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ABSTRACT

A NEW FORM OF INTERNATIONAL MIGRATION: THE UNITED STATES MILITARY RETIREE IN CENTRAL AMERICA

By

Phillip H. Allman, Jr.

The purpose of this study is to: 1) examine a developing United States military retiree migration into Central America; 2) determine where the migrants are concentrating; 3) ascertain why the migrants chose specific nations and sites for settlement; 4) identify the main characteristics of the migrants; 5) explain how the migration is taking place; and 6) point out the consequences of the migration.

International retirement migration was investigated by use of several models. A military retirement system model was developed to portray the active military establishment as a training institution and producer of potential foreign migrants. Using the concept of this model, a retirement migration schema was designed as a framework for examining retirement migration in all real world situations. Additional models, a migrant circulation system and an information exchange system, reflect the specific movement pattern and information exchanges of this migrant group. These models were applied in the Central America case.

Data were obtained during the 1975-76 academic year by personally administering a seven-page questionnaire to the military retiree population in Central America. During this field survey data were also collected from governmental organizations and other institutions. These data, combined with information gained by personal observation, formed the bases for comparative and interpretive analyses.

The study surveys the history of United States military personnel in foreign areas, emphasizing the relation of these movements to their propensity to migrate after retirement. It describes and explains the world distribution of military retirees and then focuses on Central America as a new amenity-related retirement area.

In Central America only Costa Rica, with 70 per cent of the military retiree population, was found to be important as a retirement area. Sixty per cent of the retirees are concentrated around San Jose in the Meseta Central region. In the remaining countries, most retirees reside in the primate cities, Guatemala City ranking second to San Jose. There was no evidence of retiree colonization or clustering within the major settlements. Correlation-regression analyses revealed that the distance factor accounts for little of the variation in retiree distributions.

Examination of physical, economic, social, and political factors provided a means of differentiating individual nations. Costa Rica had the most advantages for retirement living, followed by Guatemala, Nicaragua, El Salvador,

Honduras, and Belize. Favorable climate and low cost of living were the predominant reasons for migrant selection of Central America.

Military retirees have a history of foreign moves; the median for those in Central America was five during active service. Sixty-one per cent had at least one previous retirement residence. The median residency period in Central America was 2.5 years, with 78 per cent having lived in the area less than five years. The migrants' median age was 55; all were Caucasian males; 81 per cent were married, with one-half having dependent children and 34 per cent married to native wives; 49 per cent were college graduates; and 88 per cent spoke Spanish. Most of the migrants were fully retired (61 per cent) and their median annual income was \$8,900. More commissioned retirees (55 per cent) were found than enlisted, thus accounting for the relatively high median income.

Most migrants had friends, relatives, or other military retirees in-country to assist them in the move. The latter case suggests a modified chain migration effect.

Directional bias was present in the migration streams; 58 per cent of the retirees came from California, Florida, and Texas.

Retirees represent imported capital, e.g., in Costa Rica their annual income amounts to \$1,000,000.

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By

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A DISSERTATION

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To Daisy...
for sharing the sacrifices
and satisfactions

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The preparation of a study of this nature entails personal contact with a wide range of individuals from whom information, advice, and assistance are required. Recognition of all these persons obviously is an impossibility. Consequently, I would like to extend my appreciation to all those individuals who are not specifically named, but who shared in this research experience. This especially applies to the military retiree population of Central America, without whose friendliness and cooperation this research could not have been completed.

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CHAPTER I

INTRODUCTION

The population geographer is vitally concerned with the spatial relationships of population phenomena. Accordingly, the process of international migration receives special attention for study because of its obvious spatial characteristics (Demko, et al., 1970, p. 268). However, since migration is one of the more complex of the factors considered in population dynamics, its study and the formulation and testing of new concepts and theories is difficult. The absence of adequate and reliable data for study is especially noticeable (Hollingsworth, 1970, pp. 5-7 and 16-19). Consequently, many of the older laws and theories of migration cited in the literature (including Ravenstein's laws of migration, written in 1885) are still considered valid theories. Although Ravenstein's laws of migration have endured, they have been challenged at times and some modifications made of them. Most notable is Lee's (1966) work, which reiterated Ravenstein's theories and introduced a migration schema associated with migrants' areas of origin and destination, intervening obstacles to migration, and personal factors affecting individual migrants.

These general theories, which are principally of a descriptive nature, are useful in forming frameworks for the study of international migration.

Historically, international migrations have been examined by measuring the numbers of people moving between specific nations. Moreover, these movements have been analyzed to determine whether they were of a voluntary or involuntary nature and to discover the associated problems and reasons for the migrations (Maselli, 1971). In many of these analyses the movements were categorized and examined according to a defined migration typology. A typology most used today is one developed by Petersen (1958) which distinguishes between forced and free movements of an innovative or conservative nature by groups of people or individuals. Consequently, major movements of international migrants are identified in accordance with these typologies. The effects of these migrations upon the generating and recipient nations are subsequently investigated (Kirk, 1958).

In Central America, during the colonial period, the major streams of immigrants were received from Spain and Africa, followed by less significant immigrations of Europeans and other colonizing groups. The interactions of these migrants with the indigenous Indians and natives formed the socio-cultural complex of the various Central American nations. In recent times international migration in the area has declined and is of little significance in

comparison with that of the colonial era. Furthermore, international migration is now restrictive, with most migrants admitted in the interests of national development (Neiva, 1965).

As a consequence of these current limitations, it is apparent that more attention should be devoted to an understanding of free and innovative international migrations of a less spectacular, but yet of possible future significance in Central America. Included in this category are American military retirees who have migrated south of the border to the more favorable climates, recreation areas, and for other amenities of the Latin American nations, with principal concentrations for retirement in Mexico (Sleed, 1974, p. 10B). The Mexican government, however, has become concerned about a potential build-up of upper middle class American communities in certain regions, particularly the Guadalajara area, and as a consequence may restrict future American immigrations (Times of the Americas, 1973, p. 12).

The Central American nations offer American military retirees similar benefits to those found in Mexico and most of these nations have recently issued government decrees which guarantee foreign pensioners certain in-country benefits.¹ Moreover, this information is being disseminated

¹All the Central American nations with the exceptions of Honduras and Belize have enacted special laws which are beneficial to qualified retirees.

in the United States through mass media channels (Turner, 1973; Frisbee, 1973, p. 22). As a consequence, the favorable conditions for retirement in Central America have already been acknowledged by a segment of the United States populace, including an increasing number of United States military retirees (Harding, 1973a, pp. 30-33). Some of these retirees have recently established residence in Central American nations, especially Costa Rica, and it appears that many more are now entering this new retirement stream (Harding, 1973b).

Statement of the Problem

The emergence of this new form of international migration into Central America focuses attention upon a subject which lends itself to investigation by the population geographer. Not only does it offer an opportunity for a spatial analysis of the retirement migration process, but provides a regional laboratory for testing theoretical aspects of this phenomenon.

Purpose of the Study

The specific purpose of this study is to examine the developing United States military retiree migration into Central America and attempt to answer questions as to where it is concentrating, why the migrants choose specific nations and locations to settle, what are the characteristics

of the migrants, how is the migration taking place, and what are the consequences of the process.

Contribution to Theory on Foreign Retirement Migration

There is no previous study in the international migration literature which deals with retirement migration, nor has anything of a professional geographic nature been published on military retiree migration. This research represents a pioneer effort in this respect and should contribute toward a better understanding of international migration from spatial and socio-economic viewpoints. More importantly, it might prove useful as a contribution to a theory on foreign retirement migration.

Usefulness of the Study

The study should prove of use to United States citizens contemplating retirement in Central America by providing an overview of migration channels, retirement settlement areas, the causes for and consequences of foreign retirement, and information on the activities of their fellow Americans.

Officials and planners of the host nations should find the study of use in identifying the effects of American retirees on their social and economic structure and for planning purposes in attracting additional members of this group.

Objectives

The general objectives of the study are to gain an understanding of the spatial processes involved and the spatial structures formed as a result of American military retirement migration to Central America. The determinants of the migrations and the resultant spatial implications will be given special attention as explanatory factors in the migration processes. Moreover, the socio-economic effects of the migration on the migrant group and the nations concerned will be analyzed. Finally, a theoretical retirement migration schema will be developed as a framework for examining the Central American model and its applicability to other world environments will be considered.

Migration System and Military Retiree Distributions

The process of international migration includes a complex set of dynamic and interacting forces which can be best understood and treated in a conceptual framework. An initial objective of the study, therefore, is the formulation of a migration system model to be used in analyzing and discussing component parts of the migration. Movements envisaged in this migration model produce and modify retiree spatial distributions. Consequently, the depiction of these spatial concentrations is a basic objective of the study.

Military Retirees

United States military retirees are a select retirement age group which represents a segment of American society that has great potential as a generating unit of international migrants. These retirees now number over one million² and as a consequence could have a significant impact on specific retirement areas. They generally represent a trained, educated, and experienced international migrant group because of their many years of foreign travel and living. The fact that military personnel and their families have been conditioned to frequent moves and exposed to foreign areas contributes toward their propensity to migrate after retirement. Information regarding the characteristics of military retirees, including that of a demographic, social, and economic nature, is important in analyzing the selectivity process in migration and the degree of permanency of the migration act. An examination of these characteristics will be a major objective of the investigation.

Migration Decision

Most international migrations, whether by groups or individuals, have been precipitated by an overriding

²At the end of fiscal year 1975 the total number of military retirees was 1,054,923. Projections at this time called for 1.3 million in the next decade, with a peak of 1.4 million expected by 1995 (Lien, 1976a, p. 16).

condition, often economic, social, or political, which led to the decision to move (Petersen, 1955; Swatzky, 1971; Hollingsworth, 1970). According to Cox (1972, p. 75), the most significant factors to consider in an analysis of inter-nation migration decisions are those pertaining to economic opportunity, social amenities, and movement costs. He also believes that language differences and political boundary barriers also play an important and sometimes a restrictive part in the movement.

Various migration studies have been undertaken using these factors to explain migration decisions and movements. Moreover, most entail the use of socio-economic factors and the application of statistical tests to explain migration behavior (Kariel, 1963; Tarver, 1961). More recently, however, new explanations as to why people migrate have been based on behavioral conditions and relationships between individuals and environmental forces (Wolpert, 1965, 1966; Golant, 1971). Amenities as a significant factor in migration studies was given particular attention in explaining migration by Ullman (1954).

Although a consideration of all these factors is important in the migration decision process of military retirees, that factor pertaining to amenities appears dominant in relation to international retirement migration. Military retirees are economically independent or semi-independent (retirement pensions) and can choose a retirement area based on its attractiveness (amenities) rather

than upon economic conditions or employment opportunities. Their main concern in the selection of a foreign area for retirement, therefore, would probably be the amenities associated with pleasant living conditions such as climate favorable to health and recreation, beautiful landscapes, an acceptable social status, and special rights and privileges granted by the host nations. They are more apt to choose those foreign nations which offer the most advantages for favorable retirement. Consequently, a most important objective of the study will be an analysis of data concerning the amenities offered by the Central American countries which influence the decision on retirement location.

Networks

An understanding of the structure and process of migration and information networks is of particular importance in spatial analysis. Migration and information flows have been described and explained by various methods. Ravenstein (1885) established a relationship between distance and the propensity to move in his early published laws of migration. Gravity models which generally employ a distance-decay component have been widely used as a quantitative measure, since they exhibit locational regularity and can be explained in terms of least effort (Zipf, 1946). The intervening opportunities model introduced by Stouffer (1940) has received some use and other studies employing

modifications of these models as well as some new ideas have also been utilized to explain and predict migration patterns (Ter Heide, 1963; Haenszel, 1967; Bunge, 1971).

In many studies, particularly those dealing with internal migrations, these methods have proven useful in explaining migration patterns. In the case of inter-nation movements, however, these methods become more difficult to apply and sometimes are completely inapplicable. It is believed, therefore, that international migrations of the type envisaged in this study can best be understood by considering them as deviant migrations (those not fitting the normal distance-decay pattern) and looking for explanations in terms of components such as the acquisition of information through personal or mass media channels (Cox, 1972, pp. 79-81). Information exchange is the critical factor, then, since it is necessary for establishing network linkages. Considering the migration network in terms of information linkages based on the locations of favorable retirement areas, it is conceivable that a number of human interaction networks would develop. A major objective, then, is to identify and examine the migration channels, information flows, and networks; and to evaluate their importance in the migration process.

Settlement Patterns

Once migrants enter a foreign country, they tend to distribute themselves in various patterns. Their spatial arrangements in the host nations, whether they are clustered, scattered, mixed military retiree settlements with other United States migrants, urban or rural oriented, or mixed settlements of United States migrants with nationals, are important aspects of the migration phenomenon. These arrangements can influence the rate and amount of interaction between the migrants and nationals. Internal linkages and communications flows are sustained through various social, economic, and political affiliations and activities in the respective nations. This aspect of the study will entail answers to such questions as the following: Where are United States military retirees located within each host nation? Are their settlements identifiable? Do the retirees mix with the nationals, or do they remain separate? Are the retirees dispersed among the existing national settlements or are they established in nucleated United States settlements? The primary objective in this respect is to spatially locate and explain migrant settlement patterns.

Adjustment and Effects

Migrant adjustment and adaptation to a new environment, and the socio-economic effects of the migration on the

host communities as well as on the migrants themselves, are important considerations in determining the success and continuation of the migration (Jones, 1956). This leads to the question of whether or not the migrant will succeed or fail in his endeavor to adjust to his new environment and subsequently affect the permanency of the migration act. In looking at these factors, principal objectives are to determine the influences of relatives and friends and national hostilities on the migrant's perseverance in the host nations.

Hypotheses

In order to accomplish these objectives the following hypotheses have been formulated for testing in the study:

1. Conditioned to frequent moves and exposure to foreign areas, military people have a high propensity for foreign migration after retirement.
2. Military retiree migrants share the following characteristics:
 - a. Median age in the mid-fifties
 - b. Married
 - c. Highly educated
 - d. Substantial retirement income
 - e. Similarity of previous residence
 - f. Propensity to return to the United States
3. In the migration decision:
 - a. Site selection is directly related to the amenities offered by the host nations.
 - b. Climatic conditions are of prime importance.
 - c. Cost of living is of secondary importance.
 - d. Previous exposure to, or residency in, Latin America are important considerations.

- e. Place differentiation is dependent upon the exchange of information and the communications linkages between the United States and the host nations.
4. In the host nations:
- a. The retirees locate mainly in the central cities or adjacent areas connected by the major routes of communication.
 - b. The numbers of retiree migrants vary inversely with the distance from the capital or major cities.
 - c. Retiree clustering is directly related to housing and recreational developments.

Methodology

It is believed that significant research in the social sciences can best be accomplished by forming theoretical concepts which then can be empirically tested and applied to the real world. Geography, in particular, lends itself to these processes because of its inherent methodological approach to solving social problems, i.e., spatial organization applications, regional analysis, and field survey techniques.

In an examination of the American retirement migration structure in Central America, all appropriate methods for accumulating information and data were utilized; however, field surveys were the main source of primary data.

Personal Interest in the Subject

With domestic social problems, especially those existing in our major cities, in need of geographic solutions,

it is natural to question the selection of a subject dealing with foreign areas and a group composing a relatively small segment of our society. The issues of impact and significance will of course be developed and explained in the subsequent analysis. For the present, it appears pertinent only to point out my interest in the subject and qualifications for its investigation.

As a retired Army officer with over twenty years of active military duty, I have served in several foreign regions, notably Asia, Europe, and Africa. During these overseas assignments I became aware of living conditions and attitudes of foreign nationals regarding American military visitors in their respective countries, as well as the impact of the international moves on the American military personnel themselves. Thus, having been exposed to these foreign experiences and sharing many of the same characteristics, beliefs, and institutions of military people, I feel qualified to undertake a study of an international nature dealing with this group.

Since retirement from the military, I have been teaching college level geography in Michigan and concomitantly, through graduate study, have acquired an interest in migration theory and in Latin America as a regional field of study. Furthermore, being a military retiree and having chosen, from a climatic standpoint, an unfavorable area for retirement living, the questions of where military retirees

settle, and for what purposes, often come to mind. Given particular consideration in this questioning process are those foreign areas which present a combination of climates and social amenities for retirees. Consequently, the desire to combine these interests and qualifications into a relevant research area led to the decision to search for a problem in international migration dealing with American military retirees.

Selection of the Study Area

Central America, excluding Panama, was chosen as the research area for several reasons (Figure 1). It lies within the Latin America sphere of interest, has perennially favorable climates, offers special privileges to foreign retirees, and is accessible to the United States by direct highway connections. Mexico, a popular retirement area for many years, also satisfies these requisites, and certain other areas of Latin America provide advantageous conditions that attract foreign retirees. Central America, however, although a small geographic entity, is composed of several politically distinguished nations, a situation which facilitates the researcher's task of comparing and contrasting their retirement attributes. Most significant in the selection process was the receipt of information through various media, mass and interpersonal, regarding an influx of American retirees into Costa Rica beginning in early 1973.

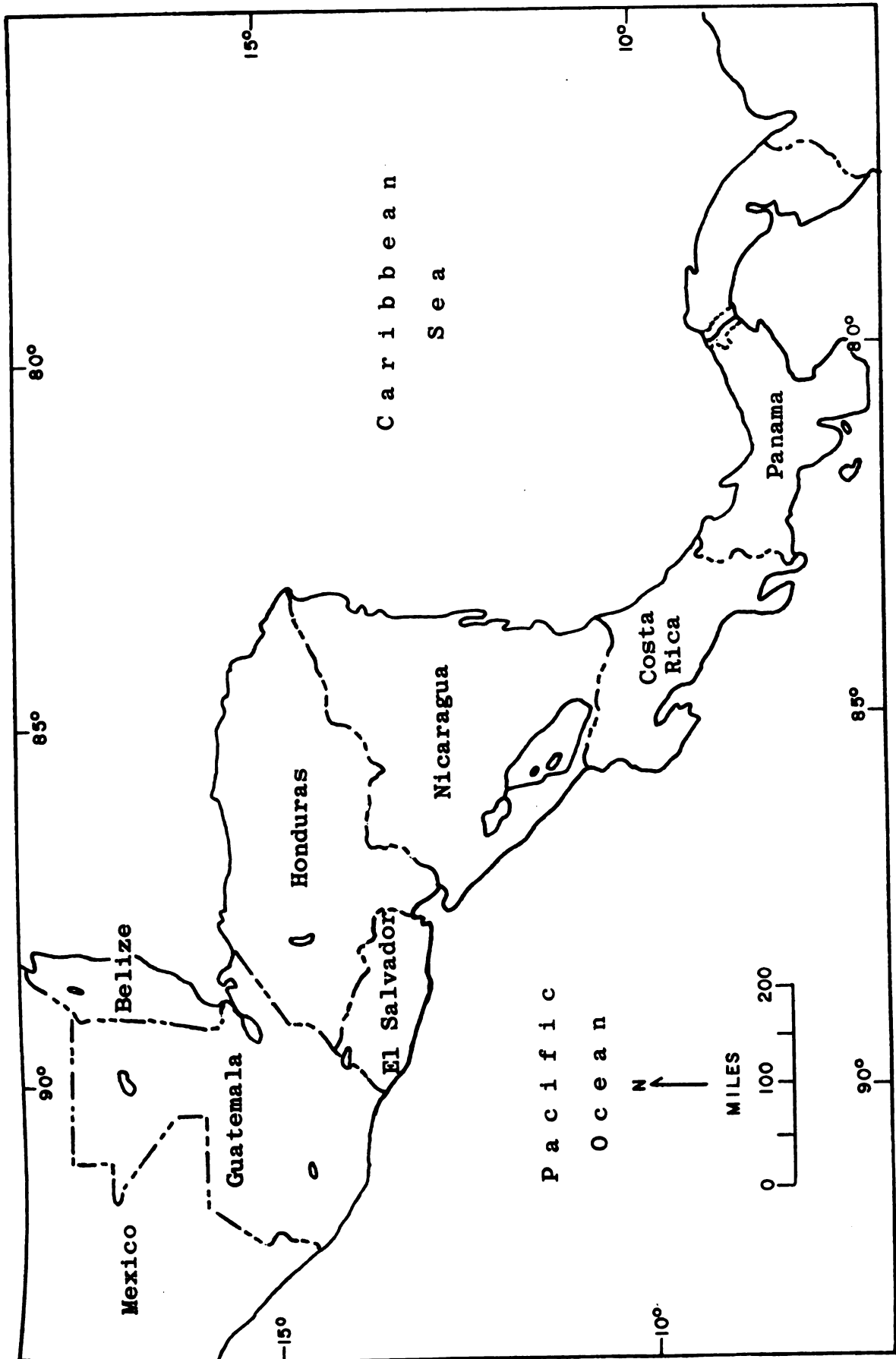


Figure 1. Central America

This information was the catalyst that prompted my preliminary investigation of this new activity in Costa Rica and which further influenced my decision to look at the phenomenon in the larger perspective of Central America. Panama was not included because the strong influence of the Canal Zone on American activities in the Republic of Panama could distort results of the study.

Data Requirements and Sources

To develop, describe, and explain the overall migration process in the study area, a wide range of data is required, i.e., pertinent statistics on the active military force, the military retiree base, and the Central American military migrant group. Moreover, information on the nature of the linkages between these groups, the migration and communications networks, and other external and internal functional relationships is vital in the collection effort. Although certain information, including population figures and socio-economic information for the active military organization and the military retiree base in the United States, are important requirements, the military retiree migrants in Central America are of principal interest in the collection of primary information. Consequently, data categorized as follows are required on United States military retirees in the host nations:

1. Personal data (demographic, social, and economic)
2. Financial data
3. Military service data
4. Military service migrations
5. Retirement migrations
6. Migration decision data
7. Place location data
8. Permanency and area satisfaction data

Other required data include information on the actual locations of retirees in the host nations and the amenities offered to them, especially those pertaining to incentives for settlement such as importation of duty-free items, favorable taxes, and other special allowances for retirees.

The chief sources of data are the military retirees located in the Central American nations. Other important sources include United States government personnel, both in the United States and the host nations; officials of military affiliated organizations; Central American governmental representatives; and other American personnel residing in Central America who have an intimate knowledge of the area.

Data Gathering Techniques

Data for the study were obtained by searching the literature, contacting United States government officials personally and through correspondence, and personally interviewing the migrants.

Literature Search

A survey of the literature regarding all aspects of Central American retirement areas and communities, real estate ventures, and other schemes which may develop into retirement areas was completed prior to the field investigation. Published material pertinent to military retirees and their migration histories was reviewed and abstracted as appropriate. Moreover, a thorough search was made on a country by country basis to determine the existence of information on special government provisions and decrees for foreign retirees, as well as other data of a political, economic, and sociological nature which might affect retirees. During the literature search stage, references pertaining to methodologies that could be useful in the study were also noted. As anticipated, little published data on this subject were uncovered.

Preliminary Data Collection

In order to obtain information on the numbers and locations of American military retirees residing in Central America, the following Department of Defense agencies were visited:

1. Headquarters, Department of the Army
U.S. Army Military Personnel Center
Retired Activities Branch
Alexandria, Virginia
2. Headquarters, Department of the Navy
Bureau of Naval Personnel
Retired Personnel Support Section
Washington, D.C.

3. Headquarters, United States Marine Corps
Personnel Affairs Branch
Retired Activities Section
Washington, D.C.
4. Headquarters, Department of the Air Force
Air Force Military Personnel Center
Randolph Air Force Base, Texas
5. Headquarters, Department of the Army
U.S. Army Finance and Accounting Center
Pay Services Division
Indianapolis, Indiana

In each case discussions with appropriate officials at these agencies revealed that names and addresses of individual retirees could not be released because of the implementation by the Department of Defense of privacy laws. Information was obtained from the agencies, however, which gave total numbers of retired personnel living in Middle and South America. Since Army Post Office (APO) addresses were given in some of the listings, complete country breakdowns were not possible. Consequently, all of the agencies personally contacted agreed to accept and staff a letter from me which would request additional information on this subject, in accordance with provisions of privacy laws.

The Retired Officers Association in Washington, D.C. was also visited to inquire about the availability of listings of retired officers located in foreign nations. Some helpful material was obtained from this source, and the editor of the Association's journal accepted for publication a personal plea to members for information regarding

my research interest. Responses, however, were disappointing, with most coming in the form of requests for copies of the study, when published. Another article published by the Army, Navy, and Air Force Times of Washington, D.C. produced similar results.

Following these visits, correspondence was initiated with the previously enumerated Defense Department organizations, plus the finance and accounting centers of the Armed Forces. These letters requested the release of names and addresses of retired personnel in Central America, and contained a full justification for the information, stating the purpose and use of the study. A listing of all foreign nations where retirees reside and the total numbers living therein was also requested. Letters were drafted to the librarians of the following institutions seeking information or references pertaining to United States military retirees in Latin America, and any other background material and general coverage on the area:

1. Industrial War College
Fort McNair, Virginia
2. National War College
Fort McNair, Virginia
3. Inter-American Defense College
Fort McNair, Virginia
4. U.S. Army Library
The Pentagon
Washington, D.C.

All replies from the Defense Department offices cited the Privacy Act of 1974, which prohibits the disclosure of

addresses to any person without the consent of the individual involved, as a justification for denying the request. In all instances, however, they did provide a listing of foreign nations where retirees reside, along with the total number of retirees in the respective nations. Nothing of a positive nature was received from the Defense librarians, two of the four failing to reply.

Since the retiree locational data could not be obtained from the referenced sources, it was decided to use the total number figures provided by the Defense Department as a general guide for each nation and to proceed with the field survey, utilizing in-country sources to later identify and locate the retirees (Table 1). The principal contacts in these cases were United States government and foreign government officials in each country.

Questionnaire Preparation

Prior to commencing the field survey in Central America, a questionnaire was designed that would satisfy the data requirements listed previously (Appendix A contains a copy of the questionnaire). Originally, the questionnaire was approximately one-third longer. Its pre-testing in Mexico the summer before its use in Central America, however, proved advantageous by identifying questions, particularly those dealing with active military assignments, which could be eliminated, thus reducing its length. This pre-testing also provided constructive criticism on clarity and

Table 1. Military Retirees in Central America

Country	Army	Navy	Air Force	Marines	Total
Belize	5	-	-	-	5
Costa Rica	24	13	1	3	41
El Salvador	1	1	2	-	4
Guatemala	1	5	3	2	11
Honduras	3	3	-	-	6
Nicaragua	2	-	-	1	3
Total	36	22	6	6	70

Source: Data received in 1975 and 1976 through personal correspondence with the separate service departments of the Department of Defense.

the arrangement of questions. The questionnaire was the principal instrument used in the data collection process and the basis of information for most of the analyses.

Field Survey

The field work and military retiree interviewing in Central America were conducted during the 1975-1976 academic year. The travel route from the United States on a country to country basis consisted of travel by private car through Mexico, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, and Panama, returning to the United States in the reverse order, and including Belize after departing Guatemala (Figure 2).

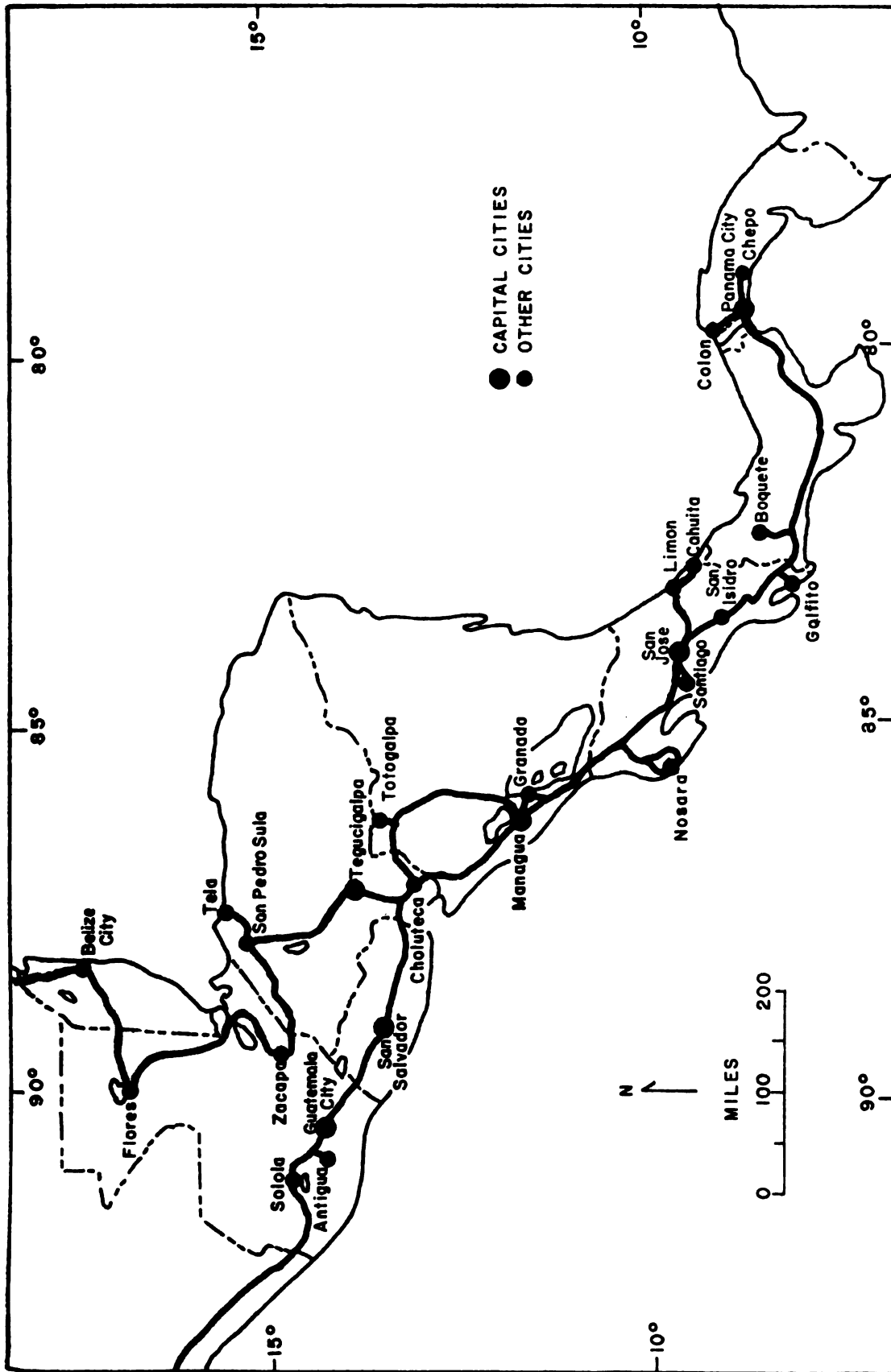


Figure 2. Travel Route in Central America

Since the total military retiree migrant population in Central America was the target for the field investigation, the principal problem in each nation was to identify and locate every person meeting this criterion. Once this was accomplished, the process of making contact and completing the questionnaire interview could then be undertaken.

The approach taken to obtain this information was generally consistent within the respective nations. First, contacts were made with appropriate American organizations, including the American Embassy, Office of the Defense Attache, United States Military Group, Inter-American Geodetic Survey, American Legion, American Chamber of Commerce, and the Retired Officers Association. Of this group, a Retired Officers Association chapter was found only in Costa Rica, and American Legion chapters in Guatemala and Costa Rica; whereas all other organizations appeared in each nation except Belize, where only the American Embassy is present. The project and its potential usefulness was explained to representatives of these organizations and as a consequence of their receptiveness, most furnished some names of military retirees. The standard procedure was then to contact each known retiree for an interview and at the same time query him regarding the identification of other retiree acquaintances.

Certain of the Tourist Bureau officials of the host nations were also most helpful in identifying retirees and

providing other pertinent material on retirement conditions. This was especially true in Costa Rica and Guatemala.

Through the utilization of these sources, it is believed that all, or at least the vast majority, of military retirees were identified and subsequently contacted if physically present in-country. This investigative method identified larger numbers of retirees in Central America than had been reported in the Defense Department figures (Table 2).

Concurrent with the interviewing procedures, general field observations were made and a variety of other sources contacted to provide a broad range of information useful in the overall analysis of the study.

Data Analysis

The data contained in the questionnaires, combined with other collected field data and supplemented by pertinent secondary and tertiary sources, form the base for the analyses in the succeeding chapters.

Table 2. Composition of the Interviewees

Country	Completed Interviews	Not Contacted*	Not Eligible ^a	Not Located ^b	Refused	Total
Belize	1					1
Costa Rica	79	24	(6) ^c	45	2	150
El Salvador	4	4				8
Guatemala	18	3				21
Honduras	6	2				8
Nicaragua	6	2	(1) ^c	1		9
Total	114	35	(7) ^c	46	2	197

*Qualified retirees who could not be contacted because they were temporarily out of country or away from home for vacation, medical, shopping, or business reasons.

^aPersons who were not qualified for military pensions; i.e., military reservists with several years service.

^bQualified retirees who could not be contacted because of permanent departure from last known address, or those identified by name but with no address.

^cNot included in totals.

CHAPTER II

MILITARY RETIREE CONCENTRATIONS

Before focusing on the distribution of military retirees in Central America, it is necessary to look at their worldwide distribution and the processes which formed concentrations of retired migrants. Consequently, this chapter is concerned with a description of the general retirement migration system and its component populations, an introduction to the migration schema used as a framework in the study, and the domestic and foreign distribution of military retirees.

Retirement Migration System

The foreign retirement locations of military retiree migrants are not ones of random selection, but the result of choice based on previous exposure to foreign areas or information about those areas accumulated during military service. In this respect, it is believed that the active military organizations (Army, Navy, Air Force, and Marine Corps) function as training institutions for international retirement migration. This concept of a military

retirement migration system is depicted in Figure 3. The model employed here is one of components which direct and control the flow of military persons into foreign retirement areas. In this system the active military organization is a producer component which places military retirees into a donor component representing military retirees in the United States, and the source of potential international migrants. Certain of these retirees migrate to foreign nations (recipient component), thus becoming international migrants. Interaction among the components of the system is maintained through the transfer of information. The flow of persons and the exchange of information in the system form circulatory movements which create a chain migration effect, sustaining the system's operation.

With this model as a base, and considering it as the generating mechanism for potential international migrants, the donor and recipient elements of the model (military retirees) were used as the main components to formulate a retirement migration schema (Figure 4). This schema was designed as a framework for analyzing and explaining the component parts of the migration process, both static and dynamic, and to insure that all important aspects of the phenomenon were given full consideration in the study. Mabogunje (1970) introduced this method for studying migration when he utilized a systems approach to understand and develop theory on rural to urban migration, especially that

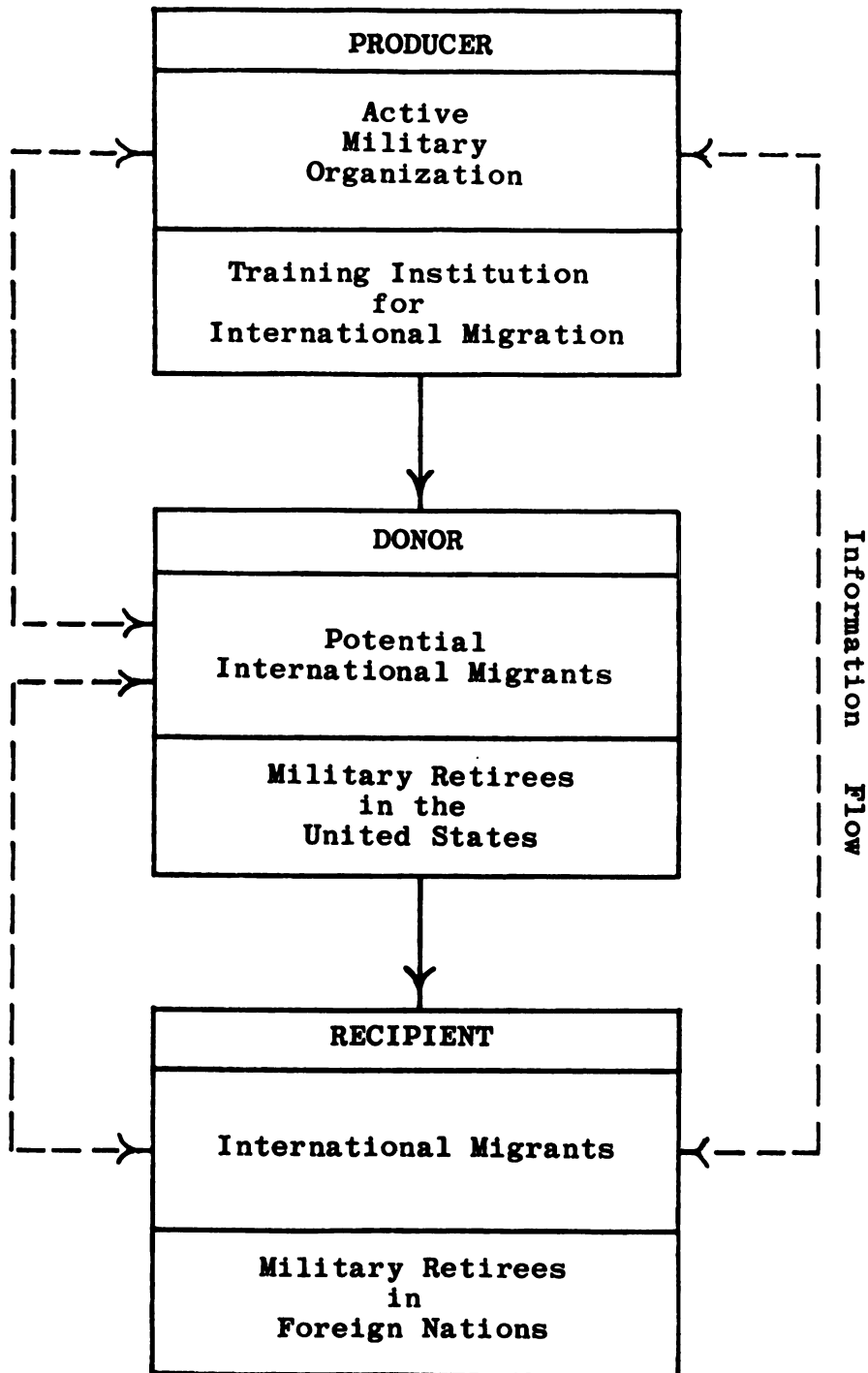


Figure 3. Retirement Migration System

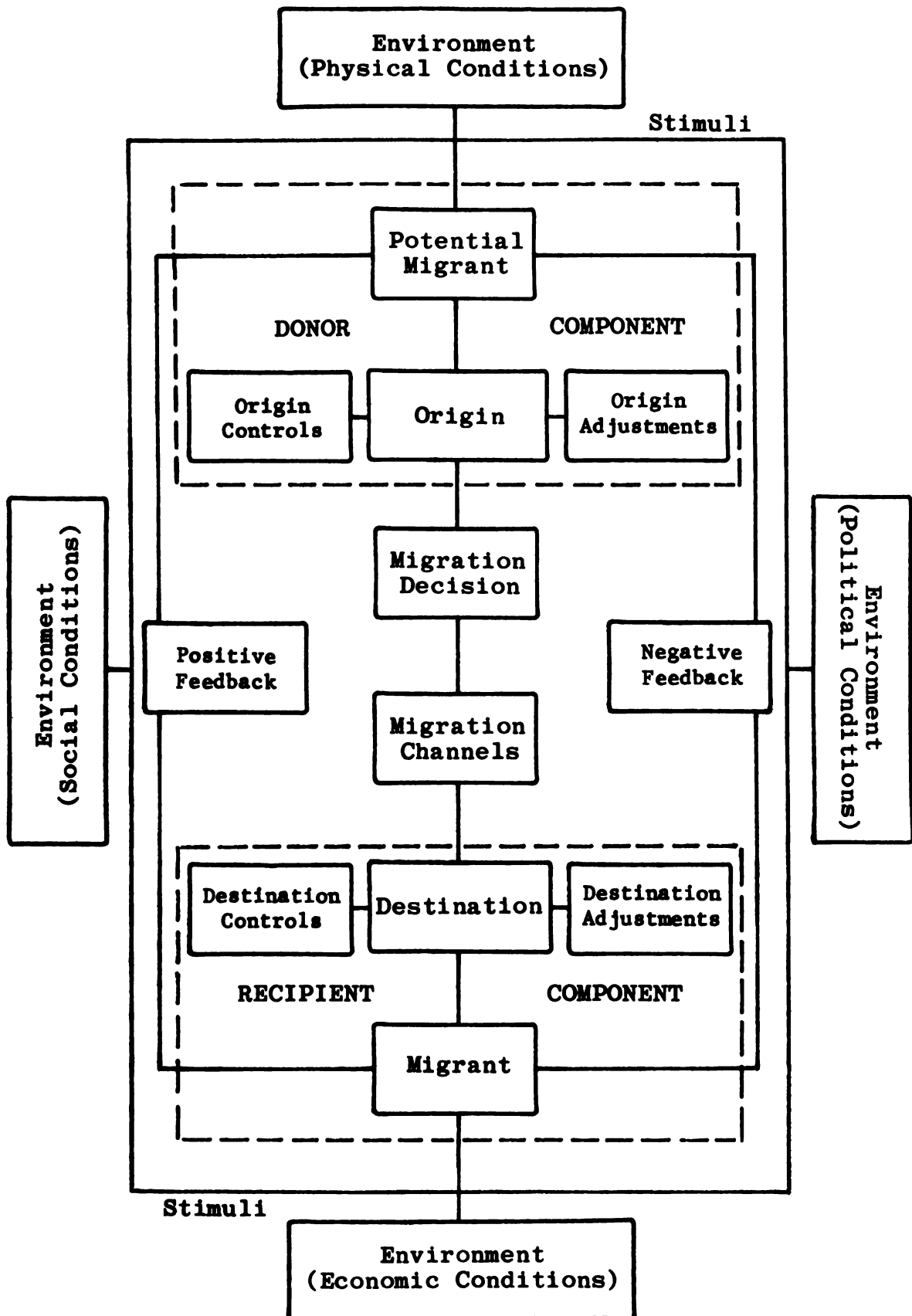


Figure 4. Retirement Migration Schema

pertaining to Africa. Figure 4, therefore, uses the ideas expressed by Mabogunje, although modified to fit the specific interests of this study.

The schema illustrates the functions of migration elements and the processes involved in migrant movements, as well as the relationships of the component parts to each other and the outside environmental effects. Within this scheme, the donor and recipient components, along with their respective sub-components, represent specific populations located within a spatial context. Acting on the inhabitants of these populations are various internal and external factors which may create or retard movement. In theory, the potential migrant, located at the place of origin, is subjected to a number of control and adjustment mechanisms, such as family and community interests and other socio-economic relationships of either a positive or negative nature. Concomitant with these internal functions, physical, political, economic, and social environmental influences (stimuli) also reach the potential migrant, thus affecting his desire to stay or move. If his decision is to move, he must evaluate a number of geographic places in terms of favorable and unfavorable conditions related to the purpose of the migration and then make a decision as to the best specific place. Once the migration decision is made, he becomes a migrant and follows particular migration channels to the selected destination. At the destination, within the

recipient component, the migrant again faces controls which encourage or discourage his stay; i.e., national laws and statutes, local customs, etc., and is subjected to adjustment mechanisms, such as social organizations (church, clubs, etc.), that affect the success or failure of the migration. Here the migrant is again influenced by environmental conditions (physical, political, economic, and social) and, in combination with those factors considered under the recipient component, he evaluates his new habitat and transmits information as negative or positive feedback to the potential migrant of the donor component. The flows of people and information in this model are not uni-directional, but circular. As a consequence, it is obvious that the migrant, if disaffected with his new environment, could again become a potential migrant in search of a new retirement site. On the other hand, if fully satisfied, he becomes a carrier and transmitter of positive information which might influence significant directional migration flows. In any case, the movements of people between the donor and recipient components create structural growth or decline in the respective populations, along with the attendant spatial changes of human distribution and infrastructural patterns on the landscape.

This model, then, fully illustrates the basis for spatial interaction by military retirees. The complementary factors of supply and demand are represented by military

retirees as potential migrants in the donor component, and by the retirement opportunity areas shown as the destination in the recipient component. Intervening opportunities, whether present or not, are implied in the model as other foreign retirement places that the retiree is exposed to in executing the move from the place of origin to destination. Finally, the transferability, or friction of distance, factor is considered as the actual migration path or channel of the military migrant between the origin and destination, and is measured in terms of geographic distance, time, and/or money. The environmental conditions of the model, inferred as domestic and foreign, provide the stimuli responsible for the retiree's migration decision and the activation of the spatial interaction, thus creating spatial forms and structures. The specific military population involved and the distribution of its relevant component (military retirees) are now appropriate for discussion.

Military Population

For background information on military retirees, including their numbers, characteristics, and learning experiences, it is essential to survey the United States military population, past and present, from which this retiree population was generated.

Our present military structure was created by the National Security Act of 1947, which established the Department of Defense and its three separate armed services, the Department of Army, Navy, and Air Force, with the Marine Corps under the jurisdiction of the Navy Department. Prior to this reorganization, the American military forces consisted of an Army, a Navy and Marine Corps, all nationalized in 1776. These services fluctuated in size throughout their history, according to domestic and foreign requirements and commitments.

Historical Bases of Foreign Exposure

In the first hundred years of America's existence there were few periods of peace; however, the military and naval commitments of the United States then were confined mostly to warfare and military actions on or near our home front; i.e., the War of 1812, the Mexican War, the Civil War, and the Indian Wars of the West. Other than the Mexican War, fought on soil south of our border, the first major overseas military operations conducted by United States forces occurred in the 1898 Spanish-American War fought in Cuba, Puerto Rico, and the Philippines with a military force of 210,000 persons (Hotchkiss, 1975, p. 20).

Since 1900 American military forces have been involved in four major wars and numerous expeditions, interventions, and small wars encompassing a major portion of the globe. During the early 1900s singular or joint military task

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forces were engaged in fighting or intervention operations in Puerto Rico, Cuba, the Philippines, North China, Panama, the Dominican Republic, Honduras, Haiti, and Mexico. Our first major war, World War I, was fought in Europe with an American expeditionary force of more than two million persons. American military action extended from April, 1917 to November, 1918, though American troops remained as an occupation force in Germany until 1923. Between World War I and the advent of World War II in 1941, America went through a period of isolationism in which military activities were confined to a few interventions (Nicaragua, Haiti, and China) to protect the lives and interests of Americans abroad. Over 16 million Americans were brought into the armed forces during World War II, in response to a major war effort that exposed them to countries in every continent. Following the victory in 1945, many Americans remained in Europe and Asia as occupation forces, despite military strength reductions to about 2 million in 1946. When the Korean War began in 1950, American military forces numbered just under a million and a half persons, the lowest level since pre-World War II. However, World War II-experienced reserve units reinforced the regular forces and by the war's end over five million persons had served in that conflict. During the period between the Korean War and the beginning of the Vietnam buildup in 1965, military manpower strengths averaged about 2.5 million.

These were considered minimum manpower levels to satisfy home defense and strategic reserve plans, to provide adequate forces to meet overseas commitments in accordance with combined and bi-lateral defense agreements, and to man worldwide military assistance and advisory groups. During the height of the Vietnam War in 1968, armed forces personnel peaked at about 3.5 million in support of the war effort and other defense needs. At that time, about 1,200,000 military persons were serving overseas, including some 600,000 in Southeast Asia, approximately 300,000 in Europe and South Korea, and the remainder distributed throughout other areas of the world considered to be of importance to the welfare and defense of the United States. In terms of foreign places, military personnel were located at 343 major and 1,927 minor bases. Japan alone maintained 48 major military installations and the Philippines 12. Bases in West Germany numbered 146, Korea contained 55, Okinawa 18, Italy 9, Spain 8, and Greece, Turkey, and Taiwan each had 3 (Donovan, 1970, pp. 2-11 and 52-54).

Recent Foreign Military Commitments

The wind-down and conclusion of the Vietnam War reduced armed forces strengths to near post-Korean War levels. As of December, 1975, the active military force consisted of 2,085,000 persons, with 767,000 soldiers, 525,000 sailors, 193,000 marines, and 600,000 airmen (DOD, 1976, p. 21).

Figure 5 shows Armed Forces strength trends by the separate services for selected years.

By the end of 1975, the overseas military manpower strength totaled 481,000, distributed as follows (DOD, 1976, p. 34):

306,000--Western Europe and related areas
(217,000 in Germany and 27,000 in the fleet)

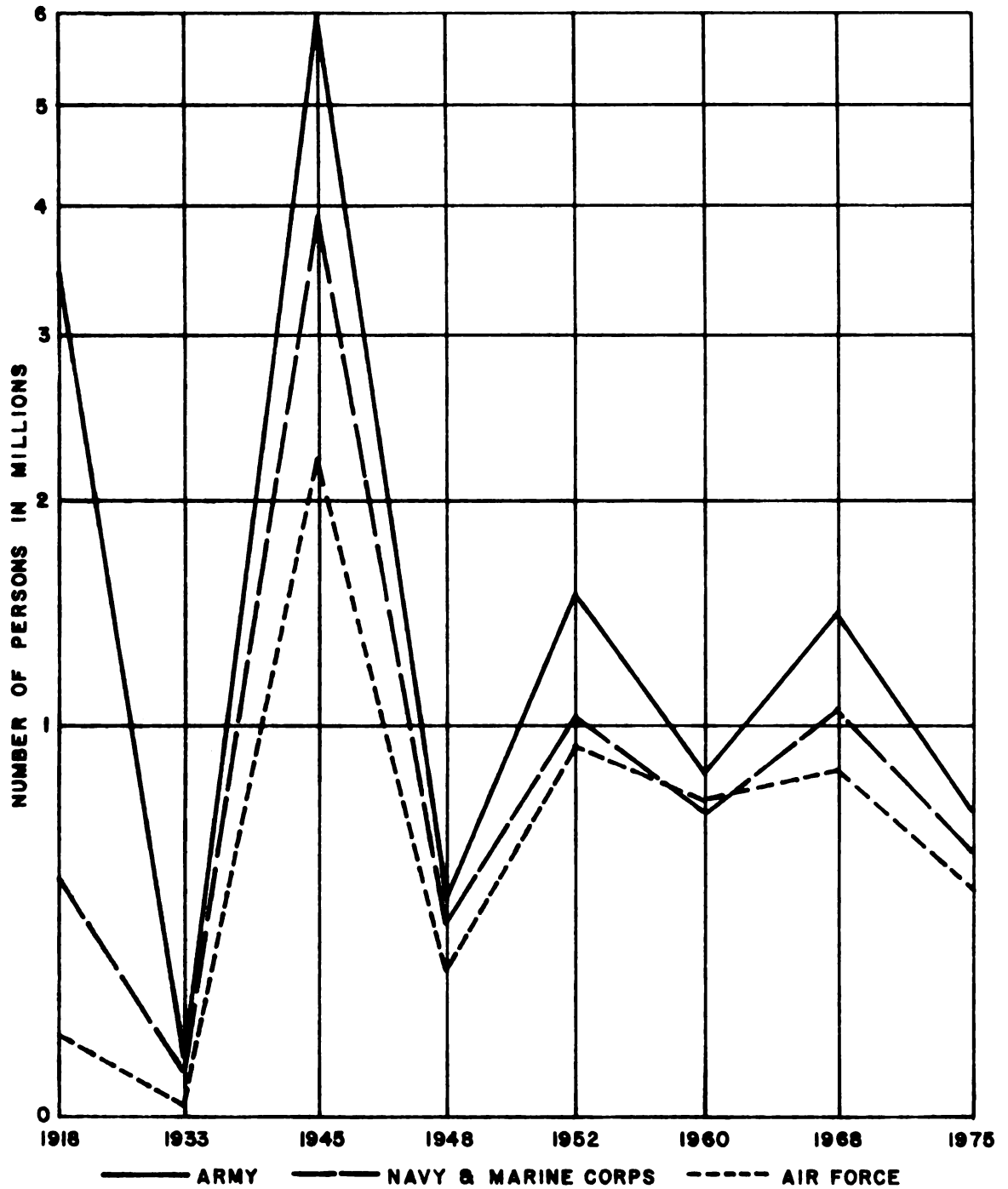
129,000--Western Pacific and related areas
(48,000 in Japan, 41,000 in South Korea,
and 22,000 on ships of the fleet)

46,000--Other geographic commands and foreign
installations
(See Appendix B for a detailed breakdown)

American armed forces personnel overseas, then, represented about one-fourth of the total active military establishment and were stationed, on a rotational basis, in those foreign areas traditionally considered of strategic importance to the United States. Since there have been no major changes in strength or deployment of troops since 1976, it can be assumed that mobility and the opportunity to visit foreign places continues to be a way of life for the American serviceman.

Military Veterans

From the brief history of American military involvement in international affairs, it is obvious that many millions of American men and women gained knowledge of foreign areas that in modern times no other nation could possibly match. Most of these service persons were not professional



Source: Department of Defense 1976

Figure 5. Armed Forces Strength Trends for Selected Years

career people, but simply those citizens who responded to the call in time of need. Consequently, the majority were released after relatively short periods of service, became additions to the list of military veterans, and returned home to families and jobs, though some continued their military associations by joining the military reserve forces or by membership in veterans organizations.

At the end of 1975 America had 29.4 million living veterans, nearly 14 per cent of the total United States population, with over one-third of them living in the states of California (3.2 million), New York (2.5 million), Pennsylvania (1.8 million), Texas (1.6 million), and Illinois (1.6 million) (TROA, 1975, p. 41). Some 225,000 veterans were living outside the United States, 159,000 of whom resided in Puerto Rico. Most of these were veterans of World War II (13.5 million). Korea provided 5.7 million, those from World War I numbered just under a million, and the majority of the remainder were veterans of the Vietnam War era (7.9 million).

Out of this sizeable segment of the American population has evolved a varied number of veterans organizations, foremost of which is the American Legion, with a 1976 membership of 2,504,794. American Legion members living abroad in over 30 countries and territories at that time accounted for 17,000 of the total number of Legionnaires. American Legion posts in Latin America are found in Puerto Rico,

the Virgin Islands, Bermuda, the West Indies, Mexico, Guatemala, Costa Rica, Panama Canal Zone, and Peru (American Legion, 1976, p. 30). Other significant veterans groups include the Veterans of Foreign Wars (1,800,000 members), which consistently lobbies for worldwide deployment of United States armed forces, and the Disabled American Veterans (245,000), many of whose members are eligible for military disability pensions (Donovan, 1970, p. 29). For purposes of this study those disabled veterans who receive full disability allotments qualify as pensioned military retirees, since the monetary amounts received are usually sufficient to sustain retirement. As of July, 1976 there were approximately 160,000 retirees in this category.

Military Reserves

Among those veterans who have served in the Armed Forces are persons that have opted to continue their affiliation with the military establishment in a semi-active capacity after release from active service. These are the veterans assigned to the nation's military reserve forces, many of whom remain with those units for a sufficient period to qualify them for partial military pensions upon reaching age 60. The reservists who have fulfilled these requirements are included in the United States Government's military retiree community, and, as a consequence, are also eligible for inclusion as retirees in this study. By the end of 1970, about 100,000 reservists had retired under the

reserve program. Since most reservists began their military service in World War II, and the average age of servicemen at that time was 25, it has been estimated that reserve retirements will peak in 1986, with a total of 136,980 (Army Times, 1970, p. 13R).

The Reserve Forces of the United States in June, 1976 totaled 822,992 service personnel. By individual armed service elements, these reservists were distributed as follows (Lien, 1976b, p. 15):

Army

National Guard.....	362,330
Reserve.....	194,611

Navy

Navy Reserve.....	97,051
Marine Corps Reserve.....	29,638

Air Force

National Guard.....	90,992
Reserve.....	48,370

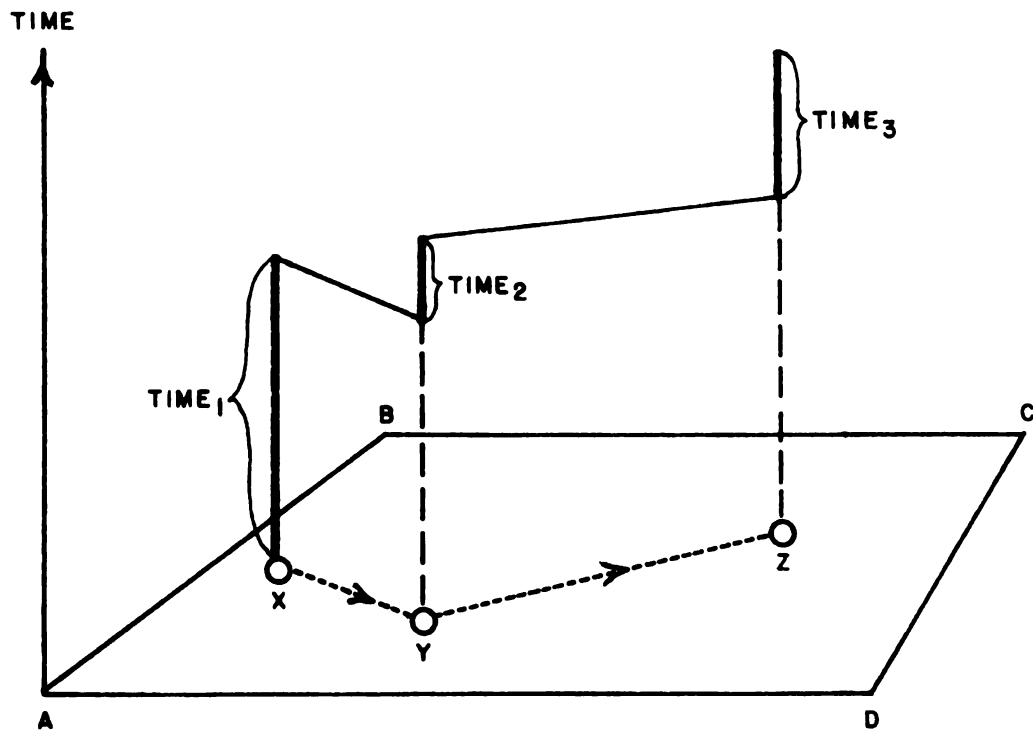
Since the termination of selective service in 1974 this component of America's armed forces has lost much of its attractiveness for veterans of the Vietnam War era and for new recruits. Consequently, an organization which as recently as 1967 had almost 2.8 million members now has fewer than one million, and will have little future effect in significantly increasing the number of military retirees.

Career Personnel

The most important element of the military population, especially in terms of ultimately producing military retirees, is that group of tenured career military personnel

who serve for 20 to 30 years, or longer, in the active ranks of the armed forces. These service people, through frequent moves between domestic and overseas stations during their military careers, have been exposed to a variety of foreign areas, cultures, and customs. Before World War II, American career soldiers served principally at isolated posts in the continental United States. That war, and the resulting revolutionary changes in peace-time American defense policy, however, brought about new missions for the armed forces that have subsequently required professional military persons to serve from about one-third to one-half of their careers abroad. In many of these foreign moves, not only are the servicemen affected, but also their immediate families.

International migratory patterns of career military people, particularly those reflecting alternate tours at foreign and domestic stations, can be graphically illustrated by use of time-space path techniques. This methodology, developed by Hagerstrand (1969), was to investigate individual and family migration paths in Sweden. The generalized scheme (Figure 6) illustrates a time-space path in which an individual or a family moves through specified periods of time at various geographic stations. In Figure 6, x, y, and z are geographic stations from which spatial movements take place as indicated by the directional arrows. At each station, the heavy vertical lines (Time 1, Time 2,



Source: Hagerstrand, Torsten (1969). "On the Definition of Migration", Yearbook of Population Research in Finland, II: 63-72.

Figure 6. Time-Space Path Scheme

and Time 3) represent the period of time spent at that place by the mover. Obviously, the movement history of individuals, families, or groups can be readily portrayed in this manner.

Using Hagerstrand's methodology, the international movements during the career of a typical military family are illustrated by Figure 7 to further support the nomadic nature of military persons. Migratory events were measured on the basis of stations representing either the continental United States or a foreign area (Figure 7). No internal migration patterns are shown. The time interval extends from the birth date of the military man to one year after military retirement (1924-1970). Solid vertical lines represent the life-path of a man while broken vertical lines are used for a woman. In the family scheme, children are located to the right of the parents and children births are designated by an S (son) or D (daughter). The principal man and wife time lines are the heavy lines designated M (man) and W (wife). Horizontal lines are migratory movements either out of or into the United States, depending on the direction of the arrows.

An analysis of the time-space paths of this family reveals that the man entered the military service at age 18, remained in the United States for one year, moved overseas for two years (World War II), then returned to the United States. The woman separated from her family at

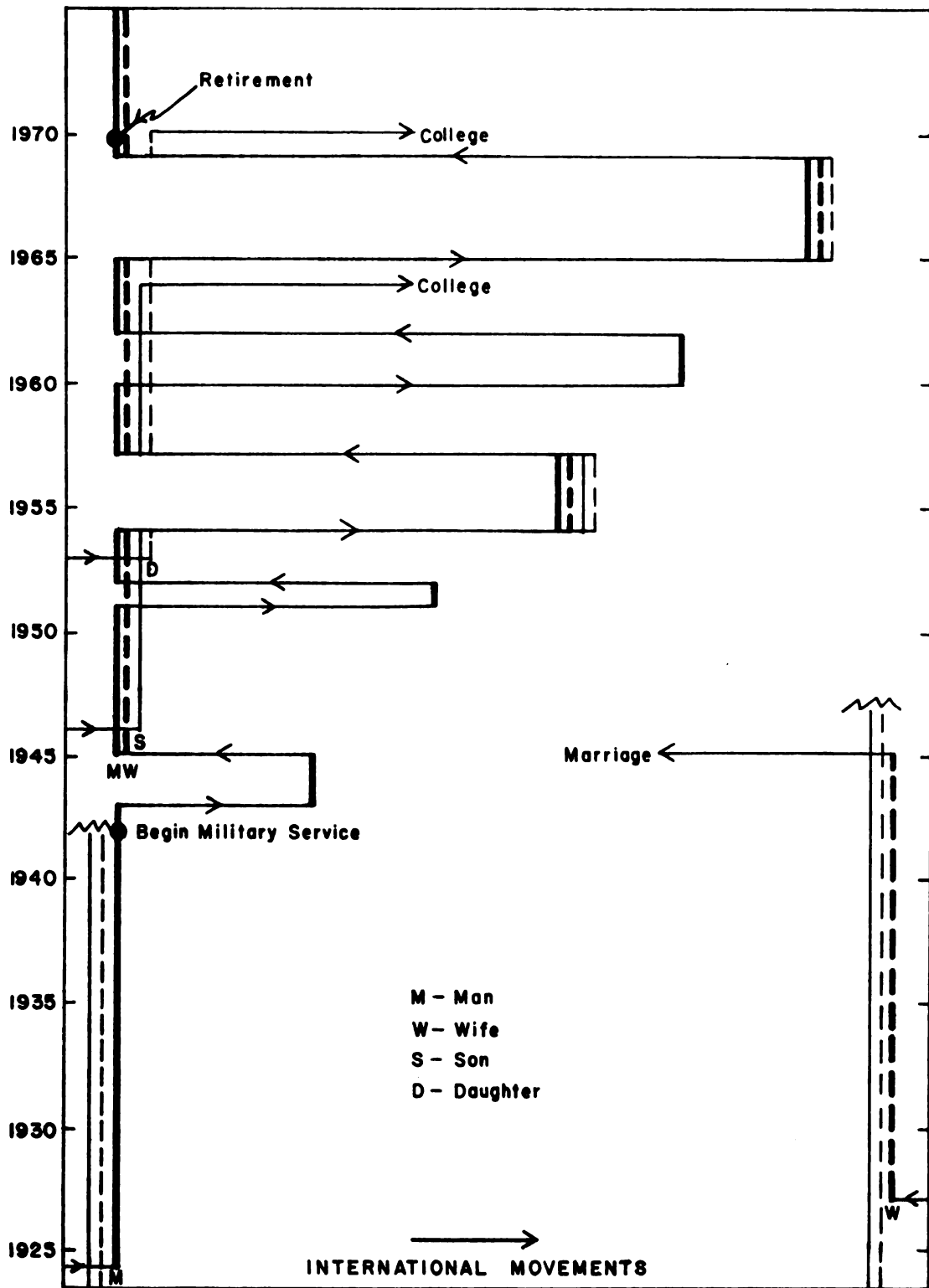


Figure 7. Time-Space Paths of a Typical Military Family

age 18, met the military man that same year and was subsequently married. A son was born the following year and the family remained together in the United States for the next five years. In 1951 the man migrated overseas alone (Korean War), returned a year later, and a daughter was born the following year. After two years together in the United States, the entire family moved to a foreign area during the period 1954 to 1957, then returned to the United States. After three years in the United States, the man was again separated from his family during a two year foreign assignment. Upon return, the family remained together for two years and during the third year the son left for college. In 1965 the man, wife, and daughter again departed the United States for a foreign tour of duty and did not return until 1969, when the man retired from military service. A year later the daughter left for college. Thereafter, with only the man and wife remaining in the household, and receiving a lifetime government pension, they are prime prospects for future foreign retirement migration.

It is recognized that professional American military persons are not alone in undertaking these foreign moves. State Department foreign service personnel and many other career governmental employees, as well as numerous executives and technicians of United States multi-corporation organizations spend large portions of their lives overseas.

Some also, quite surely, settle in their favorite foreign habitat after retirement. In terms of significant numbers involved and long period commitments, however, there is no other society or group that equals those of the career military establishment.

The learning experiences and training received during a military career are long lasting ones, particularly those pertaining to comradeship, job or mission accomplishment, teamwork, and the ability to accept and apply the creeds and traditions of service life. This experience of sharing a common life style may lead to the desire of overseas servicemen to seek out common social institutions.

Military Retiree Population

For the military careerist, after having served 20 to 30 years in a profession that has provided excitement with each change of duty assignment, the opportunity to meet new friends and frequently renew old friendships, and to travel throughout the world, retirement calls for a major adjustment. The unique aspects of military life, professionally and socially, make complete separation from this environment difficult. Consequently, many retirees attempt to retain their military ties after retirement by locating near military establishments or in communities where they can relate with others who have shared similar experiences. Military posts and stations also offer military-related

job opportunities for those searching out new careers. In addition, military installations provide various facilities, such as medical, commissary, post exchange, etc., which retirees are authorized to use. These phenomena have caused retirees to cluster around military installations, including foreign bases. This is especially noted where major bases are found close to large cities, further enhancing post-retirement employment opportunities. For example, large retiree populations are found in the areas around Washington, D.C.; San Antonio, Texas; and San Diego, California. On the other hand, some retirees return to their hometowns, accept jobs far from military facilities, or seek out remote retirement sites. For those retirees not working or seeking employment, an active and interesting way of life for many has been maintained through repetitive retirement moves, both domestic and foreign.

Employment Versus Full Retirement

The transition from military to civilian life has an impact on most retirees not only psychologically, but more importantly, in a financial way. With incomes reduced over 50 per cent in some cases, combined with early-age retirement and continuing inflation, after military service the majority of military retirees find it necessary to pursue a second career in order to maintain an acceptable standard of living. Table 3 illustrates that the younger a retiree is, the more apt he is to seek employment

Table 3. Per cent of Military Non-disability Retirees Who Have Never Been Employed.

Age At Retirement	Officer	Enlisted
37 or less	2.2	1.9
38 - 39	2.1	1.7
40 - 42	2.8	2.7
43 - 45	5.0	3.2
46 - 48	7.1	4.9
49 - 51	12.1	6.6
52 - 54	16.8	10.4
55 - 59	24.5	16.8
60 or more	30.6	27.7
All ages	8.9	4.0

Source: Office of the Assistant Secretary of Defense

upon retirement. Moreover, it shows that throughout the life cycle a higher percentage of enlisted personnel require jobs than do officers. Although most retirees become employed even in the older age brackets, beginning at age 55 and above a substantial number of them opt for full time retirement.

A recent survey by the Retired Officers Association, an organization of some 237,000 retired commissioned and warrant officers of the uniformed services, indicated that nearly 43 per cent of the members were fully employed, 11 per cent part-time employed, five per cent seeking jobs, and the remaining 41 per cent fully retired (Foster, 1976, p. 18).

A large proportion of retirees seek employment with the federal government. In 1976 almost 142,000, or 14 per cent of all military retirees, were working in federal jobs. This represents about five per cent of the total government civilian workers. The largest employer, as could be expected, is the Department of Defense with about 78,000 retirees. Moreover, the Postal Service employs some 34,000, the Veterans Administration nearly 8,000, and several other agencies hire a few thousand (Lien, 1976c, p. 18). Some of these retirees fill positions with these agencies at overseas locations.

Retiree Numbers

The total military retiree population in mid-1975 was 1,043,923 persons, 17,649, or 1.7 per cent, of whom were located outside of the continental United States.³ Of the total number, 363,701 were Air Force, 354,031 Army, 272,381 Navy, and 53,810 Marines. Compared with the total United States population, less than one half of one per cent

³The Coast Guard, under Navy jurisdiction during wartime, although not a separate armed force of the Department of Defense, is one of the seven uniformed services of the United States and provides a retirement pension for its personnel similar to that of the Navy. At the end of 1976 it had an estimated 17,500 persons on its retirement rolls (Lien, 1976c, p. 16). Commissioned officers of the National Oceanic and Atmospheric Administration (NOAA) and the Public Health Service (PHS) are the remaining members of the uniformed services. Pay, benefits, and retirement plans for these members correspond with those of the commissioned personnel of the armed forces. The retirement numbers for the few members of these groups are: NOAA-120 and PHS-1,400 (Lien, 1974, p. 19).

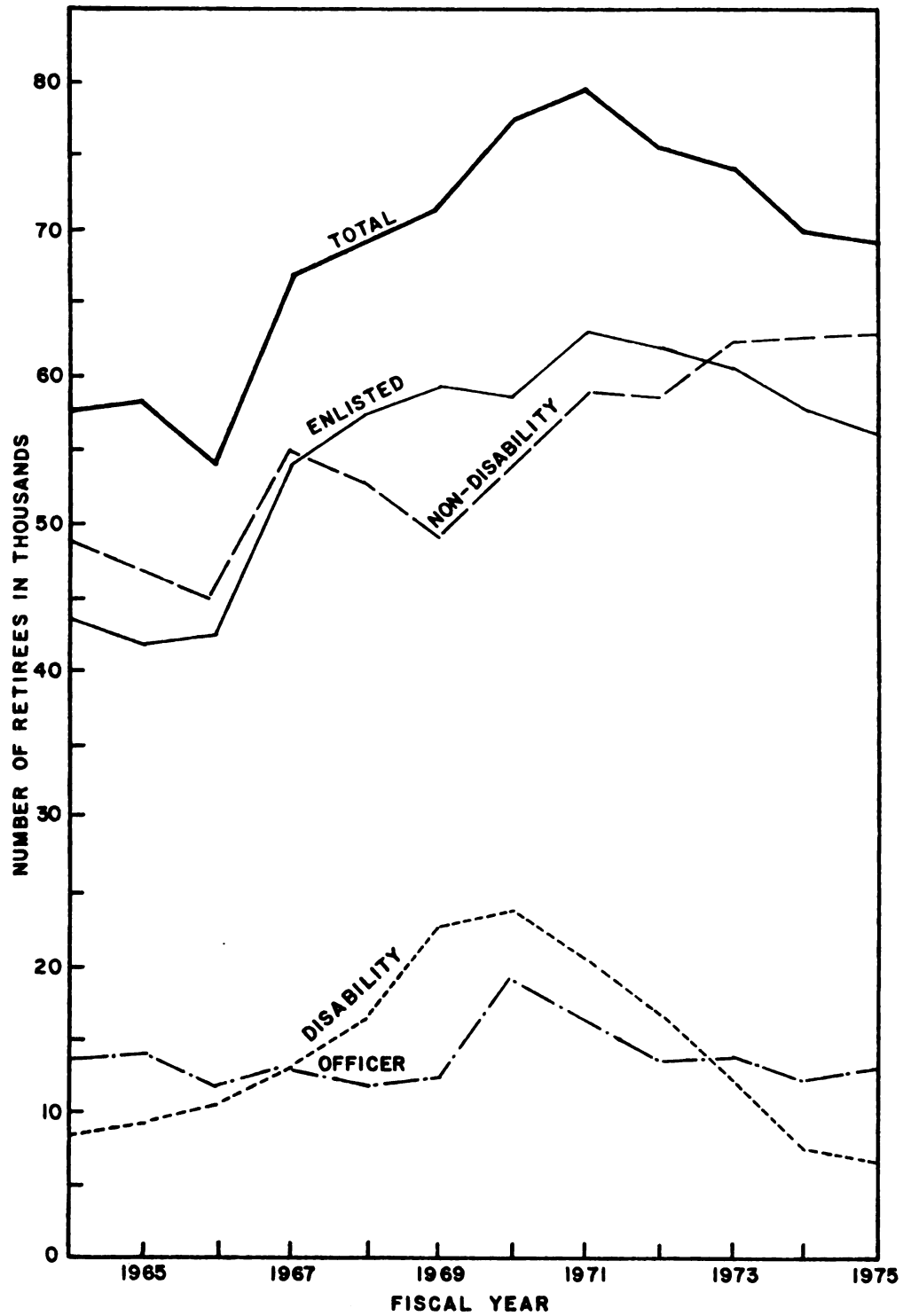
of that population is retired military. In terms of overall average retired pay, in mid-1974 military retirees received \$452 per month; whereas, separately by officer and enlisted categories, the rates were \$691 and \$339 respectively. Table 4 provides total military retiree strength figures, plus those of the separate services for the fiscal years 1972 through 1975 (Army Times, 1972-1976).

Table 4. Military Retiree Strengths FY 1972-1975

	1972	1973	1974	1975
Army	327,037	327,674	343,263	354,031
Air Force	274,744	310,161	333,948	363,701
Navy	253,116	248,776	256,677	272,381
Marines	46,997	48,661	52,061	53,810
Total	901,894	935,272	985,949	1,043,923
Total 1976 Strength -- 1,130,225 (Estimate)				

Source: Army Times, 1972-1976

Although Table 4 shows a continuing annual increase in the total numbers of retirees, the annual input from the active military services is now declining (Figure 8). As indicated in Figure 8, yearly military retirements peaked in 1971, 79,252 retirees being added to the rolls that year. Disability retirements resulting from the Vietnam War were responsible for this earlier than expected peaking, which according to previous estimates should have come about in 1974 or 1975, 30 years after the height of



Source: Army Times 1975

Figure 8. Annual Military Retirement Trends (1964-1975)

the military buildup of World War II. Future normal retirement figures, estimated on the basis of the current size and retention rates in the active armed forces, call for about 47,000 retirements annually, including almost 8,000 officers and 39,000 enlistees. Of this number, approximately 40,000 would be non-disability and 7,000 disability retirements (Army Times, 1975, p. 19). Despite the evident future annual decline in retirees, the overall total numbers continue to increase and the active military establishment remains of sufficient size to consistently supply a sizeable number of military retirees who could become international retirement migrants.

World Distribution of Military Retirees

In a broad spatial context, American military retirees are found within either a domestic or foreign environment. In the migration system and schema (Figures 3 and 4), the donor component represents the domestic environment; i.e., the fifty states; whereas, the recipient component is representative of all other locations. It is, therefore, pertinent to examine the current distribution of the military retirees according to these criteria, beginning with a worldwide overview.

Total Numbers

In terms of the number of military retirees located in the United States versus those living in foreign areas, there is no question as to which predominates. Since mid-year 1973 the ratio of military retirees living outside the United States to those in the United States has been approximately two out of every hundred retirees (Table 5).

Table 5. Percentages of Military Retirees in Foreign Areas

Year	Total Retirees	No. Outside U.S.	Percent
1973	935,272	16,627	1.8
1974	985,949	17,440	1.8
1975	1,043,923	17,649	1.7

Source: Army Times, 1973-1975

According to 1975-76 statistical data obtained from the personnel departments of the armed services, military retirees were found in most areas of the world (Table 6). The total number of retirees in this table (22,997) differs substantially from that given in Table 5 for fiscal year 1975 (17,649), since it is a more detailed compilation of known numbers at different end of month periods in late 1975 and mid 1976. The breakdown by separate states of the United States for fiscal year 1975 is given in Table 7. Aggregating the figures from these tables categorically by major geographic regions provides an abbreviated form for

Table 6. Numbers of Military Retirees by Foreign Countries

Country	Army	Navy	Air Force	Marine Corps	Total
Afghanistan		2			2
Am. Samoa	26	73			99
Antigua				1	1
Argentina	2	4	1	1	8
Australia	68	113	8	22	211
Austria	75	5	12	1	93
Azores Is.			8		8
Bahamas	6	12	3	1	22
Barbados	2				2
Belgium	49	10	14		73
Belize	5				5
Bermuda	3	6	4	1	14
Bolivia	3	1			4
Botswana	1				1
Brazil	11	10	9	1	31
Canada	161	129	6	23	319
Canal Zone	272	110	14	8	404
Ceylon (Sri Lanka)		1			1
Chile	2				2
China	16				16
Colombia	6	5	5		16
Costa Rica	24	13	1	3	41
Cuba		1			1
Cyprus	1	1			2
Czechoslovakia	1		2		3
Denmark	15	7	3		25
Dominican Rep.	4	1		1	6
Ecuador	8	7	2		17
Egypt	2	1			3
El Salvador	1	1	2		4
Ethiopia	5	3	2	1	11

Table 6 (cont'd.)

Country	Army	Navy	Air Force	Marine Corps	Total
Fiji		1			1
Finland	1	1	1		3
France	175	31	17	2	225
French Guiana		1			1
Fr. Territory			2		2
Germany	2,916	29	712	12	3,669
Greece	30	12	70	4	116
Greenland	2		5		7
Guam	193	554	161		908
Guatemala	1	5	3	2	11
Haiti	1	1		1	3
Honduras	3	3			6
Hong Kong	9	19	6	2	36
Iceland			2		2
India	1	2			3
Indonesia	8	7	1	2	18
Iran	132	25	3	20	180
Ireland	42	13	111	6	172
Israel	10	4	4		18
Italy	145	58	32		235
Ivory Coast		1			1
Japan	320	160	235	33	748
Jamaica	2	4			6
Jordan		4	1		5
Kenya		1			1
Korea, So.	302	6	48	4	360
Kuwait	1				1
Laos			4		4
Lebanon	3	4		2	9
Lesotho	1				1
Liberia	2	1	2		5

Table 6 (cont'd.)

Country	Army	Navy	Air Force	Marine Corps	Total
Libya		3			3
Luxembourg	3				3
Malagasy		1	1		2
Malaysia	1	2		1	4
Malawi	1				1
Mexico	113	94	60	18	285
Morocco	6	2	2	2	12
Nepal	1				1
Neth. Antilles	5				5
Netherlands	26	5	20	1	52
New Guinea		1			1
New Zealand	14	55	3	18	90
Nicaragua	2			1	3
Nigeria	1	2			3
Norway	1	3	6	1	11
Okinawa	*	10	55	37	102
Pakistan		2			2
Panama	14	6	2	1	23
Paraguay	1	1			2
Peru	1	3	3		7
Philippines	1,240	3,161	100	21	4,522
Portugal	3	5		1	9
Port. Timor			2		2
Puerto Rico	5,694	257	523	53	6,527
St. Pierre & Miquelon	1				1
Saudi Arabia	48	8	111	8	175
Sikkim	1				1
Singapore	13	12	6	5	36
Society Is.		2			2
South Africa	6	3		2	11
Spain	129	85	268	19	501

Table 6 (cont'd.)

Country	Army	Navy	Air Force	Marine Corps	Total
Swaziland	3		1		4
Sweden	6	12	3	1	22
Switzerland	19	7	18	1	45
Syria		1			1
Taiwan	38	22	14	8	82
Tanzania			1		1
Thailand	108	3	205	8	324
Togo	1				1
Pacific Trust Terr.	29	4	28		61
Tunisia	1	2			3
Turkey	22		53	3	78
United Arab Emirates	1				1
United Kingdom	213	154	1,074	9	1,450
Uruguay	1		3		4
Venezuela	7	3	2		12
Vietnam, So.	26	6	58		88
Virgin Is.	105	61	33	10	209
Western Samoa (Br.)		1			1
Yemen	1				1
Yemen, Republic	2				2
Yugoslavia	4				4
Zaire	2				2
Totals	12,984	5,462 ^a	4,169	382	22,997

*Number not known--included with Japan

^aCountry breakdown for 328 Army Post Office (APO) and 432 Fleet Post Office (FPO) addresses not known

Source: Data received in 1975 and 1976 from the separate service departments of the Department of Defense.

Table 7. Numbers of Military Retirees by States FY 1975

State	Total	State	Total
Alabama	22,690	Montana	2,844
Alaska	2,824	Nebraska	5,704
Arizona	20,955	Nevada	6,963
Arkansas	12,287	New Hampshire	5,279
California	171,007	New Jersey	20,683
Colorado	23,295	New Mexico	9,269
Connecticut	8,502	New York	31,200
Delaware	3,199	North Carolina	29,814
Florida	88,779	North Dakota	1,237
Georgia	36,970	Ohio	23,312
Hawaii	7,205	Oklahoma	17,226
Idaho	3,364	Oregon	12,476
Illinois	21,033	Pennsylvania	29,184
Indiana	11,046	Rhode Island	6,510
Iowa	4,781	South Carolina	21,021
Kansas	10,076	South Dakota	1,832
Kentucky	12,288	Tennessee	21,464
Louisiana	16,790	Texas	87,736
Maine	5,424	Utah	4,272
Maryland	27,048	Vermont	1,790
Massachusetts	17,549	Virginia	56,094
Michigan	14,149	Washington	31,948
Minnesota	8,155	Washington, D.C.	5,371
Mississippi	11,736	West Virginia	5,206
Missouri	17,039	Wisconsin	7,935
		Wyoming	1,713
		Total	1,026,274

Source: Army Times, 1976.

global comparison (Table 8). Since the United States is included in the Anglo-America area, it dominates all the others. Otherwise, Asia, Latin America, and Europe appear somewhat equal in numbers, with Australia and Africa well below in the listing. Outside the United States, it is obvious that the principal numbers of retirees appear in territories of the United States or in those areas in which the United States has maintained major active military bases and installations. It is interesting to note that each foreign country (excluding United States territories) attracting the most retirees of a particular armed service is also the nation which contains a large number of active military personnel of that same service; i.e., Army--Germany, Navy--Philippines, Air Force--United Kingdom, Marines--Okinawa. Further attention will be given to the locational factors in subsequent analyses.

Total Pensions

The total pensions dispersed to retired military personnel in fiscal year 1973 amounted to \$4,343,640,000. Of this sum, \$160,352,240, or 3.7 per cent of the total, was received by retirees residing outside the United States (Table 9). Comparatively, the dollar amounts accounted for in foreign areas equal just over three times that for the state of Michigan, or about one and a quarter of that received in the state of New York.

Table 8. Military Retirees by Geographic Region

Region		Numbers
Anglo-America		1,026,848
United States	1,026,274	
Canada	319	
Others	255	
Asia & Pacific Areas		7,876
Philippines	4,522	
Guam	908	
Japan	748	
Korea	360	
Others	1,338	
Latin America		7,446
Puerto Rico	6,527	
Canal Zone	404	
Mexico	285	
Central America (excl. Panama)	70	
Others	160	
Europe		6,732
Germany	3,669	
United Kingdom	1,450	
Spain	501	
Italy	235	
Others	877	
Australia		301
Australia	211	
New Zealand	90	
Africa		68
Total		1,049,271

Source: Based on data obtained from the separate services of the Department of Defense in 1975 and 1976.

Table 9. Retired Military Personnel Pensions, 1973

State	Total Pensions	State	Total Pensions
Alabama	\$ 80,888,720	Montana	\$ 9,516,320
Alaska	7,786,080	Nebraska	20,330,320
Arizona	81,753,840	Nevada	22,060,560
Arkansas	43,688,560	New Hampshire	19,465,200
California	789,854,560	New Jersey	86,944,560
Colorado	96,028,320	New Mexico	37,632,720
Connecticut	36,767,600	New York	126,740,080
Delaware	10,814,000	North Carolina	96,028,320
Washington, D.C.	34,604,800	North Dakota	3,460,480
Florida	381,950,480	Ohio	83,916,640
Georgia	134,958,720	Oklahoma	62,288,640
Hawaii	21,628,000	Oregon	44,121,120
Idaho	13,409,360	Pennsylvania	117,656,320
Illinois	79,591,040	Rhode Island	21,628,000
Indiana	40,228,080	South Carolina	83,041,520
Iowa	18,600,080	South Dakota	6,055,840
Kansas	35,902,480	Tennessee	65,749,120
Kentucky	42,390,880	Texas	363,782,960
Louisiana	59,693,280	Utah	16,869,840
Maine	20,330,320	Vermont	6,488,400
Maryland	133,661,040	Virginia	276,838,400
Massachusetts	78,293,360	Washington	133,661,040
Michigan	50,176,960	West Virginia	15,572,160
Minnesota	29,414,080	Wisconsin	29,846,640
Mississippi	39,795,520	Wyoming	5,623,280
Missouri	65,749,120		
Total U.S.		\$4,183,287,760	
Outside U.S.		<u>160,352,240</u>	
Total Pensions to			
Retired Military Personnel	\$4,343,640,000		

Source: Army Times, 1973

Significance

The socio-economic impact of these retirees on the host nations varies greatly, of course, based on the numbers involved and the corresponding capital which they represent in the form of United States government pensions. In the case of highly populated and developed nations (Germany, Japan, England, etc.) American retirees are usually widely dispersed and their presence among the populace is less conspicuous. Moreover, their pensions have little overall effect upon the economic bases of these states. Conversely, in the small less-developed countries (Costa Rica, Portugal, Greece, etc.) even a few hundred retirees could affect the social structure and strengthen the local economy, especially if clustered in retirement colonies or concentrated at particular sites.

United States

Most military retirees, as should be expected, normally settle in the United States, the donor component of the system (Figure 3). Since this component operates as the provider of international retirement migrants, it is important to examine its distributional aspects for a better understanding of the overall functions of the system.

Distribution

As of 30 June 1975, there were 1,026,274 military retirees residing in the United States, including Hawaii and Alaska (Table 7 and Figure 9). Of the total retirees, about 40 per cent were located in four states; i.e., California (171,007), Florida (88,779), Texas (87,736), and Virginia (56,094). The military significance of these four states is their association with the numerous military posts and bases of all the armed services which are found there. The attraction of military bases for retired personnel is the availability of facilities such as commissaries, post exchanges, hospitals, clubs, recreation areas, etc., which remain open to the retiree. Consequently, those states offering numerous military facilities, combined with favorable climatic conditions, job opportunities, and acceptable tax structures can expect to attract the most retirees.

The states with fewest retirees are those in the northern interior areas of the United States where few military facilities exist, job opportunities are limited, and climates are unfavorable for retirement life. Most obvious among these states are North Dakota (1,237), South Dakota (1,832), Wyoming (1,713), Montana (2,844), Idaho (3,364), Utah (4,272), and Iowa (4,781).

In the states more climatically attractive for retirement, military pensioners have concentrated in and around specific urban areas that contain a complex of

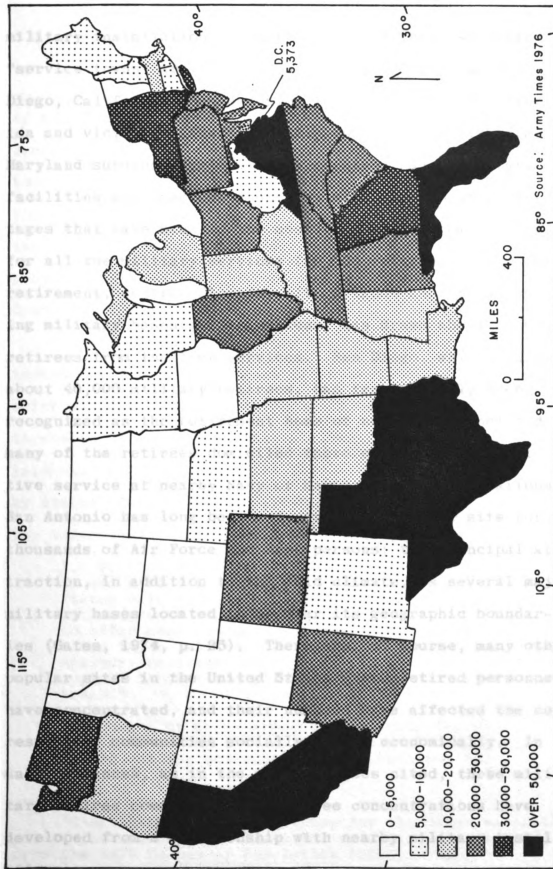


Figure 9. Military Retirees in the United States (1975)

military installations. Most notable of these so-called "service towns" are Washington, D.C. and environs; San Diego, California; San Antonio, Texas; and Orlando, Florida and vicinity. The Washington and Northern Virginia-Maryland suburban agglomeration combines major military facilities and numerous amenities with employment advantages that have made it the most popular retirement site for all the military services (50,000 retirees). For full retirement, central Florida, with Orlando and the surrounding military bases as its nucleus, has drawn about 65,000 retirees from the four services. San Diego, which claims about 40,000 military retirees, has traditionally been recognized as the retirement home of naval personnel and many of the retirees domiciled there completed their active service at nearby Navy or Marine Corps installations. San Antonio has long been a favorite retirement site for thousands of Air Force and Army persons; the principal attraction, in addition to the mild climate, is several major military bases located in or near its geographic boundaries (Gates, 1974, p. 25). There are, of course, many other popular sites in the United States where retired personnel have concentrated, and their numbers have affected the corresponding communities socially and/or economically. In many instances, as in the special cases cited, these military retiree communities or retiree concentrations have developed from a relationship with nearby military installations.

Location Choice

In the United States some military retirees, like most of their civilian retiree counterparts, settle in their hometowns or at the location of their last job site. More, however, have opted for the favorable climatic areas of the south and west, with special consideration given to those states containing major military facilities that provide services for retirees and offer employment opportunities for the younger group.

To measure the significance of the retiree-military installation relationship and to examine other factors which might account for the spatial distribution of retirees in the United States, a correlation-regression analysis was performed using the number of military retirees by states (Table 7) as a dependent variable and the following independent variables:

1. Per cent Population Change Between 1960-1970.

It was believed that those areas in the United States which have experienced the highest population growth in the last decade could be expected to offer many economic and social advantages not found in the slower growing regions; therefore, military retirees, as a younger group than the typical 65 year-old plus, would seek out these areas.⁴

2. Number of Major Armed Forces Installations.

It was theorized that this factor would be a strong one for enticing military retirees into

⁴These data, as well as those for the other variables, except the Armed Forces Installation data, were obtained from the 1970 Census of Population (USBC, 1970).

particular states, since these installations represent both a fulfillment of certain economic needs as well as social ones by the military person. These bases normally contain a hospital or large dispensary, a commissary, and a post exchange. They also offer other amenities such as service clubs, craft shops, theaters, recreational facilities, etc., as well as potential employment.⁵

3. Population Density (Persons per square mile). This variable was proposed since it is believed that military retirees would search for a more tranquil life in rural areas.

4. Median Family Income. It would normally be expected that large numbers of retirees tend to concentrate in those areas having lower median family incomes; whereas young people, who wish to increase their incomes, migrate into areas with higher income bases. Military retirees, because they are younger as a group than the average retiree and often have children to provide for and educate, might be concentrated in the higher median income areas.

5. Per cent of the Civilian Labor Force Unemployed. It is generally assumed that those areas having high unemployment percentages are less attractive to migrants. This was also the assumption used in the case of military retirees, the rationale again being their young retirement age and their pursuit of a second career.

6. Per cent of Population Urban. Urban populations are more generally associated with greater employment opportunities and provision of amenities than non-urbanized areas. Highly urbanized areas, therefore, could be expected to strongly attract migrants.

The correlation-regression test provided data to compile a table of simple correlation coefficients (Table 10).

⁵These data were extracted from Handbook on Retirement Services, Headquarters, Department of the Army (USDA, 1975).

Table 10. Coefficients of Correlation Between Variables (r)

	Y	X ₁	X ₂	X ₃	X ₄	X ₅	X ₆
Retirees	Y	1.000					
% Pop. Change	X ₁	0.261	1.000				
Installations	X ₂	<u>0.932</u>	1.000				
Density	X ₃	0.058	-0.004	1.000			
Med. Income	X ₄	0.107	0.150	0.455	1.000		
% Unemployed	X ₅	-0.019	-0.030	-0.339	-0.267	1.000	
% Pop. Urban	X ₆	-0.378	-0.393	-0.486	-0.626	0.273	1.000

From this table, it is apparent that only one independent variable, Armed Forces Installations, shows a significant relationship ($r = 0.932$) and proportion of explained variation ($r^2 = .868$) with the dependent variable. A significance test of the r value revealed significance at the .05 level and therefore assumption of a linear association. A multiple correlation-regression analysis, combining all variables, gave similar results, with slightly higher R and R^2 values. However, an examination of the Beta values (standardized regression coefficients), which represent the slope of the multivariate figure, revealed that again the only variable of significant explanation was Armed Forces Installations (Table 11).

Table 11. Significance of the Beta Values

Variable	Beta Value
1 % Pop. Change Between 1960-70	0.06198
2 Armed Forces Installations	0.93121
3 Population Density	0.11319
4 Median Family Income	-0.11130
5 % Civ. Labor Force Unemployed	0.01939
6 % Pop. Urban	-0.00534

It is evident that the Armed Forces Installations factor has remained dominant throughout the analysis. Consequently, these installations account significantly for the spatial distribution of military retirees in the

United States. There are, of course, other factors of a socio-economic nature such as job opportunities, climatic conditions, and the presence of amenities which could further explain the associations. For purposes of this study, the foregoing analysis indicates that retirees do concentrate in and around military installations and organizations where they can relate common experiences among themselves and members of the active military organizations. Information about foreign retirement places, as well as the advantages and disadvantages of locating in many different areas, is exchanged between these groups.

Foreign

Military retirees who make the decision to leave the United States, the donor component of the migration system (Figure 3), pass from that component as international retirement migrants into foreign nations, the recipient component of the system. These migrants, although accounting for only about two per cent of the total number of military retirees, have located throughout the world. As a percentage of the estimated 300,000 Americans retired abroad (Fischer, 1973, p. 1), retired military persons represent about eight per cent. This is a significant proportion, considering that retired military members number just over a million. An examination of their general distribution is

important, therefore, to show the extent of retiree mobility and for comparison with the Central American retirees.

Distribution

In 1976 approximately 23,000 military retirees resided in 115 foreign nations and territories, including those of the United States (Table 6). These retired persons are concentrated principally in three major areas: the Western Pacific region, Western Europe, and Middle America (Figure 10). A ranking of the first twenty countries and territories by percentages of the total numbers of retirees living outside the United States, and the dominant military service for each place, is given in Table 12. Puerto Rico and the Philippines alone account for almost 50 per cent of the retirees; whereas, all twenty countries in the listing represent 94 per cent of the foreign total. Since Puerto Rico, Guam, the Canal Zone, and the Virgin Islands, all appearing in Table 12, are United States territories, as well as American Samoa and the Trust Territory of the Pacific (Figure 10), their interest to retired service personnel is related mostly to factors similar to those considered by retirees located in the United States. In the strict sense of foreign nation retirement, excluding the international migration between the United States and its overseas territories, the major military retirement countries are the Philippines, Germany, the United Kingdom,

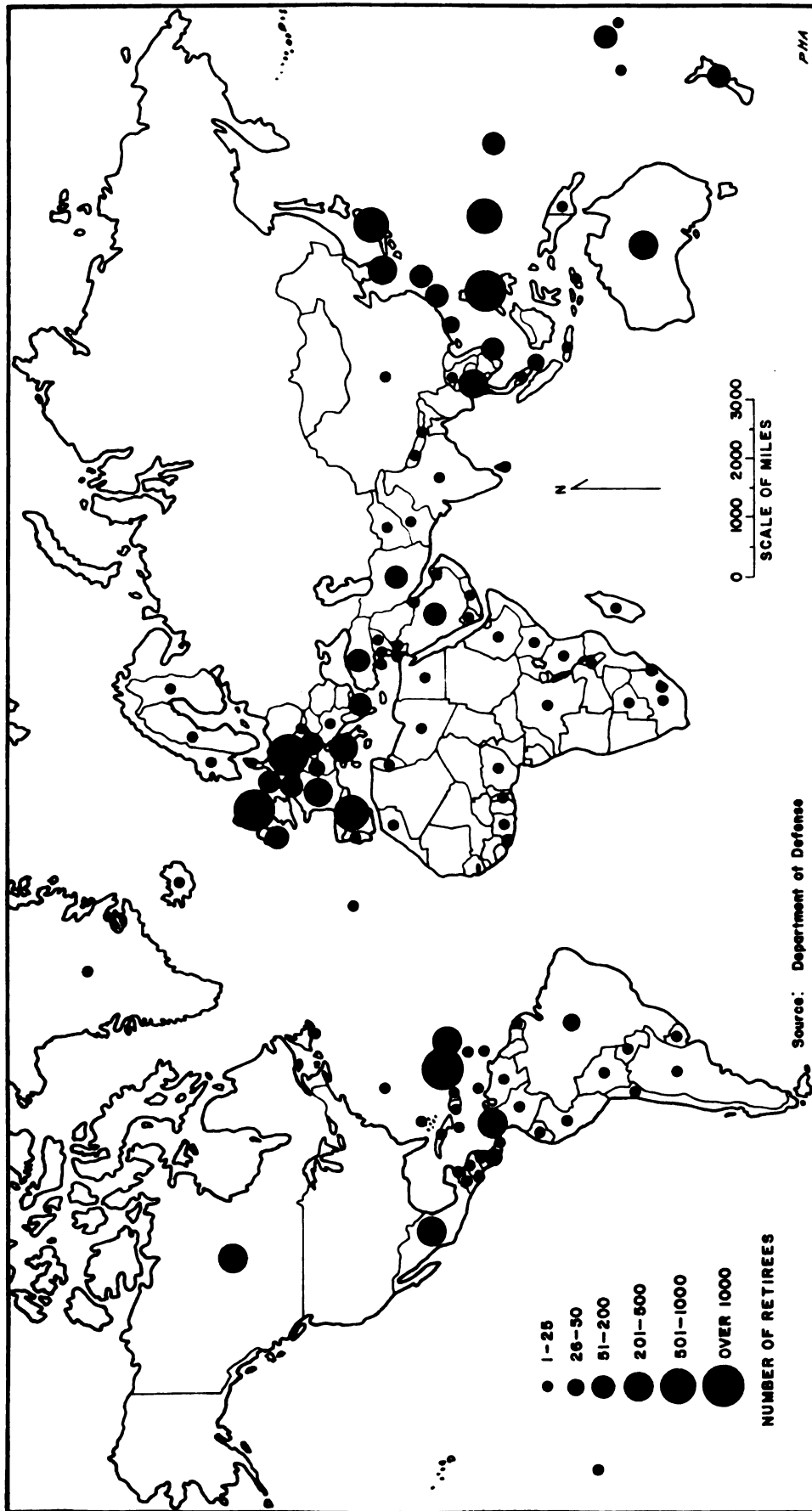


Figure 10. Military Retirees in Foreign Areas (1976)

Table 12. Ranking of Retirees by Country

Rank	Country	Percent	Dominant Service
1	Puerto Rico	28.5	Army
2	Philippines	19.8	Navy
3	Germany	16.0	Army
4	U.K.	6.3	Air Force
5	Guam	4.0	Navy
6	Japan	3.3	Army
7	Spain	2.2	Air Force
8	Canal Zone	1.8	Army
9	So. Korea	1.6	Army
10	Thailand	1.4	Air Force
11	Canada	1.4	Army
12	Mexico	1.2	Army
13	Italy	1.0	Army
14	France	1.0	Army
15	Australia	0.9	Navy
16	Virgin Is.	0.9	Army
17	Iran	0.8	Army
18	Saudi Arabia	0.8	Air Force
19	Ireland	0.8	Air Force
20	Greece	0.5	Air Force

Source: Data obtained from the Personnel Sections of the Army, Navy, and Air Force Departments and the Marine Corps, 1975-1976.

Japan, and Spain. Here again, the Philippines can be partly discounted as a foreign retirement area because of its long history as a United States territory, whose inhabitants were permitted to serve in the United States Armed Forces, mostly as mess attendants in the Navy or as Filipino Scouts in the Army. Most of those who served returned to their homeland after retirement. The dominant remaining nation in the ranking, then, is Germany (16 per cent) followed by several other nations of Western Europe and East Asia, countries in which the United States maintains significant military forces in accordance with bilateral status of forces agreements. The one nation appearing in Table 12 that has witnessed no exposure to recent United States military activity, or maintains American bases on its territory, is Mexico. Apparently, factors other than those associated with military facilities are responsible for its popularity as a retirement area.

Location Choice

A number of military retirees selected sites simply on the basis of their adventurous nature and desire to settle in some exotic or unfamiliar place. The few retirees scattered throughout Africa, South Asia, and South America could reflect this situation (Figure 10). Others have chosen a favorite foreign nation in which they previously served during active military duty, a place for

which they retained many fond remembrances and experiences. Some have made the choice on the basis of favorable retirement environments, including mild climates and other amenities, as well as the companionship of fellow military retirees. The Mediterranean and Middle American areas offer these advantages. The majority of military retirees located outside of the United States, however, probably owe their presence in a foreign nation to kinship ties and job opportunities, as exemplified by Western Europe and East Asia. In many instances, those retirees working abroad are employed by the United States government at military installations which can provide them benefits similar to those enjoyed by active military personnel stationed there. Military retirees not employed by the United States government are not authorized full use of military facilities by most foreign governments. For example, the United Kingdom, Italy, Turkey, and the Netherlands allow retirees no military related privileges; Germany and Korea permit limited use of the military exchange and commissary facilities; Japan and Okinawa authorize hospital and dependent school use, while Spain has few restrictions for retirees. In all countries where United States military troops are stationed, retirees are given base privileges that do not violate the host nation's customs and tax laws. These include the use of clubs and transient quarters, recreation facilities, laundry and dry cleaning services, military clothing sales

stores, and legal assistance, as well as travel by government aircraft on a space available basis (Leonberger, 1973, p. 25). The United States territories, of course, provide retirees the same services as those allowed at military installations in the United States, accounting partly for their attractiveness to retirees.

Other than the foreign nationals and other non-residents who have served in the United States military and returned to their homelands after retirement (Puerto Rico, Philippines, Guam, etc.), the principal numbers of American military retirees attracted to foreign areas for kinship reasons are found in those nations where large contingents of military forces are, or have been, stationed. Chief among these places are Germany, Japan, South Korea, United Kingdom, Italy, and Spain. Many of the military personnel serving in these areas married local nationals, completed their military careers and then returned to their spouses' country for retirement.

Besides employment with the United States government in defense-related jobs or other governmental agencies (U.S. Agency for International Development, U.S. Information Agency, etc.), military retirees have also been hired by large American firms operating overseas, as well as by some foreign governments. Recently, the nations offering retirees the most lucrative employment opportunities are in the Middle East, especially Iran and Saudi Arabia, who

are using retired military persons in various technical, training, administrative, and educational positions. These nations have no status of forces agreements in effect, which means that retirees can enjoy the added benefits of existing American military facilities, most notable of which are those located in the Teheran, Iran area (Army Times, 1975).

Nations with whom America shares a similar culture, political foundation, heritage, and a common language are the choice of those retirees who wish to live in a foreign country with minimum political and social risks. The United Kingdom, where an estimated 12,000 American retirees, 12 per cent of them military, have settled (Fischer, 1973, p. 3), is the most popular place for retirees in this group, especially for retired Air Force personnel. The presence of major United States air bases is a contributing factor. Other nations in this category include Canada, Australia, and New Zealand, all of which have joint military agreements with the United States for the location of military personnel and facilities on their soil.

Spain, a nation which ranks seventh in terms of military retirees, has attracted over 500 military retired persons, many of whom have settled in the Costa del Sol and other areas along the Mediterranean or in the Madrid area. For military retirement, Spain has much to offer. Several major United States military facilities which can be used

by retirees are located in that country; there are direct military space available flights from the United States; it is a low cost of living area; it offers pleasant climate and cultural attractions; and it provides special privileges to resident pensioners for the importation of household goods and effects. With the exception of United States territories, few areas provide the advantages that are apparent in Spain. Although it still is a favorite retirement site for Americans, its changing political situation may curtail future retirement migration, with possible redirection toward similar environments in Latin America. The Mediterranean areas of France, Italy, and Greece also remain popular as foreign retirement centers. Their attractiveness for the military, however, is waning, because of increased living costs and restrictions on use of United States military facilities.

Migration Potential

For migration to occur, it is necessary to have a pool of potential migrants and attracting forces which act to spatially redistribute this mass. The distribution pattern of retirees (Figure 10) illustrates the result of this movement in that the most attractive places for retirement migration are those that contain the major concentrations of retirees. Using the number of United States retirees as a potential migrant base, then, and the numbers of

retirees at each foreign location as modes, interaction could be determined by multiplying the two figures and dividing by the intervening spatial distance (gravity model). This mathematical expression, if implemented, would undoubtedly show that those foreign areas containing the largest numbers of retirees and located the shortest distance from the United States have the highest potentials for continued migration. For a more realistic portrayal, however, variables pertaining to physical, political, and economic factors are required as constants in the formula to account for such restraints as travel over water surfaces versus roads, political restrictions for migrant entry, and high cost of living areas. Nonetheless, once a sizeable number of migrants locate at a particular place, their presence and activities are projected to other potential migrants who may decide to join them. Consequently, any foreign area in which military retirees are located (Figure 10) represents a potential for further retirement migration.

The growth pole aspect of this condition at specific sites is illustrated by the formation of foreign chapters of the Retired Officers Association, an organization of some 237,000 members. Once sufficient numbers of military retirees concentrate in a popular retirement place, interaction generally leads to social organization, which for retired officers could be represented by a local chapter of the national Retired Officers Association. By 1972 this

association had chapters in San Juan, Puerto Rico; St. Thomas, Virgin Islands; Seoul, Korea; and Naha, Okinawa. Chapala, Mexico was added in 1972, followed in 1974 by Guadalajara, Mexico and Teheran, Iran. The latest additions were London, England and San Jose, Costa Rica in 1976. The possibility of organizing and maintaining membership in local chapters of this nature must be attributed to a concentration of retirees in those localities. Consequently, this concentration effect enhances their migration potential.

Middle America

Middle America, a geographic region which includes Mexico, Central America, and the West Indies or Caribbean Island complex, represents one of the three major world regional concentrations of retirees, along with Western Europe and the Western Pacific area (Figure 10). Since military retirees have located extensively throughout this area and many of the nations share similar locational factors for these migrants, a general survey of the region is presented prior to focusing on Central America.

General Distribution

Middle America, like the Mediterranean area, has attracted substantial numbers of retirees because of its

favorable climate, natural scenery, and other environmental amenities. Unlike the Mediterranean countries, however, those of Middle America have the advantage of being more accessible to the United States and, in most instances, have lower costs of living. Consequently, as the climatically favorable areas of the United States (Florida, California, and Texas) become overcrowded and less desirable for retirement purposes, Middle American nations, which offer similar retirement-related amenities, can be easily reached for pre-retirement inspection by potential migrants.

In the Caribbean Antilles, Puerto Rico dominates all other countries in numbers of military retirees (Figure 11). Most of these retirees are native Puerto Ricans with American citizenship who have returned home, although a number of them are mainland Americans who previously served in Puerto Rico, liked it, and later retired there. Others chose the area on the merits of its overall advantages for retirement; i.e., climate, military facilities, and social amenities, to mention a few. The American Virgin Islands, ranking second in the Antilles and also a United States territory, offer retirement advantages similar to those enjoyed in Puerto Rico. The remaining islands of the Antilles have attracted few military retirees, the majority having located in the English speaking nations, especially the Bahamas off-shore from southern Florida. Cuba undoubtedly would have a greater concentration of retirees if its

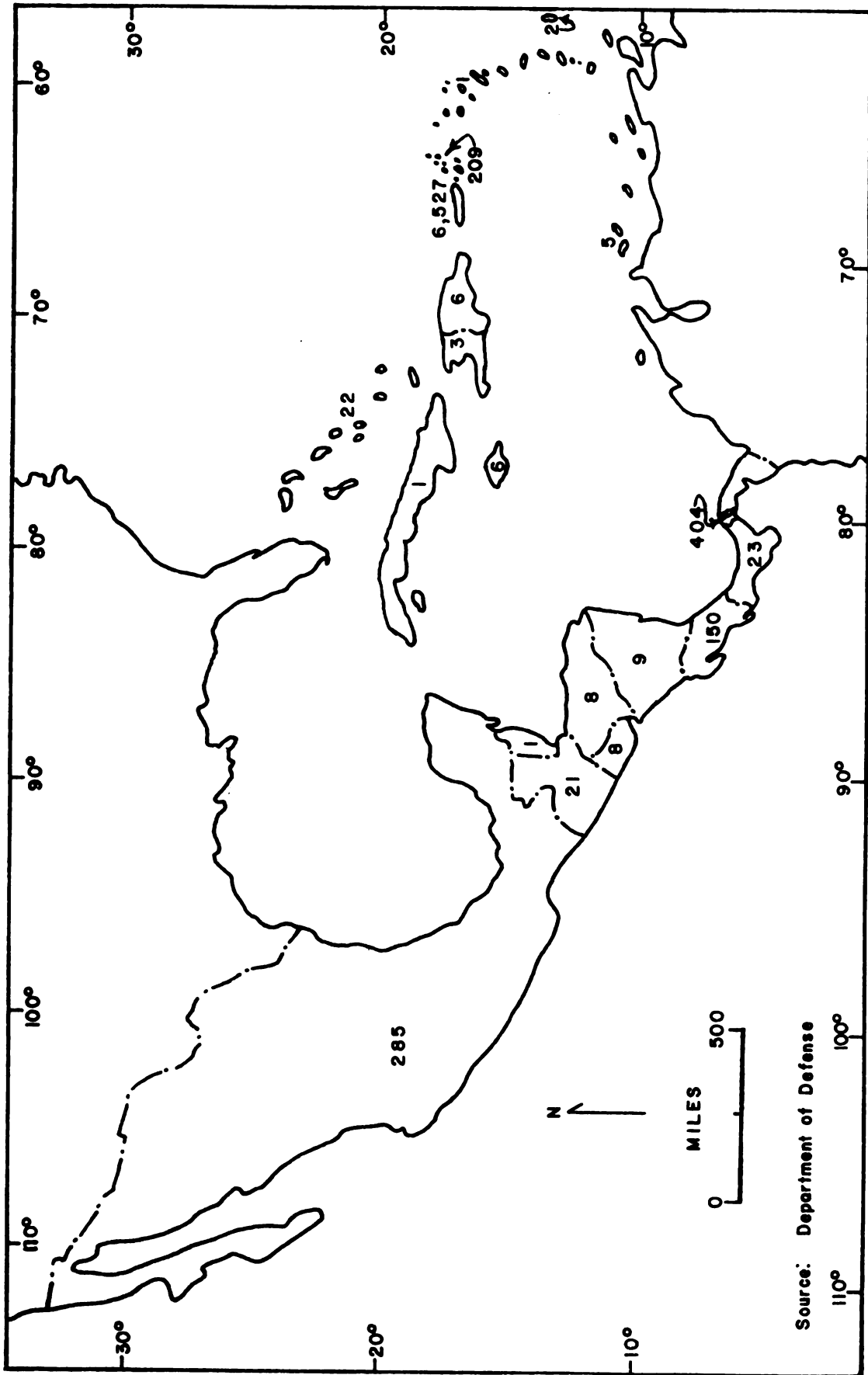


Figure 11. Military Retirees in Middle America (1976)

political philosophies were patterned along democratic lines. United States policy, incidentally, forbids payment of government pensions to persons living in any communist controlled nation.

On the Middle American mainland, the United States-governed Canal Zone contains the largest number of retirees (404), followed by Mexico (285) and Central America (93) (Table 6). Utilizing the field survey data collected in this study, the figures for Central America, excluding Panama, are increased to 197 (Table 2). These latter figures will be used in subsequent analyses for Central America.

Mexico and Panama

Mexico and Panama (including the Canal Zone), bordering Central America on the north and south, have attracted sizeable numbers of retirees for differing reasons. Since these two countries are not included in the field survey, but yet are important adjuncts in the study analysis, they are given general coverage.

Distribution

Due to the proximity of Mexico to the United States, the inherent advantages of its laws regarding migrants, and the combination of its varied scenic beauty and agreeable highland climates, numerous American retirement communities have developed there. Included among the retired Americans in these colonies are 285 military people. The specific

locations of all 285 retirees are not known. However, based on locational data for 112 of them, it has been determined that these migrants are concentrated in the central highland region of the country (Figure 12). Furthermore, over fifty per cent of the military retiree migrants are located in the state of Jalisco and only three additional states contain significant percentages of the total; i.e., Guanajuato, 9.6%; Morelos, 7.0%; and the Distrito Federal, 6.1% (Table 13). The major American retirement communities of Mexico are all located within those four states. In fact, the largest urban American community outside of the United States is found in Guadalajara, in the state of Jalisco. Also in Jalisco is the Lake Chapala area, including the towns of Chapala and Ajijic, which accommodates the largest non-urban settlement of American expatriates. In the state of Guanajuato are located the popular retirement communities of San Miguel de Allende, one of Mexico's oldest colonial towns, and Guanajuato, long noted as a quaint silver mining center. The well established retirement town of Cuernavaca is in Morelos and the major cultural center, Mexico City, is in the Distrito Federal.

Unlike Mexico, which draws many American retirees due to its proximity to the United States, Panama owes its retirement migration attractiveness to the Canal Zone. Of the 427 military retirees found in Panama, only 23 have located in the Republic. The 404 retired military persons

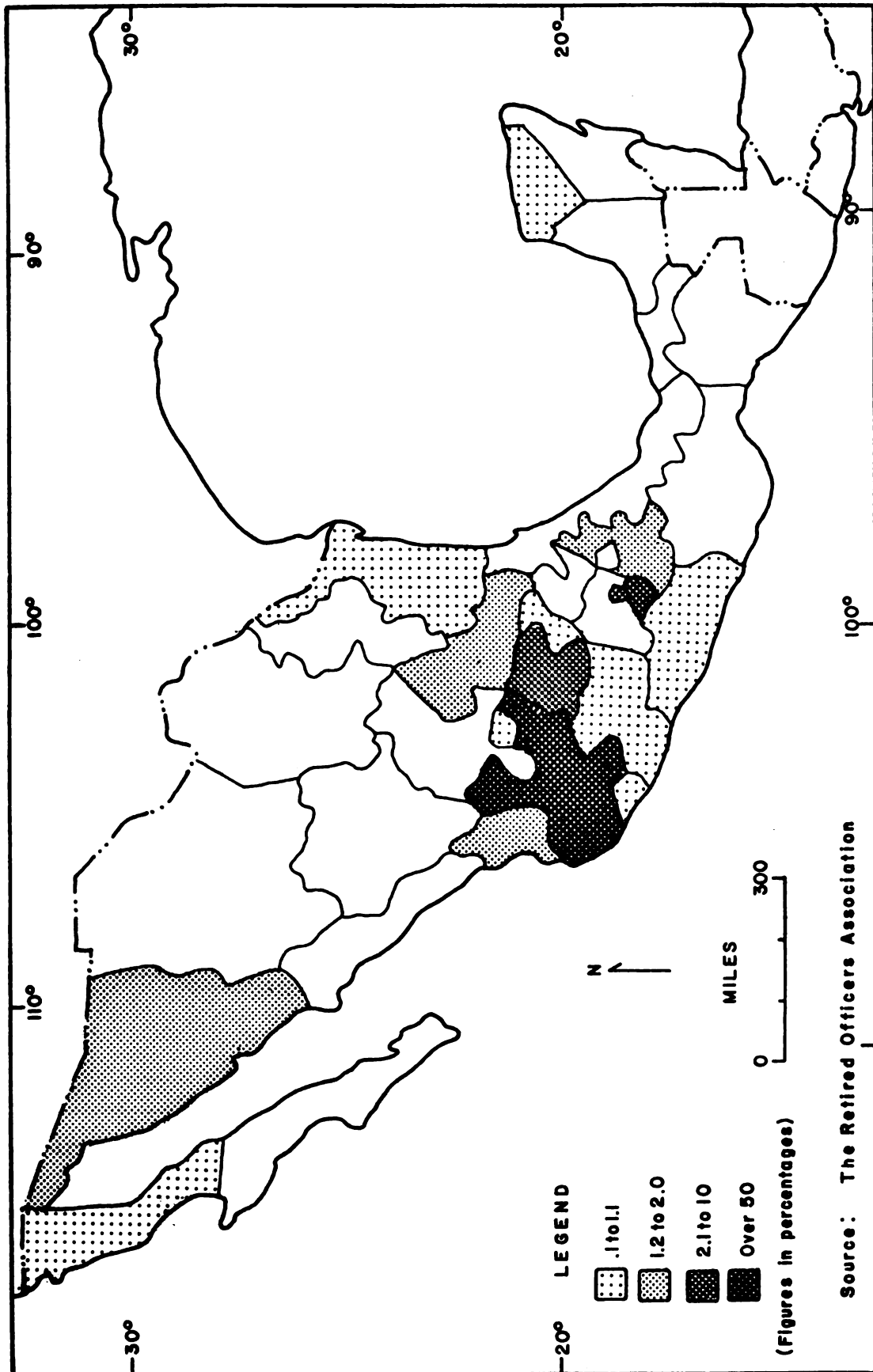


Figure 12. Military Retirees in Mexico (1973)

Table 13. Per cent of Retirees in Mexico by States

State	Per cent
Nayarit	1.7
Queretaro	0.8
Jalisco	64.1
Puebla	1.7
Morelos	7.0
Distrito Federal	6.1
Guanajuato	9.6
Tamaulipas	0.8
Aguascalientes	0.8
San Luis Potosi	1.7
Sonora	1.7
Baja California (N)	0.8
Guerrero	0.8
Michoacan	0.8
Yucatan	0.8
Colima	0.8
Total	100.0

Source: The percentages in the above table were calculated from data on 112 military retirees which were obtained in June of 1973 from the Retired Officers Association.

residing in the Canal Zone are there principally for employment. Although other reasons may play a part in their location decision, the dominant importance of employment must be accepted, since American residency in the Canal Zone is authorized only to those working there. Consequently, retirees are concentrated in the Pacific and Atlantic coastal complexes near the Zone's military facilities, along with those of the Panama Canal government and the Panama Canal Company, the principal employers (Figure 13). Though locational data are not available, it is believed that the few retirees settled outside the Canal Zone live in the principal cities adjacent to the Zone (Panama City and Colon), along the Pacific beach area southwest of the Canal Zone, or in the highlands to the west, with the scenic Boquete area as the center of attraction.

Historical Perspectives

In mainland Middle America, the foundations for retirement migration were laid in both Mexico and Panama at earlier stages than in the Central American area. Mexico, since it borders with the United States, provides easy access routes for migrants and minimized distances for the diffusion of retirement-related information. Its merits as a favorable retirement area, therefore, have been widely known throughout the United States, especially since World War II. With an influx of American veterans into Mexico after the war, followed in the late fifties and sixties by

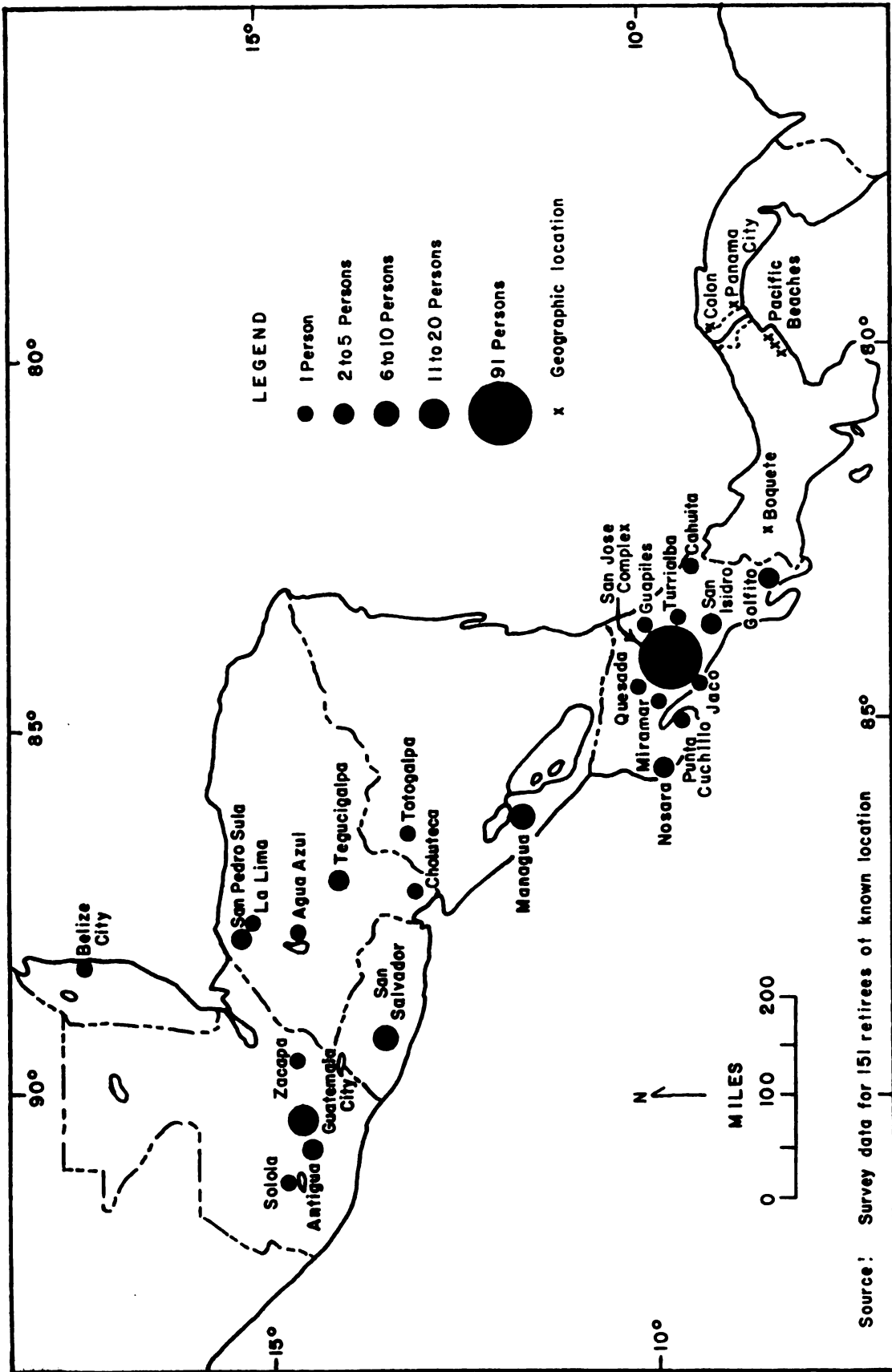


Figure 13. Military Retiree Locations in Central America (1976)

retirees seeking comfortable and inexpensive settlement, American colonies have developed in the climatically favored regions. The buildup of the military retirement element in these places was evidenced by the formation of Retired Officers Association chapters at the popular sites around Lake Chapala in 1972 and Guadalajara in 1974. Considering the fact that only seven other chapters of this organization exist outside the United States, including two in its territories (Puerto Rico and the Virgin Islands), the existence of these chapters attests to Mexico's popularity for military retirees.

American military personnel have been exposed to Panama since 1903, when the United States assisted that nation in achieving independence from Colombia. Since then, in accordance with the United States-Panama treaty of 1903, the United States has maintained military forces in the Canal Zone. During World War II, military and naval bases outside the Zone were also negotiated and manned by American military forces; e.g., Rio Hato Air Base and Taboga Island Naval Base (USDA, 1972, pp. 225-226). The attributes of Panama for retirement, therefore, have long been disseminated among the military population, including those of retired status. As a consequence, significant numbers of military retirees have taken advantage of the opportunities offered there, particularly in the Canal Zone. The migration inertia built up over time in movements from the United States to both Mexico and Panama will contribute

toward continued migration, unless the major advantages are negated; e.g., Mexican border-crossing restrictions or United States loss of the Canal Zone.

Incentives and Deterrents

Mexico, besides the beneficial aspects of its accessibility to the United States and lower cost of living, offers retirees a variety of natural scenery and climates, combined with favorable governmental migration policies. The central section of Mexico, a highland plateau referred to as the Meseta Central, is the political, economic, and population center of the country. It also has the most favorable climate in Mexico, i.e., temperate highland, a type which attracts retirees. Although other areas of Mexico offer scenic and climatic contrasts, mountains and coastal lowlands, few retirees have located outside this temperate highland region.

In accordance with Mexican law, retirees can live in that nation as tourists, visitors, or immigrants. The qualifications, responsibilities, rights, and privileges vary greatly in each of these migrant categories. For example, the allowable length of residency without renewing entry permits is six months for a tourist, two years for a visitor, and indefinite for an immigrant (For details refer to Ford, (1974), pp. 43-50).

Although the environmental and political attributes of Mexico are appealing to many retirees, it is recognized

that for Americans to successfully retire in that nation, they must adjust their way of life to certain of the Latin cultural and social conditions. In these circumstances, many Americans are unwilling to accept a position as a member of a minority group, rejecting the Latin racial, religious, and linguistic approaches to their cultures, and thereby becoming totally disaffected as foreign retirement migrants. This is less likely to happen in the case of military retirees, but nonetheless is something that they must face and deal with in a realistic manner. Other than the common inconveniences that all retirees encounter in the Latin countries, i.e., sanitation, shopping, driving, customs and immigration laws, security, etc., those privileges most missed by military retirees in Mexico are the shopping and medical privileges provided by American military installations. Most critical for older retirees, of course, is the provision of medical facilities, since United States Medicare is not applicable in foreign areas and military retirees are not eligible for CHAMPUS benefits after age 65.⁶ Consequently, those retirees not willing to relinquish the conveniences inherent in North American culture or who

⁶The Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) authorizes medical care for retired military members and their dependents at civilian facilities when use of military facilities is not feasible. The retiree pays 25 per cent of the costs for hospitalization and professional services, plus the first \$50 each fiscal year for outpatient care (USDA, 1975).

desire access to military and medical facilities are deterred from Mexican retirement.

Panama offers similar advantages for retired life. Although it does not contain the large diversity of topography and climate found in Mexico, its small size and peculiar geographic "S" shape, bisected by the Canal Zone, provides a varied and interesting landscape. In addition, it lies outside the major earthquake and hurricane zones found in Central America and Mexico. Unlike Mexico and the other Central American countries, where principal settlement has taken place in the more pleasant highlands, Panama's population center developed and has remained around the central isthmus lowlands, with the Canal as the focal point. The more favorable climatic areas of its highland interior have remained sparsely populated, thus representing virgin territory for those retirees seeking a pleasant and remote retirement environment.

The Republic of Panama has tourist laws which provide for temporary residency by American citizens, whereby a retiree may remain in-country up to 90 days as a tourist. To encourage foreign retirees on a permanent basis, in 1970 Panama implemented a law which gives qualified retirees special residency benefits. The law applies to any foreign national who receives a minimum monthly net income of \$400 in the form of a life-time pension from governmental or private institutions located outside Panama. Qualified retirees are given tourist-pensioner visas which authorize

them to reside indefinitely in Panama and receive benefits pertaining to duty free importation of certain household goods and a private vehicle (Instituto Panameno de Turismo).

Since the promulgation of this law, in mid 1970, through 1975, there were 313 persons, 273 of them Americans, who gained pensionee status.⁷ Although the numbers of military retirees in this figure are not known, it is possible that the 23 retirees identified by the Department of Defense have taken advantage of the pensionee law. Consequently, they represent 8.4 per cent of the American pensionees.

A great advantage for those military retirees living in the Republic is the availability of the vast number of military facilities in the Canal Zone which can provide American goods and services, including medical. The advantages for the several hundred retirees who work and live in the Zone are obvious. Within the Zone is a complex of military installations which includes six major Army posts, two major Air Force bases, two Navy stations, a Marine Corps post, and numerous miscellaneous facilities serving all the uniformed services. Another benefit provided to these retirees is government space-available air transportation between the Canal Zone and the United States,

⁷Figures derived from discussions with Enrique Diez, Chief of the Personnel Department, Panama Tourist Bureau, in May 1976. At that time it was estimated that approximately 300 pensionees were settled in the Republic of Panama by mid year 1976.

an important consideration since Panama is less accessible by land routes than Mexico or Central America.

Despite the many attributes of Panama for retirement purposes, the strained relations between the United States and Panama over the Canal Zone issue have created a tense political situation, which in the past has resulted in demonstrations and rioting against Americans in the Zone. This situation is potentially serious in the Panama City area, where most anti-American activities have taken place. The effects have created some dissention throughout the Republic, and will surely be detrimental to increased retirement migration, thus directing some retirees, or potential ones, to similar environments in other Central American nations.

Central America

From the foregoing analysis, it is evident that most military retirees residing in foreign nations and United States territories selected those areas for reasons related to economics, kinship, common language and customs, or availability of military facilities. Mexico is a major exception; though lacking military facilities, its proximity to the United States and its ability to provide retirement-related amenities have been strong pull factors for many years. Since Central America, which has similar retirement attributes, is less accessible than Mexico, only recently has it become known as an attractive area for

American retirees. Henceforth the examination of military retirees and their characteristics as international migrants will focus on that group in Central America. Moreover, it will be accomplished in accordance with the concepts of the retirement migration schema (Figure 4). Within the recipient component of that model, the migrant represents American military retirees in Central America; the destination is congruous with the Central American places where these retirees have settled.

In Central America, Costa Rica is by far the most popular nation for retirees (Figure 13). From a military retiree population of 151 persons in the six countries for whom place location data were found, 105 were distributed throughout Costa Rica, with 91 of these persons located in the Meseta Central area which centers on San Jose (Table 2).⁸ Of these 91 retirees, 35 were living in the central city and adjacent settlements, 16 in Escazu, 10 in Alajuela and vicinity, six in Santa Ana, and the remaining 24 scattered among the other villages. The other 14 retirees found in Costa Rica are located along the Pacific (Nosara, Punta Cuchilla, Jaco, Golfito) and Atlantic (Cahuita) coast areas,

⁸The figure of 151 was obtained from Table 2 data by adding the total numbers of retirees in the columns for Completed Interviews, Not Contacted, and Refused. The specific locations for persons in these three categories were known, whereas those for the Not Located category were not. The total numbers for the individual countries were determined in the same manner.

in the General Valley (San Isidro), and a few other isolated areas (Miramar, Quesada, Guapiles, Turrialba).

The second country of importance in terms of total retirees is Guatemala with 21, most of whom are located in the capital, Guatemala City (13), and the nearby villages of Villa Nueva (2) and San Juan Sacatepequez (1). Antigua, the old colonial capital of Guatemala and popular tourist center, has three retirees. Solola, above Lake Atitlan, and Zacapa, in the Motagua Corridor, each have one retiree living within their confines.⁹ Honduras, El Salvador, and Nicaragua each have eight retirees. In El Salvador they are all located in the capital of San Salvador, and in Nicaragua all reside in Managua, also the capital, except one (Totagalpa). Both cities lie within the volcanic axis of Central America. The Honduras retirees reside in the settlements of Choluteca (1), Tegucigalpa (3), Agua Azul (1), La Lima (1), and San Pedro Sula (2), located generally along the north-south oriented Comayugua Depression. In Belize, a self-governing British Colony, only one military retiree, who lives in Belize City, was located.

⁹The field survey in Guatemala was undertaken during the month of January 1976 and ended abruptly with the major earthquake of February 4, 1976. At that time only three of the known retirees had not been contacted, two in Guatemala City and one in Zacapa. A later search for the Zacapa retiree was unsuccessful. These figures may have changed since the February 1976 disaster.

This retiree locational structure in Central America supports hypothesis 4.a., i.e., the retirees locate mainly in the central cities or adjacent areas connected by the major routes of communication.

These are the places where military retirees have settled. Their attributes and attractions for retiree migrants will be the subject of Chapter III.

CHAPTER III

FACTORS RELEVANT TO CENTRAL AMERICAN RETIREMENT MIGRATION

This chapter will examine the various factors which make Central America attractive for retirement, thus providing answers to the why questions of the retirement migration process. In the migration schema model (Figure 4), these factors are represented by the external environmental conditions (stimuli), as well as certain of the internal control and adjustment mechanisms.

Place Utility

Place utility can be considered the perceived usefulness of geographic sites as determined by an individual, depending on that person's satisfaction or dissatisfaction with the place. Different places reflect differences in utility, and those places which provide or promise a higher level of utility are the most in demand (Wolpert, 1965, p. 62). This concept, of course, applies to retirement sites, evaluated on the basis of their desirable attributes.

Location Choice Theory

Location theory is generally used in geography for determining locations of economic activity. By measuring gross benefits against costs, net benefits at a given place can be derived. Conceptually, then, retirement locations could be determined in a similar manner, considering favorable factors as gross benefits, unfavorable ones as costs, and the composite value of these factors as the net benefit. The various composite values could also represent place utility ordering.

Applicability in International Retirement Migration

In choosing a foreign retirement nation or locality, a potential migrant must evaluate the positive and negative attributes of places under consideration to insure selection of a location which best meets anticipated place utility. For this purpose a retirement location choice model is introduced (Figure 14). In this model the potential migrant makes an assessment of the positive and negative factors which could influence the choice of a retirement location and, guided by this evaluation, ranks the places according to that person's preferences, or envisaged place utility. To this ranking of preferences are applied any constraints which might be applicable, e.g., political restrictions in communist nations, recent natural disasters,

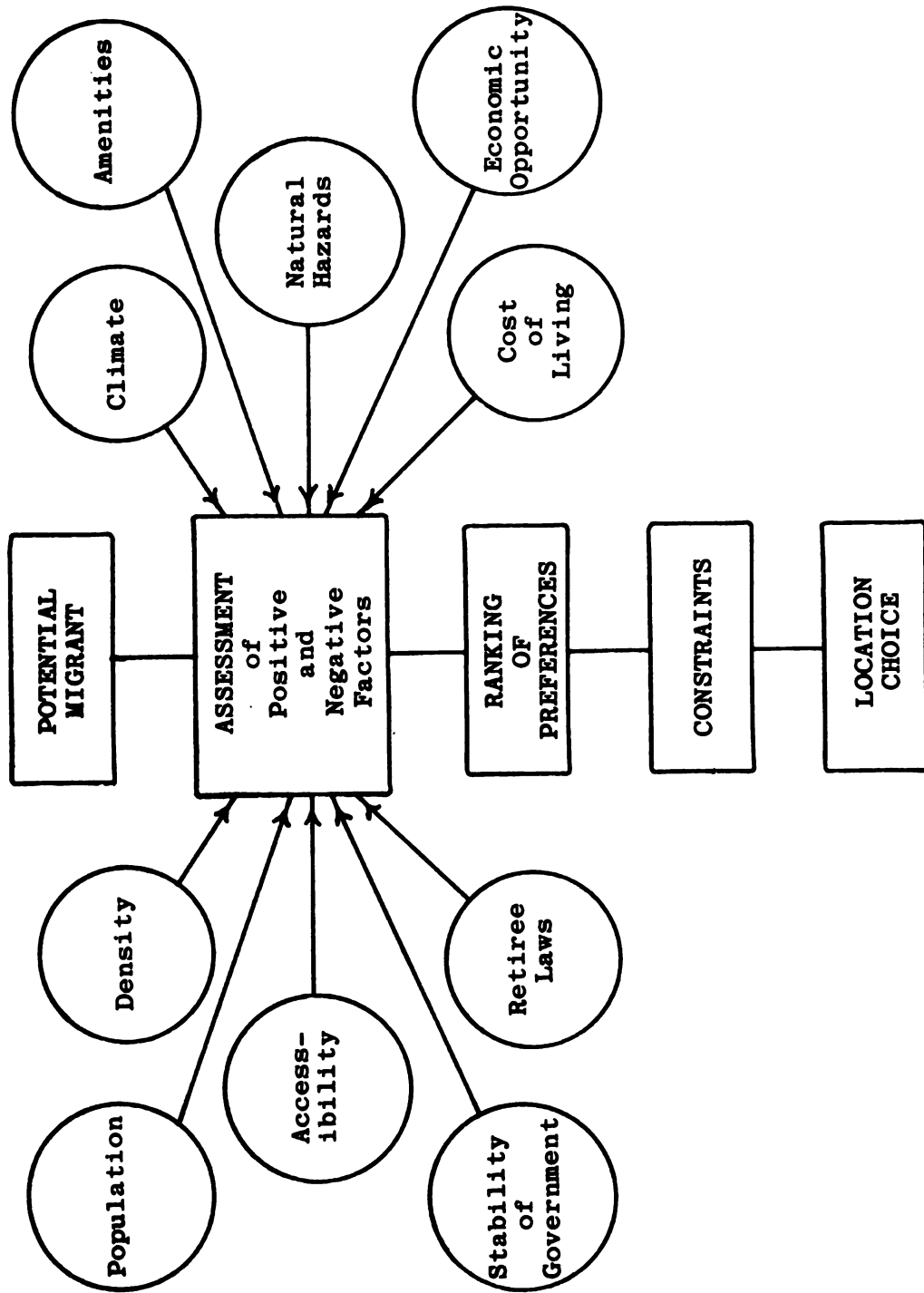


Figure 14. Retirement Location Choice

prohibitive costs, or poor accessibility. Eliminating these places from the ranking, the location choice can then be made from the remaining places under consideration. Critical to the successful application of this concept is knowledge of the important factors to be considered in the assessment. For leisure retirement purposes, major factors appear to be pleasurable climate, favorable cost of living, social amenities, special retiree privileges, and recreation opportunities. Those factors which are most relevant in attracting retirees to Central America and could be applied in the model are subjects for the remainder of this chapter.

Geographic Factors

Geographic location and the physical characteristics of a place are the most important factors influencing the choice of a foreign leisure-type retirement site. Central America, less Panama, is located generally between 8° and 18° north latitude and oriented northwest to southeast (Figure 1). The western Guatemalan border lies on a longitudinal line with central Louisiana, while the eastern Costa Rican border falls on a meridian passing through the west coast of the Florida peninsula. The entire region encompasses 179,270 square miles, equalling about one-twentieth the size of the United States, or one-fourth of Mexico's total area (Table 14). El Salvador is the smallest nation, whereas Nicaragua, almost seven times its size, is largest.

Table 14. Area and Population Comparisons

Country	Area (Sq.Miles)	Population	Pers.per Sq.Mi.
Belize	8,870	142,000	16
Costa Rica	19,700	2,023,000	103
El Salvador	8,260	4,128,000	500
Guatemala	42,040	6,016,000	143
Honduras	43,300	2,823,000	65
Nicaragua	57,100	2,224,000	39
Central America	179,270	17,356,000	97
United States	3,745,358	215,966,000	58
Mexico	764,000	62,159,000	81
Panama	29,208	1,719,000	59

Source: National Basic Intelligence Factbook (CIA, 1976)

In population, Central America contains 17,356,000 persons, almost the same as that of the state of New York, or about one-twelfth of the overall United States population. Within the region, Guatemala is the most populous and Belize the least populated. In all the nations except Honduras and Belize, the capital cities are the major center of population, as well as the economic, commercial, political, and transportation hub. In Honduras the population and economic activities are distributed between the capital, Tegucigalpa, and the north coast city of San Pedro Sula; while in Belize the population and economic concentrations remain in Belize City, its former capital and major port.

Some interesting comparisons can be made with population densities and retirees. Belize and El Salvador, both of similar area, have densities of 16 and 500 persons per square mile respectively, and both also have attracted few retirees. Costa Rica, on the other hand, has attracted the most retirees and its population density of 103 persons per square mile is near the overall Central America density of 97. This figure almost doubles that for the United States (58). Although population density did not account significantly for military retiree locations within the United States (Table 10), it could be an important consideration in foreign retirement area choice. Most significant, however, are those factors pertaining to the physical environment and accessibility of an area to the United States.

Environmental Conditions

The main environmental conditions which affect decisions on retirement sites pertain to climate and surface configuration. For year-round retirement, favorable climate allows perennial freedom of action, especially for activities related to the sun and sea and other forms of outdoor recreation such as hunting, fishing, camping, golfing, etc. Varied terrain provides spectacular scenery, such as rugged mountains, beautiful lakes, beaches, barrier reefs, volcanoes, waterfalls, canyons, etc. Based on

altitudinal change, they also affect climate and create variations in vegetation and wildlife habitats.

Surface Configuration

The physical character of Central America, in highly generalized terminology, is represented by rugged mountains, escarpments, and hills covering the major interiors, interlaced with low, undulating intermontane basins (Figure 15). Surrounding these uplands are low, narrow plains and rolling hills on the Pacific shores, and on the Caribbean, lowlands ranging from narrow coastal plains to broad, extensive ones. From the Mexico-Guatemala border to middle Costa Rica an almost continuous line of volcanoes, some active, runs along the Pacific rim, forming the most significant mountain range in Central America. This diversity within the confines of a relatively small land area creates a large variety of accessible landscapes.

Belize, which borders the Caribbean Sea, is mostly flat and swampy along the coastal areas. However, the terrain rises inland, mostly as rolling limestone hills, culminating in the Maya Mountains of the south with elevations of over 3,000 feet. The main physical attractions are the off-shore islands and adjacent Great Barrier Reef, the largest in this hemisphere.

Guatemala's landforms consist of tropical, flat-to-rolling limestone lowlands in the north; the sparsely populated Peten area; and mountainous highlands composed



Figure 15. Physical Map of Central America

of two ranges in the south. These ranges (9,000-11,000 feet) are separated by the Motagua River depression, which terminates on the irregular Caribbean coast. The Pacific coastal plain, about 200 miles long, and the lowlands along the 50 mile Caribbean coast complete the configuration. The most scenic region lies on the volcanic axis of the southern highlands, where numerous volcanic peaks (10,000-14,000 feet), lakes, and intermontane basins, including Guatemala City (5,000 feet) are located.

El Salvador, which faces the Pacific Ocean, is divided physiographically into three regions. A mountainous northern highland (9,000 feet) is located along the border with Honduras; a central region of valleys and plateaus contains the country's volcanic axis of two rows of 22 east-west oriented volcanoes; and a narrow lowland runs along the Pacific coast on the south. A land of volcanoes interspersed with lakes, the entire country offers many varied natural attractions.

Honduras is predominantly a highland nation with two major mountain ranges, which rise to elevations of 9,000 feet, bisecting the country generally from northwest to southeast. Extensive valleys and plateaus, ranging between 1,000 to 3,000 feet, occupy this mountainous interior, providing favorable areas for human settlement. There are extensive low coastal areas along a 400 mile Caribbean Sea frontage and a 90 mile lowland around the Gulf of Fonseca

on the Pacific. The off-shore Bay Islands in the Caribbean are attractive to sea sportsmen and the highland interior provides a variety of mountain scenery.

Nicaragua has three distinct physical regions. On the Pacific side are lowland plains formed by the Nicaraguan Depression, which contains the two major lakes of Central America, Lakes Nicaragua and Managua, and separating this rift valley from the ocean, a single chain of volcanoes running along the entire coast. A central highlands area, which is most extensive in the north, runs from the Honduran border to that of Costa Rica and contains mountain ridges reaching 3,000 to 6,500 feet in elevation. Finally, a vast Caribbean coastal plain, partially swampy, covers the eastern third of the country. The most scenic natural phenomena and landscapes are located in the volcano-edged plains along the Pacific.

Costa Rica's terrain features are also categorized as central highlands, Pacific lowlands containing some coastal uplands, and wide Caribbean lowlands. The major highland region is composed of a northern volcanic range (Volcanica) with volcanic peaks projecting to 11,500 feet (Irazu); a central upland basin of 3,000 to 5,000 feet elevation (Meseta Central), and a southern granitic mountain range (Talamanca) reaching almost 13,000 feet. Along the Pacific coast ubiquitous alluvial lowlands and scattered coastal uplands are also found. But unlike its neighbors to the

north, Costa Rica has two prominent rocky peninsulas (Nicoya and Osa) and two significant gulfs (Nicoya and Dulce), which are the result of geologic faulting. The Caribbean coastal plain is extensive in the north, narrowing to the south.¹⁰ This complexity of landforms provides a wealth of natural beauty that, because of a better developed infrastructure, is more accessible to the prospective retiree than that of the other Central American countries.

Climatic Conditions

Central America lies entirely within the latitudinal limits of the tropics and zone of the Northeast Trade Winds. These phenomena, along with differences in the surface configurations of the land, account principally for the climatic conditions of Central America. The Caribbean lowlands have tropical rainforest or monsoon climates, while the lowlands of the Pacific, being on the leeward side of the highlands, have tropical savanna climates. In the central highland sections, where increasing altitude has a cooling effect, most climates are classified as temperate highland, and are desirable for leisure living. According to Ullman (1954), the ideal climates of the world are those that fit the categories of the low latitude-high tableland areas of

¹⁰ Some of the information for the individual country landform descriptions was obtained from Background Notes, published by the Department of State, Washington, D.C. (USDS).

Latin America; and trade-wind island classes, such as that found in Hawaii.

With the exceptions of Nicaragua and Belize, Central American populations are concentrated in the highland basins and plateaus, taking advantage of the favorable climate. Military retirees have also been selective in this respect. Most of those who have settled in Central America chose the Meseta Central, a highland plateau containing the capital city of San Jose, Costa Rica (3,900 feet), where temperatures remain almost constant throughout the year. Average low temperatures in San Jose range from 57° in January to 62° during June, whereas average high temperatures range from 76° in January to 81° in April. Overall monthly averages range from a January low of 67° to a May high of 71°, the annual monthly difference being only 4° (Table 15). Other popular highland cities have similar temperatures, with some change due to variations in latitude and altitude; e.g., Tegucigalpa, San Salvador, and Guatemala City. In contrast with these favorable highland climates, Managua, located in the Pacific lowlands, has monthly averages in the 80s. For a familiar and chilling contrast, Detroit, Michigan is included in Table 15, as well as Miami, Florida, where winter temperatures are considered ideal and summer ones oppressive.

Table 15. Average Monthly Temperatures

Place	Altitude	Degrees in Fahrenheit											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
San Jose	3,870'	67	68	69	71	71	71	69	70	70	69	68	67
Tegucigalpa	3,200'	65	71	73	74	73	75	73	73	73	70	71	66
San Salvador	2,250'	73	75	76	77	76	76	76	76	75	75	73	73
Guatemala City	5,000'	61	63	66	66	68	66	66	66	66	65	63	61
Managua	150'	81	82	83	86	86	82	82	83	82	82	82	80
Detroit	585'	25	25	34	46	58	68	73	71	64	53	40	29
Miami	10'	68	68	71	74	77	80	82	82	81	78	72	69

Source: United States Weather Bureau Charts

Natural Hazards

The attractive topographic and climatic qualities of Central America can be reduced, or even negated, in those areas that are highly susceptible to major natural hazards. This, of course, includes the favored highland settlements and coastal population concentrations located along the Pacific, from Guatemala to middle Costa Rica. A volcanic axis and a series of geologic fault lines extend along this section of Central America, subjecting it to frequent volcanic eruptions and strong earthquakes. Volcanic activity, which is more localized and less destructive than major earthquakes in terms of human casualties, nevertheless has historically caused serious damage throughout the area. Most notable in recent years (1963-1964) was the long lasting eruption of Irazu in the Meseta Central of Costa Rica. Major earthquakes have plagued population centers in Central America throughout recorded history, including destruction of the old capitals of Antigua, Guatemala and Cartago, Costa Rica; and the present capitals of San Salvador, El Salvador and Managua, Nicaragua (West and Augelli, 1966, p. 34). The devastating Guatemala earthquakes of February 1976 severely damaged widespread areas, including Guatemala City and Antigua, and was responsible for a massive number of dead and injured.¹¹

¹¹The Guatemala Newsletter (AAP, 1976) reported 23,000 deaths, over 50,000 injured, and a million homeless people resulting from the quakes. USAID (1976) reported 22,808 dead, 76,552 injured, and 1,160,969 homeless.

The tropical climates of the coastal lowlands of the Caribbean, especially Belize and Honduras, which provide a great variety of recreational activities, are free from the threat of earthquakes. They are, however, susceptible to other environmental hazards, principally the destructive force of the tropical hurricane. Torrential rainfall and high winds flood interior regions and seriously damage coastal sections. Belize has been particularly plagued by hurricanes and its major port and former capital, Belize City, has experienced heavy damage on many occasions. Consequently, a new capital, Belmopan, was recently located some 50 miles inland. The most recent damaging tropical storm was Hurricane Fifi, which in 1974 created widespread destruction in the northern Honduras lowlands.

These natural hazards are phenomena which cannot be predicted as to exact time or place of occurrence and in most instances happen so infrequently that they usually are discounted in the retiree's location decision process. Their potential occurrence does exist, however, and for some retirees the threat is very real, therefore deterring them from settling in a natural hazardous zone.

Accessibility to the United States

The likelihood that retirement migration to a particular place could be effected is dependent upon the attributes of that place, its perceived utility by the potential

migrant, and its accessibility. Consequently, geographic space is important, in that it can indirectly limit or restrict movements, depending upon various degrees of access of one site to another. The direct land route access of the Central American nations to the United States, as well as the short airline distances, are strong positive factors favoring migration. The importance of accessibility of specific Central American nations will be discussed in the migration decision section of Chapter IV.

Effect of Distance

Geographic distance, or intervening space between places, is a critical measure in some geographic analyses. It is especially important in measuring monetary and temporal costs related to internal spatial flows of goods and people. The gravity model, with its inherent "distance decay"¹² property, has been effectively applied in many economic-motivated transportation and migration studies; e.g., transporting of commodities and labor movements (Carrothers, 1956). In long distance international retirement movements, application of this model as a means of explanation is obviously inappropriate. However, as a factor to be used in evaluating retirement areas, the amount of intervening space between the United States and the potential

¹²Distance decay pertains to the friction of distance in the gravity model, i.e., as distance between places increases, there is a rapid decline in the intensity of movement.

retirement site may strongly influence the retiree's decision in choosing one place over another. Mexico's popularity, for example, partly is due to its proximity to the United States. Also, Central America's recent appeal to retirees must be partially attributed to its relative closeness to the United States, in comparison with South America or other more distant amenity-related areas.

Intervening Opportunities

Some migration theorists have placed importance on the number of opportunities in intervening space along with the effect of distance on mobility. Stouffer (1940) believed that the number of opportunities at a particular place was proportional to the number of migrants at that place, and inversely proportional to the number of opportunities which intervened from origin to destination. His major difficulty in testing this concept was in applying measures of "opportunities". In theory, this application appears valid for foreign retirement migration in that the chosen place for migration represents maximum opportunities and within the intervening distance numerous opportunities could attract and retain the migrant. For example, retirees who have selected Costa Rica as their future retirement home because of its many attributes (opportunities), and move overland to the destination, must pass through Mexico, Guatemala, El Salvador, Honduras, and Nicaragua (intervening opportunities). In any one of these nations they could perceive

greater opportunities than expected in Costa Rica and never reach the initial objective. Of the retirees interviewed in Costa Rica, 42 per cent travelled by road and thereby were subjected to various intervening opportunities along the way. Overall, 43 per cent of the interviewees in Central America used motor vehicles as their mode of transportation from the United States to the retirement destination. These retirees apparently resisted any intervening opportunities on their journeys; others of unknown number could have opted for retirement in nations other than that of their original choice.

Stage Migration

The process whereby migrants gain access to a final destination through a series of moves is referred to as stage migration. Historically, this has been the accepted method in which migration takes place from rural areas, through various sized urban areas, to a final large urban center (Ravenstein, 1885). This migration process is evident today in the developing nations of the world and a number of empirical investigations have substantiated it in Latin America, particularly Thomas' (1968) study on internal migration to Guatemala City.

Stage migration has not significantly occurred in retirement migration to Central America, according to responses from Central American retirees. Only 14 per cent indicated that they had spent significant periods of time

in other places during their intended migration to a Central American nation. Most notable were the six retirees who settled in both Mexico and Guatemala prior to reaching their present retirement location in another country. Although few military retirees have been involved in a true form of stage migration, their retirement migration histories reflect a post-retirement pattern which could be referred to as a foreign migrant retiree strategy, i.e., initial movement to a home or job site, followed by a move to the United States sun belt, and thence to one or more amenable foreign areas. Internally, the presence of a reverse form of stage or step-wise migration from primate city to rural areas may exist in some nations. This phenomenon will be given further attention in Chapter V.

Political Factors

The political environment of nations can either positively or negatively influence potential retirement migrants. Nations having favorable laws for retirees; stable, democratic governments; fair immigration and customs procedures; and close, cordial political relationships with the United States attract retirees; whereas those experiencing political instability, governmental corruption, anti-Americanism, and those lacking special retiree benefits, tend to repel retirement migration.

Government Policy

The Central American countries, following the examples of Spain and Mexico, have employed active governmental programs to attract foreigners as part of their national development scheme. Primary emphasis in this respect is directed toward the seasonal visitor, since tourism as an industry enjoys high priority for national development in Central America. Certain nations, particularly Costa Rica and Guatemala, have also recognized the advantages of implementing special programs for retirees as an adjunct to their tourism development ventures. In most of the Central American nations tourist and retirement programs are both operated by the national tourism institutes and, therefore, their promotional endeavors can be accomplished concurrently.

Special Retiree Provisions

In order to encourage alien retirement in their respective countries as a partial means of strengthening their economic systems, four of the six Central American nations have enacted laws which provide special benefits and privileges to qualified persons (Table 16). Costa Rica was the first country to implement special legislation for retired residents (July 1971), followed in August 1973 by Guatemala, El Salvador in November 1973, and Nicaragua in November 1974. Although Honduras and Belize now have no legislation favoring retiree migrants, they will probably

Table 16. Retirement Laws for Foreign Nationals

Country	Law No. and Date	Retiree Title	Processing Agency	Qualifications	
				Min. Mo. Pension	Min. Age
Belize	None				
Costa Rica	4812 Jul 1971	Resident Pensioner	Costa Rican Tourism Institute	\$300	None
El Salvador	476 Nov 1973	Pensioner Resident	Ministry of the Interior	\$300 or \$400 with 2+ deps.	None
Guatemala	58-73 Aug 1973	Retired Resident	Guatemalan Tourism Institute	\$250	None
Honduras	None				
Nicaragua	628 Nov 1974	Retired Resident	National Tourism Office	\$400 plus \$100 per dep.	45

Table 16, cont'd.

Country	Indefinite Residence	Absence Limit (Mos.)	Allowed to Work for Pay	Change of Status Penalty
Belize	Not Applicable			
Costa Rica	Yes	6 per year	No*	Yes ¹
El Salvador	Yes	6 per year	No	Yes ²
Guatemala	Yes	None	No*	Yes ³
Honduras	Not Applicable			
Nicaragua	Yes	None	No	Yes ¹

*Exemptions made in certain professional and education areas if qualified nationals not available

¹Pay exempted taxes on household goods for status change prior to three years and on auto prior to five years

²Pay exempted taxes on household goods and auto for status change prior to four years

³Pay exempted taxes on household goods for status change prior to three years and on auto prior to four years

Table 16, cont'd.

Country	BENEFITS AND LIMITATIONS					Change of Citizenship
	Max. Amt. Free Import Duty on Household Goods	Duty Free Auto Import	Income Tax Exemption			
Belize	Not Applicable					
Costa Rica	\$7,000-one time only	1 per 5 years ⁴	All income from abroad			No
El Salvador	\$10,000-one time only	1 per 5 years	All income from abroad			No
Guatemala	\$7,000-one time only	1 first 4 years, then 1 per 3 years	All income from abroad			No
Honduras	Not applicable					
Nicaragua	\$10,000-one time only	1 per 5 years	All income from abroad			No

⁴Can include a house-trailer or light cargo trailer and tools

Source: Compiled from information contained in the cited retirement laws, copies of which were obtained from the national agencies handling these programs

follow the examples set in the other countries and implement similar programs as they become more sophisticated in promoting tourism for developmental purposes.

The retirement laws of these nations are similar in regard to processing procedures, qualifications for applicants, and benefits and limitations set forth in their programs. The national tourism institutes, in all cases except El Salvador (Ministry of the Interior), process the applications, function as executive managers of the programs, and coordinate with other interested government agencies, i.e., customs and immigration. To qualify as foreign resident pensioners, interested persons must have permanent, fixed incomes originating abroad from a guaranteed source, such as a government, school, corporation, trade union, or similar retirement fund, of a specified minimum monthly amount. By nation, the monthly minimums range from a low of \$250.00 in Guatemala, including dependents, to a high in Nicaragua of \$400.00 for single retirees, plus \$100 additional for each dependent member of the household. One country, Nicaragua, also specifies a minimum age of 45 as a qualifying prerequisite, whereas others have no minimum age limitation. Military retirees with lifetime-assured government pensions can easily verify their qualifications and, therefore, are prime prospects for taking advantage of these programs.

The principal benefits enjoyed under these laws pertain to the duty free importation of substantial amounts of household goods and one motor vehicle, total exemption from income taxes on all income originating abroad, indefinite residency privileges, and retention of national citizenship. Some disadvantages of acquiring this status also appear in the laws. For example, Costa Rica and El Salvador require that at least six months of each year be spent in-country to retain retiree status; all countries prohibit retirees and their families from performing remunerative work; and retirees in all the nations are liable for exempted taxes on household goods and automobiles if their status changes prior to specified time periods, varying from three to five years. Consequently, early dissatisfaction with an area and a subsequent move could be costly for those who have imported many household furnishings and a motor vehicle. Nonetheless, a number of military retirees have taken advantage of these laws, particularly in that nation which presently appears most attractive for long-term retirement, i.e., Costa Rica.

Costa Rica

The Central American nation which has been most successful, as well as the first, in applying the provisions of its foreign retirement law is Costa Rica. As of September 1975 there were 1,485 pensioned residents of

foreign nationality in that nation; about 75 per cent (1,114) were Americans, including 121, or 11 per cent, military retirees.¹³

Other Central American Nations

In the remaining nations of Central America, few retirees have become pensioned residents. In part this can be attributed to the later dates at which their retirement laws were published, as well as to the limited international publicity given to them, in comparison with Costa Rica's active program. Guatemala, as of January 1976, had processed 225 foreign pensioners, including about 150 Americans, of whom 14 or almost 10 per cent were military retirees. In February 1976, El Salvador claimed 50 resident pensioners that included about 35 Americans, six of whom were military retirees. These six military represented 16 per cent of the American group. Nicaragua, whose law had been in effect just over a year and is practically unknown outside of the country, had processed only two Americans as of February 1976. Neither of these was a military retiree.¹⁴

¹³These figures were compiled from data obtained from the Costa Rica Tourism Institute in March 1976.

¹⁴These figures were based on data obtained from the national tourism offices in Guatemala and Nicaragua, and from the Ministry of the Interior in El Salvador.

Tourist and Resident Provisions

Military retirees also live in Central America under the provisions of other entry laws, i.e., resident and tourist permits. In the cases of Honduras and Belize, where resident pensioner laws do not exist, they have no other options. Even in those nations offering special retiree programs, some military retirees have not taken advantage of these laws, either because they do not wish to permanently reside there, or they are desirous of engaging in some activity that is not allowable under the terms of the retirement laws. Most tourist permits in Central America are valid for 30 days and can be extended for a total of six months. Tourists are also entitled to import their personal luggage duty-free for the same period, and a private vehicle for 30 days, extendable to six months with proper governmental authorization and payment of a minimal fee. After six months in-country, the tourist must exit and gain re-entry in the usual manner. For the wanderlust type of retiree who wishes to have no long term ties in any one country, this kind of entry permit is appealing, especially in Central America, where most nations can be crossed by automobile in a day.

Retirees wishing to attain resident status in Central American nations in order to live there indefinitely, to engage in remunerative activities, or for educational purposes, must apply through legal channels to appropriate

government ministries stating their reasons, personal qualifications, and conditions of entry. Residents generally receive no special benefits and are liable for taxes and duties on imported personal possessions. Retirees seeking a full retirement life are not likely prospects for resident status and could be expected to avoid those nations not offering special retirement benefits.

Table 17 summarizes the status of military retirees in Central America. Of the 197 known retirees in that area, 141 of them, or 72 per cent, are pensioners; 44 (22 per cent) are residents and 12 (6 per cent) are tourists. Costa Rica's 121 pensioners represent 81 per cent of that nation's 150 retirees, whereas those of resident status form 14 per cent of the group, and the remaining five per cent are tourists. Costa Rica, therefore, appears most popular for full retirement purposes.

Form of Government

Except for Belize, which is a self-governing British colony with its own constitution, premier, and legal and legislative bodies, all the Central American nations are legally identified as republics composed of the three traditional branches of government, i.e., executive, legislative, and judicial. Functionally, however, only Costa Rica can be considered a truly democratic republic, exercising all provisions of its constitution. In the remaining

Table 17. Retiree Status in Central America

Country	Pensioner	Resident	Tourist	Total
Belize		1		1
Costa Rica	121	21	8	150
El Salvador	6	2		8
Guatemala	14	6	1	21
Honduras		7	1	8
Nicaragua		7	2	9
Total	141	44	12	197

Source: Information provided by interviewees and data obtained from the national tourism institutes in Costa Rica and Guatemala during 1976

Central American republics, all headed by military persons, governments are dominated by the executive.

Stability of Government

Costa Rica, in contrast to the other Central American countries, has a constitutional government and has developed and maintained democratic conditions since the implementation of its current constitution in 1949. In fact, from the time of the first free elections in 1889 to the present, there have been only two significant periods when constitutional rule was interrupted, i.e., a short-lived dictatorship during 1917-19 and the revolution of 1948, after which the existing constitution was established and the national army abolished. Subsequent to 1949 Costa Rica has held six free presidential elections while remaining free

from serious internal disorders, or disputes with its Central American neighbors. This history of political stability and democratic freedom is a strong positive factor for Costa Rica in advancing its foreign retirement program.

Belize also has enjoyed a stable, democratic form of government due to British control and the implantation of British customs and institutions into that colony. There is now little unrest between political parties, nor are urban or rural disorders in evidence. Its major political problem, and one which could be of future concern to potential retirees, pertains to the question of its sovereignty, since Guatemala claims the entire territory and periodically tension has been high along the frontier. As long as Great Britain retains its governing status of Belize and maintains British military forces in-country, it is unlikely that armed conflict with Guatemala will erupt. With future independence, however, and without British security, this dispute could lead to serious complications and possible disorder.

Histories of frequent revolutions, government by dictator, and insurgency have prevailed in the remaining Central American countries, with only short periods of representative government. Since 1936 the Somoza family has headed the government of Nicaragua, with the support of the Liberal Party and the military. This pro-American government has been successful in controlling sporadic and ineffectual

urban terrorism, as well as the rural guerilla activity in the central highlands, led by a small pro-Castro group.

During the 1960s Guatemala was the scene of widespread guerilla activity, especially in the rural northeast. After this threat was eliminated through counter-insurgency tactics, terrorist activities moved into Guatemala City from 1968 until 1971. The present government has greatly reduced all forms of insurgency; however, peace could be short-lived. Presently Guatemala's renewed emphasis on its claim to the territory of Belize may portend a serious problem along the eastern frontier.

El Salvador and Honduras, governed by military decree since 1972, have also been active in suppressing minor acts of leftist insurgency. Their major political problem, however, concerns strained relations between the two governments over Honduran treatment of Salvadoran migrants. This dispute resulted in a brief war in July 1969, and minor border incidents have sporadically occurred since the end of that five day war. The most violent clash along the common border erupted in July 1976, further exacerbating relationships.¹⁵

Despite the fact that relations between the United States and all the Central American nations are cordial,

¹⁵Reference was made to Background Notes, published by the Department of State, Washington, D.C. for basic information on the individual Central American nations contained in this section (USDS).

American citizens, who are accustomed to enjoying democratic principles, stability of government, and internal security, are often deterred from living in those nations. In choosing a retirement site, therefore, governmental stability, as well as a nation's ability to control banditry, acts of terrorism, and guerilla activity, are important factors to be considered by retirees. The importance of this factor to the interviewees of this study is covered in the migration decision section of Chapter IV.

Immigration and Customs Inconveniences

For retirees, inconveniences of a political nature pertain principally to those dealing with immigration and customs procedures, which can become complicated and distressing. The entry requirements for temporary residence (tourist) may annoy some Americans, particularly if they travel by private vehicle and must pass through several nations to reach their destination. In these instances, valid visas, immunization certificates, proof of auto ownership and registration, international drivers licenses, and special auto insurance for the various countries are required by immigration and customs officials at most border stations. Inspection of baggage and personal effects, and appropriate fee payments are normal procedures at these frontier posts, as well as at interior check points in some countries. Obtaining visa extensions through

immigration and customs offices also leads to difficult and exasperating experiences for many retirees.

For the potential resident pensioner, these procedures are compounded, due to varied requirements by different governmental agencies and attendant delays in the processing of applications, household effects, and motor vehicles. Once valid pensioner credentials are obtained, retirees are still periodically required to report to appropriate agencies on the stability and permanence of their retirement income, changes of address, and travel abroad. Permanent departure by pensioners requires exit permits from migration, customs, and public safety authorities, to insure that they have complied with all provisions of the law. No doubt some retirees feel that certain of these procedures are unnecessary and harassing, or that as aliens they are treated unfairly by the host governments, thereby becoming disaffected migrants. Consequently, the ability to cope with the frustrations often involved in fulfilling these obligations must be given full consideration in the evaluation process of choosing a retirement location in Central America.

Socio-Economic Factors

Some physical and political attributes, both favorable and unfavorable, have been described in terms of retirement in Central America. Equally important factors for consideration are social and economic conditions. Some potential

retirement locations may offer ideal physical and political advantages; but undesirable societal attitudes and institutions, few socio-cultural amenities, excessive living costs, and poor economic opportunities could counteract the positive forces.

Latin Way of Life and Attitudes

To contribute toward success in a Central American retirement environment, an understanding and appreciation of Latin culture and society is essential. Differences in language, customs, traditions, and other social institutions will, of course, appear strange and therefore may be rejected by some retirees. However, with recognition and acceptance of the positive values of Latin attitudes and way of life, retirement transition into Central American communities can be effected more easily. Military retirees, having been exposed to foreign cultures during their active careers, are assumed to be better conditioned to live abroad than their civilian counterparts. Nevertheless, certain of them have been sheltered in overseas American military communities, where little interaction with the local population has transpired. Consequently, allowance for the shock of culture differentiation in these initial encounters must be given full consideration in foreign retirement.

Latin American culture is a blend of European, African, and American Indian cultural heritages, with the

Spanish culture dominating in Central America. Due to extensive racial mixing between the Spanish and Indians after the Conquest, mestizos comprise the majority of the population. For the most part, the common culture patterns of Spain have been preserved, as well as the Spanish language.

There was less mixing in Costa Rica, due to the nature of Spanish settlement in that country. Apparently most of the Indian population was driven out or annihilated during colonial times, so that today Costa Rica has more pure Spanish and fewer pure Indian inhabitants than any other Central American country. A growing middle class, the largest in all of Central America, has risen from this large Caucasian group.

In all of Central America, the only significant Indian population is found in Guatemala. These Indians, many of whom are descendants of the Maya, are found in large numbers in the northeastern and northwestern regions, and have retained their ancient traditions, customs, and languages.

In Belize and the Caribbean coastal areas of Honduras, Nicaragua, and Costa Rica the populations are composed predominantly of African racial stock, most of whom speak various dialects of English, as well as some Spanish. These black populations, resulting from immigrations from British colonies of the Caribbean, represent an interesting blend of Spanish, English, and island traditions, though Belize, of course, is much more strongly British.

Although these ethnic differentiations present some cultural contrasts between regions, or even nations, especially in the pure Indian areas, there is, nonetheless, much similarity in the cultural and social makeup of Central America.

Except in Belize, where English-Protestant institutions prevail, social class systems exist in a hierarchy, ranking the few upper class against the many lower class, with an emerging middle class in most major urban areas. In practice, if not in theory, the class system is based on skin color. As a rule, the Caucasian enjoys the top position in this social structure, whereas the black appears at the bottom of the scale. Others, depending on lighter to darker skin color, rank between. Although this distinction is changing with the implementation of broader educational systems, these social differentiations are still prevalent. This racial relationship to social status in Latin America may partly account for the absence of black military retirees in Central America; none of the interviewees of this study were of that race.

Other culture traits that should interest potential retirees and have possible effects on their adaptation are those related to the importance of the family in Latin life, the male-female roles, the significance of the church, and the work ethic.

The close-knit extended family structure in Latin America tends to limit the interaction of members outside the related group, making it difficult for newcomers in a community to establish friendship ties. Americans may have cordial acquaintances among the Latins, but deeper attachments are rare.

Central America, like all of Latin America, is a male-dominated society in which the man has much freedom of action, especially in marital matters and extra-marital sexual activity. On the other hand, the female is expected to function as the ideal mother and faithful wife. This attitude is undergoing change in the larger urban centers, particularly in Costa Rica, where a larger middle-class exists. Nevertheless, this situation appeals to certain retirees, especially those who are single. Twenty one of these were interviewed in this study and several expressed their appreciation of living in a male-oriented society. Female opposition to this social condition can be implied from the absence of military retirees of that sex in Central America.¹⁶

Catholicism, the dominant religion, influences Latin life in many ways. In addition to the religious function, the Catholic church is the center of most social activity.

¹⁶In the Middle American nation of Mexico a survey of 42 military retirees residing in two different Mexican communities identified two female retirees. One, however, was married to a military retiree and the other was in Mexico primarily as a student and journalist (Allman, 1975).

In fact, there are some communities where little social activity exists outside the church. In this situation the non-Catholic is often denied, and certainly limited in, opportunities of social interaction (Wagley, 1973).

The Latin attitude toward work or job responsibilities, referred to by North Americans as the mañana attitude, is often a source of irritation for Americans who value getting a job done with maximum energy and minimum time. In business and legal affairs, too, the commonly accepted practice of extra-legal fee arrangements is quite disconcerting to many outsiders.

Instead of attempting to understand the cultural background underlying Latin attitudes, Americans belittle the Latin way of life in comparison with that of the United States, thus creating "anti-American" feelings. These cultural differences are important factors for retiree consideration when assessing the advantages and disadvantages of retirement living in a Latin environment.

Amenities

Amenities exist in physical and material forms. The importance of environmental and political amenities has previously been discussed. In nations offering retirees the same environmental and political amenities, the differentiating factors could be socio-economic. Examples of these advantages are: social, cultural, and recreational

facilities; medical care; educational institutions; and commercial and transportation facilities. These amenities exist in all the Central American nations, especially in the principal urban centers; however, the quality and degree of concentration is dependent upon their demand. Retirees are likely, therefore, to select those nations or sites which offer the greatest variety of desired amenities, or at least a minimum acceptable number. From observational information and discussions with retirees during the field survey, it is estimated that Costa Rica can best serve the social amenity needs of retirees; followed by Guatemala; then El Salvador, Nicaragua, and Honduras evenly matched; with Belize least desirable. This ranking of social amenities corresponds with the ranking of retirees by total numbers in Central America.

Cost of Living

In similar environments an important economic differentiating factor, and in many instances the most important of all factors pertinent to retirement migration, is that of living costs. This factor, of course, has a strong relationship with the standards of living. For example, among the Central American countries Honduras has the lowest cost of living. However, the corresponding low living standard, represented by poor housing and services, few socio-cultural amenities, unsafe or poor hygienic conditions,

weak infrastructure, etc., offset the inherent advantage of the low cost of living. Conversely, Costa Rica, where living costs are higher, provides acceptable services for Americans which contribute to its attraction for larger numbers of retirees. Despite the fact that Central American living costs vary somewhat by nation, it still is less expensive for retirement than in the United States, especially in terms of housing, utilities, fresh foods, domestic services, public transportation, and building costs. In the location choice analysis, therefore, the cost of living factor must be weighed against the lifestyle desired, i.e., modern urban versus undeveloped rural.

Economic Opportunities

Retirees with permanent fixed incomes (pensions) are not usually attracted to a place for job opportunities. For military retirees, especially those of younger age and lower retirement incomes, this is not always the case. Some retirees migrate to Central America for investment purposes; some operate businesses, farms, or ranches; and others work for governmental or educational institutions. The questionnaire responses indicate that 18 per cent of the retirees were fully employed and 17 per cent employed part-time. However, over half of these retirees were working for themselves, most as ranchers or farmers, occupations which many retirees, even in America, select after initial

retirement from the labor force. This percentage of employed is indicative of the need for many retirees to remain fully occupied in their new environment. The stronger economically developed nations, therefore, may be more attractive for retirees who want to continue in some type of economic activity. Costa Rica, for example, has the largest group of retirees in Central America, as well as the highest per capita income (Table 18). These factors and their importance in the migrant's retirement decision will be further explored in Chapter IV.

Table 18. Per Capita Income

Country	Annual PCI	Year
Belize	\$680	1974(Est)
Costa Rica	810	1975
El Salvador	390	1974
Guatemala	600	1974
Honduras	330	1975(Est)
Nicaragua	730	1975(Est)

Source: National Basic Intelligence Factbook (CIA, 1976).

This chapter has considered some of the factors which are relevant in the evaluation of retirement locations and introduced a method whereby these places can be ranked for selection of a desirable retirement site. Chapter IV will deal with the characteristics of the Central American migrant.

CHAPTER IV

MIGRANT CHARACTERISTICS

In accordance with the retirement migration schema (Figure 4), the donor component of the model, with its sub-component origin representing the United States and the potential migrants as United States-based military retirees, was examined in Chapter II. Also in Chapter II, the recipient component was identified as Central America and the sub-component destination as retirement sites in that region. Chapter III considered the external environmental stimuli and the internal influencing factors that can attract migrants to Central America. This chapter continues the development of the migration schema by investigating migrant characteristics in the recipient Central American nations and the motivating factors responsible for their migration decision.

Character of the Migrants

Military retiree migrants in Central America cannot be stereotyped as homogeneous groups of pioneers who have settled in foreign lands for a common cause. They do, however, share a number of common characteristics and interests, some

of which have been instilled in them through their former associations with the military. The background of these Central American respondents, then, will be considered in terms of their demographic and socio-economic attributes and personal interests, in order to distinguish some measures of commonality.

Demographic

A major distinction of military retirees, in comparison with civilian retirees, is their younger retirement age (Table 19). Retirement at a younger age occurs because the military retirement system offers the option of retirement after 20 years of active service. Many people start their military careers at ages 17-19 and are eligible for retirement before the age of 40.

Table 19. Age at Retirement from the Military

Country	Age			
	Under 40	40-49	50-59	60-69
Belize	0	1	0	0
Costa Rica	24	34	16	5
El Salvador	2	1	1	0
Guatemala	2	8	7	1
Honduras	3	3	0	0
Nicaragua	1	4	1	0
Total Number	32	51	25	6
Per cent	28	45	22	5

In the case of the Central American respondents, 48 per cent entered the armed forces before age 20 and 28 per cent retired before age 40. The median age group at retirement was 40-49, comprising 45 per cent of those interviewed, while 22 per cent were 50-59 years old at retirement. The remaining five per cent retired at age 60 or above, a figure that contrasts dramatically with that of 65+ for the majority of civilians.

The age groups of the retiree migrants at the time of the survey are given in Table 20. Although their median age group at initial retirement from the military was 40-49, the dominant age group is now 50-59, with a median of age 55. This reflects either long term retirement residency in Central America, or significant periods of retirement in other places prior to locating in Central America.

In Central America all of the identified military retirees were of the male sex (Table 20). Because of the fewer numbers of female retirees in the military,¹⁷ this could be attributed to a least chance selection process; however, as discussed in Chapter III, it is more probable that the dominant male role in Latin society has deterred female retirees from settling in that area.

¹⁷At the end of 1976 there were more than 7,400 female retirees of the armed forces, 50 of whom were residing outside the United States (RAB, 1976, p. 5).

Table 20. Demographic Composition of the Migrants

Category	Country					Total	
	Belize	Costa Rica	El Salvador	Guatemala	Honduras	Nicaragua	No. Per cent
<u>Age</u>							
Under 40	0	1	1	1	2	1	6 5
40-49	1	22	0	2	0	1	26 23
50-59	0	34	3	8	2	3	50 44
60-69	0	15	0	7	2	1	25 22
70+	0	7	0	0	0	0	7 6
<u>Sex</u>							
Male	1	79	4	18	6	6	114 100
Female	0	0	0	0	0	0	0 0
<u>Race</u>							
Caucasian	1	79	4	18	6	6	114 100
Negro	0	0	0	0	0	0	0 0
Other	0	0	0	0	0	0	0 0

Race is another demographic factor that is highly selective in Central America among military retiree migrants. All of the respondents were Caucasian (Table 20). The complete absence of non-Caucasian retirees in these nations may be due to the social status values placed on skin color in Latin America.

Socio-Economic

The socio-economic characteristics of retirees account for the attitudes and objectives of many, just as the demographic factors differentiate them from a normal cross-section of the total American retiree population. Sociologically, the family structure and educational background of the migrants are revealing factors with regard to their potential stability in, and contributions to foreign communities.

Of the total retiree population surveyed, 81 per cent were married, eight per cent single, nine per cent divorced, and two per cent widowed (Table 21). Only in Costa Rica and Guatemala were retirees found in all these categories, whereas in Honduras and Belize, they were all married. Within the married category, 98 per cent of the spouses were present in the household. In addition, 48 per cent, or about one-half, of these households included one or more children, or other dependent relatives. This substantiates hypothesis 2.b., i.e., military retiree migrants share the characteristic of being married.

Table 21. Migrant Socio-Economic Characteristics

Category	Country					Total	
	Bel.	C.R.	E.S.	Gte.	Hon.	Nic.	No. Per cent
<u>Marital Status</u>							
Single	0	5	0	4	0	0	9 8
Married	1	65	4	12	6	5	93 81
Divorced	0	8	0	1	0	1	10 9
Widowed	0	1	0	1	0	0	2 2
<u>Persons in Household</u>							
Spouse	1	63	4	12	6	5	91 98
1 Child	1	15	0	1	1	2	20 21
2 Children	0	9	2	1	2	1	15 16
3 Children	0	3	0	0	0	0	3 3
4 Children	0	2	0	0	0	0	2 2
Other Relative	1	5	0	0	0	0	6 6

Table 21 (cont'd.)

Category	Country					Total	
	Bel.	C.R.	E.S.	Gte.	Hon.	Nic.	No. Per cent
<u>Education</u>							
Under 8 years							
Migrant	0	1	0	0	0	0	1
Spouse	0	2	0	0	0	0	2
8th Grade							
Migrant	0	5	0	1	0	0	6
Spouse	0	6	0	0	0	0	6
12th Grade							
Migrant	1	13	2	3	3	1	23
Spouse	1	16	2	4	4	1	28
Some College							
Migrant	0	22	0	4	1	2	29
Spouse	0	18	1	2	1	1	23
Baccalaureate							
Migrant	0	19	2	7	1	0	29
Spouse	0	13	1	4	1	1	20
Masters							
Migrant	0	13	0	3	1	1	18
Spouse	0	5	0	0	0	1	6
Ph.D.							
Migrant	0	6	0	0	0	2	8
Spouse	0	1	0	0	0	0	1

Table 21 (cont'd.)

Category	Country					Total	
	Bel.	C.R.	E.S.	Gte.	Hon.	Nic.	No. Per cent
<u>Employment</u>							
Fully Retired	1	57	2	8	0	1	69 61
Fully Employed	0	5	2	6	4	4	21 18
Part-time Emp.	0	15	0	3	2	0	20 17
Seeking Emp.	0	2	0	1	0	1	4 4
<u>Uniformed Service</u>							
Army	1	31	1	3	3	3	42 37
Navy	0	17	0	5	1	2	25 22
Air Force	0	23	2	8	1	1	35 30
Marines	0	6	1	2	1	0	10 9
Other	0	2	0	0	0	0	2 2
<u>Grade Structure</u>							
Enlisted	1	30	2	10	2	1	46 41
Warrant	0	3	0	0	1	1	5 4
Officer	0	46	2	8	3	4	63 55
<u>Retirement Income</u>							
Under \$5,000	0	16	2	2	2	1	23 20
\$5-10,000	1	36	1	9	3	3	53 47
\$10-15,000	0	18	1	4	1	1	25 22
\$15-20,000	0	3	0	2	0	1	6 5
\$20-25,000	0	5	0	1	0	0	6 5
\$25-30,000	0	1	0	0	0	0	1 1

The educational status of both the retirees and their spouses ranged from under eight years of schooling through completion of the doctorate degree (Table 21). Most significant in respect to education are the high percentages of migrants and their spouses who hold baccalaureate and higher degrees, i.e., 49 per cent of the retirees and 31 per cent of the spouses. Additionally, 25 per cent of the retirees and 27 per cent of the spouses had completed some college, with only six and nine per cent, respectively, not having graduated from secondary school. The education level attained by this group supports hypothesis 2.c., i.e., they are highly educated.

The majority (61 per cent) of the retirees migrated to Central America to fully retire, whereas 18 and 17 per cent, respectively, were employed fully or part-time and four per cent were seeking employment (Table 21). This distribution reflects some association with the younger age structure of military retirees, the size of their families, and the need for employment as an income supplement or an ego-satisfying mechanism. Costa Rica, most popular of the Central American nations, led the fully retired category with 72 per cent, while all the Honduran retirees were fully or part-time employed. In the remaining countries, except Belize, fewer than half of the migrants were fully retired. As pointed out in the section on economic opportunities in Chapter III, most of these working retirees are self-employed,

principally as farm or ranch owners, with a few operating small businesses such as real estate sales, bars and restaurants, gasoline stations, and recreation vehicle parks. Others are employed with United States government organizations and in educational institutions.

The principal parent service of the retirees was the Army, with 37 per cent of the migrants, followed by the Air Force and Navy, representing 30 and 22 per cent, respectively (Table 21). The Marine Corps accounted for nine per cent, and the Coast Guard and Public Health Service had one per cent each. Marine Corps retirees comprise only five per cent of all military retirees. The inflated percentage for Marine retirees in Central America may be related to the assignment of Marines as guards at all American embassies. That is to say, a higher percentage of Marines than other services has served in most of these nations. In numbers of retirees in Central America, however, the Marine Corps contribution is relatively small and the percentages for the other services are not out of line with overall military retiree strengths; consequently, no single military service can be considered dominant in Central America.

A strong differentiating factor among military personnel is that of rank or grade in the service, since it identifies not only financial capabilities, but one's place in the social structure. To a certain degree this attitude

carries over in the retired ranks. The Central American retirees were somewhat evenly distributed according to rank, with 55 per cent commissioned officers, 41 per cent enlisted men, and four per cent warrant officers (Table 21). Specific retirement grades among those personnel retired for length of service (20 plus years) ranged between sergeant (E5) and lieutenant general (O9), which in terms of current annual retired pay could be the difference between \$4,080 and \$29,700.

Military retirement income is critical for those retirees who have taken advantage of the special laws for retirees in Costa Rica, Guatemala, El Salvador, and Nicaragua, since their status is dependent upon a minimum monthly guaranteed pension. On the basis of current armed forces pay scales, a retired enlisted man in pay grade E5 (sergeant) with 20 years active service would receive a pension of \$340 monthly, thus qualifying him as a pensioned resident in Costa Rica (\$300 mo.) or Guatemala (\$250 mo.) (Table 16). If single, or with only one dependent, he could also qualify in El Salvador; however, with two or more dependents he would need \$400 per month in El Salvador. In Nicaragua a minimum of \$400 monthly qualifies a single person, plus \$100 additional for each dependent. Some enlisted personnel, of course, cannot meet these minimum income requirements, especially if retired some years ago, when lower pay scales were in effect. Nonetheless, if recently retired

in pay grade E6 (staff sergeant) or higher, all retirees should be financially eligible for these retirement programs. The annual military retirement income for the Central American retirees ranged from under \$5,000 to over \$25,000, the median, representing 47 per cent of the group, falling in the \$5,000 to \$10,000 category (Table 21). In the nations of Central America, where annual per capita incomes vary from a low of \$330 in Honduras to a high of \$810 in Costa Rica, the retiree pensions represent substantial amounts. Moreover, the capital input into these small nations from external sources could be significant in strengthening their economies. For example, using the upper limits of the retirement income ranges, and multiplying these by the numbers of retirees in Costa Rica for each range, that nation benefits from a foreign capital income of about one million dollars annually. Those retirees who are employed or have other sources of income besides their retirement pensions contribute additional resources to the economies. Total income figures of the respondents in this study were incomplete, since some retirees did not wish to divulge their outside incomes.

For years of active military service completed, 52 per cent of the migrants had served 20-24 years, 26 per cent served over 25 years, and 22 per cent less than 20 years. Retirees in the latter group are those retired for disability or through a reserve program in which less than

20 years of active duty was required for partial retirement pay.

Personal Interests

Military retirees have varied fields of interest. This is to be expected, considering the fact that during their active military careers they have travelled extensively, changed jobs frequently, and been exposed to many social and recreational opportunities. Some areas of interest expressed by the Central American respondents pertain to all types of outdoor activities, such as golf, tennis, hunting, fishing, boating, camping, etc.; social events of both an organizational and personal nature, e.g., club and fraternal meetings and dining and night club entertainment; building and decorating a dream home; archeological and nature expeditions; or pleasurable jobs and business operations. As a more definitive measure for determining how the retirees are occupied, they were asked to indicate the amount of time spent each week in certain activities (Table 22). The most revealing and unexpected finding of this inquiry was that the retirees spend the highest percent of their time on reading and writing. A young and active group of this nature might be expected to devote most of their energy to recreation. Second in the ordering of time spent was socializing, followed by recreation. As expected, the majority of those retirees engaged in work or

Table 22. Migrant Expenditure of Time in Average Week

Activity	Degree of Time Spent (Per cent)				
	Most	Much	Some	Little	None
Job or Business	26	2	7	1	64
Socializing	5	25	39	20	11
Housework	8	21	26	16	29
Recreation	7	11	43	20	19
Religious & Community	1	10	29	31	29
Reading & Writing	10	39	31	13	7
TV & Radio	1	8	25	43	23
Education	5	11	16	15	53

business devote the highest degree of their time to that activity; however, 64 per cent spend none of their time on the job or in business, attesting to a full retirement life for most. These retirement behavioral patterns probably conform with the typical life style of most retirees worldwide. This relationship with the total retirement population could be of interest for further research.

Selectivity

Selectivity in the migration process pertains to the singling out of demographic and socio-economic characteristics of migrants which distinguish one group from another. This section of the study identifies some selective characteristics of the Central American military retirees as compared with the general United States military retiree population.

Age, Sex, and Race

The predominant age group of the military migrants is 50-59 with a median age of 55, whereas that for the general military retiree population is 45-54 with an average age of 42 (Army Times, 1973, pp. 11 and 22). The older age structure of the migrants suggests selectivity for full retirement in Central America. Moreover, the median age of 55 substantiates hypothesis 2.a., which states that military retiree migrants share the characteristic of a median age in the mid fifties. All of the Central American migrants are males and of the Caucasian race, thus reflecting selectivity for these persons.

Language

The ability to speak Spanish is apparently an important selective criterion for Central American settlement, since 88 per cent of the military migrants have this capability. Although figures regarding the Spanish language capability of the general military retiree population are not available, they are probably below 10 per cent.

Retirement Income

The median annual retirement income of the migrants is \$8,900, a significant guaranteed income. The average yearly retirement income for all United States military retirees in 1976 was \$6,648. The yearly average for officers was

\$10,092 and for enlisted persons \$5,184 (TROA, 1977, p. 11). Although the Central American retiree figure is a median value and the overall retiree one an average, they can be used for relative comparison. Consequently, it is evident that a larger number of retirees with higher income opt for Central American retirement, verifying hypothesis 2.d., which states that military retiree migrants share the characteristic of having a substantial retirement income.

Military Service

The selectivity of migrants with regard to military service pertains to the dominance of one parent branch of the armed forces over others and the differentiation of retirees by military rank. Army and Marine Corps migrants are present in larger percentages (37 and 9) than corresponding percentages of the total military retiree population (34 and 5). On the other hand, Navy and Air Force migrant percentages (22 and 30) are smaller than the overall retiree populations for those services (26 and 35). Army and Marine Corps migrants, therefore, are somewhat selective. Military rank is selective in Central America, with 55 per cent officers and 41 per cent enlisted persons, as compared with 27.5 per cent officers and 68.5 per cent enlisted persons in the entire military retiree population. No selectivity is present for warrant officers, both categories having four per cent (TROA, 1977, p. 11).

Propensity to Migrate

Once a person's bond to a familiar environment and population is broken by spatial movement to new surroundings, succeeding moves are likely to occur with less anxiety and difficulty than the initial one. Consequently, persons with extensive migration histories are prone to continued movement. Military personnel epitomize this phenomenon, becoming highly specialized migrants from the time of initial entry into the service and continuing through their active careers. For many military personnel, the migration patterns and cycles established during military service carry over into their retirement years, due to their continued search for something new and interesting. Having experienced foreign assignments, therefore, military retirees are probably more apt to try retirement life abroad than are their civilian counterparts.

Movement During Military Service

To illustrate the movement patterns of career military personnel, the Central American retiree population was asked to recall the numbers of their principal military moves and places of assignment. In the continental United States the moves ranged from one to 20, with a median of six moves per person. Principal states in which these personnel served, in order of ranking, were California, Florida, Texas, and Colorado. Their expressed preferences for

military assignment were predominantly California, followed by Florida and Texas. Foreign moves ranged from zero for two retirees to 14 for one retiree, with a median of five moves. Principal overseas assignments by ranking were Europe, Japan, Korea, Southeast Asia, and the western Pacific area. Predominant in Latin America were Panama and Puerto Rico.

With a median of six continental United States moves and five foreign ones during the military careers of these retirees, it is evident that they have been conditioned to frequent moves and exposure to foreign areas, thus more likely to have a high propensity for foreign migration after retirement. Consequently, this finding supports hypothesis 1.

Previous Retirement Migrations

The Central American retiree population has, of course, exercised its propensity to migrate to a foreign area at least once since termination of active service. After this first retirement move the propensity to migrate continues to prevail in the new retirement environment. For example, the survey found that 61 per cent of the migrants had previously lived in a country different from their present foreign residence since retirement. The number of previous retirement migrations by this group ranged from one to six, including moves within the United States; the majority of

that number (59 per cent) moved once, 19 per cent twice, 12 per cent three times, eight per cent four times, and one per cent each for fifth and sixth time movers. The most popular retirement residence prior to residency in Central America was the United States, where California and Florida dominated all other states. Outside the United States, the top rank order of previous retirement residency was Mexico, Panama, and Puerto Rico (Table 23). This pattern of repetitive migrations to favorable climatic areas, including many foreign nations, lends further support to the proposition that military retirees' propensity for international migration is strong.

Table 23. Previous Foreign Retirement Residences

Nation	No.	Nation	No.	Nation	No.
Mexico	10	Nicaragua	1	Philippines	1
Panama	6	Honduras	1	Thailand	1
Puerto Rico	5	Colombia	1	Okinawa	1
Vietnam	4	Bahamas	1	Germany	1
Ecuador	3	Spain	1	Ireland	1
Guatemala	2	Australia	1	Somalia	1
Brazil	2	New Zealand	1		

The areas of concentration of these previous retirement residences reflect a pattern of amenity-oriented regions, both foreign and domestic. Specifically, Mexico, Panama, and Puerto Rico accounted for 48 per cent of the

previous foreign retirement sites; whereas in the United States, California, Florida, and Texas accounted for 59 per cent of the domestic ones. All of these places are associated with warm climates and other retirement-related amenities. Consequently, these statistics support hypothesis 2.e., that is, military retiree migrants share the characteristic of a similarity of previous residence. This subject will be further addressed in Chapter V under directional bias of the migration streams.

Migration Decision

In the retirement migration schema (Figure 4), the most important element activating the migration is the migration decision. Obviously, unless the potential migrant has made the decision to move, the situation depicted in the model remains static. In the decision making process, the potential migrant evaluates the positive and negative factors at both the origin and destination in terms of his perceived objectives, and if the destination is favorable, he decides to migrate.

For the military retiree looking for a desirable retirement location, it could be expected that the principal factors influencing the migration decision would be those associated with pleasant climate, low living costs, and other amenities which contribute toward a leisure form of life. To determine the significance of these attractive

factors at the destination, as well as those which might repel migrants from the origin, the Central American retirees were asked to give their reasons for the migration and to evaluate certain factors according to their importance to the migration decision.

Positive Reasons for the Migration

Individual responses from the migrants reflected a wide range of reasons for migrating to Central America; collectively, however, the majority of answers were related to favorable climate and cost of living factors. Descriptive replies included:

- Liked the mild climate
- Attractive cost of living
- Healthy climate
- Good opportunity for outdoor sports and recreation
- Owned property and desired to build home
- Wanted a total change of atmosphere
- Liked Latin American people
- Desire to live in an area with friendly people
- Simply want to retire
- Slower pace of life
- Favorable government
- Educational opportunities
- Native homeland
- Relatives' home and property ownership
- Economic opportunities and challenges
- Employment

In order to provide a more definitive and measurable unit pertaining to the reasons for migrating, data were tabulated for the more influential factors, according to degrees of importance, for Costa Rica and collectively for the other Central American nations.

Costa Rica

Since Costa Rica is believed to exemplify the nations of Central America for amenity seeking migrants, it has been analyzed separately for comparative purposes with the remaining nations (Table 24). Considering both most and great degrees of importance, it is evident that the majority of Costa Rican migrants attribute their migration decision primarily to agreeable climate, secondly to the low cost of living, and thirdly to the special privileges granted to retirees. Moreover, the fourth and fifth ranking categories in the first two degrees of importance are favorable health and political conditions. The combination of these attributes account for Costa Rica's attractiveness among the Central American nations as a complete retirement environment. Furthermore, it supports hypothesis 3.a., which states that in the migration decision, site selection is directly related to the amenities offered by the host nations.

Other Central American Nations

Since the other Central American nations have attracted fewer military migrants than Costa Rica and also have higher percentages of employed retirees, it was deemed necessary to collectively analyze these nations to determine the differentiating reasons for the migration (Table 25). Again, as was done with the Costa Rica data, most and great degrees of importance were given main consideration. In this case, however, the ranking differs between the categories of most

Table 24. Reasons for Migration to Costa Rica

Reason	Degree of Importance(Percent)			
	Most	Great	Some	Little
Climate	37	19	5	0
Low cost of living	16	20	9	7
Special retiree privileges	13	14	10	8
Social & cultural activities	1	5	14	22
Recreational activities	1	7	13	23
Near relatives & friends	5	3	5	6
Health	12	6	6	7
Job	7	1	0	0
Property ownership	0	5	5	8
Accessibility to U.S.	0	5	16	12
Political conditions	8	15	16	6

Table 25. Reasons for Migration to Other C.A. Nations

Reason	Degree of Importance(Percent)			
	Most	Great	Some	Little
Climate	23	20	8	0
Low cost of living	12	17	12	0
Special retiree privileges	0	14	10	5
Social & cultural activities	3	9	20	23
Recreational activities	0	8	10	31
Near relatives & friends	20	8	8	2
Health	3	4	5	18
Job opportunities	28	3	8	5
Property ownership	5	8	5	0
Accessibility to U.S.	3	5	12	8
Political conditions	3	4	2	8

and great degrees. Job opportunities, climate, and proximity to friends and relatives are the rank order for the most important category; whereas combining the categories of most and great importance, climate is again first, followed by job opportunities, and cost of living. Although the climate and cost of living factors do not appear as strong in these nations as for Costa Rica, nevertheless, they rank high in the migration decision process and rank first and second in Central America as a whole. Consequently, these data substantiate hypotheses 3.b. and 3.c., i.e., in the migration decision climatic conditions are of prime importance, and cost of living is of secondary importance.

By individual countries, the nation which most closely corresponds with Costa Rica in terms of attractiveness for full retirement is Guatemala, where climate, low cost of living, and special retiree privileges have the same ranking. Retirees in the remaining nations, especially Honduras, have located there primarily for employment or to be near relatives.

Negative Factors Influencing the Migration

The Central American retirees who had a previous retirement location were asked to specify why they had departed that place. Those retirees, of course, who migrated directly to Central America upon retirement from active

military service presumably considered only the attractive factors at the destination, not having experienced repelling factors at a previous retirement site. The analysis, therefore, considers only that percentage of the retiree population with a former retirement migration history (Table 26). The primary reasons for leaving the place of origin were job dissatisfaction (25 per cent), unfavorable political conditions (22 per cent), high cost of living (17 per cent), and disagreeable climate (14 per cent). The latter two factors could be alleviated by a move to any of the Central American nations. Job dissatisfaction could be remedied by selecting a total retirement environment and the political situation corrected by choosing a country with a stable, democratic government. It was interesting

Table 26. Reasons for Leaving Previous Retirement Location

Reason for Departure	Percent
Job dissatisfaction	25
Political conditions	22
High cost of living	17
Disagreeable climate	14
Inadequate educational facilities	9
Social ills	4
Health	4
Poor relations with relatives & friends	4
Lack of community services	1

to note that none of the respondents mentioned the lack of social, cultural, or recreational activities; poor tax structures; or high risk natural hazard areas as negative factors considered in the migration decision.

Role of the Amenities

Economic factors, normally the most important motivating forces in migration theory, have less application as determinants in migration for retirement purposes. The foregoing findings strongly support the dominant role that climate and other amenities play in retirement migrations, thus giving weight to the conjecture that this type of migration is amenity-induced. Nonetheless, even in retirement, material improvement is desirable, and can be realized on fixed pension incomes in lower cost of living environments. That is why many military retirees have migrated from the agreeable climatic areas of the southern United States to Central America; i.e., to live a more gracious life on the same income. In some areas, the gap between living costs in Central America and the United States is narrowing, thus reducing the economic advantages. Consequently, although amenities remain the dominant motivating factors for migration into Central America, changing economic conditions in some nations could create spatial change.

Importance of Place Perception

As stated earlier, in deciding whether or not to migrate, migrants make a comparison of the perceived advantages and disadvantages for retirement living at the origins and destinations, and if the perceived differences are positive at the destination, the migration is likely to occur. In this comparative analysis, knowledge of the potential retirement places is critical for making a sound decision and to better insure consequent success of the migration.

Perception of a place can be formulated through descriptive readings, from pictures and films, information provided by friends and relatives, and by various other sources. Fifty-nine per cent of the Central American retirees had relatives or friends already living in the host nations, who could have provided information to reinforce their perceptions of the potential migration sites. However, if confidence in the accuracy of perception gained by these means is lacking, the alternative is a personal visit to the area. In the case of the Central American retirees, a large number had positive perceptions of the places to which they migrated, since 79 per cent had visited the selected retirement area before deciding to move.

More important than the mere overview that a cursory visit to an area would offer is previous long-term residency which has provided in-depth knowledge of both the country and people. In this respect, it was found that

seven per cent of the retirees had completed their last active military assignments in Central America, while six per cent had finished their active careers in Panama and two per cent in Puerto Rico. This represents 15 per cent of the respondents, a significant figure considering the limited number of active military personnel assigned to these nations. Many other retirees had completed duty assignments in Central America and other parts of Latin America at some time during their active military service (Table 27). Other than Panama (Canal Zone), Puerto Rico, and Cuba (Guantanamo), where conventional military forces are stationed, assignments in the remaining Latin American nations are limited to embassy staffs or military assistance groups. Consequently, Panama heads the listing in Table 27; however, the third place ranking of Guatemala was most surprising. These findings illustrate the importance of familiarity with an area prior to migration, particularly in strengthening individual information about the place. Moreover, they substantiate hypothesis 3.d., which states that previous exposure to, or residency in, Latin America is an important consideration in the migration decision.

It is interesting to note that 51 per cent of the retirees had considered other foreign retirement areas during the decision making process. The nations most often mentioned were, by ranking: Mexico, Spain, Costa Rica, Panama, Guatemala, Puerto Rico, Honduras, Portugal, and Australia.

Table 27. Previous Latin America Military Assignments

Country	No.	Country	No.	Country	No.
Panama	29	Costa Rica	2	Haiti	1
Puerto Rico	12	El Salvador	2	Guiana	1
Guatemala	9	Honduras	2	Surinam	1
Ecuador	5	Dominican Rep.	2	Bolivia	1
Cuba	5	Venezuela	2	Chile	1
Nicaragua	3	Mexico	1	Brazil	1
Colombia	3	Trinidad	1		

Degree of Permanency

It has been shown that military retirees have a history of frequent foreign moves, during both active service and retirement, having become conditioned to continued movement as a way of life. After the migration has been effected, then, it is of interest to investigate its permanency and to consider some factors which may be influential in sustaining the foreign residence.

Analysis of Area Satisfaction

To discover how the retiree migrants felt about retirement life in Central America, they were queried regarding acceptance of the host nation as a permanent home; their satisfaction with the retirement location; and if dissatisfied, their reasoning and movement plans. Sixty-four per cent of the respondents considered the host country their permanent home, with six per cent undecided. Seventy-five

per cent indicated that they were satisfied with their present retirement location. About half of the 25 per cent who were not satisfied stated a desire to return to the United States, while others of this group wished to move to either Chile, Argentina, Mexico, Costa Rica, Guatemala, Spain, Italy, or Southern Europe. Although not representing large absolute numbers, the fact that almost half of those desiring to move wished to return to the United States in itself is significant. This finding supports hypothesis 2.f., which states that military migrants share the characteristic of a propensity to return to the United States.

Rising cost of living is the reason most given by those retirees who are dissatisfied and would like to leave (Table 28). Other significant responses in order of importance were lack of employment, lack of community and commercial services, and social ills. Even among those retirees who had expressed satisfaction with their retirement location, much recent concern was expressed over increasing costs throughout Central America and, in the major urban areas, over rising crime rates, especially theft and burglary. Due to inflation and the consequent lower purchasing power of American dollars in Central America, some retirees with small incomes, especially those with families, now feel the need of a job to supplement their retirement pay. If unable to work under existing retirement laws, the alternatives are migration to a more amenable nation (lower cost

Table 28. Reasons for Desiring to Leave the Host Nations

Reason	Degree of Importance (Percent)	
	Most	Great
Disagreeable climate	0	5
Rising cost of living	32	25
Lack of employment	28	11
Lack of community & commercial services	8	14
Lack of social & cultural activities	4	8
Lack of recreational activities	4	8
Inadequate educational facilities	4	0
Poor relations with foreign neighbors	0	8
Poor relations with relatives and friends	4	0
Social ills (crime, drugs, etc.)	8	14
Political conditions (unstable government)	8	5
High risk natural hazard area (earthquakes, etc.)	0	0

of living), or to one that does not restrict work by alien retirees, or preferably both. The retirees living outside the main metropolitan areas were those mostly concerned about inconveniences resulting from a lack of community and commercial services. Although a small number considered "poor relations with foreign neighbors" an important contributor to their discontent, it was apparent in some communities, especially where more Americans were concentrated, that the local populace resented the special privileges

given to pensioned foreign residents, thus creating some animosity. Most interesting was the lack of concern about living in an area that is prone to natural hazards.¹⁸

Despite the fact that 25 per cent of the migrants were dissatisfied with their retirement location, only 11 per cent of the retiree population stated that they had definite plans to move. However, another 31 per cent of that population did not answer this question, thereby inferring the possibility of migration. Commitments under the special retirement laws, of course, retain some disaffected retirees. The majority of the retirees, however, indicated satisfaction with the area as their retirement home.

Cyclic Nature of the Migration

Retirement migration to Central America is a recent phenomenon. Consequently, the permanence or cyclic aspects of the act at this early stage cannot be precisely determined. On the basis of information provided by the respondents on years of residency in the host nations, however, some measures of the flexibility, or temporal length of the migration, can be derived. In Central America, the migrants' length of residency ranged from less than one year

¹⁸The personal interview survey was conducted in Guatemala prior to the major earthquake of February 4, 1976. It would have been interesting to interview the Guatemala respondents again subsequent to the earthquake, to determine if their opinions had changed.

for 10 per cent of the retirees to 30 years for a disability retiree with a history of business ventures in the area. The median residency period was 2.5 years and the highest percentage of retirees in any single year (28 per cent) was represented by those in residence between one and two years. After four years of residency, the numbers of retirees fell dramatically, 78 per cent having been in-country less than five years. This short-term residence history for most of the migrants can be partly accounted for by the recent popularity of the area for retirement. Moreover, it appears that the penalty provisions of the special retirement laws, under which many are living, retains some retirees through the mandatory periods (3-5 years) of those laws. Based on the proven migratory nature of the military retiree population, however, it is more likely that the turn-over is due simply to the inherent desire to move on to new and different places.

Evidence of Seasonality

Since the majority of the retirees have migrated to Central America for full retirement (61 per cent), they obviously have leisure time for travel and visitation. Consequently, those of pensioned resident status can exercise their rights to remain outside the host nation for periods totalling six months or less on a voluntary basis. Retirees residing in Central America in a tourist status, however,

must leave the country every six months. These situations are, of course, conducive to migrants spending significant periods of time outside the host nations, which many do, planning their absences for the most part during the more disagreeable climatic seasons.

When temporarily leaving the area most retirees (65 per cent) return to the United States to visit relatives and friends, or simply for travel and vacation. These seasonal visits regularly expose the retirees to the United States, thus providing them the opportunity to periodically re-evaluate the advantages of retirement in both places. Moreover, these trips to the United States lend credence to the hypothesis that military retirees share the characteristic of propensity to return to the United States. The remaining 35 per cent of the retirees who seasonally depart the host nation indicated that they vacationed, or visited friends and relatives, in other foreign areas. A most popular and frequent trip in this category for many retirees, especially those residing in Costa Rica, is a visit to the Panama Canal Zone, where military facilities are available for shopping and medical services.

Another indicator of seasonality of the migration was reflected by the presence of travel trailers as residences for six per cent of the retirees. Although the occupants of these trailers considered them temporary residences, while decisions were being made on the type and location

of their permanent homes, the trailers' very existence in trailer parks suggests possible transience.

Effects of Kinship and Friendship Ties

Satisfaction with a foreign area is more likely to occur if relatives and friends live there, through whom adjustment to the new environment can be facilitated. This adjustment can be effected through the process of accommodation or assimilation in the host nations. Friends and relatives residing in the area and of the same nationality as the migrant are apt to facilitate accommodation, whereas those relatives and friends native to the host country could be the means for the migrants' assimilation into the new culture system.

In Central America, 59 per cent of the retiree migrants had relatives and/or friends in the area prior to migration. Assistance rendered to them by these sources during their initial introduction to the area undoubtedly alleviated anxiety and softened the "culture shock". Moreover, continued association with and assistance by these relatives and friends during the adjustment period contributed toward satisfaction and their likelihood of remaining in the area. Strong bonds of friendship in both Costa Rica and Guatemala were evident among members of the American Legion posts, and in Costa Rica through membership in the Retired Officers Association. Forty-three per cent of the retirees held

membership in the Retired Officers Association, whereas 17 per cent belonged to the American Legion. Both of these organizations provide support and assistance of a nature that contributes to migrant accommodation. Further discussion of the importance of these institutions to the retired officer living overseas will be found in the next chapter. Those migrants, on the other hand, who have close ties with natives of the area, or especially those whose wives are natives of the host nation, stand a high chance of becoming assimilated into the local society. For the Central American migrants this assimilation possibility is strong, since 34 per cent of them are married to natives of their host countries.

This chapter has described the character of the migrant and examined his propensity to migrate, the migration decision, and the permanency of the migration. Chapter V will examine the migration channels and the spatial consequences of the migration.

CHAPTER V

SPATIAL SIGNIFICANCE OF THE MIGRATION

This chapter is chiefly concerned with the migration channels and information flows, and the consequent formation of networks and settlement patterns in the host nations.

Migration Channels and Information Flows

Once the decision to migrate has been made, movement commences between a place of origin and a destination, following specific paths and establishing patterns. Concomitant with the migrant movement, a transfer of information, either directly by the migrant, or indirectly through the transmittal of correspondence, is likely to occur. Consequently, migration entails the exchange of both people and information. How this occurs through space is of central importance to the population geographer.

Migrant Circulation System

To understand the process of international retirement migration from the standpoint of how migrants settle in-country, a Migrant Circulation System model is introduced

for testing in real world situations (Figure 16). In accordance with the model, most military retirees who are considering retirement in a foreign country leave the United States (origin) for the host country (destination) on an exploratory trip. Once in the host country they investigate most cultural and physical aspects of life, returning to the United States to evaluate their findings and make a decision on whether or not to make the permanent move.

Those retirees not satisfied after their return from the exploration trip, and who decide not to migrate, may act as carriers of negative information regarding the host country. However, the individual who, after evaluating all available information, decides to make the permanent move, quite likely will become a carrier of positive information.

The satisfied retirees make the physical move to the host nation, in many instances passing through intervening areas, to enter temporary living quarters (gateway residence) in the host nation. These temporary living quarters provide the migrants sufficient time to thoroughly assess the area before selecting a permanent residence. At this stage in the migration process dissatisfaction can again prevail, and if sufficiently strong, the migrant may return to the United States with minimum loss of time and money. Their negative reactions, of course, quite likely are carried back to the United States (origin), or to an intervening area. Those migrants who decide to take up

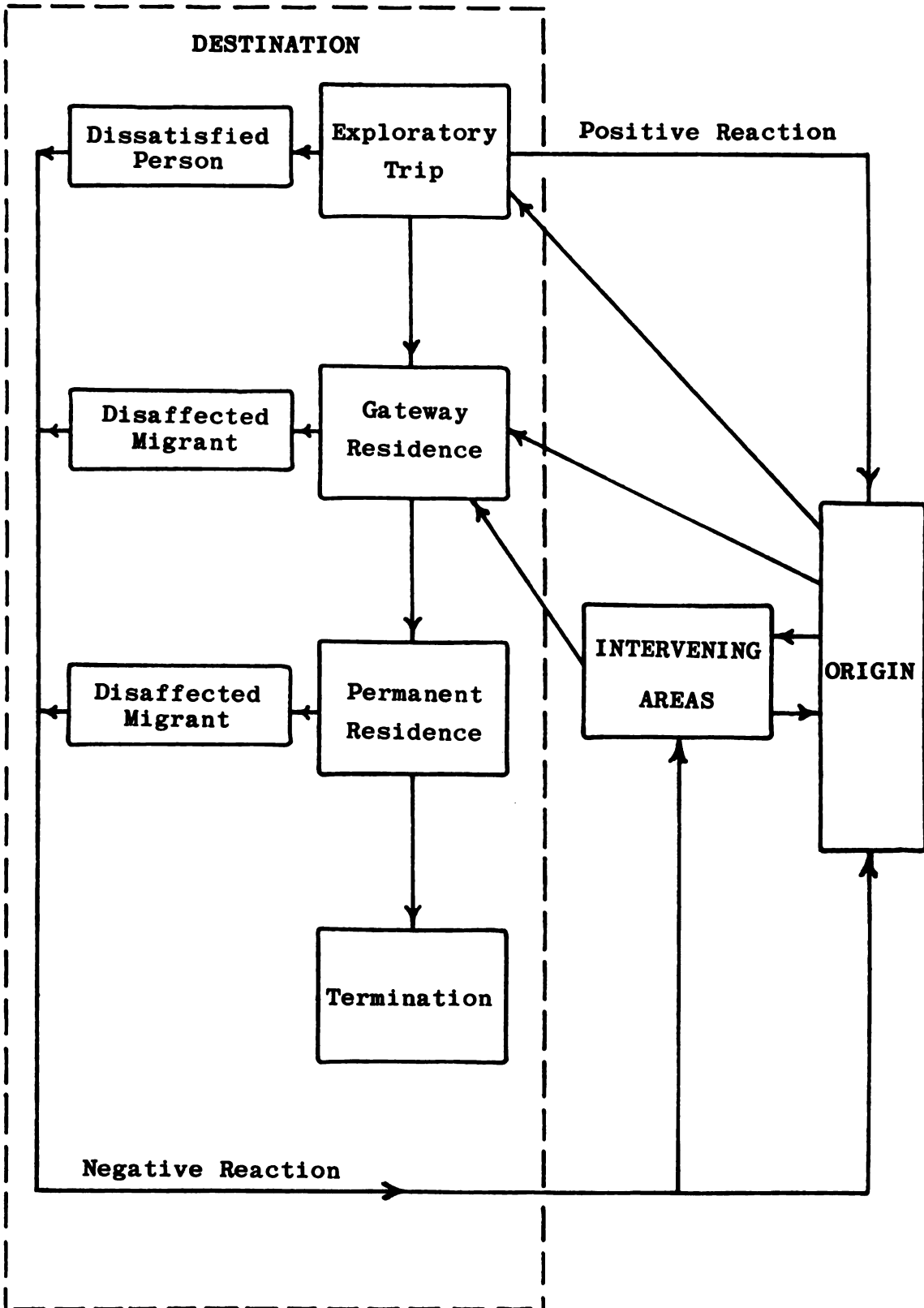


Figure 16. Migrant Circulation System

permanent residence in the host country usually will either remain until death (termination) or become disenchanted with the host country and return to the United States.

Case Study

To determine the authenticity of this concept in Central America, Costa Rica is used as a test case because of its larger retiree base and accepted status as a popular retirement area. Based on discussions with the respondents in Costa Rica, it was found that most of them followed the migration procedure shown in the model (Figure 16). For example, 78 per cent of the migrants had visited the area before deciding to permanently move. During this exploratory trip, most retirees came to the host nation directly by air. However, some travelled by auto via the Inter-American Highway, passing through Mexico, Guatemala, El Salvador, Honduras, and Nicaragua; while others utilized "space-available" military air transport from United States bases to the Panama Canal Zone, and then on to Costa Rica via a "space-available" military-consular flight. In the latter two instances these inspection trips proceeded through intervening areas where the retirees were exposed to other Middle American countries.

Upon arrival in the host nation, the retirees usually had contacts with friends, relatives, or military associates, who gave personal assistance and offered advice during their exploratory visit to the area. During this

time they surveyed the host country to determine if it conformed to their expectations. Those who liked what they saw returned to the United States, or other places of origin, and made preparations for the permanent migration. Those who were not satisfied returned home, some as carriers of negative information. This movement in advance of the actual retirement move is probably the most important single act in the overall migration process. It insures a greater chance of the migration succeeding, with the dissidents filtered out of the system at this early stage. Of those retirees who performed this exploratory trip to Costa Rica, only one of ten later made the actual move.¹⁸

Those retirees who made the decision to migrate, upon entry into Costa Rica, located initially in San Jose in temporary quarters (gateway residence) while looking for, or building, permanent homes. At the same time they processed their applications for resident pensioner status. These gateway residences, which are usually furnished apartments or apartment-hotels, have become well known and much in demand by retirees. Of course, some opt to live temporarily in hotels, while still others who have traveled with house trailers reside in trailer parks. Discussions with

¹⁸This ratio was derived from estimates of the numbers of military retirees who had visited the area during 1973-1975 and the numbers that actually became resident pensioners. The estimates were based on information supplied by members of the Costa Rica Retiree Club, who had assisted these people.

retirees, their families, and other information sources revealed that at this stage in the migration process, some retirees become disenchanted and return to the United States, substantiating information obtained from the Costa Rican Tourism Institute. Of the military retirees identified as resident pensioners, 37 per cent were not located at addresses listed and their whereabouts in most cases were not known by neighbors or other retirees (Tables 2 and 17). It can be assumed, therefore, that the majority of these individuals left the country as disaffected migrants without notifying Costa Rican Tourism Institute officials, as required by law.¹⁹

The majority of the newly-arrived migrants residing in a gateway residence completes all necessary government paperwork, obtains resident pensioner status, and moves into a permanent residence. Sixty-five per cent of the respondents indicated that they considered Costa Rica their

¹⁹In accordance with provisions of the resident pensioner law, premature departure requires exportation of all goods and articles imported tax-free, or payment of the appropriate taxes if the goods are sold or remain in-country. Early departure, in some cases, occurred as a result of retiree disenchantment with the area because of bureaucratic harassment, misunderstandings concerning the limitations set by customs laws on importation of personal property, difficulties encountered in processing retiree applications, and other inconveniences. It is believed that some retirees failed to advise the Costa Rican Tourism Institute of their changes of address or departure from the country before expiration of their contractual agreements in order to avoid payment of taxes and customs duties on goods brought into the country tax-free, or other fees and gratuities that facilitate exit.

permanent home and, based on the number of years residency, this appears to be true. One retiree has lived there 30 years and several others more than 10 years. The majority, however, 70 per cent, have been in-country for less than four years, implying that the "disenchantment syndrome" may be a continual obstacle facing military retirees residing in Costa Rica. This disenchantment after several years residence is viewed as a real problem by the retiree population, since it could establish a reverse trend in the migration flow to Costa Rica, thereby reducing social interaction among the group. The final stage in the migration circulation system is termination by death in Costa Rica or disaffection with life overseas and return to the United States.

There are, of course, individual deviations from the norm where the retiree purchased land and constructed housing without first visiting the host country. Others moved directly into households of relatives; while still others were provided housing by business corporations, private institutions, or a United States government agency.

In the other Central American nations some retirees conform to this model. Most moved there directly, either for employment, because their wives were native to the host country, or they completed terminal military duty assignments in these nations. Although of future potential importance as retirement areas, these countries presently do not attract significant numbers because only recently have they implemented legislation to attract the military retiree.

Directional Bias and Chain Migration

The retirees that pass through the Migrant Circulation System are not generated randomly at the origin (United States), but come mainly from selected areas in the southern United States retirement belt, California, Florida, and Texas (Table 29). This group includes 58 per cent of the migrants, thus establishing a directional bias in the flow. California is the major source area, supplying 27 per cent of the migrants, and is closely followed by Florida, with 22 per cent. The Virginia-District of Columbia complex, accounting for 10 per cent, is also important and, when combined with the northeastern states of New York, New Jersey, Massachusetts, New Hampshire, and Maryland, can be

Table 29. Migrant Origins by States

State	Per cent of Total Migrants	State	Per cent of Total Migrants
California	27	Alaska	1
Florida	22	Arizona	1
Texas	9	Georgia	1
D.C.	5	Illinois	1
New York	5	Indiana	1
Virginia	5	Kansas	1
Colorado	4	Maryland	1
New Jersey	4	Michigan	1
Hawaii	3	Missouri	1
Massachusetts	3	North Carolina	1
New Hampshire	3		

considered significant as a generating region. Twenty-six per cent of the migrants are from that area, the only major source area other than the sun-belt. Only a few retirees originate in the midwestern and mountain states, while no retirees were found who came from the Northwest. These principal flow patterns lend support to the concept that military retirees usually work for a period directly after retirement, retire to an amenable area in the southern United States, then migrate to a foreign area.

True chain migration²⁰ was not evident in Central American retirement migration. Although directional bias was strong for the states of California and Florida, there were no particular sites identified in those states from which several retirees had migrated, based on kinship or close friend ties. However, in view of the cohesive nature of the entire military retirement community, it is conceivable that this process could be described as chain migration. For example, many of the United States-based military retirees were informed of retirement life in Costa Rica by the migrants living there, and those United States retirees who chose to migrate were assisted by the in-country retirees simply because they were military. These new migrants were subsequently socialized into the new environment and

²⁰ According to MacDonald (1964) chain migration is defined as "that movement in which prospective migrants learn of opportunities, are provided with transportation, and have initial accommodation and employment arranged by means of primary social relationships with previous migrants."

served in the same capacity as information providers and assistants to the group, thus establishing a broad chain migration effect.

Information Exchange System

Equally important as the method by which migrants move to Central America is how they gain information about the area. The interjection of information flows into the migration schema is of utmost importance in international migration. Prospective migrants are dependent upon information to differentiate potential Central American retirement areas, unless, of course, they have previously resided in or visited the area. Information can be transferred by means of mass media or through interpersonal communication. Both of these processes are effective means of communication; however, personal contact between migrants and potential migrants has a greater impact than other forms of communication. Information feedback therefore is critical, since it can either encourage or discourage the potential migrant (Figure 4).

The means whereby information is exchanged between the destination and the place of origin is introduced as an information exchange system (Figure 17). Those exchanges of information through agencies and mail channels represent media sources, whereas trips and personal contacts are primary means of communication through personal interaction. Since the most influential form of information is that

transmitted personally, it is apparent that the larger the migrant group in the recipient areas, the greater the flow of information through all channels to the potential migrant group in the United States. Most important, then, are the personal contacts generated when the new migrants return to the United States during social, medical, or shopping trips and interact with friends and relatives who represent potential migrants.

Next to personal contact, the media plays an important part in attracting migrants. Although media can reach wide audiences and sometimes be as influential as interpersonal communication, it is not always certain that the group toward which the information is directed receives it. Consequently, the most effective media must be that initiated by the in-country migrants in the form of personal letters and publications by organizations catering to this professional group. Information transmitted through government and private agencies (embassy, military groups, Chambers of Commerce, and tourist institutes) (Figure 17) is generally aimed toward the specific operation and mission of those agencies and therefore must be considered more biased than that exchanged through personal means.

Without the existence of information exchange mechanisms, retirement migration to Central America would be highly disordered or random. Since information is readily exchanged through United States-Central American channels,

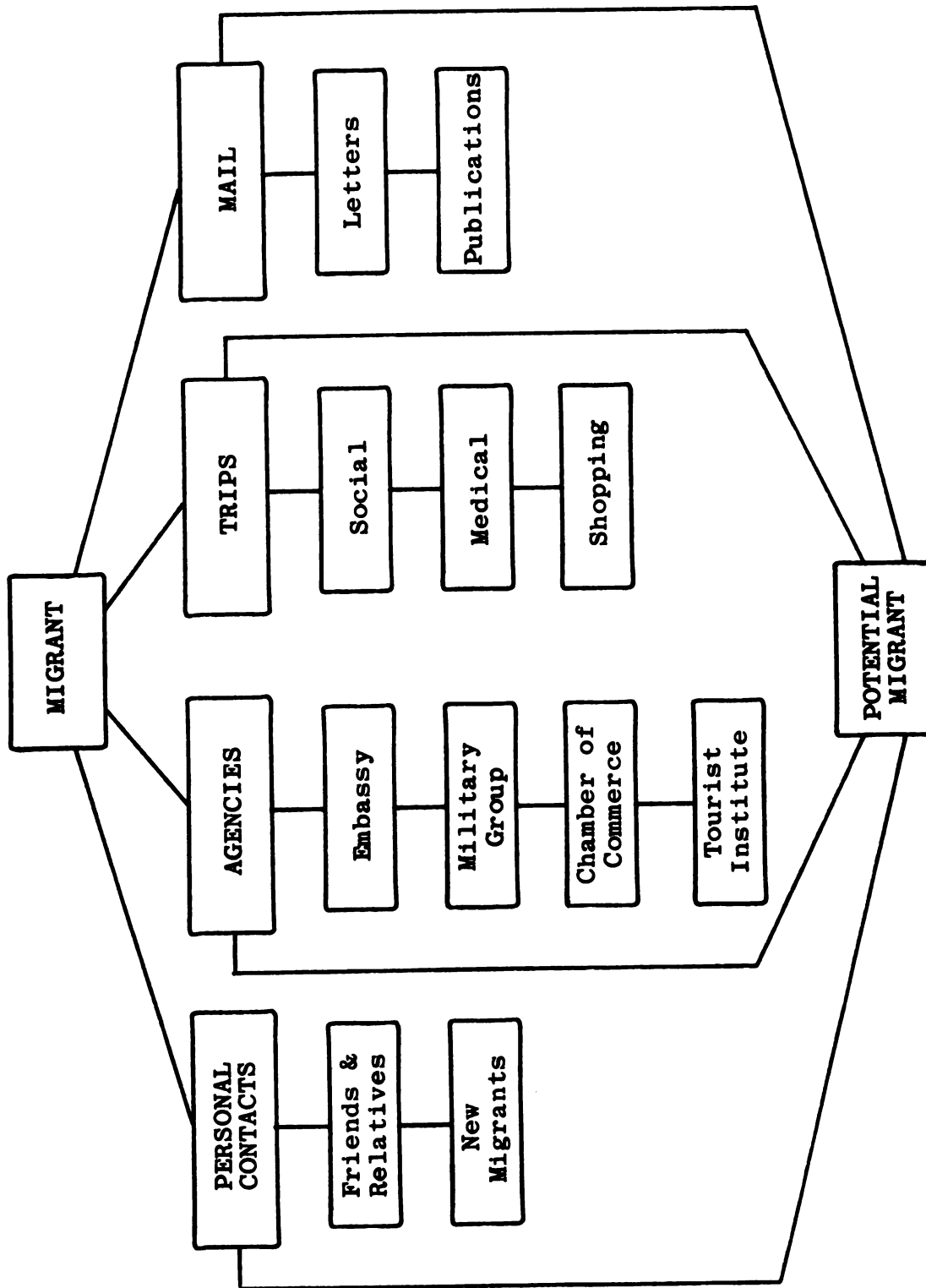


Figure 17. Information Exchange System

however, organization does exist in the migration system, resulting in a differentiation among retirement locations.

Influence of Information Sources

In order to determine the importance of pre-migration information relative to Central America, the respondents were asked to specify what they considered the most important source of information about the host nation which influenced their retirement migration decision. Some of the significant responses were:

- Personal visit and vacation in the area
- Personal visit while assigned in Panama
- Military assignment in the host nation
- Visit while employed with U.S. corporation
- Attended university in host nation for Spanish language training
- Previously worked in host nation
- Native of host nation
- Relatives in host nation
- Personal friends in host nation
- Tourists who visited the host nation
- Host nation government publication on retiree law
- Magazine and newspaper articles on retirement in Costa Rica
- U.S. State Department publications

Obviously, these replies are related to personal observations of the area, communications with relatives and friends, or information gained from various publications. To measure this phenomenon, these information sources were categorized and the respondents asked to indicate the degree of significance they attributed to each as a source of information prior to the migration (Table 30). It is evident that the Central American retirees consider personal observation of the area as their chief means of attaining

Table 30. Importance of Information Sources

Source	Degree of Importance (Per cent)		
	Most	Great	Some
Personal visits	71	17	0
Relatives or friends	23	39	12
Radio - TV	0	0	4
Newspapers	0	4	12
Magazines and books	3	15	27
Host government publications	1	18	28
Mailed advertisements	0	1	3
U.S. government information	2	6	14

information; 71 per cent stated that a personal visit was their most important source. Information obtained from relatives and friends was of secondary importance (23 per cent) and all other categories were relatively insignificant, amounting to only six per cent of the responses. The fact that 80 per cent of the retirees visited the host nation before moving attests to their pre-migration knowledge of the area. It was found that 59 per cent had relatives or friends in-country prior to migration, and 76 per cent of that group stated that they received information and were influenced by those relatives or friends. It was interesting, however, to find that only 33 per cent of all the respondents encouraged other retirees to join them in the host nation.

The worthiness of other information sources appears when they are evaluated in terms of great or some degree

of importance. In the case of great importance, relatives and friends ranked first (39 per cent) followed by host government publications (18 per cent), personal visits (17 per cent), and magazines and books (15 per cent). For some degree of importance, the media categories of host government publications (28 per cent) and magazines and books (27 per cent) were predominant, illustrating their importance in the dissemination of information through media channels. The utilization of these media sources can be strongly effective if directed toward an appropriate and interested target population.

Impact: The Case of Costa Rica

The impact of favorable information communicated through news media is illustrated by the reaction to an article that appeared in The Retired Officer, the monthly journal of the Retired Officers Association, which in 1973 had 170,000 subscribers. The article, entitled "Retiring in Costa Rica," advantageously portrayed the life of the United States military retiree in Costa Rica and included the name of a military retiree as a contact for more information (Frisbee, 1973). It was assumed that maybe 10 or 15 people might respond; however, 600 inquiries were answered by the Costa Rican retiree contact in less than six months (Harding, 1973a). Concurrent with the publication of this article, the New York Times and Miami Herald, and several popular magazines, ran advertisements on a

Costa Rican Pacific beach development called the "Beaches of Nosara." As a result of this mass distribution of information, it was estimated that approximately 2,000 military retirees visited Costa Rica within a year and almost 200 settled there, with others contemplating the move at some future date (Harding, 1973b).

Although this form of information was not indicated as highly significant in the majority of retiree responses to the importance of information sources, it is apparent that, at least in the case of Costa Rica, the media were responsible for triggering an interest in the area that resulted in personal visits and, in some cases, subsequent settlements. Also, it is noted that 51 per cent of the respondents in Costa Rica were members of the Retired Officers Association and received its monthly journal.²¹ Moreover, another interesting observation is that five retirees identified The Retired Officer magazine article as the most important source of information on Costa Rica which influenced their retirement decision, and two other retirees stated that advertisements and material on the "Beaches of Nosara" were most influential.

In summary, it is evident that widespread publicity about retirement areas can influence personal opinion, either favorably or adversely. These findings, therefore,

²¹For the first six months of 1976, the average monthly circulation for The Retired Officer magazine was 235,458 copies (Lien, 1976b, p. 12).

support hypothesis 3.e., which states that place differentiation is dependent upon the exchange of information and the communication linkages between the United States and the host nations.

Networks

Retirees located at specific places are represented by nodes, while functional associations (migrant movements and information flows) between the nodes are represented by connecting lines, thus forming linkages. Systems of linkages create networks of spatial significance, since they are the structures through which retiree movement and interaction takes place.

In Central America there are two important network structures in operation. One, the transportation network, provides the means by which the actual migration from the United States to Central America takes place, as well as movement within the host country. The other structure consists of social networks which are formed through human interaction among the retiree migrants, potential United States migrants, and people living in the host country. The density and connectivity of these networks are critical determinants in examining accessibility of retirement areas and the amount of retiree interaction.

Transportation Networks

There are two transportation systems in operation, one external that connects the origin (United States) to the

destination areas (Central American nations), and an internal system that provides physical access to places within the host nations. These systems have sub-systems composed of the various modes of transportation, i.e., air, road, and sea, all of which are combined to form a transportation network.

External Transportation Systems

In gaining access to most foreign areas, it is obvious that air travel would be the principal mode of transportation, since long distances over water surfaces are generally required. The alternative means of overseas travel is by ship, unless the foreign area is accessible by land, in which case automobile or rail transportation would be appropriate. The Central American nations are accessible to the United States by all of these modes except rail transportation (Figure 18).

Airways

The Central American countries have air connections with the United States, principally from Miami, New Orleans, and Houston. Service is by either United States or Central American carriers, with flights directed into the capital cities, except for Belize, where air traffic is received at Belize City rather than the capital, Belmopan. These entry, or gateway, cities in Central America are also connected by air routes, thus effecting complete international and inter-regional linkages. Most important in this air system is

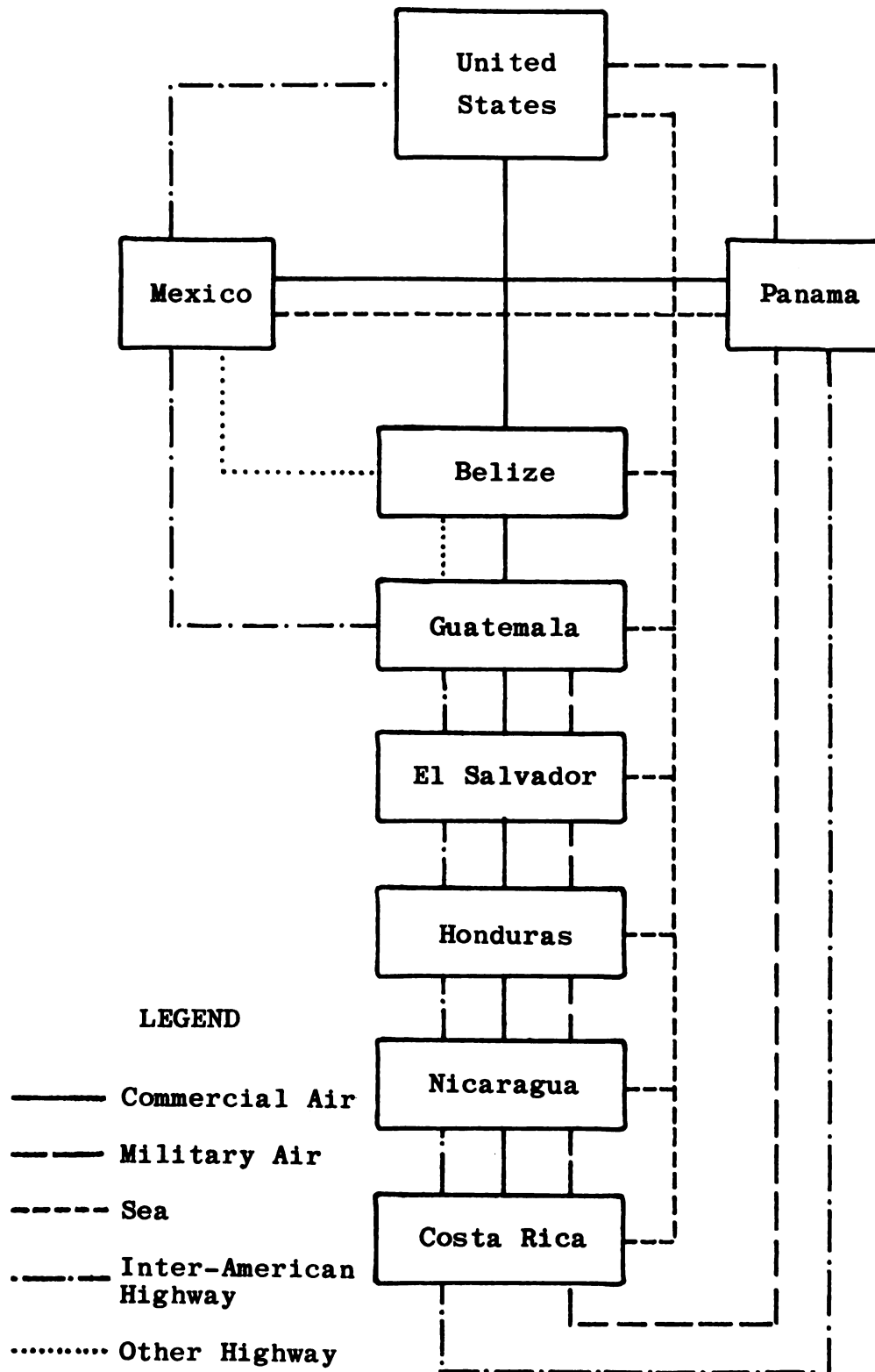


Figure 18. External Transportation System

Guatemala City, which serves as a hub for Central American air traffic, since it receives flights directly from Miami, Los Angeles, Mexico City, and Panama City, as well as from the other Central American capitals.

Besides these commercial air connections, military retirees and their dependents have use of "space-available" military air transport from the United States to the Canal Zone, from where periodic regional flights to the Central American capital cities, except Belize, are available on a first-come-first-serve basis.

Because of the distance and inconveniences of surface travel, the airways are widely used. Fifty six per cent of the military retirees took advantage of air transportation in migrating to Central America, thereby attesting to its significance.

Highways

Along with Mexico and Canada, Central America is the only other foreign area that is accessible to the United States by means of a highway system. The Inter-American Highway, an all-weather paved route, passes through Mexico and Central America, terminating about 25 miles east of Panama City. This highway, in its journey through Central America, links all countries and connects the capitals and major cities of Guatemala City, San Salvador, Managua, and San Jose. Belize is connected directly with Mexico by national highways and Tegucigalpa, Honduras has a direct

linkage with the Inter-American Highway. Forty per cent of the retiree migrants utilized this highway system in their retirement movement to Central America.

Seaways

Guatemala, Honduras, Nicaragua, and Costa Rica have major ports on both their Caribbean and Pacific coasts, and all but Nicaragua have major roads connecting these coasts. El Salvador and Belize, oriented respectively toward the Pacific Ocean and the Caribbean Sea, also have accessible ports. Although the sea lanes between certain of these cities, particularly Puerto Barrios, Guatemala and Limon, Costa Rica, have been used by retirees, only four per cent of the Central American retirees migrated by ship, all to Costa Rica; half of them accomplished the trip in their private vessels.

Internal Transportation Systems

Once retiree migrants gain entry to the host nation, their distribution is dependent upon the existing infrastructural transportation system (Figure 19. Also see Figures 2 and 13 for site locations). In Central America, they use all the available forms of transportation in locating throughout the country and in the performance of daily activities.

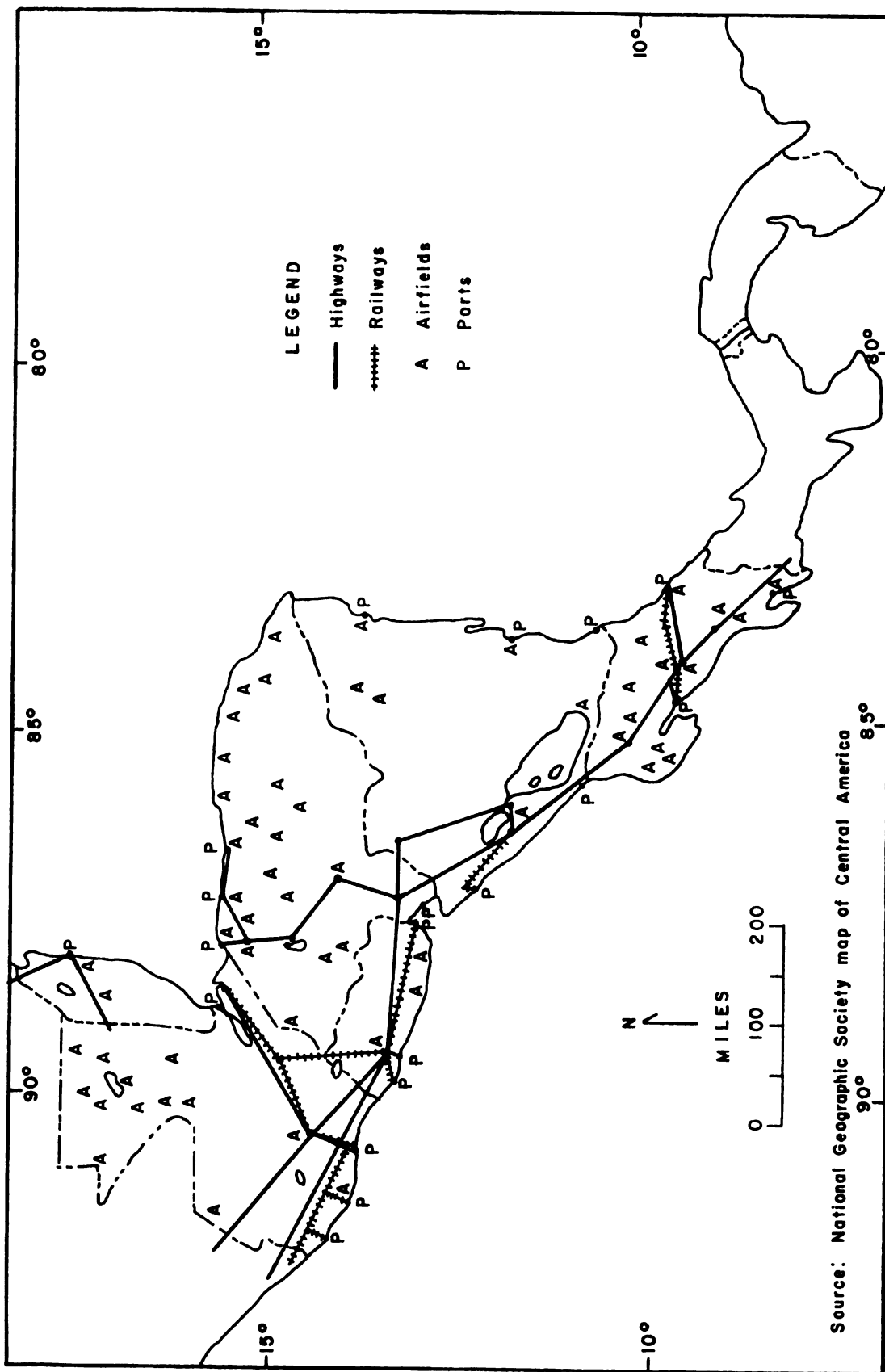


Figure 19. Main Internal Transportation Systems

Railways

Although railways exist in all the nations except Belize, their importance as passenger conveyances is insignificant, due to limited trackage and few connections. Consequently, few military retirees are dependent on them for transport. However, the significance of railroads rests mainly in their capability to transport household goods and other commodities. Guatemala and Costa Rica have the best developed railway systems (Table 31). Their important linkages are the transisthmian routes, which connect their Pacific and Caribbean ports with their capital cities. El Salvador has an extensive railway system, with linkages to major settlements, the capital, major Pacific ports, and the transisthmian Guatemala line. Other railway lines in these nations, as well as in Honduras and Nicaragua, are short cargo-carrying lines located near the coast.

Waterways

Inland waterways and coastal waterway connections are important parts of the transportation network, since they are the only means of access to some areas. Several retirees in Costa Rica, for example, reach their remote retirement sites only by this means. More importantly, however, this mode of transportation supplements others as a means of cargo transportation. Nicaragua has the most extensive inland waterway network. It utilizes the two major lakes, Lake Managua and Nicaragua, and their linkage with

Table 31. Internal Transportation System Comparisons

Category	Country			
	Belize	Costa Rica	El Salvador	Guatemala Honduras Nicaragua
<u>Railways</u>				
Total Miles	None	407	375	592 357 220
<u>Waterways (Miles)</u>				
Total navigable	514	455	NK	622 750 1,380
<u>Airfields (Number)</u>				
Total	36	150	146	338 248 421
Usable	36	146	145	338 222 413
Permanent Surface	4	19	NK	7 4 5
Runway 4-8,000 ft.	1	8	9	16 8 8
Runway 8-12,000 ft.	0	1	0	1 1 1
<u>Highways (Miles)</u>				
Total	1,400	14,300	6,700	7,700 5,400 8,050
Paved	200	1,000	800	1,600 700 850
Gravel	500	{ 4,100	1,200	3,950 { 1,550 { 3,200
Improved earth	550	{ 9,200	{ 4,700	{ 2,150 3,150 4,000
Unimproved earth	150			

Source of data: National Basic Intelligence Factbook (CIA, 1976)

the San Juan River as an outlet to the Caribbean Sea. Other significant navigable waterways are located in the Lake Izabal area of Guatemala and the Ulua River system in Honduras.

Airways

Air transport is an important means of travel in Central America, since some remote places are accessible only by air. It was found that several of the retirees, former Air Force pilots, had their own aircraft at their places of residence, for use on business, recreation, or social trips. Others, on occasion, hired private aircraft, or flew on scheduled commercial lines. The importance of internal air travel is evident by the large numbers of small airfields located throughout the Central American nations, particularly in the vast inaccessible areas of eastern Nicaragua, northeastern Honduras, and northern Guatemala. Comparatively, Nicaragua has the largest number of usable airfields (413), Costa Rica the most permanent surfaced runways (19), and Guatemala the most airfields with runways of 4,000-8,000 feet long (16). Also Costa Rica, Guatemala, Honduras, and Nicaragua have airports with runways of 8,000-12,000 foot lengths.

Highways

The principal means of transportation by which the retiree population has located and interacts in Central America is the automobile. The Inter-American Highway serves as a trunk line through the individual nations, with

primary, secondary, and tertiary linkages forming the individual highway networks. Exceptions to this pattern are found in Honduras, where the Inter-American Highway passes through only a short southern section of the nation and in Belize, which has no direct connection. The Honduran road system is oriented along its main north-south highway connecting the Caribbean port of Puerto Cortes, San Pedro Sula, Tegucigalpa and the Inter-American Highway. The retirees in Honduras have located along this axis. The Belize system connects with Mexico in the southeastern section of the Yucatan Peninsula, passes through Belize City and Belmopan, and terminates at the northeastern Guatemalan border.

In Guatemala, El Salvador, and Nicaragua the retirees have located in the capital cities along the Inter-American Highway or short distances from that route, with direct access to it; e.g., Antigua and Solola in Guatemala and Totogalpa in Nicaragua. Only in Costa Rica are the retirees more dispersed throughout the country, with some located at considerable distance from major paved highways; e.g., Guapiles, Cahuita, Nosara, and Jaco. Most Costa Rican military retirees, however, are concentrated in settlements along the Inter-American Highway, principally in the Meseta Central (San Jose complex) and the General Valley (San Isidro). Others are served by secondary road connections; i.e., Miramar, Quesada, Turrialba, and Golfito. This retiree distribution pattern substantiates hypothesis 4.a., which states that the retirees locate mainly in the central

cities or adjacent areas connected by the major routes of communication.

In total road mileage, Costa Rica overwhelmingly leads the other Central American nations (14,300 miles), followed by Nicaragua with 8,050 miles and Guatemala with 7,700 miles. In terms of paved road mileage, however, Guatemala ranks first with 1,600 miles; Costa Rica and Nicaragua follow with 1,000 and 850 miles, respectively. Gravel-surfaced and improved earth roads are often not well maintained and during the rainy season many are impassable. Since the majority of roads in Central America are of these latter classifications, it is apparent that the improvement and strengthening of these systems are necessary, if retirees are to be attracted to areas outside the main urban centers which lie along the Inter-American Highway axis.

Social Networks

Transportation systems form networks which are visible (highways and railways), or at least easily perceived (airways and waterways), in a spatial context. Other networks of equal importance in migration, but those difficult to envisage, are the social networks which result from human activities of a social, economic, or political nature. Like the transportation networks, these have two systems in operation that are differentiated according to retiree interactions; i.e., those which take place between the host nation and the United States (external contacts), and those

that occur within the host nations (internal contacts). In these contact systems, retirees can be carriers, transmitters, or receivers of information and ideas.

External Contacts

Social networks linking host nations with other countries are formed by external contacts of retirees with friends, relatives, and associates while visiting, vacationing, participating in inter-regional organizational functions, shopping, etc.

Social Activities

The most significant external linkages reflecting the presence of military retirees in Central America are those based on the social activities inherent in military-related organizations. In the Central American nations 64 per cent of the retirees hold membership in military affiliated associations and societies. Among this member group the most popular organization is the Retired Officers Association, which has attracted 67 per cent of those retirees who have joined a social organization, followed by the American Legion with 26 per cent membership, the Veterans of Foreign Wars and the Air Force Association with eight per cent each, and the Disabled American Veterans and Non-Commissioned Officers Association with five per cent each. Several other organizations hold smaller memberships. National conventions and meetings of these organizations are conducted in the United States periodically and attract members of the

Central American retiree group, thus linking the host nation with the United States in this social relationship.

Furthermore, Costa Rica and Guatemala have local American Legion posts, which participate in annual regional conventions held in the Panama Canal Zone. These posts are thus linked with similar ones in other Latin American nations, enabling the members to interact and exchange information. Also, Costa Rica is unique in Central America, in that it has the only local Retired Officers Association chapter in the area. This chapter, therefore, is a node that is linked to other Latin American chapters of the Retired Officers Association (Mexico, Puerto Rico, and Virgin Islands), as well as with the United States national headquarters and other United States chapters.

Economic Activities

For military retirees in Central America, distinctive external economic linkages result from shopping and medical trips to both the United States and Panama. With available free military air transport between the Central American capitals and the Canal Zone, many retirees periodically use these facilities to make medical and shopping visits at the numerous military installations in the Canal Zone, where they take advantage of commissary, post exchange, and other military facilities. Some also use this means to travel from the Canal Zone to the United States for the same purposes. Private vehicles are used for similar trips to both

the Canal Zone and the United States. Other economic linkages with the United States and neighboring Central American nations are those derived from business trips and other commercial ventures.

Political Activities

Obtaining documentation and authorization for international travel requires retirees to initiate connections with both United States and foreign governmental agencies, thus creating diplomatic-oriented linkages. An important media connectivity which links all retirees with their former parent military services are newsletters written especially for retirees and published by the retired activities offices of the Army, Navy, Air Force, Marine Corps, and Coast Guard. These newsletters are transmitted bi-monthly by the Army, Navy, and Air Force and quarterly by the Marine Corps and Coast Guard to each retiree of their respective service, thus forming linkages between these United States-based organizations and individual retirees. This media form enables the retirees to maintain contact with one another.

Internal Contacts

In any new environment, individuals go through a space-searching stage in which they develop formal and informal contacts. For migrants settling in a foreign area, this search stage is particularly critical, since successful attainment of early contacts may sustain the migration,

whereas an absence of contacts could result in disappointment and failure. Migrants are first exposed to the local surroundings where they come in contact with many individuals and establishments. Subsequently, they learn of specific institutions that interest them, and eventually, through these connections, form personal friendships. These combined linkages of a social, economic, and political nature, therefore, collectively form an internal contact network (Figure 20). Most individuals engage in the activities depicted in this model, although by no means are these activities all-inclusive. The model does, however, provide a framework for discussion of certain important linkages in the internal contact network.

Social Activities

The social organization of space in Central America is a consequence of retiree participation in a variety of social activities. Most numerous are social linkages resulting from personal visits with relatives and friends. An especially interesting relationship observed in San Jose, Costa Rica, was that of informal meetings by small groups of retirees in different coffee shops, some meeting daily and others once or twice a week. This activity appeared to be a favorite means of information exchange, since telecommunications are limited in Central America and few retirees have private telephones.

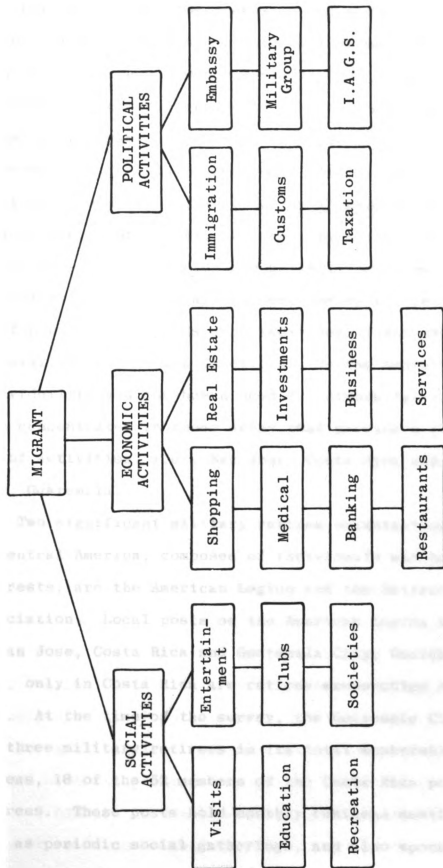


Figure 20. Internal Contact Network

Personal visits for cocktails and card games were common occurrences and another important method of communication among retirees. Other social interactions, either individual or group, pertain to retiree participation in education programs, especially language training; all forms of recreation, including hunting, fishing, boating, beach functions, team sports, etc.; entertainment activities to include spectator sports, theaters, bars and night clubs, and sight-seeing; and club and society functions. These activities, of course, are not enjoyed by all retirees; their popularity depends upon individual interests and on the availability of the functions. On the basis of this individuality and the human need for diversity, retirees have concentrated in those areas that provide a great variety of activities; i.e., San Jose, Costa Rica and Guatemala City, Guatemala.

Two significant military retiree organizations found in Central America, composed of individuals who have mutual interests, are the American Legion and the Retired Officers Association. Local posts of the American Legion are located in San Jose, Costa Rica and Guatemala City, Guatemala; however, only in Costa Rica are retiree memberships significant. At the time of the survey, the Guatemala City post had three military retirees in its total membership (30); whereas, 18 of the 52 members of the Costa Rica post were retirees. These posts hold monthly business meetings, as well as periodic social gatherings, and also sponsor

community projects. The Costa Rica chapter of the Retired Officers Association, organized in September 1975, had 48 military retiree members in February 1976, or about one-third the total known retirees in Costa Rica. This organization alternately holds monthly business meetings and social functions at different sites throughout the country. Among the objectives of the chapter is that of assistance to the Costa Rican government in the areas of civic action and community development. Both of these organizations provide its members opportunities for interaction and discussion of items of mutual interest, as well as rendering assistance to individuals.

An important service of these organizations is that of arranging government transportation and escorts to Panama or the United States for emergency medical care, or in the case of death, for appropriate burial. This function is valued by older retirees who do not have wives or other relatives to care for them. To help recent retiree migrants during their initial adjustment period, the Retired Officers Association chapter has a welcoming and assistance committee, consisting of an Army, Navy, and Air Force member. The positive psychological effect of having available the helping hand of compatriots is obvious.

For many military retirees, group cohesion is attained through membership and participation in recreation and athletic clubs. This was noticeable in San Jose, Costa Rica, where retirees held membership in the two major golf

clubs, a tennis club, and a racket club. Although at least one country club was available in each of the other Central American nations, retiree participation was not noticeable, due to their smaller numbers in those countries. The churches, especially those offering Protestant services in English, are also important in bringing together retirees, and thereby contributing toward their adjustment in a new environment. There are several English-language Protestant churches in San Jose, Guatemala City, San Salvador, Tegucigalpa, and Belize. Some retirees belong to the International Lions and Rotary Clubs, chapters of which are located in each of the Central American nations. Others are members of various private social clubs, including those organized by the local English-speaking groups, such as the American Club in Guatemala City, the American Society in San Salvador, and the Retiree Club in San Jose, now inactive.

Besides the interaction that takes place through these social linkages, interchange of information is indirectly effected in some nations through local newspapers published in English. San Jose, with its large English-speaking community, has two English language newspapers, both published weekly, plus a weekly information publication for tourists. Guatemala City publications in English are distributed on a daily and monthly basis by hotels and businesses, primarily for tourist consumption. San Salvador has a monthly publication which contains news of interest to its American community. Honduras and Nicaragua have no special English

language publications, and in Belize, where English is the official language, there is obviously no requirement for special publications catering to Americans.

Economic Activities

Internal linkages of an economic nature are established mainly through contacts with people and agencies located in the retirees' local community, with whom retirees must relate on a periodic or recurring basis. These contacts result from routine shopping, medical, banking, and restaurant trips, as well as more complex activities, such as those dealing with real estate, investments, business, and household services. Due to a number of inconveniences intrinsic to Latin culture, frequent and time-consuming attention is required to accomplish many of these activities. For example, the routine process of sending and receiving mail in the United States (mail-drop boxes and home delivery) can be accomplished in most of Central America only by personal visits to the community post office. After the mail pickups, some retirees meet at selected coffee shops or in the public parks. Necessary activities such as shopping for groceries or arranging for household services can become involved when there is no local supermarket, and in areas where few technicians are available. As a result, the retiree, during his daily routine, must interact with numerous individuals, thus creating further personal contacts.

Political Activities

Retiree political activities are usually associated with contact linkages in the capital centers. Retiree migrants are frequently required to contact host-government immigration and customs officials in the initiation and maintenance of their in-country status. Moreover, those working, owning businesses or property, or investing in the host country are liable for appropriate taxation and must coordinate with officials handling those affairs.

Retirees also interact with United States government representatives at the American Embassy in the host nations, where they can obtain assistance with passports, processing of retiree resident documents, gathering general information on the host nation, and other special requirements. The Defense Attache staffs of the embassies are available for assistance related to authorized military matters. In all the Central American nations, except Belize, the United States maintains small Military Groups to assist in advising and training the national military forces. Also, these United States personnel are often helpful in assisting retirees, especially with handling mail and government checks, overseeing movements of household goods shipped at government expense for first-move retirees, arranging "space-available" travel on military aircraft, and emergency air evacuation to Panama. Although the smallest staffed group in Central America (3 persons), the Costa Rica organization appeared to be the most active and cooperative in dealing

with military retirees. This greater attention given to retirees is partly explained by the fact that Costa Rica has no active national military forces to advise (only quasi-military); in addition, there are greater numbers of retirees in Costa Rica to assist. Another agency worthy of mention, which has United States representatives in each nation (except Belize), is the Inter-American Geodetic Survey (I.A.G.S.). These representatives, usually long term residents, can provide retirees valuable advice, map coverage of the host nation, and other pertinent information.

The linkages between these major activities (social, economic, and political) and among their components form an internal contact network. This can be of critical importance in the exchange and circulation of information regarding the positive and negative aspects of retirement life in the Central American nations, as well as providing the means of interpersonal contact for this group.

Interrelationships and Connectivity

In a broad context, the external and internal linkages, both physical (transportation) and social, form a complex network in which many of the activities inferred by the linkages are interrelated. These intricate relationships and the combinations of interactions that occur among destinations, intervening areas, and origin are depicted in Figure 21. From this model, it is obvious that the formation of various networks is necessary to initiate

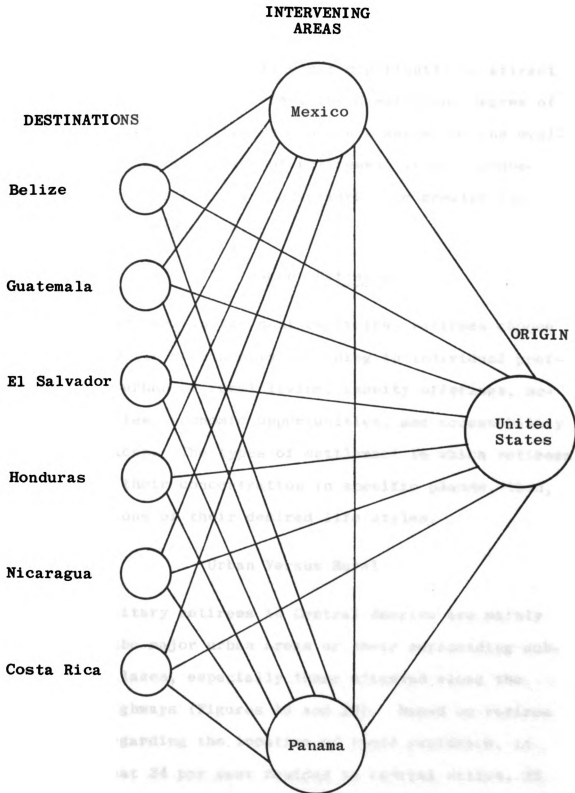


Figure 21. Network Interrelationships

and sustain migrant information flows. In the Central American case, theoretically, all the nations are similarly connected, thus each one has equal opportunity to attract migrants. In reality, however, the density and degree of connectivity of the networks provide a means for the evaluation and differentiation of retirement areas. Consequently, the more complex the network, the greater the probability of migration.

Settlement Patterns

After arrival in the host countries, retirees choose places to settle permanently according to individual preferences for urban or rural living, amenity offerings, social activities, economic opportunities, and accessibility to other places. The types of settlement in which retirees locate, and their concentration in specific places, then, are reflections of their desired life styles.

Urban Versus Rural

The military retirees in Central America are mainly located in the major urban areas or their surrounding suburbs and villages, especially those situated along the principal highways (Figures 13 and 19). Based on retiree responses regarding the location of their residence, it was found that 34 per cent resided in central cities, 33 per cent in the suburbs, and 16 per cent in villages, for a total of 83 per cent urban dwellers (Table 32).

Table 32. Retiree Residence Location (Per cent)

Location	Country						Total
	Belize	C.R.	E.S.	Guate.	Hon.	Nic.	
Central City	0	22	100	72	34	34	34
Suburb	100	38	0	6	50	50	33
Village	0	20	0	0	16	16	16
Farm	0	10	0	16	0	0	10
Beach area	0	6	0	0	0	0	4
Ranch	0	4	0	6	0	0	3

In contrast, 10 per cent of the retirees lived on farms, four per cent at beach areas, and three per cent on ranches. By individual country, 78 per cent or more of the retirees in each nation are urbanites and in Belize, El Salvador, Honduras, and Nicaragua, none of them live in rural areas. Only in Costa Rica are retirees located at beach areas (six per cent), while those living on farms and ranches are found in both Costa Rica (14 per cent) and Guatemala (22 per cent). These findings further support hypothesis 4.a., which states that retirees locate mainly in the central cities or adjacent areas accessible to major routes of communication.

It is believed that as the retiree population in Central America increases, greater numbers will locate in the rural areas. In Costa Rica, for example, this is already occurring. As previously discussed in the explanation of the Migrant Circulation System model, most retirees enter the host nation through the capital city where initial

impressions of the nation are formulated. As familiarity with the surrounding areas occurs, the retiree is more apt to venture away from the capital and settle in a village or rural place, thus effecting a filtering-down process from urban to rural area.

Primate Cities

In Central America, as is the case in most of Latin America, a major migration trend is that of mass movement into the primate cities. The attractiveness of these centers to small village and farm dwellers is obvious; i.e., job opportunities, education facilities, social and welfare institutions, "bright-lights" attractions, etc. With respect to retiree migrants who have chosen to live in Central America mainly because of amenity advantages, their settlement in the primate cities is probably related to their need for community and commercial services, and for the social, cultural, and recreational activities provided by those cities. Their fixed retirement incomes allow them this freedom of choice.

The availability of services and activities in the primate cities is apparently important to military retirees, since most have located in those urban centers. In Belize and El Salvador, all the military retirees are in the primate cities of Belize City and San Salvador, respectively, whereas, in Nicaragua 88 per cent are located in Managua. Honduras is unique in Central America, since it

has two major urban centers, Tegucigalpa and San Pedro Sula, where 38 and 25 per cent, respectively, of the retirees have settled. Guatemala City, along with the adjacent community of Villa Nueva, the primate urban center of Guatemala, attracted 71 per cent of the military retirees in that country. San Jose, primate city of Costa Rica, and its suburbs, including the villages of Escazu and Pavas, form an urban complex that accounts for 51 per cent of its retirees.

Migrant Clustering or Dispersal

Considering Central America as an integral unit, the major concentration of retirees appears in the Meseta Central area of Costa Rica, with San Jose as its nucleus (Figure 13). Outlying retiree groups are found in the highland basins of Guatemala City and San Salvador, and in the lowland urban area of Managua. The remaining scattered settlements, which have attracted few military retirees, are presently of little significance, although some have the potential for expansion, e.g., Nosara Beaches of Costa Rica. At this time clustering can be accepted as a concentration of retirees in the major population centers.

In the individual host nations, however, there is no evidence of military retiree colonization, or clustering, within the major settlements. Instead, the retirees are generally dispersed throughout the residential sections of their selected communities and are spatially integrated

with the local populace. There is in Costa Rica, however, some locational bias in the selection of neighborhoods in San Jose and its suburbs. Although retirees are scattered through the area, most have located on the western or eastern fringes of the city, in the adjacent community of San Pedro, or in the outlying suburban village of Escazu (Figure 22).

In all of Central America 96 per cent of the retirees live in integrated neighborhoods. Only in Costa Rica, where the four per cent of retirees not living in integrated neighborhoods are found, could residence locations be described as other than mixed-neighborhood communities. Although two per cent of these are located in the Nosara Beach area, which is planned as a "retirement community," their present numbers do not reflect a clustering effect. This enterprise is still in a rather primitive stage of development, however, with only 30 houses completed at the time of the survey. The other two per cent represents retirees who have settled on remote ranches in frontier areas of Costa Rica.

Distances between military retiree residences also indicate the absence of clustering. Only among the 26 per cent of the retirees who have retiree neighbors living within one mile of their residences could any form of concentration be inferred. Even here, however, the field survey disclosed that clustering was not evident among this group. Forty six per cent were 1-5 miles from their

Identification of Numerals

1 - San Jose	11 - Guadalupe	21 - Guacima
2 - Escazu	12 - Heredia	22 - Aserri
3 - San Pedro	13 - Villa Colon	23 - Los Sauces
4 - Santa Ana	14 - Desamparados	24 - San Luis de Heredia
5 - Alajuela	15 - San Francisco Dos Rios	25 - Corrizal
6 - Yeluka Park	16 - San Rafael	26 - San Isidro de Coronado
7 - Tres Rios	17 - Tibas	27 - Zapote
8 - Pavas	18 - San Antonio Desamparados	28 - Curridabat
9 - San Antonio de Belen	19 - Rio Oro de Santa Ana	29 - Atenas
10 - Santa Domingo	20 - Grecia	

San Jose Complex

1 - San Jose	17 - Tibas
3 - San Pedro	18 - San Antonio Desamparados
11 - Guadalupe	23 - Los Sauces
14 - Desamparados	27 - Zapote
15 - San Francisco Dos Rios	28 - Curridabat

Figure 22. Military Retirees in the Meseta Central of Costa Rica

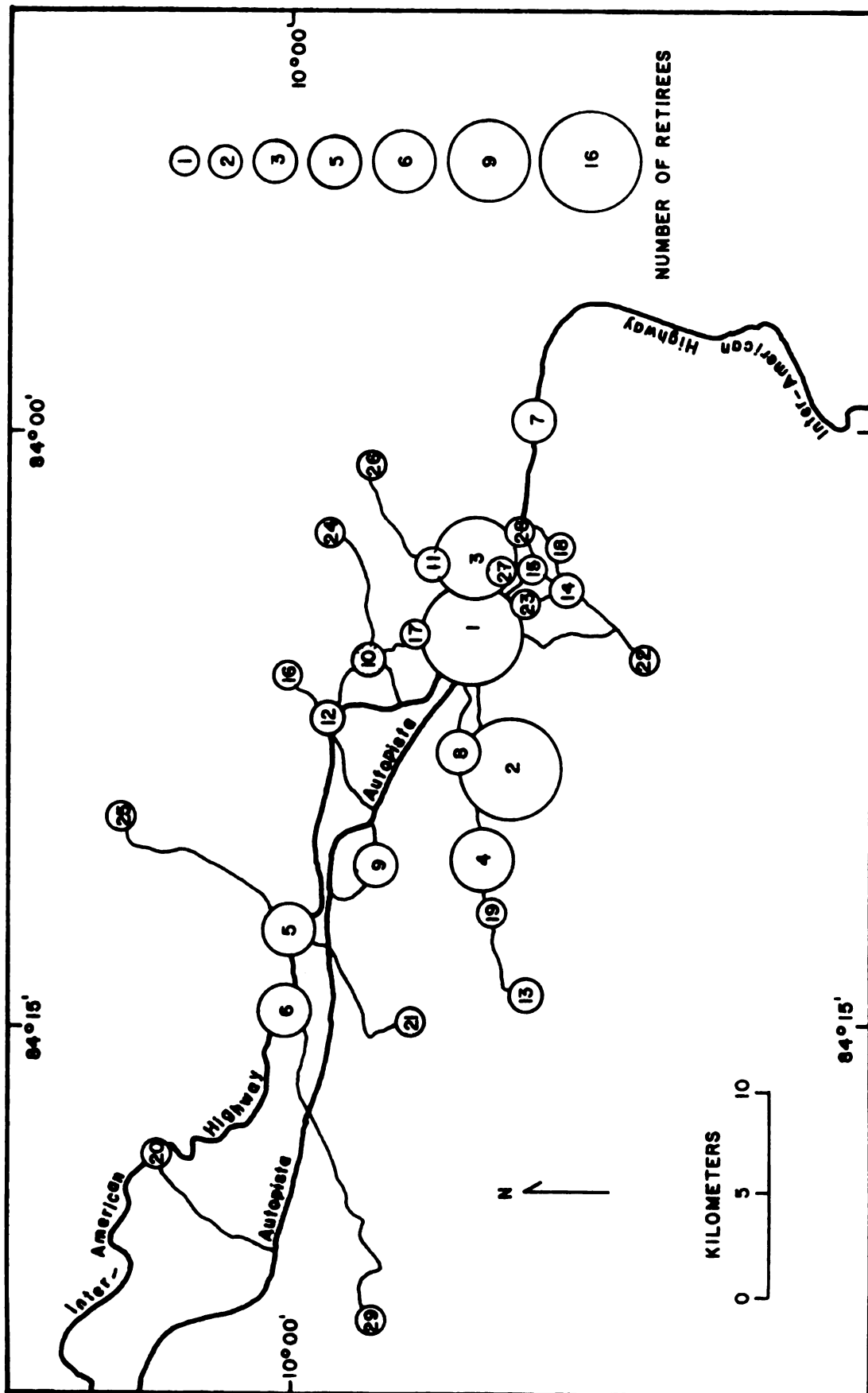


Figure 22

nearest retiree neighbor, seven per cent each from 6-10 miles and 11-15 miles, three per cent from 16-25 miles, and 11 per cent with retiree neighbors more distant than 25 miles. These findings attest to the integration of military retirees within their respective local communities. Consequently, hypothesis 4.c., which states that retiree clustering is directly related to housing and recreational developments cannot be supported. Despite the fact that military retiree clustering has not occurred within settlements in these nations, new housing projects and the development of recreational facilities in certain areas have evidently been influential in attracting retirees to those places. For example, in San Jose, Costa Rica the eastern suburban settlement of San Pedro, where the University of Costa Rica is located, is a popular living area for retirees because of the availability of new and modern houses, apartments, and apartment hotels. The western suburbs, also popular for retirees, offer many new housing and apartment units, as well as recreation facilities (Sabana Athletic Field, Costa Rica Tennis Club, San Jose Indoor Club). Escazu, a suburban community four miles west of San Jose, is attractive to retirees because of its proximity to the Costa Rica Country Club. Several subdivisions have been developed in that area, including the prestigious "Bello Horizonte" section where the Costa Rican President resides. These areas, along with the Cariari Country Club and its surrounding housing development located about six miles northwest

of San Jose, have the potential of attracting more retirees, if the retiree population in Costa Rica continues to grow.

Effect of Distance in Costa Rica

In migration theory, two generally accepted concepts are that migrants travelling long distances go directly to one of the large urban centers, and that the numbers of migrants located in a major population center will decrease as distance from the population center increases (Ravenstein, 1885). For military retirement migration to Central America, the first of these concepts has been found to apply; i.e., the majority of the retirees proceeded directly from the United States to the primate cities. Within Central America, it was believed that the number of retirees located outside the major cities would be inversely related to their distances from those cities. To test this relationship, Costa Rica was selected as a case study, since most of the retiree population of Central America is found there and its major urban center, San Jose, has the greatest concentration of retirees.

To measure the effect of distance relative to the number of retirees located outside of San Jose, two correlation-regression analyses were computed, using numbers of military retirees as the dependent variable and distances from San Jose as the independent variable. The first of these tests regressed the number of retirees located throughout Costa Rica against the most direct road distances

between San Jose and each location. This amounted to 29 distributions (retiree locations) in the Meseta Central area (Figure 22) plus 10 lying outside that region (Figure 13). Nine of the distributions contiguous with San Jose were combined into a San Jose complex, thus giving a total of 20 observations in that area. Combined with the 10 others, there was a total of 30 observations in the test. The results of the regression indicated little association ($r = -0.19$) between these variables and only four per cent explained variation ($r^2 = .04$). Moreover, a "t" test indicated no significance at either the .05 or .10 level, thus reflecting a weak linear relationship.

Since the main concentration of retirees is in the Meseta Central area (Figure 22) and the longest road distance from San Jose to an outlying retiree location in that area is only 45 kilometers, it was believed that a separate test of this area would reflect a valid relationship between the two variables. In this test, the 20 observations of retirees in the Meseta Central were again regressed against shortest road distances from San Jose to the retiree locations. Although a higher association ($r = -.42$) was found in this case, still only 18 per cent ($r^2 = .18$) of the retiree distribution was explained by the distance factor, and results of the "t" test showed no significance at the .05 and .10 levels. Consequently, hypothesis 4.b., which states that the number of retiree migrants varies

inversely with the distance from the capital or major cities, cannot be substantiated.

Since the distance factor accounts for little of the variation in retiree distributions, it is obvious that other locational factors play a more dominant explanatory role. As has been mentioned, the presence of modern housing, which conforms to American standards, and available recreation facilities are important, as well as the availability of community and commercial services, and other socio-cultural amenities.

CHAPTER VI

SUMMARY AND CONCLUSIONS

Central America has recently become recognized as a favorable location for retirement by United States military retirees because of its pleasant climate, less expensive living costs, and other amenities. In this study the nature of this specialized migration and the characteristics of its relevant migrant group are investigated, using a retirement migration schema as a framework.

Summation

The pertinent findings of this study are summarized in terms of military retirement concentrations, locational factors, migrant characteristics, and the spatial significance of the migration.

Military Retiree Concentrations

In 1976 about 23,000 of approximately 1,050,000 military retirees resided in 115 foreign nations and territories. These retirees are concentrated principally in the Western Pacific region, Middle America, and Western Europe. Within the Middle American area, Central America is a recent entry as an attractive region for retirees.

Among the six nations of Central America, only Costa Rica, with 70 per cent of the retiree population, is presently important as a retirement area. Sixty per cent of the retirees are located in the Meseta Central region of that country; consequently, it is expected to remain most popular as a retirement site, since the presence of these retirees attracts others.

In the remaining nations, most military retirees reside in the primate city. Second to San Jose in the numbers of retirees attracted is Guatemala City. That urban center, therefore, is expected to compete most strongly with San Jose in the settlement of new retiree migrants, unless the February 1976 earthquake created an adverse effect.

Factors Relevant to Central American Retirement Migration

Physical, economic, social, and political factors play an important role in location choice of retirees by providing a means of differentiating the individual nations. To evaluate the attributes of potential retirement sites, a retirement location choice model was structured for use in the assessment process. This model provides a means by which a potential retiree considers a number of positive and negative factors which could influence the selection of particular retirement sites, ranks selected sites, applies constraints, and then makes a choice.

The relevant factors in attracting retirees to Central America are pleasant climate, accessibility to the United

States, special retiree privileges, political stability, social amenities, and low cost of living. The most favorable climate of Central America is found in the highland basins and plateaus. Consequently, the majority of military retirees have selected these areas for retirement, e.g., the Meseta Central of Costa Rica. Only in Nicaragua and Belize have the retirees chosen the less favorable lowland tropical areas, i.e., Managua and Belize City, respectively.

Accessibility to the United States presents few problems, since there are adequate road systems for travel by private automobile, direct air routes from several United States coastal cities, and "space-available" military air transportation from the United States to Panama, with connections to the other Central American nations. The current appeal of Central America to retirees, therefore, is partially attributed to its relative proximity to the United States, especially in comparison with accessibility to South America or other more distant potential retirement areas.

The Central American nations that attract the majority of retirees have beneficial retirement laws; stable, democratic governments; fair immigration and customs procedures; and close, cordial political relationships with the United States. Costa Rica, Guatemala, El Salvador, and Nicaragua have enacted laws which provide special benefits and privileges to qualified retirees. The major qualifying criterion of these laws is a guaranteed lifetime income of

a minimum monthly amount, ranging from a low of \$250 in Guatemala to a high of \$400 in Nicaragua. Most military retirees with lifetime-assured government pensions can easily qualify and the majority of those in Central America have taken advantage of these special programs. In all of Central America, 72 per cent of the military retirees had attained retired resident status under these laws, whereas 81 per cent had done so in Costa Rica, thereby attesting to its popularity for full retirement. Moreover, Costa Rica's history of political stability and democratic freedom was found to be a strong factor in favor of its successful foreign retirement program. In the remaining nations, except Belize, which is a self-governing British colony, histories of frequent revolutions, government by dictator, and insurgency have tended to discourage retiree settlement.

Amenities such as social, cultural, and recreational facilities; medical care; educational institutions; and commercial and transportation facilities exist in all the Central American nations, especially in the primary urban centers. A greater variety of amenities that satisfy the needs of North American retirees, however, was evident in Costa Rica, followed by Guatemala, Nicaragua, El Salvador, Honduras and Belize. This ranking corresponds with that of the total number of military retirees located in these nations.

Living costs were found to vary somewhat from one nation to another and the high inflation rates of the past few years are beginning to narrow the gap between costs of living in the United States and Central America. For the present, however, that area is still less expensive for retirement than the United States, especially in terms of housing, utilities, fresh foods, domestic services, public transportation, and building costs. Despite the fact that living costs in Costa Rica are higher than the other nations, it still attracts larger numbers of retirees because it provides a wider range of acceptable commercial and domestic services and other amenities.

Several important factors may deter a possible move. Since employment opportunities are limited in Central America, military retirees with low incomes and younger retirees with families, who by economic necessity are required to work, are more apt to remain in the United States or move to a foreign area which offers employment opportunities. Consequently, the Central American nations remain most suitable for migrants who desire full retirement. Natural hazards, which occur frequently throughout Central America in the form of volcanic eruptions, earthquakes, and tropical hurricanes, are very real threats to some retirees, thus deterring their settlement in these areas.

Certain aspects of the Latin way of life and their attitudes discourage some retirees. For example, differences in language, customs, traditions, and other social

institutions cannot be accepted by many North Americans and the shock of this culture differentiation eliminates Central America as a desirable retirement area. The mañana attitude of the Latin irritates North Americans, as does the practice of extra-legal payments in business and political affairs. Moreover, goods and services available in the United States are often lacking in Central America, causing inconveniences that deter some potential migrants; e.g., potable water is rarely provided by local water systems and faulty plumbing is common.

Migrant Characteristics

Military retirees have a history of frequent foreign moves due to their previous active military service, in which foreign assignments are numerous. The Central American military retiree population has had a median number of five foreign assignments during their active military careers. Due to this conditioning to movement, it could be expected that former military personnel will continue to move periodically, including retirement migrations to foreign areas. This is the case with the retirees in Central America. It was found that 61 per cent of the migrants interviewed had at least one previous retirement residence before migrating to their present location. Of that number, 19 per cent had moved twice, 12 per cent three times, eight per cent four times, and two per cent were in their fifth

fifth and sixth retirement residences. Consequently, it appears that frequent movement by this group will continue.

Seventy five per cent of the migrants indicated satisfaction with their present retirement site and 64 per cent considered it their permanent home. Nevertheless, some of these "satisfied" retirees appeared disenchanted with the area because of the rising cost of living, lack of employment, lack of community and commercial services, and emerging social ills.

The short length of residency in the host country also indirectly reflects the nomadic nature of military retirees. The median residency period was 2.5 years, with 78 per cent of the retirees having lived in their retirement area less than five years. The short term residence history is accountable to some degree to the recent popularity of the area for retirement. It is more likely, however, that a turn-over of migrants has occurred, due simply to the inherent desire of military retirees to move on to new and different surroundings on a cyclic basis. The imposition of penalties on those retirees covered by the special retiree laws who depart prior to the mandatory periods will force many to remain in-country for three to five years, still relatively short periods of residence. A similar study of military retirees in the Lake Chapala region of Mexico revealed an average stay of five years in that area (Allman, 1975).

Adjustment by the migrants to the Central American environment was facilitated in those cases where relatives and friends resided in-country. Fifty-nine per cent of the migrants had relatives and/or friends in the area prior to migration. "Culture shock" and anxiety were lessened by these contacts during initial introduction to the area, and appear to increase the likelihood that the migrants will remain.

Retired members of the military are younger than the average civilian retiree, since the military retirement system offers the option of retirement after 20 years of active service. The median age group at retirement for the migrant retirees in Central America was 40-49, whereas their median age at the time of the survey was 55. This time gap reflects either long term retirement residency in Central America, or periods of retirement in places other than Central America, the latter representing the majority of cases. All of the retirees were of the male sex. Although this occurrence could be attributed to the least chance selection process, since there are fewer numbers of female military retirees, the Latin attitudes toward females and the dominant role played by males in that society is more likely to have deterred female retirees. Moreover, the absence of non-Caucasian retirees in these nations may also be explained by the lower social status values placed on darker skin color in Latin America.

Eighty-one per cent of the retiree population was married and 98 per cent of the spouses of this group were present in the migrant household. In addition, about one-half (48 per cent) of these households included dependent children or other relatives. This higher than expected number of families with dependent children is perhaps a reflection of the retirees married to native wives (34 per cent) who frequently are at child-bearing age.

Retirees in Central America are an educated group; three-fourths have had some college, with 49 per cent having received a baccalaureate or higher degree. The education level of their spouses is somewhat lower, 58 per cent having attended college. Also of selectivity significance is the fact that 88 per cent of the retirees are able to speak Spanish with varying degrees of fluency. The high level of education may be reflected by a favored pastime of the retirees. According to the survey, the greatest proportion of their leisure time is spent in reading and writing, followed by socializing and recreation. This ranking of activities was an unexpected finding, since it is usually believed that a young and active retiree group might devote most of its time and energy to recreation.

The majority (61 per cent) of the retirees migrated to Central America for full retirement. This is especially true in Costa Rica where 72 per cent of the migrants are fully retired. In the other nations (except Belize), however, most of them are either fully or partially employed.

In fact, employment is perhaps the most important factor influencing migration to those countries. The retirees who have migrated to Central America to enjoy full retirement are able to do so, since they receive a relatively high guaranteed income, the median annual pension being \$8,900. In a relative comparison with the yearly average retirement income for all United States military retirees (\$6,648), that of the Central American group is significant. Moreover, it indicates that retirees with higher incomes opt for Central American retirement, thus providing capital needed by these small developing nations.

There is no selectivity for the parent military service of the retirees, since all are represented in near proportion to their sizes; i.e., Army, 37 per cent; Air Force, 30 per cent; Navy, 22 per cent; and Marine Corps, nine per cent. Neither is military rank selective, although more commissioned officers (55 per cent) are found among the migrants than enlisted men (41 per cent) and warrant officers (four per cent). Retirement grades among these personnel ranged between sergeant (E5) and lieutenant general (O9), which means an annual retired pay range of \$4,080 to \$29,700. Consequently, lower ranking enlisted personnel with small annual incomes apparently are less likely to opt for foreign retirement, especially in areas that offer few employment opportunities.

The principal reasons given by the migrant retirees for their decisions to migrate to Central America were

favorable climate and low cost of living. In Costa Rica, the most attractive of the Central American nations, the majority of the migrants attributed their migration decision primarily to agreeable climate, secondly to low cost of living, and thirdly to the special privileges granted to retirees. Among the other nations, that country which most closely corresponds with Costa Rica in terms of attractiveness for full retirement is Guatemala. It, too, was chosen according to the same ranked criteria as Costa Rica. Retirees in the remaining nations, however, especially Honduras, have located in those countries primarily for employment or to be near relatives.

Spatial Significance of the Migration

Migration entails an exchange of people and information. To determine how this occurs through space, a Migrant Circulation System model was designed which shows that military retiree migration to Central America is an ordered phenomenon. In this model a migrant is carried through a series of steps in which he evaluates and moves to a retirement destination. To test the concept of the model, Costa Rica was used as a case study. A component in the system, the exploratory trip, is the single most important element in the migration process for the retiree group, since it insures a greater chance of the migration succeeding, with dissidents filtered out of the system at this early stage. Of those retirees who made this exploratory trip to

Costa Rica, only one of ten later made the actual move. Moreover, 78 per cent of the Costa Rica respondents decided to migrate on the basis of positive information obtained during the exploratory trip. At this point, early in the migration process, personal observation and evaluation can indicate the potential success or failure of the proposed migration. If overriding negative information is exchanged, a decision not to migrate can be made before large sums of money are expended on the move.

After the exploratory trip and the decision to migrate is made, the migrant arrives in-country and settles in a gateway residence while processing resident pensioner applications and making arrangements for permanent housing. These gateway residences, located in San Jose, provide temporary quarters, usually consisting of furnished apartments or apartment-hotels, which have become well known and much in demand by retirees. Some, of course, live temporarily in San Jose hotels, and those who entered by travel trailer reside in one of the several nearby trailer parks. The majority of these newly-arrived migrants obtain resident pensioner status and move into a permanent residence. Though most of the retirees considered Costa Rica their permanent home, 70 per cent had lived there less than four years and their migration histories suggested many of them would eventually move on, either back to the United States or to another retirement location. Those remaining in Costa Rica until death complete the final stage of the

migration circulation system. The other nations of Central America do not presently have sufficient numbers of military retirees to apply the model; however, they are of potential importance as viable retirement areas and the model's application may be of future use.

At all times during the migration process the migrant is a carrier of information which can be passed on to other potential migrants. This is especially true during visits to the United States or Panama, which the retirees make periodically. Here they normally interact with the military community and may influence others in making a retirement location choice.

A majority of the potential migrants had contacts in Costa Rica, either friends, relatives, or other military retirees who assisted them in most part because they were military. It is the latter case that suggests a modified chain migration effect, e.g., these new migrants who had been assisted by the in-country retirees were subsequently "socialized" and they then became providers of information and assistance for new migrants.

Directional bias was present in the migration streams. Most retirees entering the migrant circulation system came mainly from the popular retirement states of California, Florida, and Texas. These three areas supplied 58 per cent of the migrants, with California alone providing 27 per cent. The only other important generating area was the Virginia-District of Columbia complex, which accounted for

10 per cent of the Central American retirees. About 15 per cent of the migrants were from the major population states of the northeast and the few others from midwestern and western states. It is believed that most military retirees in Central America worked for a while directly after retirement from the military, retired to an amenable area in the southern United States, and then migrated to Central America.

Two networks are in operation to sustain the migration stream and information flows. These consist of transportation and social systems which operate externally to connect the United States and the host nations, as well as internally, where they represent the means for in-country movement and personal interaction. The interrelationships and degree of connectivity among the components of these networks account for their complexity. The more complex the networks, the greater the probability of migrant and information flows.

Within the individual nations of Central America, the retirees have located mainly in the major urban areas or their surrounding suburbs and villages (83 per cent), especially those situated along the main highways. Of those not living in urban areas, 10 per cent resided on farms, four per cent at beach areas, and three per cent on ranches. The primate cities attracted most, apparently because of the available services and activities that are important to retirees, and few of which exist at other places.

There was no evidence of military retiree colonization or clustering within the major settlements and 96 per cent of the retirees indicated that they resided in integrated communities. Correlation-regression analyses were made to measure the effect of distance relative to the number of retirees located outside Costa Rica's primate city, San Jose. Results of these tests indicated that the distance factor accounts for little of the variation in retiree distributions.

Migration Theory

There are no precedents in the literature relative to international retirement migration per se. However, the general principles involving international movements, or any form of migration for that matter, are similar. Consequently, identification of deviations from the generally accepted migration theories, and the application of new ideas which incorporate these differences, are necessary for the advancement of knowledge in this field.

Application to Existing Theory

The process of migration is normally considered in migration theory by means of a conceptualized spatial model which includes an origin, a destination, and an intervening space which contains a number of possible obstacles. Within this spatial framework, potential migrants react to positive or negative factors at the origin and destination, and if

the decision to move is made, during the move they are subjected to various obstacles that exist between these places. Obviously, any form of migration can be considered within this conceptual framework. Furthermore, the basic laws of migration, as developed by Ravenstein (1885) and modified by Lee (1966), can be examined for their applicability at various stages of this migration process.

Development of a Retirement Migration Theory

In this study, the existing concepts and theories of migration, along with the concepts of Mabogunje (1970), were used to formulate a framework for examining the Central American case. This system, the retirement migration schema (Figure 4), provides a guide that insures complete investigation of all aspects of the retirement migration process. The schema illustrates the functions of migration elements and the processes involved in migrant movements, as well as the relationships of the component parts to each other and the outside environment. Within this schema, donor and recipient components, along with their respective sub-components, represent specific populations located within a spatial context. (For a detailed explanation of the model refer to Figure 4 and pages 32-34.) Although the schema illustrates the basis for spatial interaction by military retirees, certain components within the model require additional explanation; i.e., migration channels and information feedback. Consequently, to more definitively explain

migrant circulation patterns and information flows, supplementary models were designed to illustrate and explain these phenomena (Figures 16 and 17). It is believed, therefore, that these models constitute the foundation for an understanding of international retirement migration and will prove useful in developing theory applicable to that end. This study represents a beginning toward that task, since it has introduced and identified some deviations from traditional migration theory; e.g., the inapplicability of time/cost distance measures, stage migration, and economic motivation; while demonstrating the importance of interaction and information exchange, and the significance of amenities, as criteria for site selection. Consequently, to advance research and develop theory in the increasingly important field of retirement migration, it is suggested that other empirical cases be examined using the framework of this study.

Application

This study has provided information on military retiree migrants in Central America, including their locations, concentrations, method of transport to Central America, and how they interact within their respective communities. Other than its inherent contribution to the international migration literature, therefore, the study should prove useful to potential migrants by providing an overview of the area, and to host nation governments for planning purposes.

Socio-Economic Aspects

In the Central American countries there is little evidence of an "Americanization" effect upon the host country's cultural landscape. No retirement colonies have been developed in the area where retirees might cluster, although a few real estate schemes for sub-divisions and recreation areas which might cater to foreign retirees are found in a developing stage; e.g., the Nosara Beaches of Costa Rica and the San Jose suburban area of Escazu. Consequently, most retirees have successfully integrated into their respective host countries and participate in many of the social and cultural activities of the local community.

Retirees living in the host nations under the provisions of special retiree laws represent a source of imported capital, since their income is derived from outside sources. However, at the present, in all countries except Costa Rica, the amounts are insignificant, due to the few military retirees in these nations. But, in Costa Rica this income represents an annual input to the local economy of over \$1,000,000, a significant amount for a nation of this size. In addition to the dollar inflow to the economy, the presence of retirees creates employment opportunities for nationals, especially in the sectors of domestic help, construction labor, and commercial services.

If the host countries wish to retain their military retirees, it is important that they provide amenities and

commercial services, such as supermarkets, drug stores, restaurants, and recreational facilities, some of which are found in most of these nations. These types of facilities are especially prevalent in the Escazu suburb of San Jose, Costa Rica, where military retirees are concentrated. Without the provision of amenities and commercial services, the attractiveness of Central America for its climate, scenery, and lower cost of living, could be out-weighed by inconveniences. Furthermore, these problems are compounded in Central America by government bureaucracy. The possibility of a "disenchantment syndrome" in some nations could set in motion a reverse movement that would reduce the military retiree population. This situation is now apparent in Costa Rica, with larger numbers of retirees becoming discontented over escalating problems with the government, the same social ills found in many large cities in the United States, and inflation boosting the cost of living. Consequently, some retirees have already departed and others have made plans to leave over the next year or two, especially if living costs become equal with those of the United States (Harding, 1976).

Planning and Policy Formulation

Officials and planners in the host nations can use this study to ascertain where military retirees are located in their countries and their possible impact in areas of concentration. Those nations desiring more dispersed

distribution of retirees and the development of recreation-type settlements such as Nosara Beaches of Costa Rica, must improve their communications infrastructure, thus providing more avenues for settlement.

Nations now having few retirees and wishing to attract more for national development purposes (capital import) could follow the example and experiences of Costa Rica, which has a history of successful governmental programs oriented toward settlement of foreign resident pensioners and promoting its advantages for retired living. It appears that a concentrated promotion and advertising campaign is required which describes the attributes of the nation for retirement and its advantageous laws for retirees. Toward this end, the study provides information regarding those areas in the United States where retirees are concentrated, enabling promotion activities to be directed to a more receptive group.

A final conclusion pertains to the field survey method used in obtaining the research information. It is apparent that an interpretative study of this type can only be accomplished through personal exposure to the geographic area where direct observations and experiences reveal general trends as well as specific information on the investigated phenomenon. This field procedure, combined with the personal interview technique, is therefore the recommended method for data collection for similar research studies.

APPENDIX A

MILITARY RETIREE MIGRATION HISTORY QUESTIONNAIRE

APPENDIX A

MILITARY RETIREE MIGRATION HISTORY QUESTIONNAIRE

(Country)

Part I -- Personal Data

1. Name (Optional) _____
2. Address (Town) _____ (State) _____
3. Sex: Male _____ Female _____
4. Race: Caucasian _____ Negro _____ Other _____
5. Present age: Under 40 _____ 40-44 _____ 45-49 _____ 50-54 _____
55-59 _____ 60-64 _____ 65-69 _____ 70 plus _____
6. Marital Status: Single _____ Married _____ Divorced _____
Widowed _____
7. Persons in present household: Spouse _____ # Children _____
Other (who and #) _____
8. Education (highest year completed): Self _____ Spouse _____
9. Employment Status: Fully Retired _____ Fully Employed _____
Part-time employed _____ Seeking employment _____
10. If employed, working in: For self _____ Education _____
Government _____ Business _____ Other _____

Part II -- Financial Data

1. Present military retirement income: Under \$5,000 _____
\$5-10,000 _____ \$10-15,000 _____ \$15-20,000 _____
\$20-25,000 _____ \$25-30,000 _____ Over \$30,000 _____
2. Present annual income from all sources, including joint:
Under \$5,000 _____ \$5-10,000 _____ \$10-15,000 _____
\$15-20,000 _____ \$20-25,000 _____ \$25-30,000 _____
Over \$30,000 _____

Part III -- Military Service Data

1. Parent Service: Army___ Navy___ Air Force___
Marines___ Other_____
2. Retirement grade or rank (E1-E9, WO1-WO4, O1-O10)
(Specify)_____
3. Years military service completed: 19 or less___
20-24___ 25-30___ Over 30___
4. Special skills and interests during military duty_____
5. Age at retirement: Under 40___ 40-49___ 50-59___ 60-69___
6. Last duty station: _____
(country) (state) (city/post)
7. Place of residence prior to entering the military_____
8. Age at entry into military: _____

Part IV -- Military Service Migrations

1. Number of continental U.S. moves during mil. career: _____
2. Principal duty stations or states to which you were assigned in the U.S.: _____
3. What states or areas did you like the most during this period? _____
4. Number of foreign moves during military career: _____
5. Principal countries assigned: _____
6. Which of the above countries were most appealing to you during these assignments? _____
7. Why? _____

Part V -- Retirement Migrations

- A. Previous Retirement Residency (The following moves pertain to those accomplished prior to your current foreign area residency. If your current foreign area residency was initiated directly after retirement, proceed to paragraph B.)

1. **FIRST MOVE:**

- a. Place _____
(country) (city) (state)
- b. Year arrived _____ Year departed _____

c. Reasons for choosing this location (See factors below):

- (1) Most important _____
 (2) Second most important _____
 (3) Third most important _____

(Factors to consider in answering above)
 Close to military facilities
 Climate (warm, temperate) favorable
 Low cost of living area
 Social and cultural activities
 Near last duty station (job, friends, school)
 Low risk natural hazards area
 Job opportunities (government/private)
 Hometown (relatives and friends)
 Property ownership (land/home)
 Recreation activities
 Favorable taxes
 Health considerations (medical facilities)
 Political conditions favorable
 Other (please describe)

d. Reasons for leaving this location (See factors below):

- (1) Most important _____
 (2) Second most important _____
 (3) Third most important _____

(Factors to consider in answering above)
 Inadequate educational facilities
 Poor relations with relatives, friends
 Lack of community and commercial services
 Lack of social, cultural activities
 Lack of recreational activities
 Political conditions (unstable government, etc.)
 Disagreeable climate
 High cost of living
 Poor tax structure
 Job dissatisfaction
 Social ills (crime, drugs, etc.)
 High risk natural hazard area (earthquakes, etc.)
 Other (please describe)

2. SECOND MOVE:

a. Place _____
 (country) (city) (state)

b. Year arrived _____ Year departed _____

c. Reasons for choosing this location (See factors listed above)

- (1) Most important _____
 (2) Second most important _____
 (3) Third most important _____

d. Reasons for leaving this location (See factors listed above):

(1) Most important _____

(2) Second most important _____

(3) Third most important _____

3. **THIRD MOVE:**

a. Place _____

(country)

(city)

(state)

b. Year arrived _____ Year departed _____

c. Reasons for choosing this location (See factors listed above):

(1) Most important _____

(2) Second most important _____

(3) Third most important _____

d. Reasons for leaving this location (See factors listed above):

(1) Most important _____

(2) Second most important _____

(3) Third most important _____

B. Present Retirement Residency

1. **Pre-Migration Information:**

a. What was the most important source of information about the host nation which influenced your retirement migration decision? (Specify) _____

b. How much influence did each of the following information sources have in providing you with knowledge of the area before moving there:

	<u>Most</u>	<u>Great</u>	<u>Some</u>	<u>Little</u>
(1) Personal visits	_____	_____	_____	_____
(2) Relatives or friends	_____	_____	_____	_____
(3) Radio or TV	_____	_____	_____	_____
(4) Newspapers	_____	_____	_____	_____
(5) Magazines & books	_____	_____	_____	_____
(6) Host gov't publ.	_____	_____	_____	_____
(7) Mailed advertisements	_____	_____	_____	_____
(8) U.S. gov't info.	_____	_____	_____	_____
(9) Other _____	_____	_____	_____	_____

c. Did you visit the host country before deciding to move there? Yes _____ No _____

d. Before moving to the host nation did you have relatives or friends living there? Yes _____ No _____
Did they influence your movement decision? _____
Yes _____ No _____

e. Did you own property in the host country before moving there? Yes _____ No _____. If yes, how long before? Months _____

2. Migration Decision Data:

a. When did you actually arrive in the host country for retirement purposes? Date _____
Years of residency _____

b. What were your main reasons for this migration?

c. Indicate the degree of importance you attach to the following reasons for migration?

	<u>Most</u>	<u>Great</u>	<u>Some</u>	<u>Little</u>
(1) Climate	_____	_____	_____	_____
(2) Low cost of living	_____	_____	_____	_____
(3) Special retiree priv.	_____	_____	_____	_____
(4) Social & cult. act.	_____	_____	_____	_____
(5) Recreational activities	_____	_____	_____	_____
(6) Near relatives, friends	_____	_____	_____	_____
(7) Health considerations	_____	_____	_____	_____
(8) Job considerations	_____	_____	_____	_____
(9) Property ownership	_____	_____	_____	_____
(10) Accessibility to U.S.	_____	_____	_____	_____
(11) Political conditions	_____	_____	_____	_____
(12) Other _____	_____	_____	_____	_____

d. During your migration decision making process, did you consider other foreign areas for retirement? Yes _____ No _____. If yes, where? _____

e. Why did you choose the host country instead?

3. Place Location Data:

a. Where did you first locate in the host nation? (geographic place) _____

b. Type of residence: Apt. _____ Mobile home _____
Condominium _____ House _____

c. Is the residence located: On a farm _____ in
suburbs _____ village _____ central city _____
beach area _____ ranch _____

d. If urban oriented, is the residence in a so-called "retirement community" _____ or in a regular mixed neighborhood _____?

e. What is the distance between your present residence and that of your nearest military retiree neighbor? Miles _____

4. Permanency and Area Satisfaction Data:

a. Do you consider this to be your permanent retirement home? Yes _____ No _____

b. If No, where is your permanent home? _____

- c. If you consider your residency in this nation to be of a seasonal or temporary nature, how frequently and for what period of time do you leave the area? Frequency _____
Period of time _____
- d. When you leave the area, where do you normally go?
 (1) Vacation in other foreign areas _____
 (2) Visit relatives and friends in other foreign areas _____
 (3) Vacation in the U.S. _____
 (4) Visit relatives and friends in the U.S. _____
 (5) Return to permanent home _____
- e. During the visits or vacations specified above, do you encourage other retirees or potential retirees to live in the host nation? Yes _____ No _____
- f. If Yes, reasons why: _____
- g. If No, reasons why: _____
- h. In your retirement environment, how much of your time during the average week is spent on the following activities?
- | | Most | Much | Some | Little |
|---|-------|-------|-------|--------|
| (1) Job or business | _____ | _____ | _____ | _____ |
| (2) Socializing | _____ | _____ | _____ | _____ |
| (3) Housework (cleaning repairs, gardening) | _____ | _____ | _____ | _____ |
| (4) Recreation (sports) | _____ | _____ | _____ | _____ |
| (5) Rel. & community act. | _____ | _____ | _____ | _____ |
| (6) Reading & writing | _____ | _____ | _____ | _____ |
| (7) TV & radio | _____ | _____ | _____ | _____ |
| (8) Education | _____ | _____ | _____ | _____ |
| (9) Other _____ | _____ | _____ | _____ | _____ |
- i. Are you satisfied with your present retirement location? Yes _____ No _____
- j. If No, where would you like to move? _____
- k. Why there? _____
- l. Do you plan to move soon? Yes _____ No _____
- m. If you plan to permanently leave the host nation, to what degree of importance do you attribute the following reasons for leaving?
- | | Most | Great | Some | Little |
|---|-------|-------|-------|--------|
| (1) Disagreeable climate | _____ | _____ | _____ | _____ |
| (2) High or rising cost of living | _____ | _____ | _____ | _____ |
| (3) Lack of employment | _____ | _____ | _____ | _____ |
| (4) Lack of community & commercial services | _____ | _____ | _____ | _____ |

	<u>Most</u>	<u>Great</u>	<u>Some</u>	<u>Little</u>
(5) Lack of social & cultural activities	_____	_____	_____	_____
(6) Lack of recreat. act.	_____	_____	_____	_____
(7) Inadequate educational facilities	_____	_____	_____	_____
(8) Poor relations with foreign neighbors	_____	_____	_____	_____
(9) Poor relations with relatives & friends	_____	_____	_____	_____
(10) Social ills (crime, drugs, etc.)	_____	_____	_____	_____
(11) Political conditions (unstable gov't)	_____	_____	_____	_____
(12) High risk natural hazard area	_____	_____	_____	_____
(13) Others _____	_____	_____	_____	_____

5. Miscellaneous Data:

- a. What mode of transportation was used in your move to the host country? Auto____ Ship____ Air____
Other _____
- b. Place of departure _____
Place of arrival _____
- c. Was your move direct to the host nation from place of departure or was it accomplished in stages or steps? Direct____ Stages____
- d. If in stages, were there any significant periods of time spent in other nations? (Specify) _____
- e. As a retiree, do you receive any special rights or privileges granted by the host nation? Yes____
No____
- f. If applicable, what government law or decree pertains to these privileges? _____
- g. Do you speak the language of the host nation?
Yes____ No____
- h. Do you hold memberships in any military or military-related organizations? Yes____ No____
- i. If Yes, specify _____
- j. Do you subscribe to or receive any military-related publications? Yes____ No____
- k. If Yes, specify _____
- l. Was or is your spouse a native of the host nation in which you now reside? Yes____ No____

APPENDIX B

U.S. MILITARY STRENGTH OUTSIDE THE UNITED STATES

APPENDIX B

U. S. MILITARY STRENGTH OUTSIDE THE UNITED STATES

March 31, 1976

Total Outside the United States	481,000
U.S. Territories and Possessions	
(includes Afloat)	31,000
Foreign Countries	450,000

<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;"><u>Western Europe and Related Areas</u> . .</td> <td style="width: 20%; text-align: right;"><u>306,000</u></td> </tr> <tr> <td> Belgium</td> <td style="text-align: right;">2,000</td> </tr> <tr> <td> Germany</td> <td style="text-align: right;">217,000</td> </tr> <tr> <td> Greece</td> <td style="text-align: right;">4,000</td> </tr> <tr> <td> Iceland</td> <td style="text-align: right;">3,000</td> </tr> <tr> <td> Italy</td> <td style="text-align: right;">12,000</td> </tr> <tr> <td> Morocco</td> <td style="text-align: right;">1,000</td> </tr> <tr> <td> Netherlands . . .</td> <td style="text-align: right;">2,000</td> </tr> <tr> <td> Portugal/Azores .</td> <td style="text-align: right;">1,000</td> </tr> <tr> <td> Spain</td> <td style="text-align: right;">10,000</td> </tr> <tr> <td> Turkey</td> <td style="text-align: right;">7,000</td> </tr> <tr> <td> United Kingdom .</td> <td style="text-align: right;">21,000</td> </tr> <tr> <td> Other</td> <td style="text-align: right;">1,000</td> </tr> <tr> <td> Afloat</td> <td style="text-align: right;">27,000</td> </tr> <tr> <td colspan="2" style="padding-top: 10px;"> <u>Less than 250</u> </td> </tr> <tr> <td> Bahamas</td> <td></td> </tr> <tr> <td> Bahrain</td> <td></td> </tr> <tr> <td> Barbados</td> <td></td> </tr> <tr> <td> Ethiopia (incl. Eritrea)</td> <td></td> </tr> <tr> <td> Johnston Is.</td> <td></td> </tr> <tr> <td> Leeward Is. (Antigua)</td> <td></td> </tr> <tr> <td> Norway</td> <td></td> </tr> <tr> <td> Brazil</td> <td></td> </tr> </table>	<u>Western Europe and Related Areas</u> . .	<u>306,000</u>	Belgium	2,000	Germany	217,000	Greece	4,000	Iceland	3,000	Italy	12,000	Morocco	1,000	Netherlands . . .	2,000	Portugal/Azores .	1,000	Spain	10,000	Turkey	7,000	United Kingdom .	21,000	Other	1,000	Afloat	27,000	<u>Less than 250</u>		Bahamas		Bahrain		Barbados		Ethiopia (incl. Eritrea)		Johnston Is.		Leeward Is. (Antigua)		Norway		Brazil		<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;"><u>Selected Areas</u></td> <td style="width: 20%;"></td> </tr> <tr> <td> <u>Southeast Asia</u> . .</td> <td style="text-align: right;"><u>4,000</u></td> </tr> <tr> <td> Thailand</td> <td style="text-align: right;">4,000</td> </tr> <tr> <td> <u>Western Pacific</u> .</td> <td style="text-align: right;"><u>129,000</u></td> </tr> <tr> <td> Japan (incl.</td> <td></td> </tr> <tr> <td> Okinawa . . .</td> <td style="text-align: right;">48,000</td> </tr> <tr> <td> Philippines . .</td> <td style="text-align: right;">16,000</td> </tr> <tr> <td> South Korea . .</td> <td style="text-align: right;">41,000</td> </tr> <tr> <td> Taiwan</td> <td style="text-align: right;">2,000</td> </tr> <tr> <td> Afloat</td> <td style="text-align: right;">22,000</td> </tr> <tr> <td> <u>Other Areas</u> . . .</td> <td style="text-align: right;"><u>41,000</u></td> </tr> <tr> <td> Australia</td> <td style="text-align: right;">1,000</td> </tr> <tr> <td> Bermuda</td> <td style="text-align: right;">1,000</td> </tr> <tr> <td> Canada</td> <td style="text-align: right;">1,000</td> </tr> <tr> <td> Cuba</td> <td style="text-align: right;">3,000</td> </tr> <tr> <td> Guam</td> <td style="text-align: right;">9,000</td> </tr> <tr> <td> Iran</td> <td style="text-align: right;">1,000</td> </tr> <tr> <td> Midway Is. . . .</td> <td style="text-align: right;">1,000</td> </tr> <tr> <td> Panama C.Z. . . .</td> <td style="text-align: right;">9,000</td> </tr> <tr> <td> Puerto Rico . . .</td> <td style="text-align: right;">5,000</td> </tr> <tr> <td> Other</td> <td style="text-align: right;">5,000</td> </tr> <tr> <td> Afloat</td> <td style="text-align: right;">5,000</td> </tr> <tr> <td colspan="2" style="padding-top: 10px;"> <u>Less than 1,000</u> </td> </tr> <tr> <td> Greenland</td> <td></td> </tr> <tr> <td> Saudia Arabia</td> <td></td> </tr> </table>	<u>Selected Areas</u>		<u>Southeast Asia</u> . .	<u>4,000</u>	Thailand	4,000	<u>Western Pacific</u> .	<u>129,000</u>	Japan (incl.		Okinawa . . .	48,000	Philippines . .	16,000	South Korea . .	41,000	Taiwan	2,000	Afloat	22,000	<u>Other Areas</u> . . .	<u>41,000</u>	Australia	1,000	Bermuda	1,000	Canada	1,000	Cuba	3,000	Guam	9,000	Iran	1,000	Midway Is. . . .	1,000	Panama C.Z. . . .	9,000	Puerto Rico . . .	5,000	Other	5,000	Afloat	5,000	<u>Less than 1,000</u>		Greenland		Saudia Arabia	
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All other countries: Less than 100 U.S. military personnel
 Totals may not add due to rounding.

Source: Department of Defense (DOD, 1976)

BIBLIOGRAPHY

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- AAP (1976). Asociacion de Amigos del Pais, Guatemala Newsletter (Guatemala City) April 22.
- Allman, Phillip H. (1974). "Case History of a Career Military Retiree," an unpublished paper prepared at Michigan State University, February, 1974.
- _____. (1975). "A Comparative Study of American Military Retiree Migrants in Mexico: The Case of San Miguel de Allende and the Lake Chapala Region," an unpublished field problem report prepared for the Department of Geography, Michigan State University.
- American Legion (1976). "News of the American Legion," The American Legion Magazine, 100/6: 28-32.
- Army Times (1970). "Retirement Supplement," Army Times (Washington, D.C.: Army Times Publishing Co.) October 28, 1970, p. 13R.
- _____. (1972-1976). "Retirement Supplement," Army Times (Washington, D.C.: Army Times Publishing Co.).
- _____. (1973). "Military Facts and Figures," Army Times (Washington, D.C.: Army Times Publishing Co.) September 26.
- _____. (1975). "Retirement Supplement," Army Times (Washington, D.C.: Army Times Publishing Co.) September 17, pp. 1-28.
- Beaujeu-Garnier, J. (1966). Geography of Population (London: Longmans, Green and Co. Ltd.).
- Buckley, Joseph C. (1967). The Retirement Handbook (New York: Harper and Row).
- Bunge, Mario (1971). "Four Models of Human Migration," General Systems, 16: 87-92.
- Carrothers, Gerald A. P. (1956). "An Historical Review of the Gravity and Potential Concepts of Human Interaction," Journal of the American Institute of Planners, 22/2: 94-102.

- CIA (1976). Central Intelligence Agency, Office of Geographic and Cartographic Research. National Basic Intelligence Factbook (Washington, D.C.: Government Printing Office) July.
- Costa Rica (1971). Regulation of Law No. 4812 and Procedures (San Jose: Instituto Costarricense de Turismo).
- Cox, Kevin R. (1972). Man, Location, and Behavior: An Introduction to Human Geography (New York: Wiley and Sons).
- Demko, George J., Harold M. Rose and George A. Schnell (1970). Population Geography: A Reader (New York: McGraw-Hill).
- DOD (1976). Department of Defense, Office of the Assistant Secretary of Defense (Comptroller), Directorate for Information Operations and Control. Selected Manpower Statistics (Washington, D.C.: Government Printing Office) June.
- Donovan, James A. (1970). Militarism, U.S.A. (New York: Charles Scribner's Sons).
- El Salvador (1973). "Ley Especial Para Residentes Rentistas," Diario Oficial, Decree 476 (San Salvador: Ministry of the Interior).
- Fischer, Edward (1973). Why Americans Retire Abroad (New York: Sheed and Ward, Inc.).
- Ford, Norman D. (1974). Fabulous Mexico (Greenlawn, New York: Harian Publications).
- Foster, Donald C. (1976). "Membership Survey," The Retired Officer, 32/10: 18-21.
- Frisbee, John L. (1973). "Retiring in Costa Rica," The Retired Officer, 29/5: 22-25.
- Gates, Ed (1974). "Where to Retire," The Retired Officer, 30/5: 22-26.
- Golant, Stephen N. (1971). "Adjustment Process in a System: A Behavioral Model of Human Movement," Geographical Analysis, 3/3: 203-220.
- Guatemala (1973). Congress of the Republic, Decree 58-73, Law of Retired and Annuitant Residents (Guatemala City: Guatemalan Tourism Institute).

- Haenszel, William (1967). "Concept, Measurement, and Data in Migration Analysis," Demography, 4: 253-261.
- Hagerstrand, Torsen (1969). "On the Definition of Migration," Yearbook of Population Research in Finland, 11: 63-72.
- Harding, Wade P. (1973a). "Dear Former Friend, or Retirement in Costa Rica Revisited," The Retired Officer, 29/10: 30-33.
- _____. (1973b). Personal letters (San Jose, Costa Rica) May 1973 and February 1974.
- _____. (1976). Personal letter (San Jose, Costa Rica) August.
- Hollingsworth, T.H. (1970). Migration: A Study Based on Scottish Experience Between 1939 and 1964 (Edinburgh: Oliver and Boyd).
- Hotchkiss, P. (1975). "The United States Army," The Retired Officer, 31/6: 18-22.
- Instituto Panameno de Turismo. Retire to Panama and Live, an undated brochure (Panama City).
- Jones, F.E. (1956). "Sociological Perspective on Immigrant Adjustment," Social Forces, 35/10: 39-47.
- Kahn, Theodore C. (1974). "Military Careerists: A New Scapegoat Minority," The Retired Officer, 30/1: 20-23.
- Kariel, H.G. (1963). "Selected Factors Areally Associated with Population Growth Due to Net Migration," Annals of the Association of American Geographers, 53: 210-223.
- Kirk, Dudley (1958). "Major Migrations Since World War II," Milbank Memorial Fund Quarterly, 36: 11-28.
- Lee, F.S. (1966). "A Theory of Migration," Demography, 3/1: 47-57.
- Leonberger, Loren B. (1973). "A Marvelous Mirage," The Retired Officer, 29/6: 22-25.
- Lien, Maurice L. (1974). "Notes and Comments," The Retired Officer, 30/4: 12-19.
- _____. (1976a). "Notes and Comments," The Retired Officer, 32/3: 16-17.

- _____. (1976b). "News, Notes and Comments," The Retired Officer, 32/10: 12-15.
- _____. (1976c). "Notes and Comments," The Retired Officer, 32/12: 12-19.
- Mabogunje, Akin L. (1970). "Systems Approach to a Theory of Rural-Urban Migration," Geographical Analysis, 2: 1-18.
- MacDonald, John S. and Leatrice D. MacDonald (1964). "Chain Migration, Ethnic Neighborhood Formation, and Social Networks," Milbank Memorial Fund Quarterly, 42: 82-97.
- Maselli, G. (1971). "World Population Movements," International Migration, 9/3-4: 117-125.
- Neiva, Artur H. (1965). "International Migrations Affecting Latin America," Milbank Memorial Fund Quarterly, 43/4: 119-135.
- Nicaragua (1974). National Constitutional Assembly, Decree 628 (Tegucigalpa: Ministry of Economy, Industry and Commerce, National Tourism Office).
- Peterson, William (1955). Planned Migration: The Social Determinants of the Dutch-Canadian Movement (Berkeley: University of California Press).
- _____. (1958). "A General Typology of Migration," American Sociological Review, 23: 264-273.
- RAB (1976). Retired Army Bulletin. "Women in the Military Services," Retired Army Bulletin, 6/11-12: 5.
- Ravenstein, E.G. (1885). "The Laws of Migration," Journal of the Royal Statistical Society, 48: 167-227.
- Sawatsky, Harry L. (1971). They Sought a Country: Mennonite Colonization in Mexico (Berkeley: University of California Press).
- Sleed, Joel (1974). "Retired Gringos Find Green Fields in Old Guadalajara," Detroit Free Press, January 13.
- Stouffer, Samuel A. (1940). "Intervening Opportunities: A Theory Relating Mobility and Distance," American Sociological Review, 5/6: 845-857.
- Tarver, James D. (1961). "Predicting Migration," Social Forces, 39: 207-213.

Ter Heide, H. (1963). "Migration Models and Their Significance for Population Forecasts," Milbank Memorial Fund Quarterly, 41: 56-76.

Thomas, Robert N. (1968). Internal Migration to Guatemala City, C.A., a Ph.D. dissertation, Department of Geography, Pennsylvania State University.

Times of the Americas (1973). "Mexico Considers Limits on Foreign Residents," Times of the Americas (Washington, D.C.) October 17, p. 12.

TROA (1975). The Retired Officers Association. "Some Facts on Veterans' Numbers," The Retired Officer, 31/12: 41.

____ (1977). The Retired Officers Association. "Military Retirees: Who and Where," The Retired Officer, 33/3: 11.

Turner, Kernan (1973). "Costa Rica Promoted as Retiree Home," Inquirer and News (Battle Creek, Michigan) February 18.

Ullman, E.L. (1954). "Amenities as a Factor in Regional Growth," Geographical Review, 44: 119-132.

USBC (1970). United States Bureau of the Census. Census of Population (Washington, D.C.: Government Printing Office).

USDA (1972). United States Department of the Army. Area Handbook for Panama (Washington, D.C.: Government Printing Office).

____ (1975). United States Department of the Army. Handbook on Retirement Services (Washington, D.C.: Government Printing Office).

USAID (1976). United States Agency for International Development. "The Relief Effort: A Matter of Loving," War on Hunger, 10/4: 10.

USDS United States Department of State. Background Notes, Fact sheets on foreign nations (Washington, D.C.: Government Printing Office).

Wagley, Charles (1973). "An Introduction to Latin American Culture," Handbook of Required Readings - International Relations and Government Department (Fort Benjamin Harrison, Indiana: Defense Information School), pp. 73-89.

- Ware, George W. (1968). The New Guide to Happy Retirement (New York: Crown Publishers).
- West, Robert C. and John P. Augelli (1966). Middle America: Its Lands and Peoples (Englewood Cliffs, N.J.: Prentice-Hall).
- Wolpert, Julian (1965). "Behavioral Aspects of the Decision to Migrate," Papers and Proceedings of the Regional Science Association, 15: 159-169.
- (1966). "Migration as an Adjustment of Environmental Areas," Journal of Social Issues, 22: 92-102.
- Zipf, G.K. (1946). "Some Determinants of the Circulation of Information," American Journal of Psychology, 59: 401-421.

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