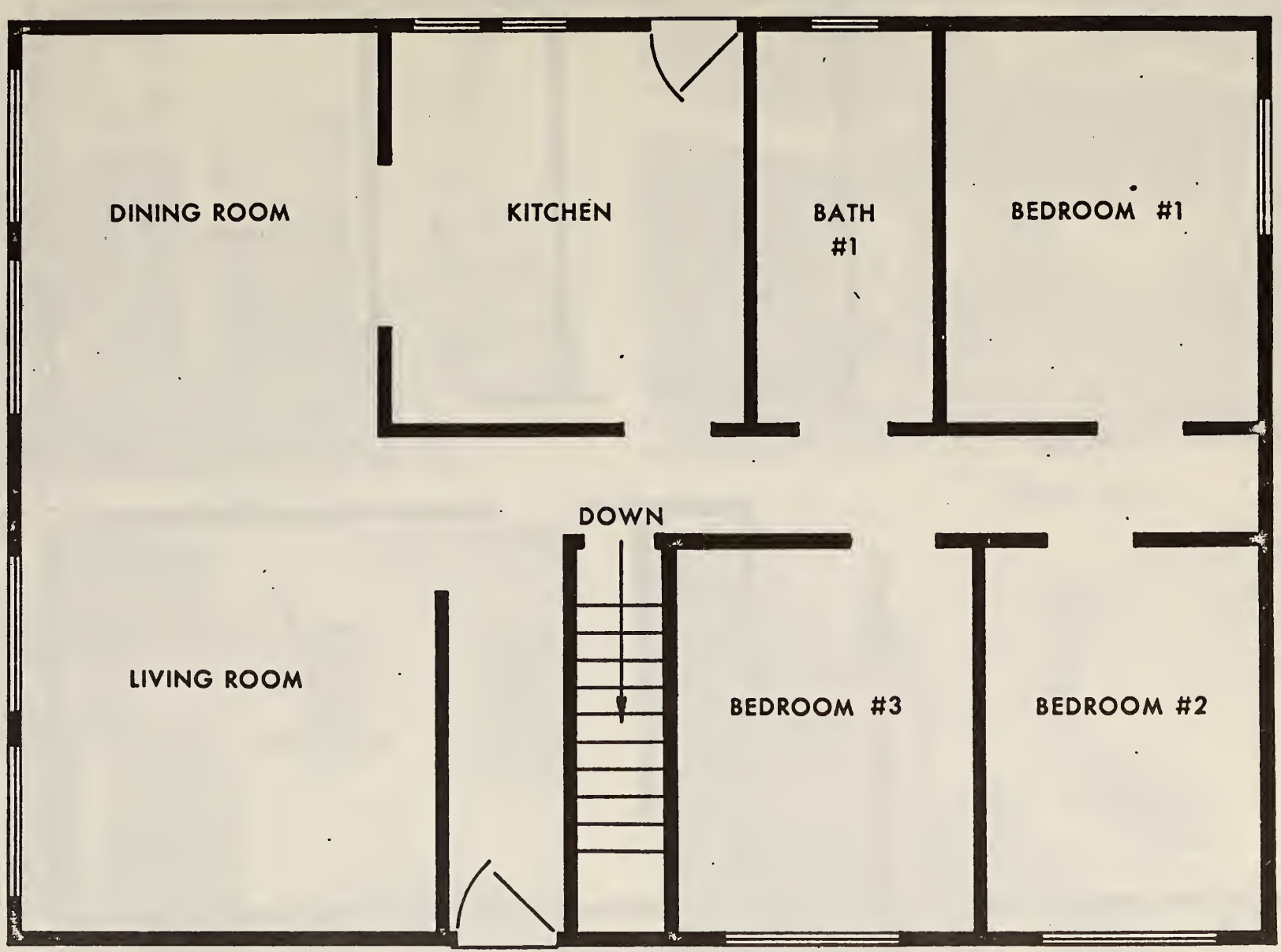
Heating System	Oil
Number of Residents	6
Range of Chronological Age	14 years - 20 years
Range of Mental Age	2 years - 8 years
Disabilities	Mental Retardation

Percentage of Total Person Hours of Use for Each Room



Average number of hours per day in which no residents are reported to be in home = 7.0.

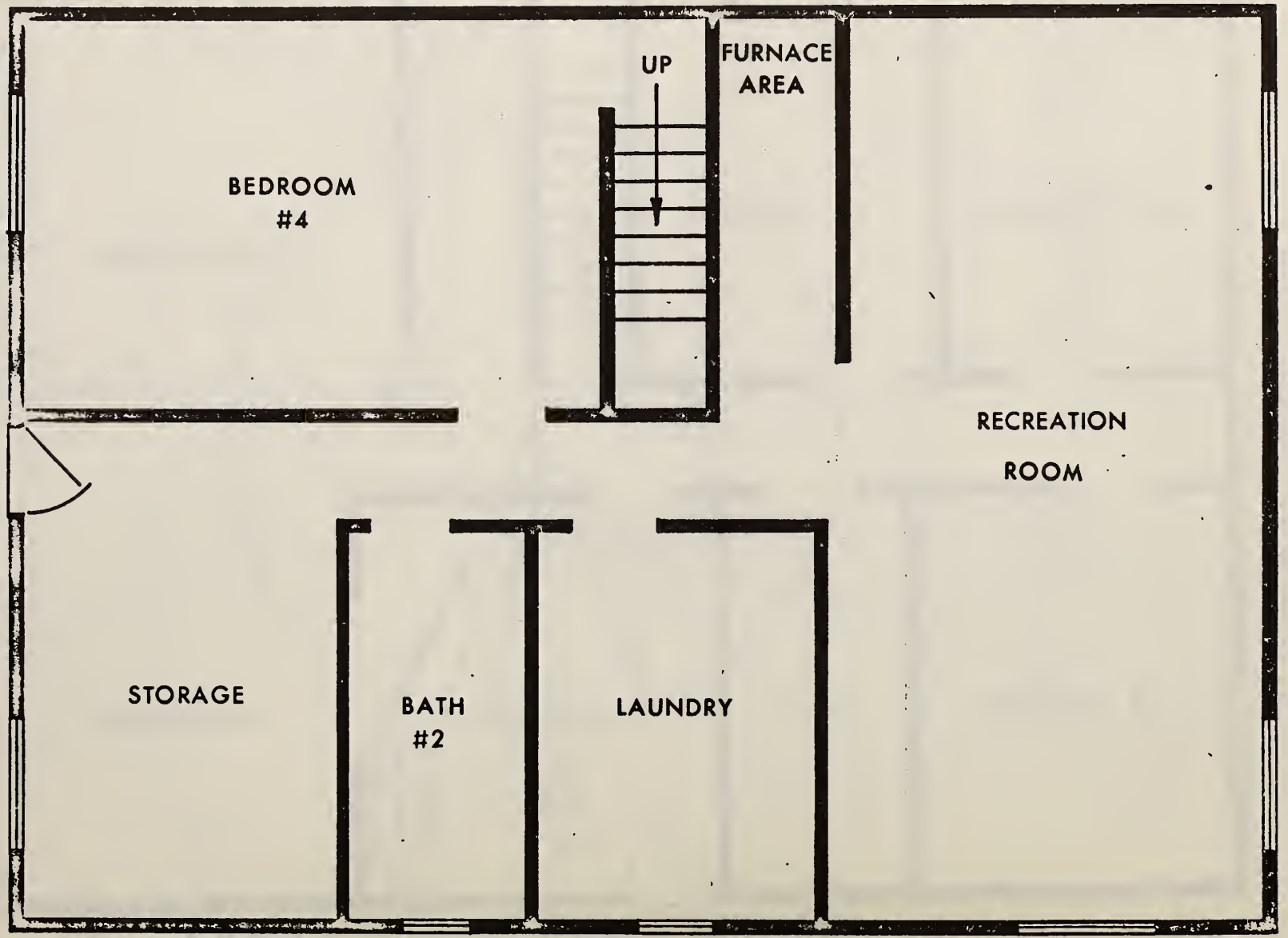
Floor Plan--Washington A Group Home



FIRST FLOOR

Appendix B Continued

Floor Plan--Washington A Group Home

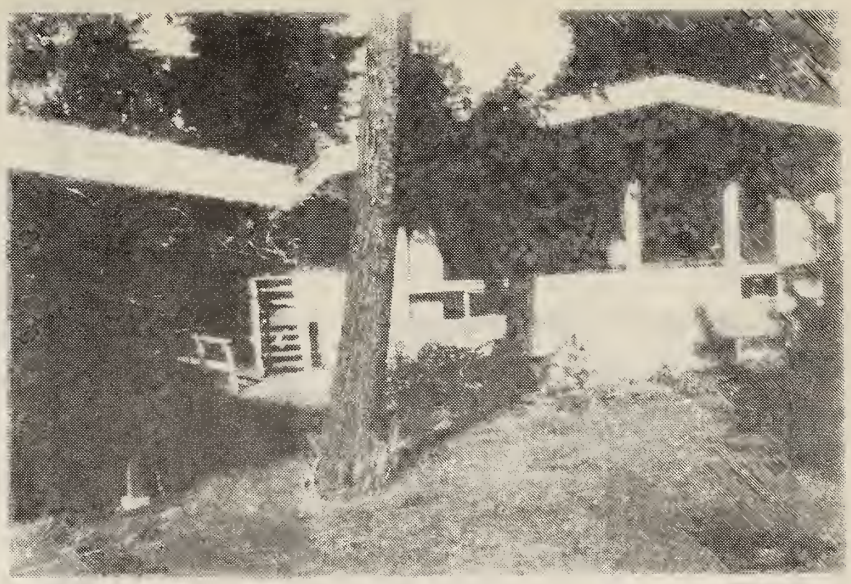


BASEMENT

Appendix B Continued

Photographs--Washington A Group Home

Kitchen



Exterior

Bedroom

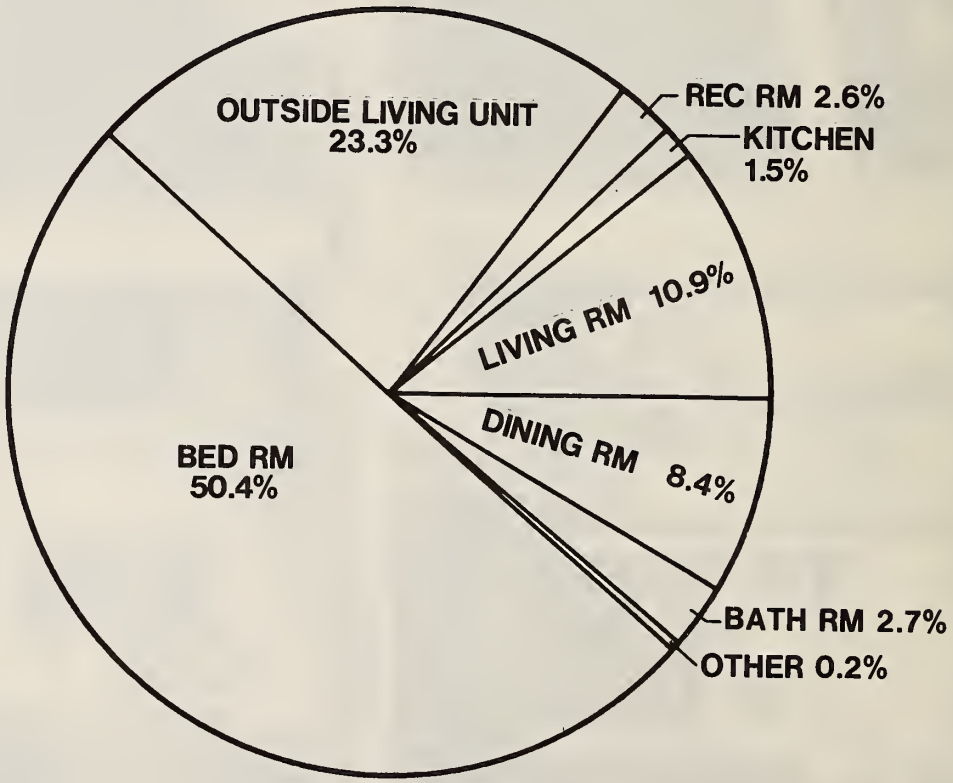
Living Room

APPENDIX C

Summary Data--Wisconsin Group Home

Heating System	Bottle Gas Electrical Heating Addition Baseboard in Rec Room
Number of Residents	8
Range of Chronological Age	21 years - 52 years
Range of Mental Age	Moderate to Severe
Disabilities	Mental Retardation (and Epilepsy)

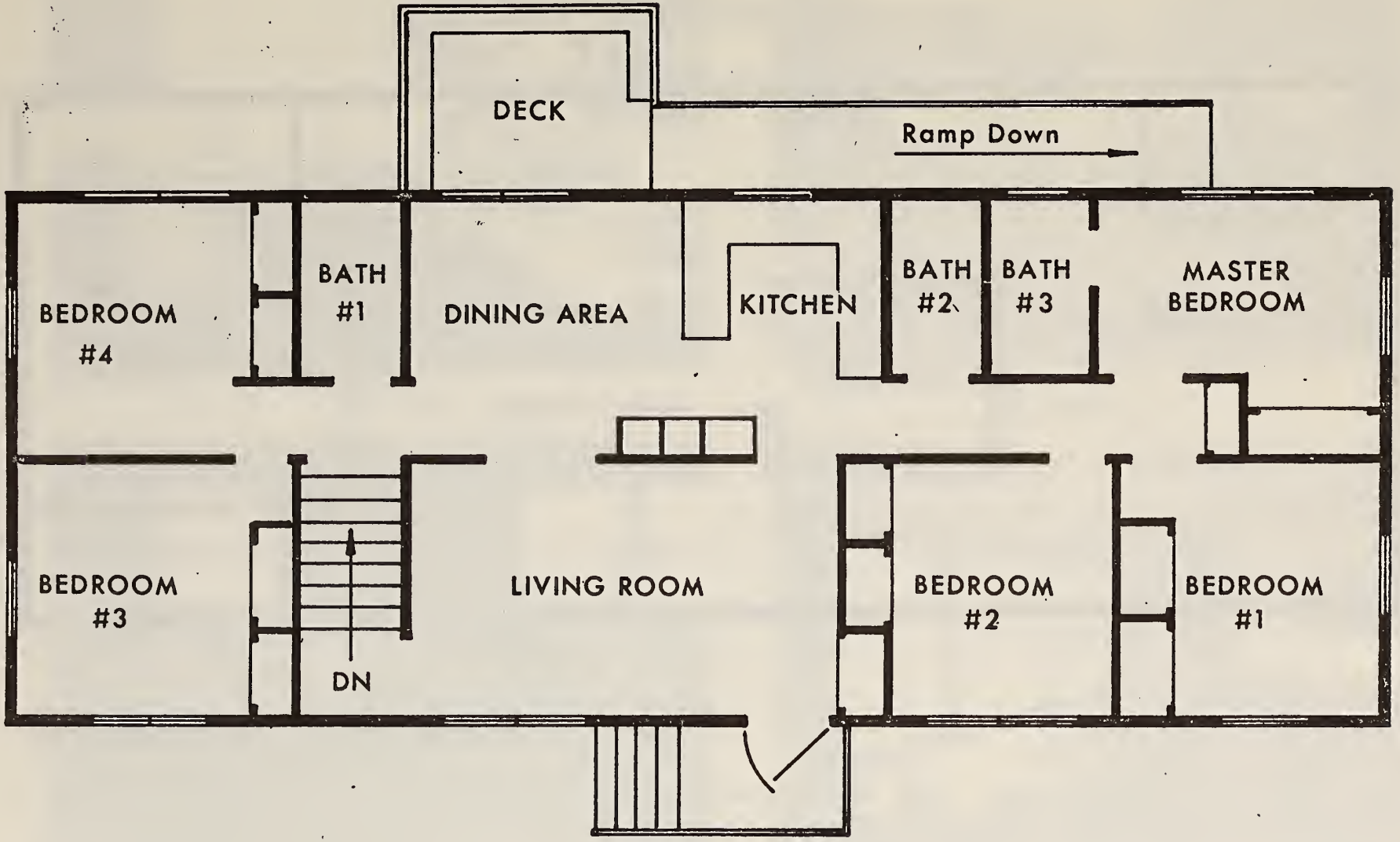
Percentage of Total Person Hours of Use for Each Room



Average number of hours per day in which no residents are reported to be in home = 5.0.

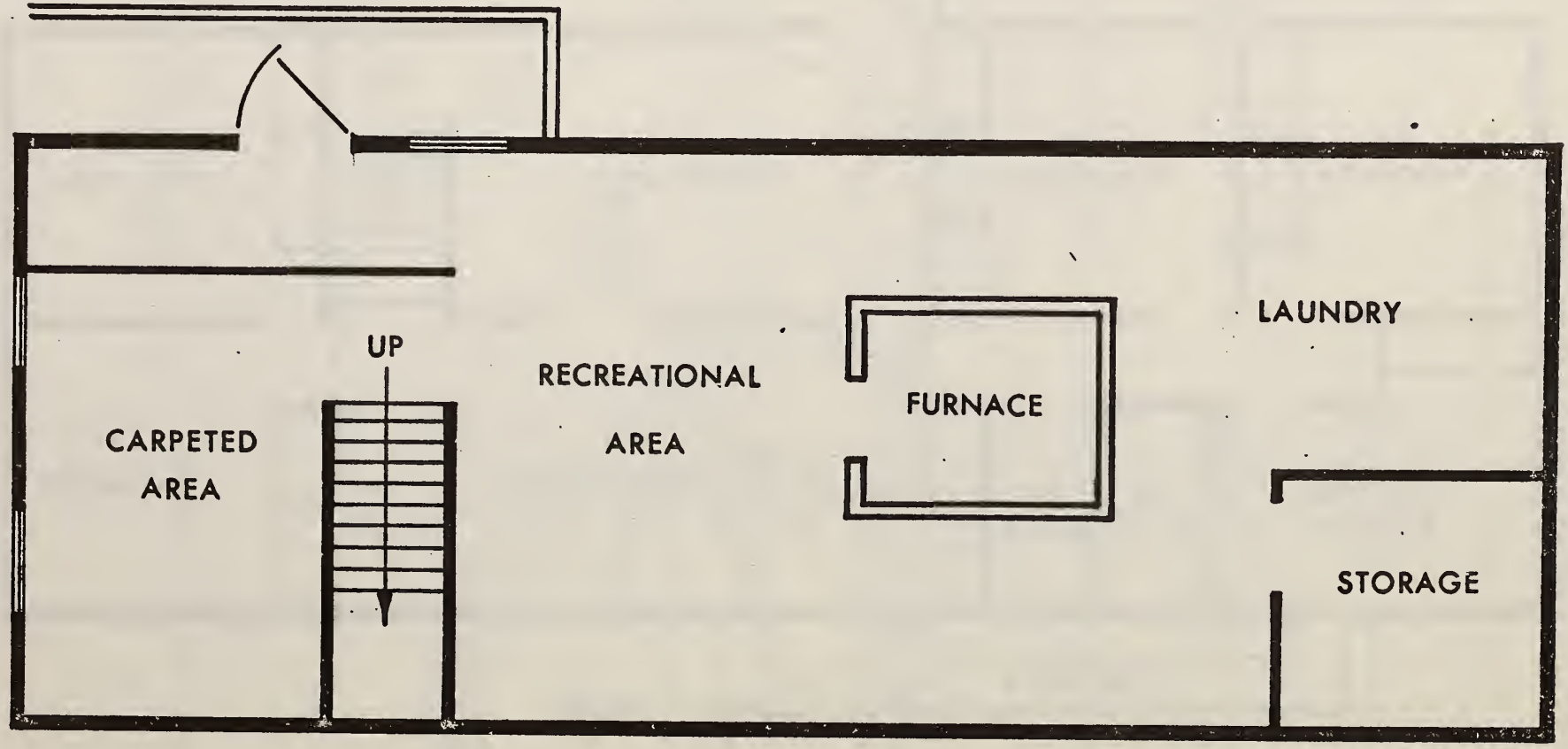
Appendix C Continued

Floor Plan--Wisconsin Group Home

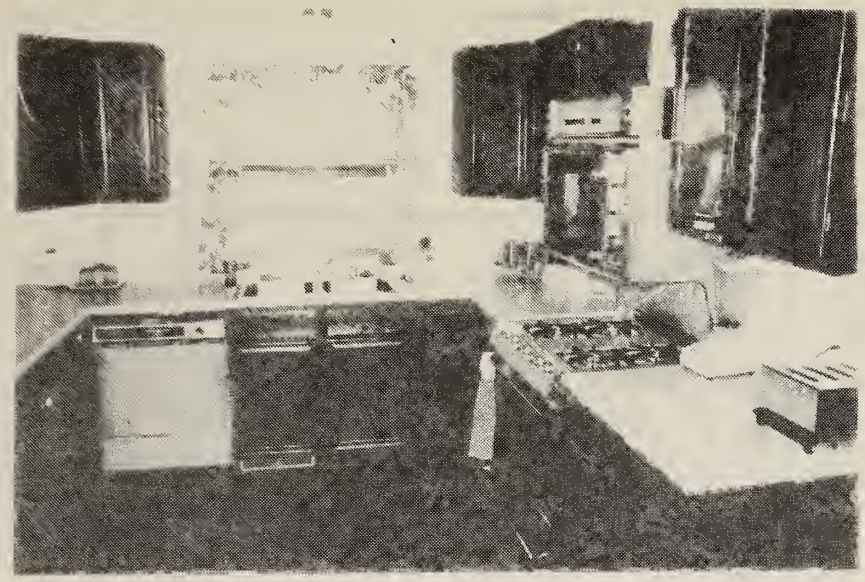


UPPER LEVEL

Appendix C Continued
Floor Plan--Wisconsin Group Home

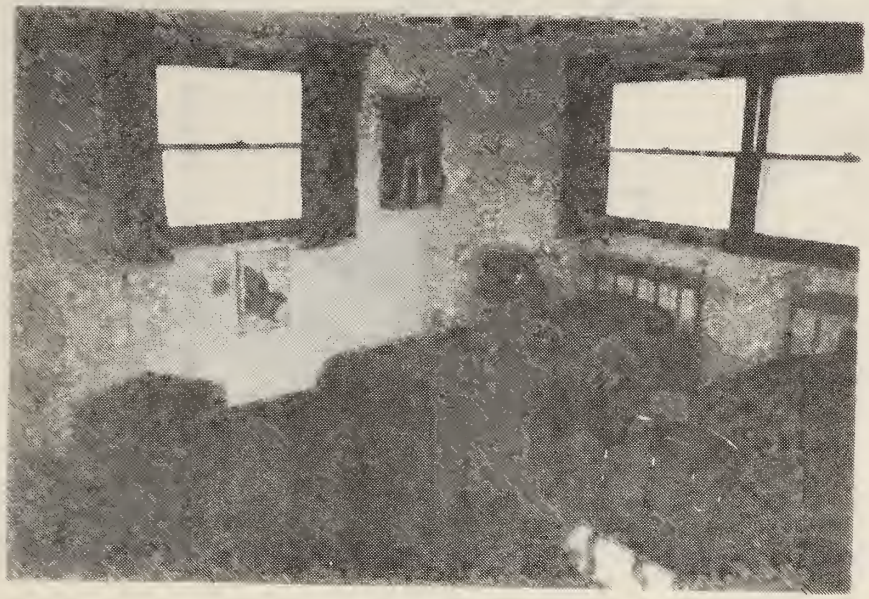


LOWER LEVEL (FULL BASEMENT)

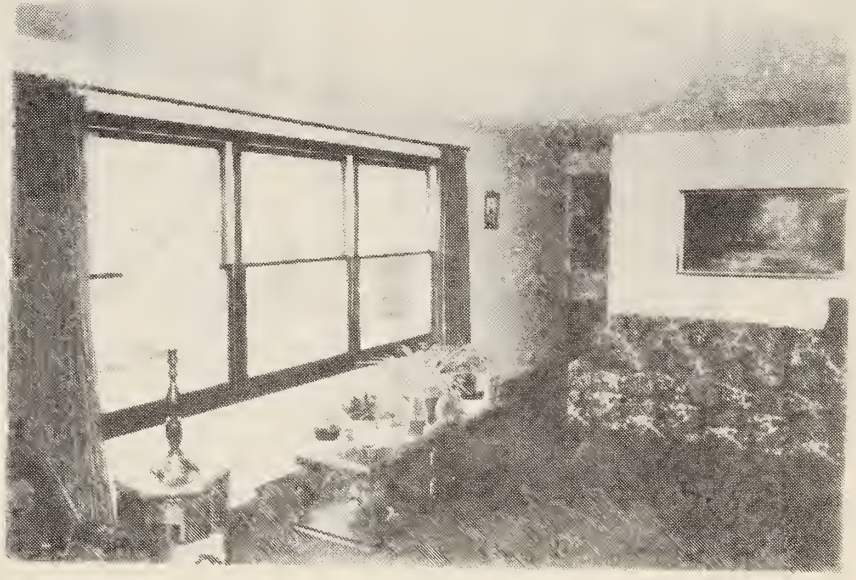


Kitchen

Exterior



Bedroom



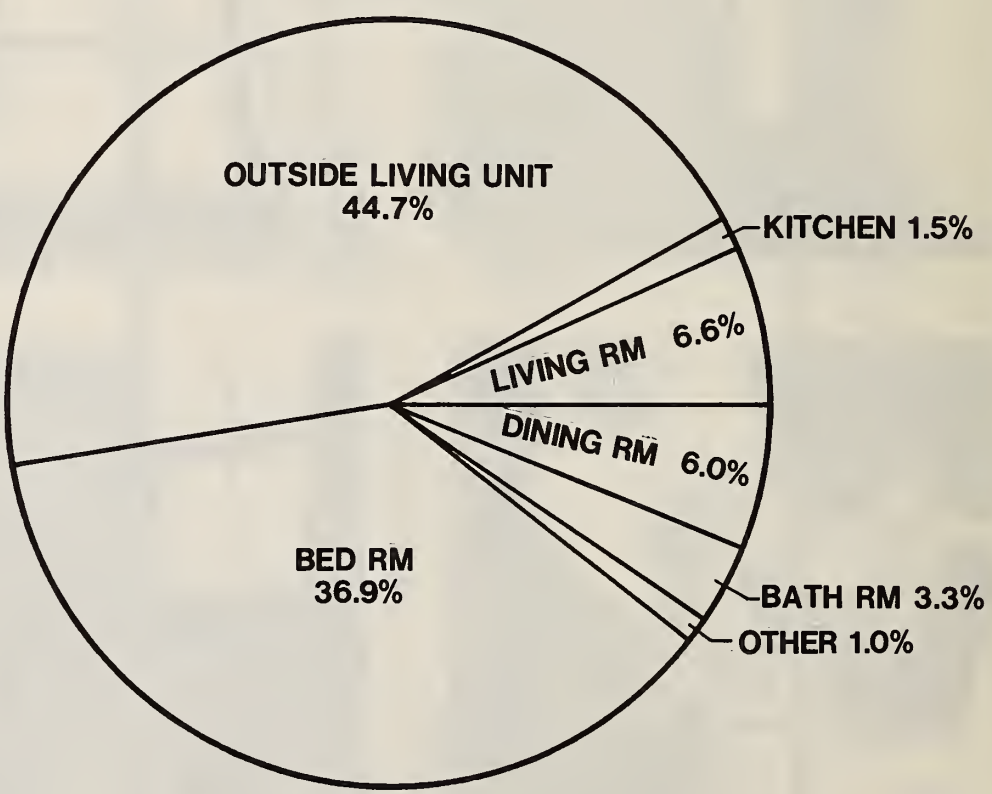
Living Room

APPENDIX D

Summary Data--Florida Group Home

Heating System	Electric
Number of Residents	10
Range of Chronological Age	17 years - 29 years
Range of Mental Age	7.5 years - 13.6 years
Disabilities	Mental Retardation (and Cerebral Palsy or Dyslexia) Emotional Disturbance

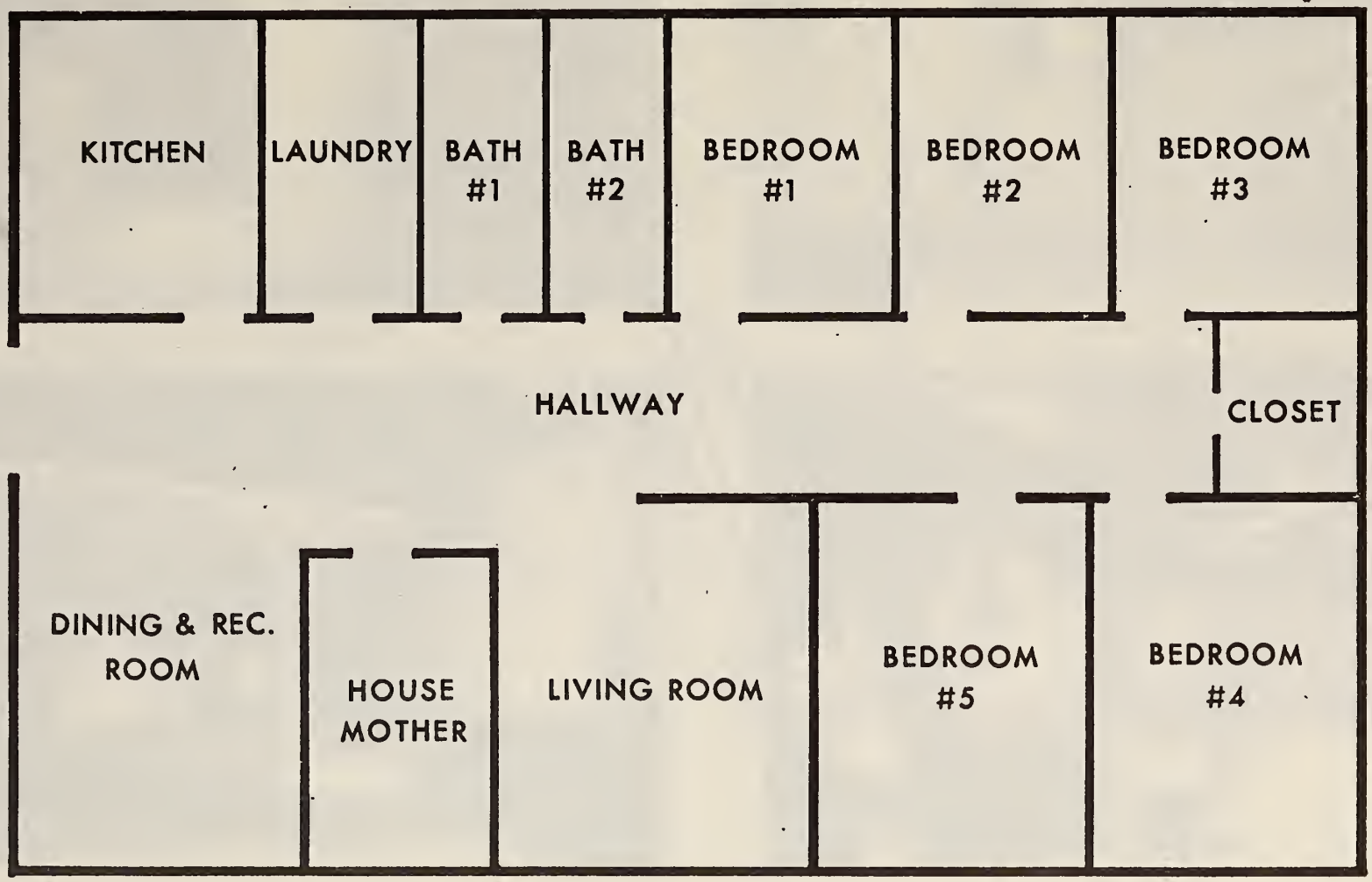
Percentage of Total Person Hours of Use for Each Room



Average number of hours per day in which no residents are reported to be in home = 4.4.

Appendix D Continued

Floor Plan--Florida Group Home



FLOOR PLAN

Appendix D Continued
Photographs--Florida Group Home

Kitchen

Exterior

Bedroom

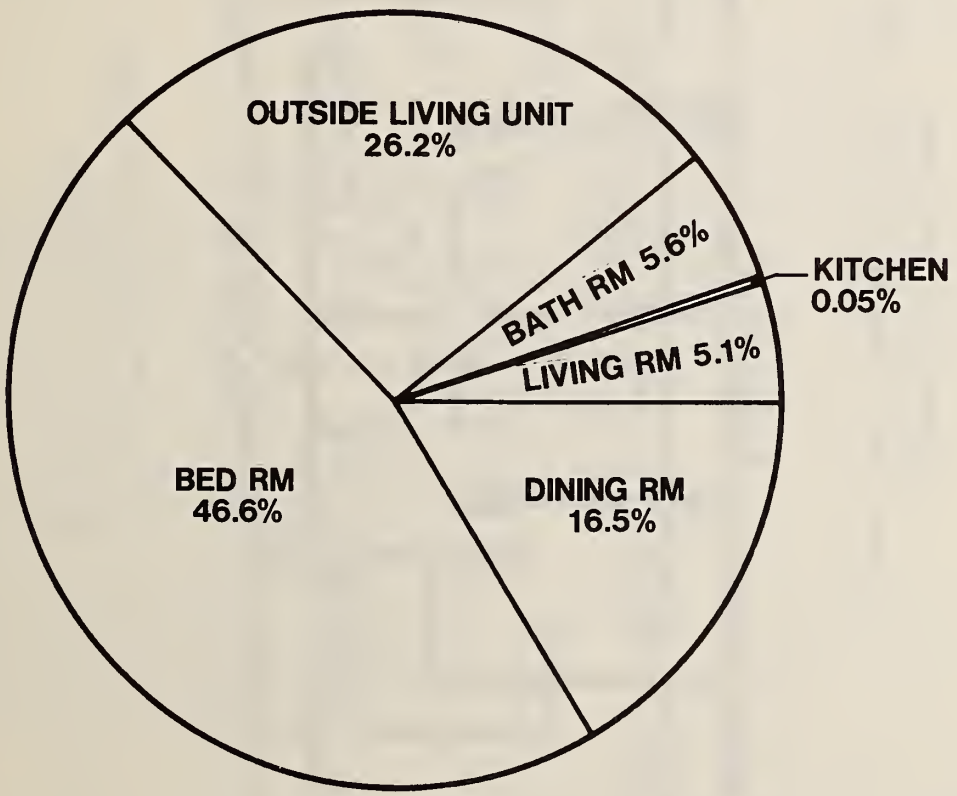
Living Room

APPENDIX E

Summary Data--New York Group Home

Heating System	Gas and Oil
Number of Residents	12
Range of Chronological Age	10 years - 19 years
Range of Mental Age	1.7 years - 7.1 years
Disabilities	Cerebral Palsy
	Cerebral Palsy (and Legally Blind)

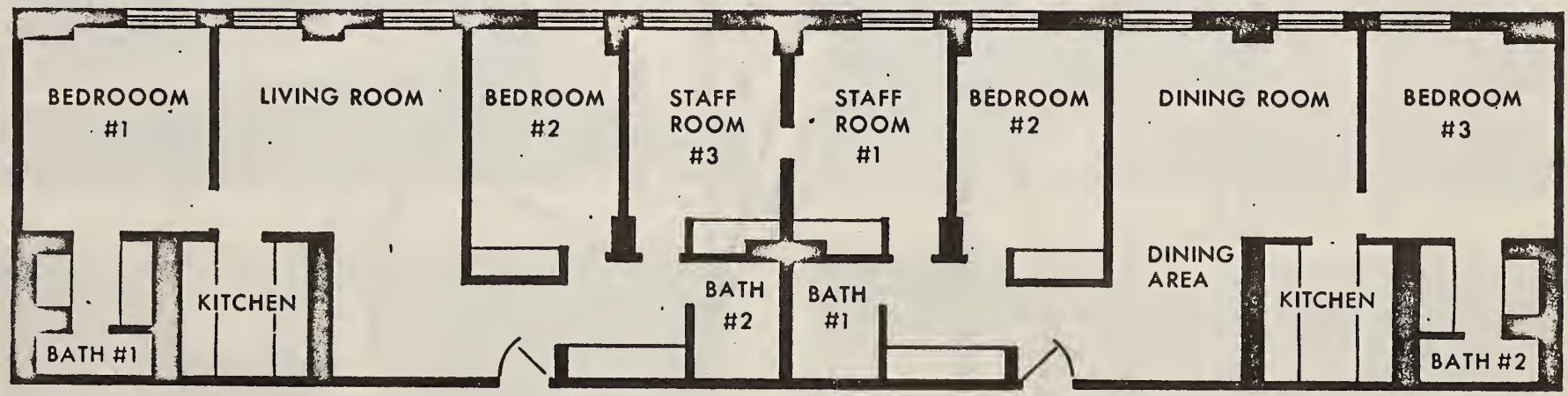
Percentage of Total Person Hours of Use for Each Room



Average number of hours per day in which to residents are reported to be in home = 5.2.

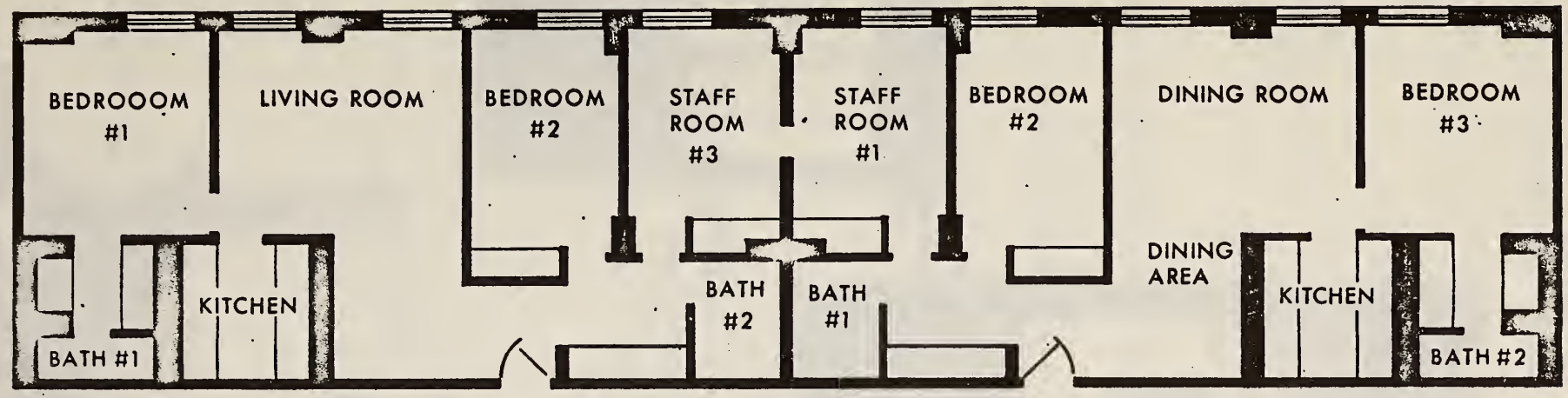
Appendix E Continued

Floor Plan--New York Group Home



Appendix E Continued

Floor Plan--New York Group Home



FLOOR 6

Kitchen

Not available

Exterior

Bedroom

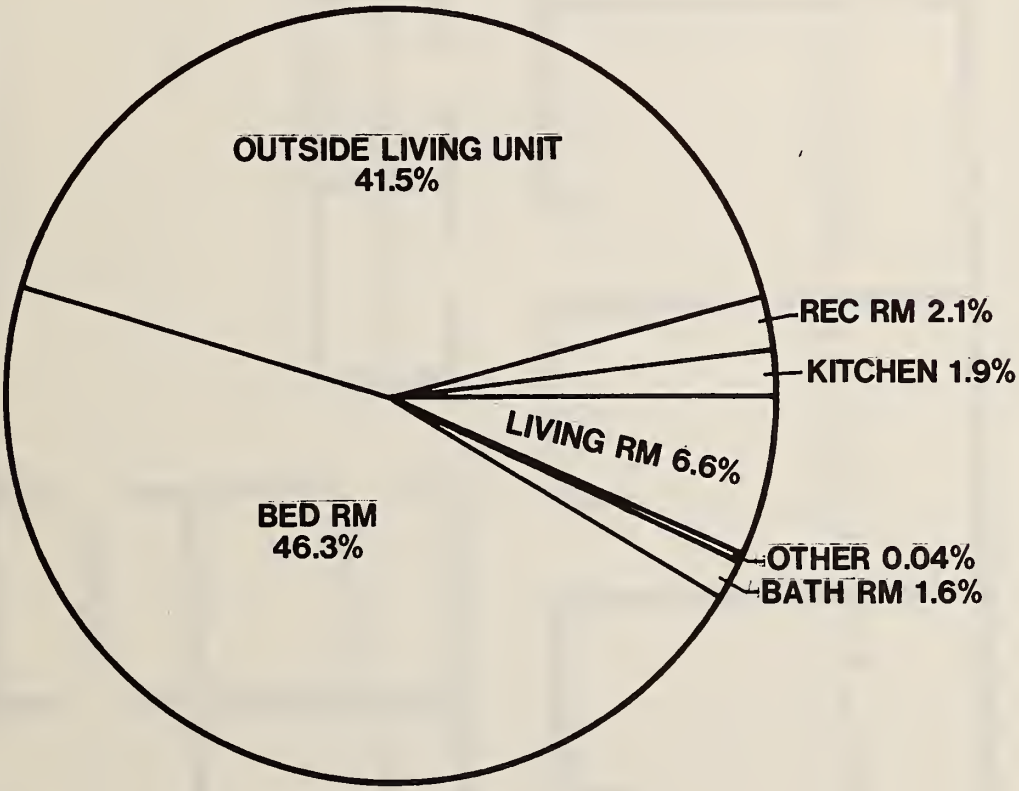
Living Room

APPENDIX F

Summary Data--Georgia Group Home

Heating System	Natural Gas
Number of Residents	12
Range of Chronological Age	18 years - 48 years
Range of Mental Age	6 years - 13 years
Disabilities	Mental Retardation Emotional Disturbance

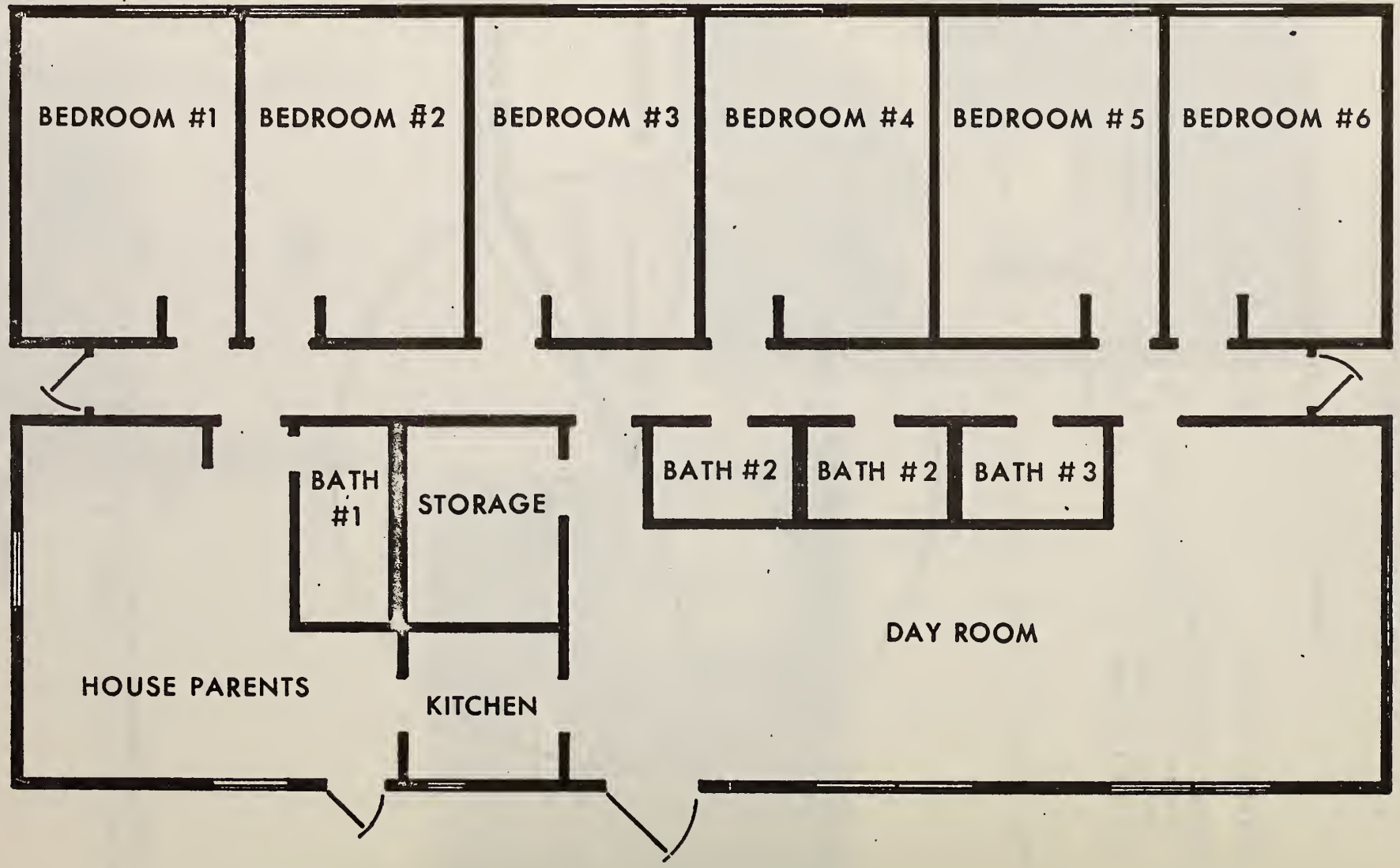
Percentage of Total Person Hours of Use for Each Room



Average number of hours per day in which no residents are reported to be in home = 2.9.

Appendix F Continued

Floor Plan--Georgia Group Home



FLOOR PLAN

Appendix F Continued

Photographs--Georgia Group Home

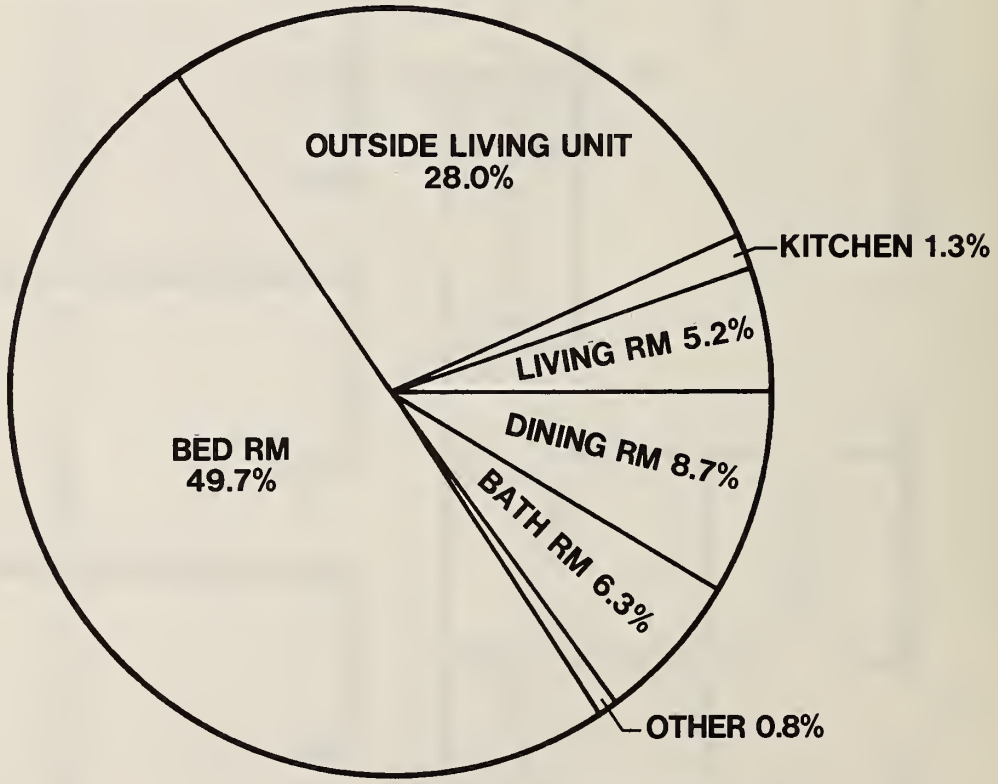
NO PHOTOGRAPHS TAKEN

APPENDIX G

Summary Data--Washington B Group Home

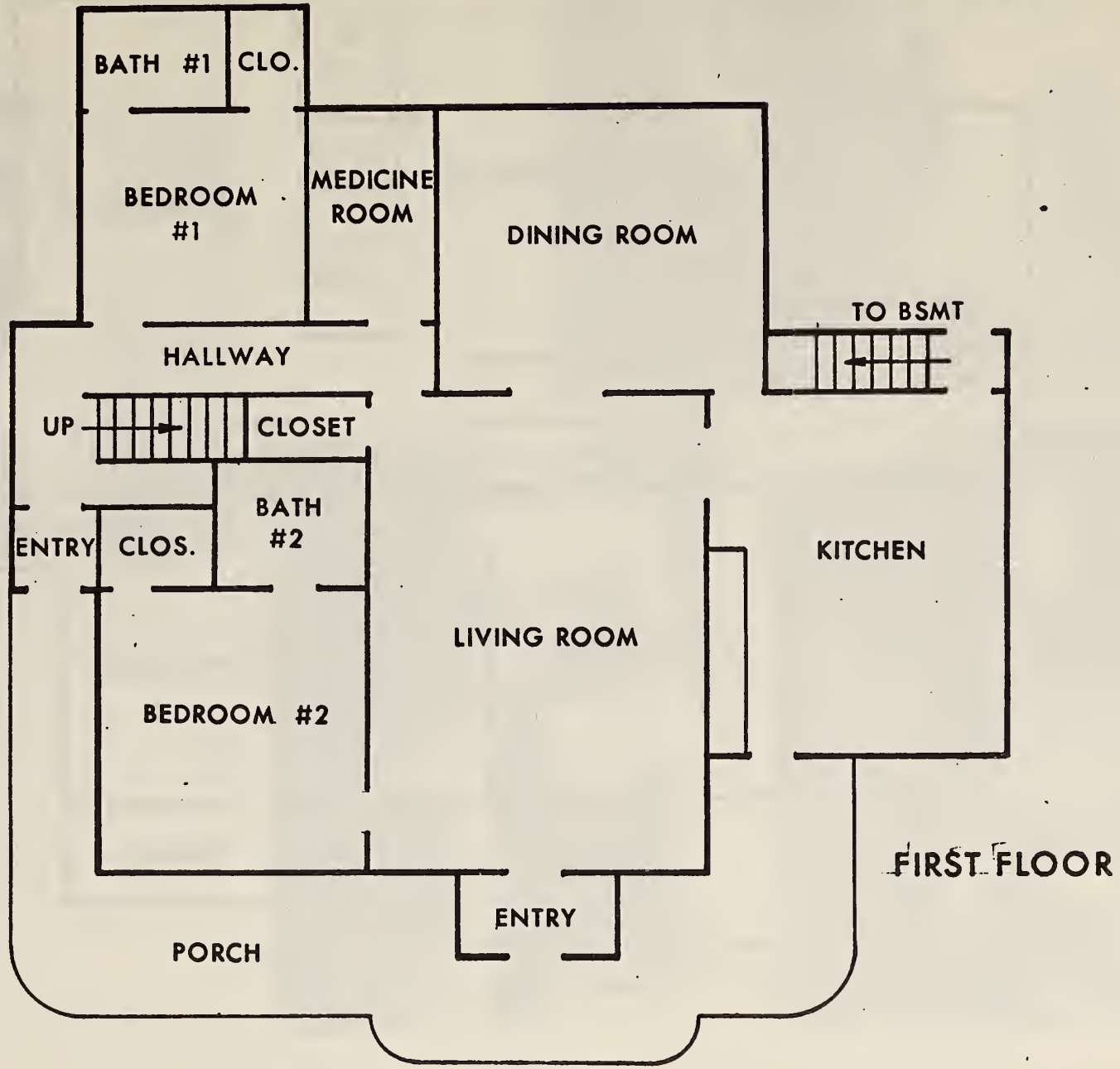
Heating System	Gas
Number of Residents	20
Range of Chronological Age	25 years - 61 years
Range of Mental Age	4.1 years - 11.6 years
Disabilities	Mental Retardation

Percentage of Total Person Hours of Use for Each Room



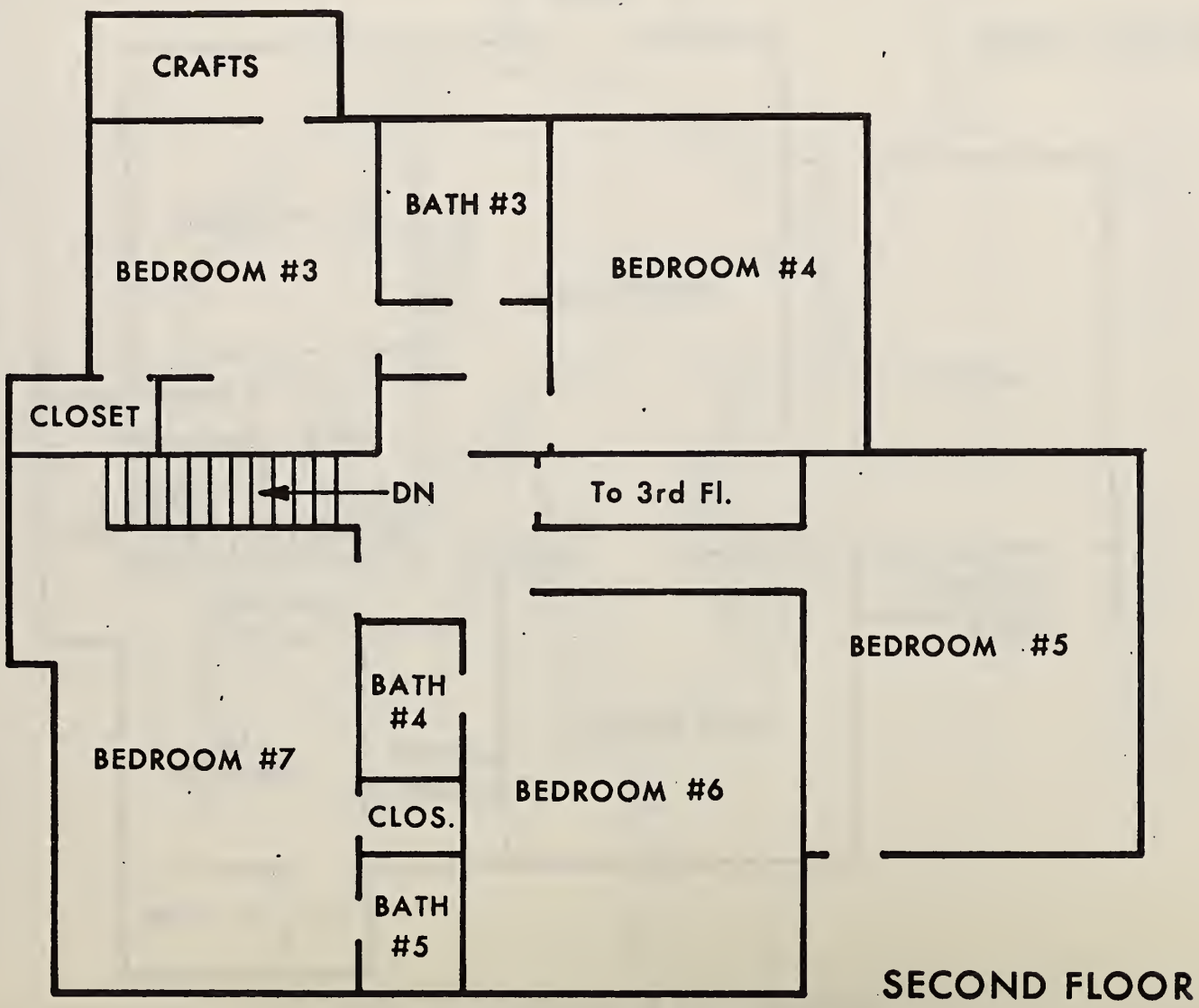
Average number of hours per day in which no residents are reported to be in home = 1.1.

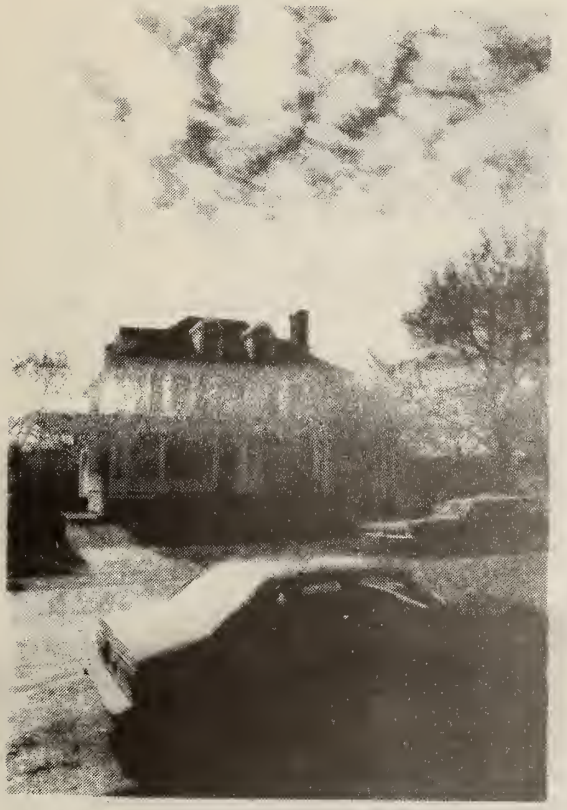
Appendix G Continued
Floor Plan--Washington B Group Home



Appendix G Continued

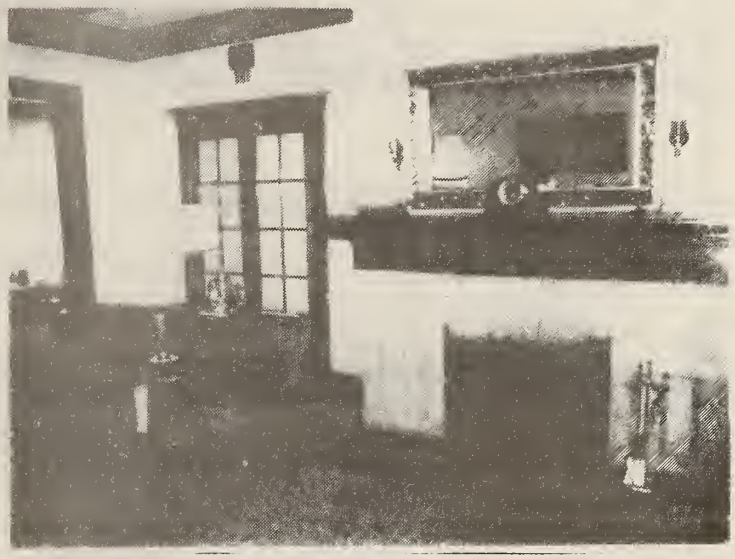
Floor Plan--Washington B Group Home





Exterior

Kitchen



Living Room

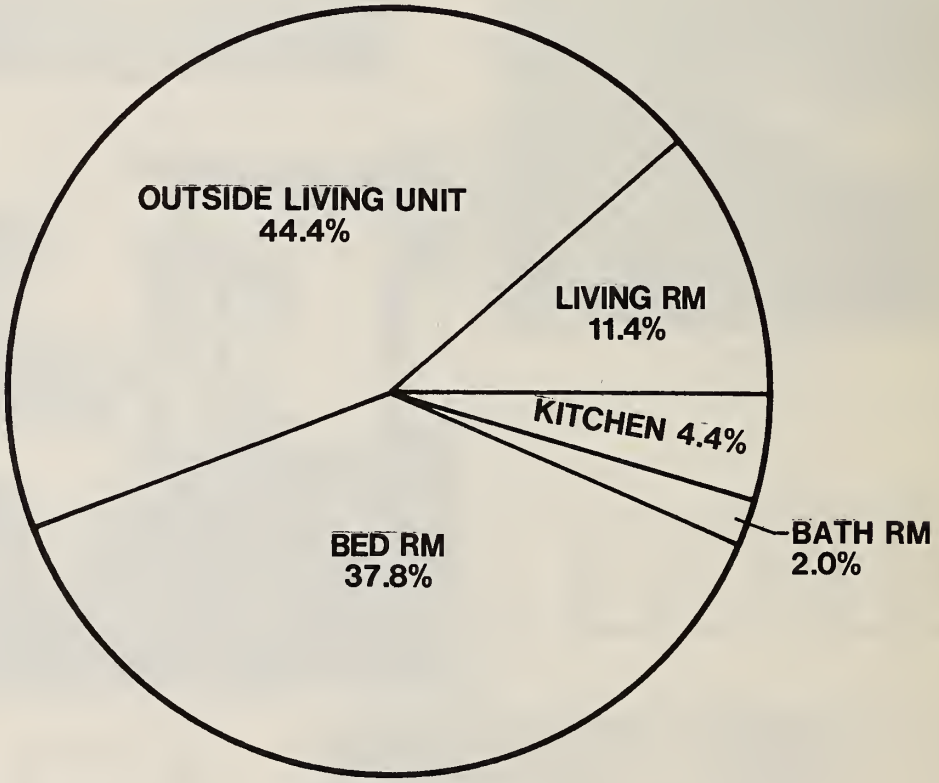
Bedroom

APPENDIX H

Summary Data--Minnesota Group Home

Heating System	Natural Gas
Number of Residents	41
Range of Chronological Age	19 years - 64 years
Range of Mental Age	2.8 years - 12.4 years
Range of IQ	34-76
Disabilities	Mental Retardation
	Mental Retardation (and Epilepsy)

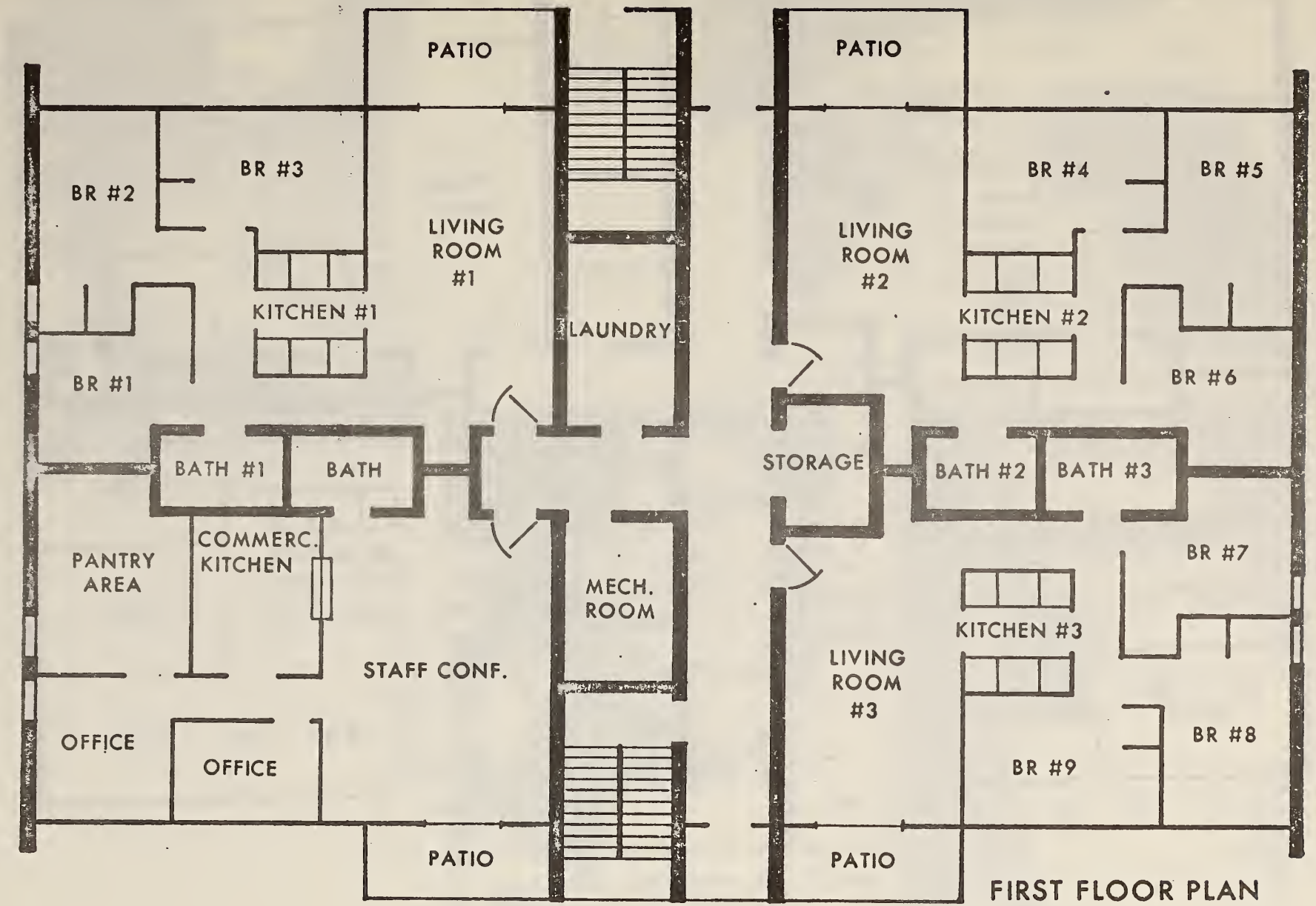
Percentage of Total Person Hours of Use for Each Room



Average number of hours per day in which no residents are reported to be in home = 4.1.

Appendix H Continued

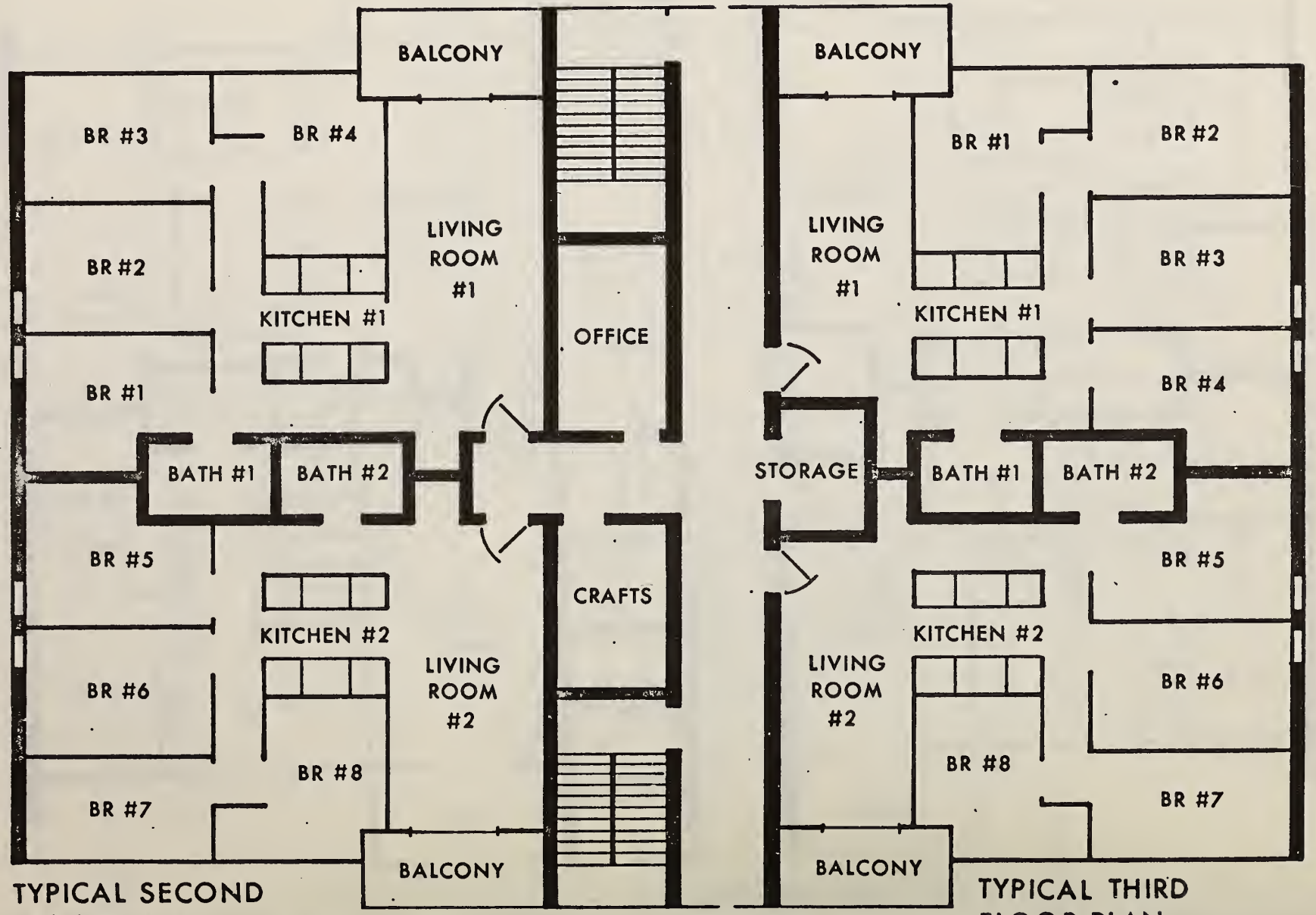
Floor Plan--Minnesota Group Home



FIRST FLOOR PLAN

Appendix H Continued

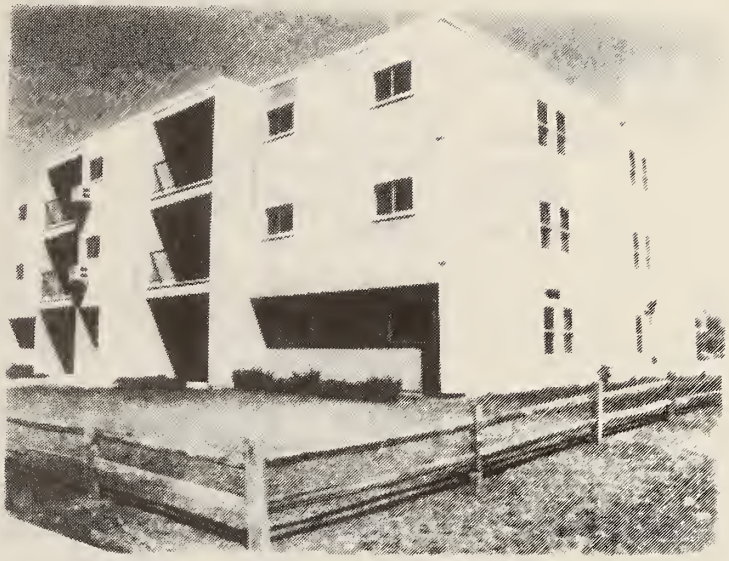
Floor Plan--Minnesota Group Home



TYPICAL SECOND FLOOR PLAN

TYPICAL THIRD FLOOR PLAN

Kitchen



Exterior

Living Room

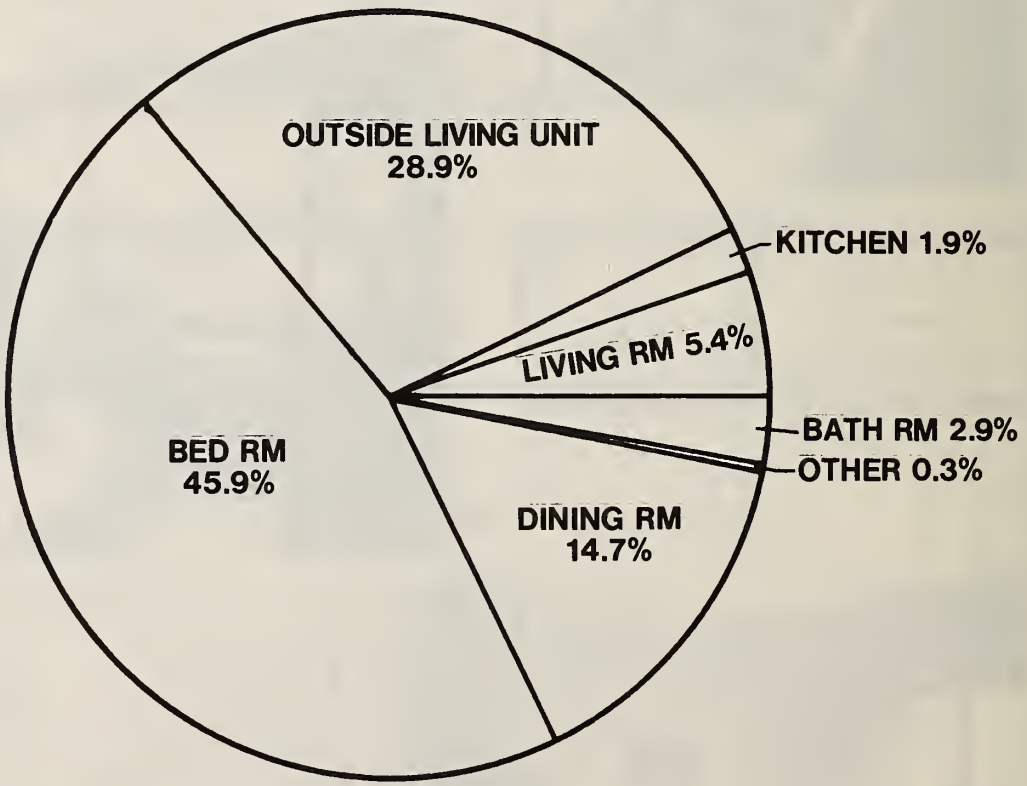
Bedroom

APPENDIX I

Summary Data--Iowa Group Home

Heating System	Natural Gas
Number of Residents	17
Range of Chronological Age	21 years - 47 years
Range of Mental Age	Borderline to severe
Disabilities	Mental Retardation
	Mental Retardation (and Cerebral Palsy, Epilepsy, Blindness, or Amputation)
	Cerebral Palsy
	Emotional Disturbance

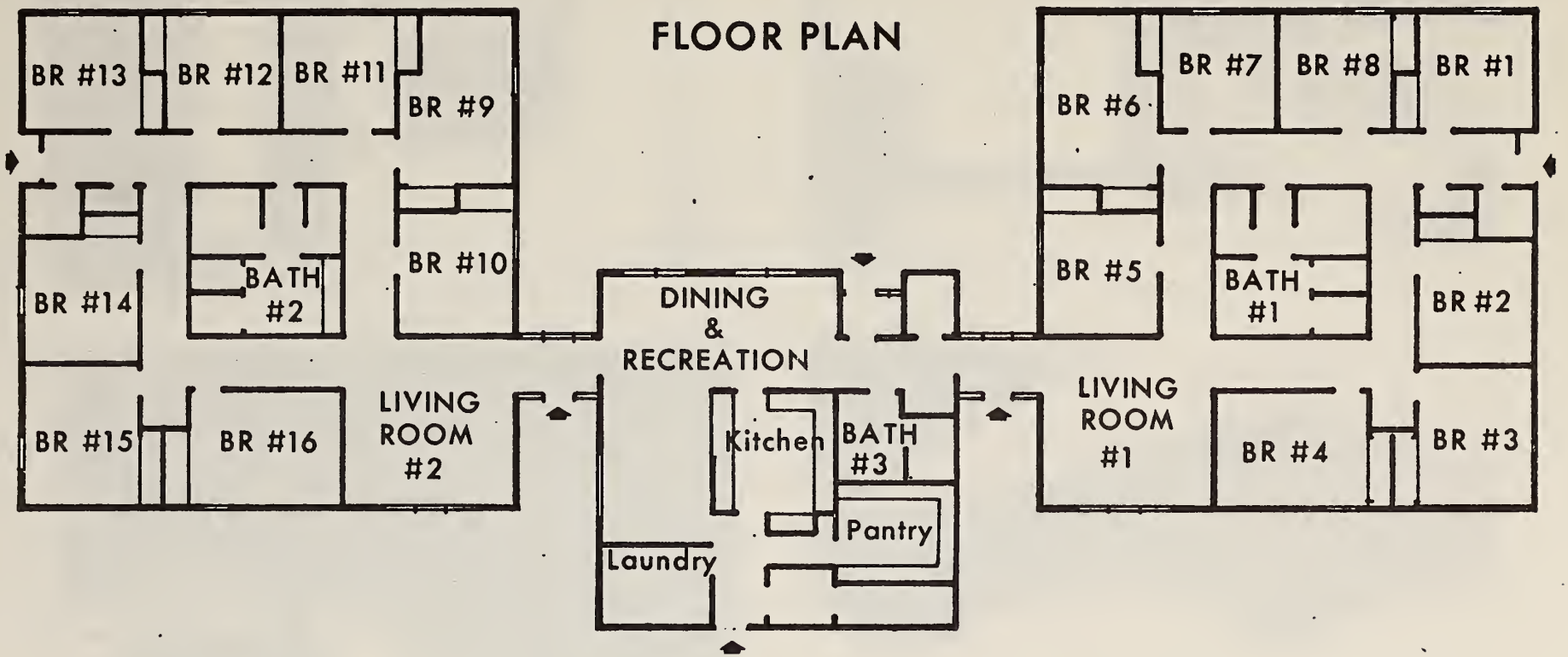
Percentage of Total Person Hours of Use for Each Room



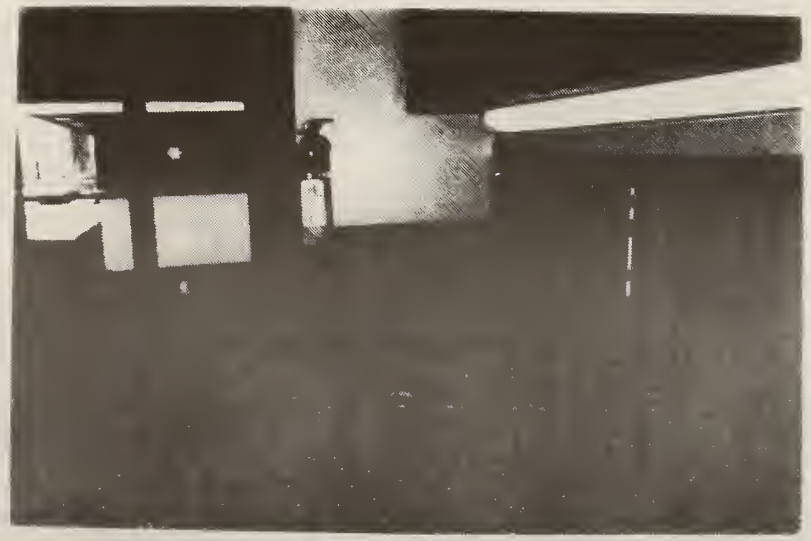
Average number of hours per day in which no residents are reported to be in home = 3.6.

Appendix I Continued

Floor Plan--Iowa Group Home



Appendix I Continued
Photographs--Iowa Group Home



Kitchen

Exterior

Bedroom

Living Room

Appendix J
Sample Room Use and Activities Checklist
for Nine Half Hour Time Blocks

Group Home Name _____ Day _____

Room Use and Activities Checklist

Time Blocks	Bedroom #1	Bedroom #2	Bedroom #3	Bath #1	Bath #2	Kitchen	Living Room	Dining Room	Laundry	Recreation Room
Midnight	2 sleeping	2 sleeping	2 sleeping	--	--	--	--	--	--	--
12:30 am	2 sleeping	2 sleeping	2 sleeping	--	--	--	--	--	--	--
7:00 am	1 sleeping	--	--	--	1 showering	4 eating breakfast	--	--	--	--
7:30 am	--	1 dressing	--	1 showering	--	2 doing dishes	2 cleaning	--	--	--
1:30 pm	--	1 reading	--	--	--	1 washing lunch dishes	2 watching TV	--	--	2 playing cards
2:00 pm	--	1 napping	--	--	--	--	2 watching TV	--	--	1 cleaning
7:00 pm	--	--	1 cleaning	1 showering	--	--	2 talking	2 watching TV	--	--
7:30 pm	1 listening to radio	--	--	1 showering	--	1 getting snack	1 watching TV	--	--	2 talking
11:30 pm	2 sleeping	2 sleeping	2 sleeping							

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15. SUPPLEMENTARY NOTES

[ ] Document describes a computer program; SF-185, FIPS Software Summary, is attached.

16. ABSTRACT *(A 200-word or less factual summary of most significant information. If document includes a significant bibliography or literature survey, mention it here.)*

This document is the final report to the National Bureau of Standards' Center for Fire Research as part of their support to the Developmental Disability Office of the U.S. Department of Health, Education and Welfare. The objective of the present study was to obtain case history information on a sample of group homes for the developmentally disabled. Survey techniques were used to compile summary data on residents' room use and activities, the group home facilities, and demographics of the supervisors and residents. Data are presented for room use and activities of developmentally disabled residents and these data are compared to results available for the normal population. Summary data describe characteristics of the group homes, supervisors, and residents. Recommendations are presented regarding fire safety for developmentally disabled residents of group homes.

17. KEY WORDS *(six to twelve entries; alphabetical order; capitalize only the first letter of the first key word unless a proper name; separated by semicolons)*

Demographics; developmental disabilities; fire protection; group homes; household activities; room use

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