

## DOCUMENT RESUME

ED 105 019

UD 015 009

AUTHOR Morrison, Peter A.  
TITLE Urban Growth and Decline in the United States: A Study of Migration's Effects in Two Cities. Paper Series No. 5234.  
INSTITUTION Rand Corp., Santa Monica, Calif.  
REPORT NO P-5234  
PUB DATE May 74  
NOTE 40p.

EDRS PRICE MF-\$0.76 HC-\$1.95 PLUS POSTAGE  
DESCRIPTORS \*Case Studies; \*City Demography; \*Demography; Inner City; Metropolitan Areas; \*Migration; Migration Patterns; Population Distribution; Population Growth; \*Population Trends; Social Change; Urbanization; Urban Population  
IDENTIFIERS California; Missouri; Saint Louis; San Jose

## ABSTRACT

The United States is a highly urbanized nation with space in abundance, yet large portions of its national territory are emptying out. The counterpart of this pervasive population decline is a highly selective pattern of growth, conferred by a national system of migration flows that has increasingly favored a certain few metropolitan areas. This duality of growth and decline, and its dependence on an intricate system of migration flows, are central features of U.S. urbanization. Migration is a key observable phenomenon, expressing the urbanization process and hence promising insight into its workings. This paper examines U.S. migration first from a broad analytical viewpoint and then through the experience of two specific cities. Section Two considers the functions and dynamics of the migration process: what causes migration to occur, what its effects are on migrants, and how it affects the places they leave and the places to which they go. Sections Three and Four present two specific metropolitan area case studies within which general urbanization phenomena are examined: San Jose, California, a case study of rapid population growth; and the city of Saint Louis which exemplifies central-city population decline. (Author/JM)

ED105019

URBAN GROWTH AND DECLINE IN THE UNITED STATES: A STUDY  
OF MIGRATION'S EFFECTS IN TWO CITIES

Peter A. Morrison

May 1974

U.S. DEPARTMENT OF HEALTH  
EDUCATION & WELFARE  
NATIONAL INSTITUTE OF  
EDUCATION

THIS DOCUMENT HAS BEEN REPRO-  
DUCED EXACTLY AS RECEIVED FROM  
THE PERSON OR ORGANIZATION ORIGIN-  
ATING IT. POINTS OF VIEW OR OPINIONS  
STATED DO NOT NECESSARILY REPRESENT  
THE NATIONAL INSTITUTE OF  
EDUCATION POSITION OR POLICY.

P-5234

UD 015009

### The Rand Paper Series

Papers are issued by The Rand Corporation as a service to its professional staff. Their purpose is to facilitate the exchange of ideas among those who share the author's research interests; Papers are not reports prepared in fulfillment of Rand's contracts or grants. Views expressed in a Paper are the author's own, and are not necessarily shared by Rand or its research sponsors.

The Rand Corporation  
Santa Monica, California 90406

## ABSTRACT

The United States is a highly urbanized nation with space in abundance, yet large portions of its national territory are emptying out. The counterpart of this pervasive population decline is a highly selective pattern of growth, conferred by a national system of migration flows that has increasingly favored a certain few metropolitan areas. This duality of growth and decline, and its dependence on an intricate system of migration flows, are central features of U.S. urbanization. Migration is a key observable phenomenon, expressing the urbanization process and hence promising insight into its workings.

This paper examines U.S. migration, first from a broad analytical viewpoint and then through the experience of two specific cities. Section II considers the functions and dynamics of the migration process: what causes migration to occur, what its effects are on migrants, and how it affects the places they leave and the places to which they go. Sections III and IV present two specific metropolitan area case studies within which general urbanization phenomena are examined: San Jose, California, a case study of rapid population growth; and the City of St. Louis, which exemplifies central-city population decline. Viewed as opposite extremes of a growth-decline continuum, San Jose and St. Louis illuminate the common demographic processes operating in these two highly contrasting settings.

URBAN GROWTH AND DECLINE IN THE UNITED STATES: A STUDY  
OF MIGRATION'S EFFECTS IN TWO CITIES

Peter A. Morrison\*

The Rand Corporation, Santa Monica, California

1. INTRODUCTION

The United States is a highly urbanized nation with space in abundance, yet large portions of its national territory are emptying out. In two out of every three counties during the 1960s, more persons moved out than in, and in one out of two an absolute decline in residents was recorded. Increasingly, the population has concentrated in metropolitan centers or within commuting distance of them. In 1970, 69 percent of the population was classified as metropolitan (the figure had already reached 67 percent in 1960); over 95 percent of the population resided within the daily commuting field of a city.

Most Americans now live in metropolitan areas but shun their central cities. During the 1960s, the central cities' share of the metropolitan population fell from 50 to 46 percent. Rising incomes and extensive highway building within and to metropolitan areas have permitted more and more people to rove out to the suburbs and indulge their taste for detached single-family homes with yards; the exodus of whites has been hastened in certain instances by the rising percentage of nonwhites in central cities.

Presented at the Conference on Contemporary Migration, Urbanization, and Socio-Economic Development, cosponsored by the Committee on Comparative Urban Economics and the Polish Economic Association, June 27-July 3, 1974, in Warsaw, Poland

This paper is drawn from two Rand Reports written by the author: *San Francisco's Decline: A Study of the Effects of Migration on Populations*, R-1513-NSF, 1973, prepared under Rand's Urban Policy Analysis Program with support from the National Science Foundation; and *Migrants from Distressed Areas: The Role of Government Policy*, R-1105 ED/H/NH, 1973, supported by the Economic Development Administration, The Ford Foundation and the National Institutes of Health. I thank Professor William Alonso of the University of California, Berkeley, and Professor Sidney Goldstein, Director of the Population Studies and Training Center, Brown University, for their helpful critiques of earlier drafts on which this paper is based.

Changing technology and transportation costs have fostered industrial decentralization as well. The trends set in motion by these market forces have been inadvertently accelerated by federal policies. National mortgage insurance programs and tax laws encouraged widespread home ownership following World War II, and highway construction programs increased homeowners' access to the suburbs.

As a result, an unprecedented number of the nation's central cities not only ceased to grow but lost population during the 1960s. Of the 292 municipalities designated as central cities of Standard Metropolitan Statistical Areas (SMSAs), 130 contained fewer inhabitants in 1970 than in 1960. The losers include 15 of the 21 central cities whose 1960 populations exceeded 500,000: Chicago, Philadelphia, Detroit, Baltimore, Cleveland, Washington, D.C., St. Louis, Milwaukee, San Francisco, Boston, New Orleans, Pittsburgh, Seattle, Buffalo, and Cincinnati. Of these, St. Louis suffered the sharpest drop.

The counterpart of pervasive population decline is a highly selective pattern of growth, conferred by a national system of migration flows that has increasingly favored a certain few metropolitan areas. Between 1960 and 1970, 23 metropolitan areas grew by 20 percent or more because of net in-migration. As of 1965, those areas held only a tenth of the entire metropolitan population, yet they drew seven-tenths of the cumulative net migration that fed metropolitan growth during the decade.

For any country, a study of urbanization might be organized around a variety of perspectives, and whichever one is chosen imposes a selective focus. The duality of growth and decline and its dependence on an intricate system of migration flows are central features of the U.S. experience, and provide the perspective adopted in this study. Migration is taken as a key observable phenomenon, expressing the urbanization process and hence promising insight into its workings. This paper therefore examines U.S. migration, first from a broad analytical viewpoint and then through the experience of two specific cities.

Section II considers the functions and dynamics of the migration process: What causes migration to occur, what its effects are on migrants, and how it affects the places they leave and the places to which they go.

Because national urbanization trends are more immediately palpable at the local than at the national scale, it is useful to examine them in concrete settings. Accordingly, Sections III and IV present two specific metropolitan area case studies within which general urbanization phenomena are examined. San Jose, California, was chosen as a case study of rapid population growth in the low-density mode typical of the 1950s and 1960s. The City of St. Louis exemplifies central-city population decline within the core jurisdiction of metropolitan St. Louis. Clearly, no single pair of urban centers can represent the diversity of experiences and variations of common themes that are represented in the several hundred centers, each with its own engaging history, of which the national urban fabric is composed. But despite the historically unique processes that have shaped each city, San Jose and St. Louis can be viewed as opposite extremes of a growth-decline continuum, thereby illuminating the common demographic processes at work in these two highly contrasting settings and strengthening generalizations about these processes in other urban settings.

## II. THE FUNCTIONS AND DYNAMICS OF THE MIGRATION PROCESS

### INTRODUCTION

Urban populations form and redistribute themselves primarily through migration, but until relatively recently little was known in detail about why migration itself occurs. Prior to about 1960, studies of migration did little more than describe net migration patterns. While net figures offered some indication of a community's or a region's comparative "attractiveness," they were, for analytical purposes, statistical fictions. There are no "net migrants"; there are, rather, people who are arriving at places or leaving them. Why they are doing so is central to understanding the dynamics of urban growth and decline.

Since 1960, the scope and analytical precision of migration research have increased immensely. Information developed in surveys and residence histories has given us insight into the social and economic determinants of the *intent* to move and enabled us to identify factors that prompt or impede a subsequent *decision* to move. Residence histories have also illuminated the *sequences* of moves more directly than before so that we can examine single moves within the context of a series of related acts. New sources of historical data, as well, have supplied important insights into the remarkable fluidity of nineteenth century urban populations.\*

The studies based on these superior data sources have enlarged understanding of what causes migration to occur, what its effects are on migrants, and how it affects the places they leave and the places to which they go: Now, as in the past, the primary motives for, and the effects of, migration are connected with the workings of the national economy and social system. Economic expansion -- or contraction -- generates geographic shifts in opportunities, which, in turn, induce internal migration. In modern economies with extensive technological activities,

---

\* Stephan Thernstrom, *The Underclass: Poverty and Progress in the American Metropolis, 1880 - 1970*, Harvard University Press, Cambridge, Mass., 1975.

such shifts may be frequent or radical, requiring the abandonment of old enterprises along with the development of new ones.\* One important function of migration, then, is to support the prompt exploitation of new resources and cushion the impact of economic decline. Without a continuous movement of people from areas where jobs are dwindling to places where workers are needed, economic growth would be sluggish and imbalanced.

Migration has also served, and appears to continue to serve, as an important vehicle of social mobility in a society that is stratified predominantly along lines of achievement rather than ascription. Immigrants and, more recently, migrants from rural areas have congregated in cities where access to the training needed for high-wage jobs in commerce and industry afforded them opportunities to improve their material well-being. In this way, social status came to rest more on personal achievement and less on a legacy of disadvantage imposed by racial or cultural prejudice. Today's intermetropolitan migrants also appear to benefit from the option to migrate, whether to increase their income or gain access to avenues of opportunity not available in their former location.

But, while migration clearly provides a means of correcting economic imbalance and social disadvantage, it also is the source of selective and uneven urban growth.

#### DETERMINANTS OF MIGRATION

The dominant migratory pattern of the past -- away from rural areas to urban centers -- occurred for many reasons which, taken together, reflect long-run demographic and economic adjustments. On the demographic

---

\* Everett S. Lee, "Psychological and Social Effects of Population Growth," in International Union of Biological Sciences, *Proceedings of the Scientific Program, VII, 1969-1971*, National Academy of Sciences, Washington, D.C., 1971, p. 20.

side, rural population always grew more rapidly than urban population.<sup>A</sup> While urban families produced slightly more offspring than were needed for generational replacement, rural families produced substantially more. On the economic side, the mechanization of agriculture reduced absolutely the demand for labor in rural areas, especially in those farm occupations that were likely to be filled by blacks.

The combination of high fertility and shrinking labor demand in rural areas produced increasing unemployment and underemployment. Faced with this prospect, many people were drawn to urban centers, attracted by both jobs and the amenities of urban life heard about through relatives, friends and, increasingly, the mass media.

Now, however, country-to-city movement is largely over. The newcomers to a metropolitan area are likely to have moved there from other metropolitan areas, often over long distances. Viewed in the aggregate, their moves amount to a system for exchanging manpower among different metropolitan labor markets. How this system functions has been elaborated through a number of recent studies.

#### Economic "Pull" Without "Push"

Migrants possess a seemingly one-sided economic wisdom. Research findings on intermetropolitan migration, although not fully in agreement, indicate that migrants find their way to areas where labor is in demand, but they may not always leave places where labor is in over-supply.

Economic "pull" is clearly evident in migration studies. The demand for labor, gauged by relative wage rates and the availability of jobs, attracts immigrants from economically healthy localities as well as from ailing labor-market areas. Outmigration from a metropolitan area, however, appears to be spontaneous and, over the long term, insensitive to local labor-market conditions.

-----  
 In 1969, for example, the cumulative fertility of women nearing the end of the childbearing period (35-44 years old) was 12 percent higher for nonmetropolitan women (and 28 percent higher for farm women) than for metropolitan women. Source: U.S. Bureau of the Census, *Current Population Reports*, Series P-20, No. 203, July 6, 1970, Table 5.

The first indication of outmigration's economic insensitivity was given in Lowry's often-cited study of intermetropolitan migration,<sup>\*</sup> which was later supported by numerous other studies.<sup>\*\*</sup> Further support at the micro level came in a unique survey that illuminated behavioral aspects of this push/pull asymmetry for actual and would-be migrants.<sup>\*\*\*</sup> The investigators probed individuals' perceptions of local economic conditions and their motives for staying or leaving. The data obtained indicated that there was no obvious "push" for outmigration among residents of depressed areas, compared to residents of economically healthy areas.

Other investigators, however, report finding a relationship between outmigration and economic conditions at origin. According to Miller's research, the expected correlation between outmigration rates and income levels appears when state of birth is controlled.<sup>\*\*\*\*</sup> Others assert that origin "push" surely is operative, but it is masked by improper specification of the unemployment variable: Average or end-period unemployment rates have already been modified by the most recent corrective effects of outmigration. To avoid this problem, they developed such synthetic measures as "prospective" or "potential" unemployment, which were intended to indicate the actual economic pressure for outflow and its effect on outmigration.<sup>\*\*\*\*\*</sup>

Ironically, the evidence on both sides rests partly or wholly on five-year migration data from the 1960 Census which show that outmigration

---

<sup>\*</sup> Ira S. Lowry, *Migration and Metropolitan Growth: Two Analytical Models*, Chandler, San Francisco, 1966.

<sup>\*\*</sup> Discussed in William Alonso, "The System of Intermetropolitan Population Flows," Working Paper No. 155, Center for Planning and Development Research, University of California, Berkeley, 1971.

<sup>\*\*\*</sup> John B. Lansing and Iva Mueller, *The Geographic Mobility of Labor*, Survey Research Center, Institute for Social Research, Ann Arbor, Mich., 1967.

<sup>\*\*\*\*</sup> Edward Miller, "Is Out-Migration Affected by Economic Conditions?" *Southwest Economic Journal*, Vol. 39, No. 3, January 1973, pp. 396-405.

<sup>\*\*\*\*\*</sup> Cicely Bianco, "Prospective Unemployment and Interstate Population Movements," *Journal of Economic and Statistics*, 46, 1964, pp. 221-222; Warren F. Mazek, "The Efficacy of Labor Migration with Special Emphasis on Depressed Areas," mimeographed, 1966; Lee Dome Olvey, "Regional Growth and Interregional Migration -- Their Pattern of Interaction," Ph.D. dissertation, Department of Economics, Harvard University, 1970.

rates, viewed in cross-section, are at least as high in prosperous metropolitan areas as in depressed ones. The trouble is that in these data, long-term structural changes are amalgamated with short-term adaptive changes. It may be that the high outflows from fast-growing urban centers like San Jose, California, reflect a hypermobile population base built up by wave after wave of immigrants.\* And, conversely, low outflow rates from ailing urban centers like St. Louis, Missouri may reflect the fact that such areas have already lost many of their mobile residents.

If "push" does operate in the short term, then, any trace of its effect may be obscured by the opposing structural effect of hypermobility. A recent study that examined this hypothesis using annual migration-flow data supports this interpretation. It concluded that metropolitan out-migration does respond to short-run changes in local employment growth, but, over the long term, it is economically insensitive (cf. Lowry).\*\*

### Beaten Paths

People move, or fail to move, for multiple and complex reasons. A national survey of migrants\*\*\* disclosed that:

- o Two-thirds of all migrants consider no other destination than the place to which they actually move.
- o Six out of ten migrants rely on only one source of information to explore job opportunities in a new place.
- o Information about jobs is obtained most frequently from friends and relatives (49 percent) or through special trips to look the situation over (33 percent).

Because they rely so heavily on family and friends in deciding where to go, migrants often limit their destination choices to places where

---

\* Peter A. Morrison, "Chronic Movers and the Future Redistribution of Population," *Demography*, 8, 1971, pp. 171-184.

\*\* Vernon Renshaw, "The Role of Migration in Labor Market Adjustment," Ph.D. dissertation, Massachusetts Institute of Technology, 1970; "Using Gross Migration Data Compiled from the Social Security Sample File," *Demography*, Vol. 11, No. 1, February 1974, pp. 143-148.

\*\*\* Lansing and Mueller, *op. cit.*

friends and relatives have already settled. This "beaten path" effect gives rise to a second important feature of metropolitan migration: a steady flow of migrants into a locality becomes, to a degree, self-perpetuating. Like a siphon, it draws ever more migrants to the same locale through ties with people left behind.

Economic "pull" without long-term "push," reinforced by this "beaten path" effect, is a powerful force for selective and uneven urban growth. First, the metropolitan center that can remain an economically "live" magnet draws on a virtually unlimited supply of "urbanization on the move" -- the pool of migrants from both prosperous and depressed areas. Second, its access to this pool broadens as early-arriving migrants broadcast information to other would-be migrants.

#### INDIVIDUAL OUTCOMES OF MIGRATION

How migration affects people's material well-being and personal satisfaction is somewhat ambiguous.\* For one thing, migration is not equally advantageous for all types of people. The skilled or educated worker is better equipped to compete in new labor markets and stands to gain more from moving than do his less skilled or educated counterparts.

Moreover, whether the migration experience is "favorable" or not may depend on the norm of comparison selected. One possibility is to compare migrants and nonmigrants from the same place of origin. If the migrants are more successful, we may infer that their migration experience has been favorable. Recent studies, for example, report that rural-urban migrants enjoy greater economic success relative to their counterparts who stay behind.\*\* In making this comparison, however, we cannot rule

---

\* This discussion is drawn in part from Otis Dudley Duncan, et al., *Socioeconomic Background and Achievement*, Seminar Press, New York, 1972, pp. 224-225.

\*\* Recent findings about rural-urban migration are reviewed in Patricia Koshel, *Migration and the Poor*, Working Paper No. 7, Office of Planning, Research, and Evaluation, U.S. Office of Economic Opportunity, Washington, D.C., July 1972; Daniel O. Price, *Rural-Urban Migration and Poverty: A Synthesis of Research Findings with a Look at the Literature*, U.S. Office of Economic Opportunity, Washington, D.C., July 1971; Gladys K. Bowles, "A Profile of the Incidence of Poverty Among Rural-Urban Migrants and Comparative Populations," paper presented at the annual meeting of the Rural Sociological Society, Washington, D. C., 1970; Frederick C. Collignon, *The Causes of Rural-Urban Migration Among the Poor*, Institute of Urban and Regional Development, University of California, Berkeley, 1973; and Peter A. Morrison, *The Impact and Significance of Rural-Urban Migration in the United States*, The Rand Corporation, P-1752, March 1972.

out the possibility that the migrant's advantage arises primarily from his access to a broader set of opportunities. One way of separating these interpretations is to compare migrants with nonmigrants in the communities of destination, where opportunities are presumably the same for immigrants and natives alike.

Whichever comparison is made, there is always a further and more serious source of ambiguity: whether migration in some sense "causes" observed improvements, or whether migration is merely selective of certain persons who would have improved their status irrespective of the decision to migrate. The personal initiative required for a decision to migrate tends to be more characteristic of people who have had superior advantages in education and work experience -- factors that make for improved outcomes. So, to an unknown extent, migration may simply move people likely to succeed anywhere to places where the opportunities for success are more readily available for everyone.\*

In the studies reviewed here, the effects of migration have been gauged in three different ways: (1) by asking migrants for their own evaluation, (2) by comparing migrants with their counterparts who have not migrated, and (3) by estimating migration's "dividends" as an investment in human capital.

Regarding the first approach, it can be tricky to assess outcomes on the basis of how the individual migrant *perceives* the consequences of his action. Actual monetary improvements are meaningful only if they are perceived as gains; on the other hand, the individual's judgment may overstate his true gain if he fails to account for loss of purchasing power.

Migration's perceived effect on earnings is shown in Table 1.\*\* These data refer to heads of families in the labor force who, after migrating, were asked about their prior and subsequent earnings. Referring to their last move, 65 percent reported higher earnings after moving; 24 percent said they earned less. Of the 11 percent earning the same, some probably had made defensive moves to avoid circumstances in which earnings would otherwise have declined. The right-hand column shows

---

\* Peter M. Blau and Otis Dudley Duncan, *The American Occupational Structure*, John Wiley and Sons, New York, 1967, p. 273.

\*\* Lansing and Mueller, *op. cit.*

Table 1  
 REPORTED EARNINGS AFTER MIGRATION FOR HEADS OF  
 FAMILIES IN THE LABOR FORCE

Head's Earnings After Move	% of Moves in Last Five Years	
	All Moves	Moves to Get a Better Job
Higher	65	73
Same	11	10
Lower	24	17
Total	100	100
Number of moves	401	139

SOURCE: John B. Lansing and Eva Mueller, *The Geographic Mobility of Labor*, Survey Research Center, Institute for Social Research, Ann Arbor, Michigan, 1967, p. 247.

NOTE: Migration is defined here as moving across the boundaries of labor market areas.

that for persons who moved with the intention of obtaining a better job, earnings were even more likely to have increased. According to people's own reports, then, migration tends to be accompanied by higher earnings, although it must be noted that many moves are made by young adults, who typically enjoy a rising income anyway.

People's overall evaluations, all things considered, are shown in Table 2. They, too, are highly favorable, although possibly influenced by *ex post facto* rationalization. The vast majority of moves (89 percent) are judged as a "good idea" or "very good idea," without qualification by people's own criteria.

Comparing migrants with nonmigrants affords a second perspective on individual outcomes. Specifically, we can ask whether people who have moved enjoy higher incomes than those who have not moved, other things being equal. Lansing and Mueller's survey does not show migration to have any consistently favorable effect on subsequent income. To be sure, mean income for migrants is substantially higher than for nonmigrants, but the differential is attributable to occupational, educational, and racial differences between the two groups.\*

\* Lansing and Mueller, p. 85.

Table 2  
OVERALL EVALUATION OF MOVES

Evaluation of the Move	% of Moves in Last Five Years
Very good idea	11
Good idea	75
Good in some ways not others	5
Poor idea	4
Very poor idea	2
Total	100
Number of moves	690

Source: John B. Lansing and Eva Mueller, *The Geographic Mobility of Labor*, Survey Research Center, Institute for Social Research, Ann Arbor, Michigan, 1967, p. 250.

These cross-sectional data, however, afford only crude comparisons and have intrinsic limitations. For example, they do not compare the rural-urban migrant's earnings with those of his counterpart who remained behind, or with earnings of urban nonmovers at the destination. On these points, the evidence shows that migrants from rural to urban areas subsequently better their economic positions and attain parity with the urbanites they join:

- o Relative to earnings at origin: "People who have left rural areas for urban areas now earn more on the average than those who remained in rural areas, and people who have left the Deep South now earn more on the average than those who remained there."<sup>\*</sup>
- o Relative to earnings at destination: "Five years after moving, the migrants have earnings equal to those of...urban nonmovers of the same education, age, race, and sex."<sup>\*\*</sup>

<sup>\*</sup> John B. Lansing and James N. Morgan, "The Effect of Geographical Mobility on Income," *Journal of Human Resources*, Vol. 2, Fall 1967, p. 460.

<sup>\*\*</sup> Richard F. Wertheimer II, *The Monetary Rewards of Migration Within the U.S.*, The Urban Institute, Washington, D.C., 1970.

Thus, people do not consistently better their earnings when they migrate, given their initial personal attributes. However, our distinguishing among functionally different types of migration forces qualifications. Certain kinds of migration are associated -- and strongly so -- with improved incomes and better employment prospects. Migrants from rural to urban areas and migration by disadvantaged blacks are the clearest cases in point.\*

Finally, migration can be viewed as an investment in human capital that incurs costs and yields returns. It is an investment with direct costs, opportunity costs, information costs, and psychological costs, and also losses in the value of capital that is costly to transfer to a new location. Among the returns are changes in earnings and non-pecuniary benefits over subsequent years (e.g., the individual's full lifetime or his remaining years in the labor force). Since it is embodied in the individual himself, migration is an investment in *human* capital.

Migration may change the value of a person's existing stock of human capital by affording him the opportunity to work in another labor market where his stock of human capital is more highly valued. Migration also may enable him to add to his human capital stock -- by obtaining on-the-job training at the destination, for example.\*\*

The human capital approach is represented in a study of migration out of the South, which reports that "the present value of the expected income gains from moving out of the South is positively related to the probability of moving,"\*\*\* i.e., people who stand to gain the most from moving are the ones most apt to do so. It also notes that the effect of

---

\* See Morrison, *The Impact and Significance of Rural-Urban Migration in the United States*, op. cit.

\*\* This description of the human capital approach is drawn from, and developed more fully in, Julie DeVanzo, *An Analytical Framework for Studying the Potential Effects of an Income Maintenance Program on U.S. Interregional Migration*, The Rand Corporation, R-1081-EDA, December 1972.

\*\*\* Samuel Bowles, *Migration as Investment: Empirical Tests of the Human Investment Approach to Geographical Mobility*, Discussion Paper No. 51, Harvard Program on Regional and Urban Economics, Harvard University, July 1969, pp. 1-2.

income gain on the probability of moving appears to be increased by the level of schooling, but reduced by the individual's age.\*

#### EFFECTS OF MIGRATION ON PLACES

In facilitating national economic growth and personal well-being, migration also affects the basic anatomy of local growth and decline. Additions of population through migration may stimulate further growth; subtractions may attenuate it.

Two explanations of how immigration and employment growth reinforce one another have been offered. One is that employment growth acts as a magnet to attract available migrants (jobs draw migrants). Alternatively, differential employment growth itself may result from differential immigration and its invigoration of local demand for goods and services (additions of migrants stimulate new jobs).\*\*

However useful this distinction may be in theory, it is difficult to make empirically. The weight of evidence points to the interpretation that migration and employment growth perpetuate one another.\*\*\* That is, an influx of migrants tends to stimulate employment growth by increasing the demand for local goods and services, thereby drawing more migrants to fill new jobs. Three possible effects can be distinguished here: (1) the tendency for service jobs to increase in response to the demands of a population growing larger and more diverse, (2) the pull exerted by growing economies, which begin to evidence agglomeration opportunities, and (3) the tendency for migration to add more ambitious and enterprising

---

\* Although theoretically sound, this analysis suffers from several empirical faults. One is its focus on net rather than gross migration flows, which complicates interpretations of actual behavior. More important, though, the data supporting the analysis are contaminated by the influence of military-related migration, which accounts for a substantial share of long-distance moves by men. Other kinds of migration (e.g., return migration) that are responsive to different factors also are lumped together in the study. See William C. Apgar, Jr., *Migration as Investment: Some Further Considerations*, Discussion Paper No. 64, Harvard Program on Regional and Urban Economics, Harvard University, May 1970.

\*\* Richard F. Muth, "Migration: Chicken or Egg?" *Southern Economic Journal*, Vol. 37, January 1971, pp. 295-306.

\*\*\* See Muth, *op. cit.*; Olvey, *op. cit.*; and Michael J. Greenwood, "A Simultaneous Equations Model of Urban Growth and Migration," n.d. (mimeograph); "Urban Economic Growth and Migration: Their Interaction," *Environment and Planning*, Vol. 5, No. 1, January-February 1973, pp. 91-112.

workers whose qualifications attract additional entrepreneurs. Because of their interaction, exogenous increases in either migration or employment lead to multiple increases in both.<sup>\*</sup>

The self-perpetuating characteristic in a growing locality has its counterpart in a declining area. Part of the reason why outmigration and economic stagnation reinforce each other is that migration is adversely selective. Outmigration acts as an economic adjustment mechanism by reducing local labor surpluses and lessening competition for scarce employment. But what begins as an equilibrating force may lead to disequilibrium, as rich areas become richer and poor areas become poorer. At some point, outmigration accelerates local economic distress by reducing the productivity of the area's labor force and, hence, its attractiveness to new industry.

Since outmigration usually draws away the more highly qualified members of the labor force -- the young, the educated, and the skilled -- the labor force left behind tends to be overaged, undereducated, and underskilled. This effect often is further accentuated by immigration of persons similar to those who have remained behind.<sup>\*\*</sup> As a labor force declines in quality, distressed areas become less attractive to new industries that require a supply of skilled workers. Only marginal firms paying low wages want an undereducated, underskilled, and overaged labor force. Where down-side rigidity has kept wages high relative to productivity, an area fails to attract new employers and hence continues to lose labor, though perhaps too slowly.<sup>\*\*\*</sup>

Furthermore, since the people who stay are generally the less migration-prone, the remaining population shows a gradually reduced potential for mobility. This means that stronger and stronger economic incentives would be necessary to induce additional people to move away in order to maintain any balance between population size and shrinking employment opportunities.

Prolonged and heavy outmigration, then, leaves behind those persons who are least able to cope with the unfavorable conditions that led others

<sup>\*</sup>Muth, *op. cit.*

<sup>\*\*</sup>Lansing and Mueller, *op. cit.*, pp. 318-319.

<sup>\*\*\*</sup>Olvey, *op. cit.*, pp. 127-129.

to depart in the first place. The remaining residents tend to lack the attributes and skills that would attract new employers who could offer them jobs or that would predispose them to move away as others before them did.

#### SUMMARY

Migration promotes economic efficiency by rearranging workers so as to increase national output. In economically expanding localities, migration responds vigorously to the demand for labor and has a multiplicative effect on this growth. In declining localities, it reduces imbalance between labor supply and demand in the near term, although its effectiveness diminishes with prolonged heavy outflow.

On the individual level, migration tends to be both economically rewarding and personally satisfying. Judged by objective measures, migrants often improve their earnings and occupational status, particularly where the move is rural-to-urban. And their own self-evaluations of moving suggest that migrants believe they are better off for having moved. Disadvantaged persons -- blacks especially -- benefit remarkably when they migrate, inviting the conclusion that moving offers people a major escape route from disadvantaged circumstances.

There is, however, in the combination of economic "push" without "pull" which is reinforced by the "beaten path" effect, a powerful force for selective urban growth. Together, these factors have strengthened the reciprocal relationship between employment growth and migration.

### III. GROWTH IN SAN JOSE

For the better half of this century, population in urban centers grew mainly through rural-to-urban and international migration. These large migrations from outside the metropolitan system, along with the substantial cushion of natural increase, afforded all urban centers some measure of growth. In recent years, however, the intensification or reversal of some longstanding trends has altered the growth and re-distribution of the U.S. population.

For one thing, net growth from international migration has diminished both absolutely and as a percentage of the U.S. population. During the era of major immigration -- 1908 to 1915 -- the population increased 0.6 percent annually through net international migration; more recently, this increase has been only about 0.2 percent.

The rate of rural-urban migration has also diminished. The rural population has declined over recent decades, leaving a limited reservoir of potential migrants in the countryside. Equally significant, rural areas now retain a much higher proportion of their population growth than formerly.

Finally, the national fertility rate has declined. The "average" woman in 1960 would eventually bear 3.7 children over a lifetime; in 1973, her completed fertility would be only 2.0 children.

As these traditional growth forces weakened, migration flows *among* metropolitan areas emerged as the principal determinants of urban growth. But intermetropolitan migration favors a certain few metropolitan centers with the bulk of available migratory growth.\*

No metropolis demonstrates this effect more clearly than San Jose, whose rapidly expanding aerospace and service industries have attracted an extraordinary influx of new residents over the last two decades. During the 1960s, metropolitan San Jose's population increased 66 percent, a rate surpassed by only four other standard metropolitan statistical

---

\* William Alonso and Elliott Medrich, "Spontaneous Growth Centers in Twentieth-Century American Urbanization," in Niles Hansen, ed., *Growth Centers in Regional Economic Development* (New York: Free Press, 1972), pp. 229-265.

areas (SMSAs) in the United States. One-third of this growth was due to natural increase, two-thirds to net immigration. In 1965, fewer than 7 of every thousand metropolitan Americans were residents of San Jose, but San Jose received 55 of every thousand net migrants arriving in metropolitan areas between 1960 and 1970.

Having more than tripled in population between 1950 and 1970, San Jose today bears the cumulative hallmarks of selective immigration: its population is young and highly migratory, and its age distribution, enriched through additions of young adults of childbearing age, gives rise to many more births than deaths.

But this remarkable growth cannot be comprehended strictly in local terms. San Jose's experience is part of the expansion of California's entire metropolitan structure through migration to and within it.\*

#### MIGRATION FLOWS AFFECTING SAN JOSE

California draws migrants from great distances. The vast majority of them enter the state through Los Angeles, San Francisco, or San Diego. Table 3 shows that these centers act as national magnets, drawing migrants mostly from out of state. (Los Angeles and San Francisco also draw significant numbers of foreign immigrants.) The 10 other California metropolises in Table 3 draw migrants primarily from within the state. (All 16 of California's standard metropolitan statistical areas are shown in Fig. 1.)

But large numbers of people use these cities only as gateways. Consider the flows in and out of San Francisco. Between 1965 and 1970, San Francisco received 269,000 out-of-state migrants and sent only 204,000 migrants to other states -- a net population gain of 65,000 for San Francisco (and California). But San Francisco kept little of this gain: 249,000 of its residents moved to other places in California, but only 191,000 Californians moved to San Francisco; so the city lost 58,000

---

\* D. L. Foley, et al., *Characteristics of Metropolitan Growth in California*, Vol. 1, Report, Center for Planning and Development Research, Institute for Urban and Regional Development, Berkeley, California, 1965.

Table 3

DOMESTIC MIGRATION STREAMS INTO AND OUT OF CALIFORNIA'S METROPOLITAN AREAS, 1965-1970<sup>a</sup>

Metropolitan Area <sup>b</sup>	Migrants to Metropolitan Area from		Migrants from Metropolitan Area to		Net Migration to Metropolitan Area	
	California	Out of State	California	Out of State	California	Out of State
San Francisco	190,931	268,824	249,495	204,149	-58,564	+64,675
Los Angeles	265,500	649,166	414,096	516,019	-148,596	+133,147
San Diego	124,578	223,001	88,544	139,130	+36,034	+83,871
San Jose	132,223	102,416	92,875	67,043	+39,348	+35,373
Sacramento	67,055	52,245	77,359	50,631	-10,304	+1,614
Stockton	29,601	13,808	29,658	11,609	-57	+2,199
Fresno	39,296	15,731	47,972	18,704	-8,676	-2,973
San Bernardino- Riverside	150,470	112,553	107,600	91,728	+42,870	+20,825
Bakersfield	35,097	23,451	42,314	24,328	-7,217	-877
Santa Barbara	41,296	31,879	32,576	29,529	+8,720	+2,350
Santa Rosa	51,516	15,201	29,834	14,178	+21,682	+1,023
Modesto	35,493	21,793	31,797	20,801	+3,696	+992
Oxnard-Ventura	68,157	37,366	39,973	29,183	+28,184	+8,183

SOURCE: U.S. Bureau of the Census, *Census of Population, 1970: Subject Reports, Final Report PC(2)-2E, Migration Between State Economic Areas*, Government Printing Office, Washington, D.C., 1972.

<sup>a</sup>Excludes foreign migration. The Salinas-Monterey and Vallejo-Napa SMSAs are not shown, since they cannot be approximated with the State Economic Area data used here.

<sup>b</sup>These are Standard Metropolitan Statistical Areas, with the following exceptions: San Francisco here includes Solano County, Los Angeles combines the Los Angeles SMSA and the Anaheim-Santa Ana-Garden Grove SMSA, Sacramento excludes Placer and Yolo Counties, Santa Rosa includes Napa County, and Modesto includes Merced County.

Table 4

DOMESTIC MIGRATION STREAMS INTO AND OUT OF THE SAN JOSE SMSA, 1965-1970<sup>a</sup>

Metropolitan Area <sup>b</sup>	Migrants from Metropolitan Area to San Jose	Migrants to Metropolitan Area from San Jose	Net Migration to San Jose
San Francisco	55,674	32,241	+23,433
Los Angeles	23,741	15,363	+8,378
San Diego	5,553	4,008	+1,545
Sacramento	6,646	2,443	+4,203
Stockton	2,160	1,616	+544
Fresno	3,954	1,897	+2,057
San Bernardino- Riverside	3,219	2,504	+715
Bakersfield	1,970	968	+1,002
Santa Barbara	2,881	2,169	+712
Santa Rosa	2,340	2,875	-535
Modesto	2,788	2,428	+360
Oxnard-Ventura	1,265	1,452	-187
Rest of Calif.	20,032	22,911	-2,879
Rest of U.S.	102,416	67,043	+35,373

SOURCE: U.S. Bureau of the Census. (See Table 3)

<sup>a</sup>See footnote (a), Table 3.

<sup>b</sup>See footnote (b), Table 3.



Fig. 1 -- Standard Metropolitan Statistical Areas, State of California, 1971

migrants to the rest of the state, of whom 23,000 ended up in San Jose. In fact, San Jose lures nearly as many migrants away from San Francisco and Los Angeles combined as it does from the remainder of the entire nation (Table 4). This abundant supply of new growth funneled into California through San Francisco and Los Angeles has undoubtedly been an important factor in San Jose's 44-percent increase through migration during the 1960s.

#### REPERCUSSIONS OF RAPID MIGRATORY GROWTH

Rapid growth causes a number of repercussions, one of which is the youth-weighted age distribution that heavy immigration typically confers. (Nationally, nearly a third of all migrants are in their twenties -- the peak childbearing age -- and 16 percent more are children one through six years old.) We can see the difference between a place that grows through migration and one that declines by comparing the San Jose SMSA with the City of St. Louis. While San Jose's population more than tripled between 1950 and 1970, mostly because of migration, St. Louis's declined 27 percent as heavy outmigration more than cancelled out its natural increase. Thus, compared with that of St. Louis, San Jose's age distribution shows a comparative surplus in the under-44 age brackets and a comparative deficit in the over-45 range (Fig. 2). With relatively more potential parents, San Jose's population grew faster than St. Louis's. San Jose's 1960-1970 rate of natural increase was 21.6 per hundred residents in 1960; St. Louis's was only 7.3.

San Jose's rapid migratory growth also makes its population hyper-mobile. Since people who migrate tend to do so repeatedly, a population built up by waves of past immigration is heavily weighted with chronically mobile people and therefore is subject to high rates of subsequent out-migration.\* Consequently, there is a continual flow of migrants *through* San Jose. Annual net migration into metropolitan San Jose averaged nearly 4 percent during the 1960s. This net flow was composed of about 21 arrivals and 17 departures each year per hundred residents (or nearly

---

\* Evidence on this point is given in Morrison, "Chronic Movers and the Future Redistribution of Population," *op. cit.*

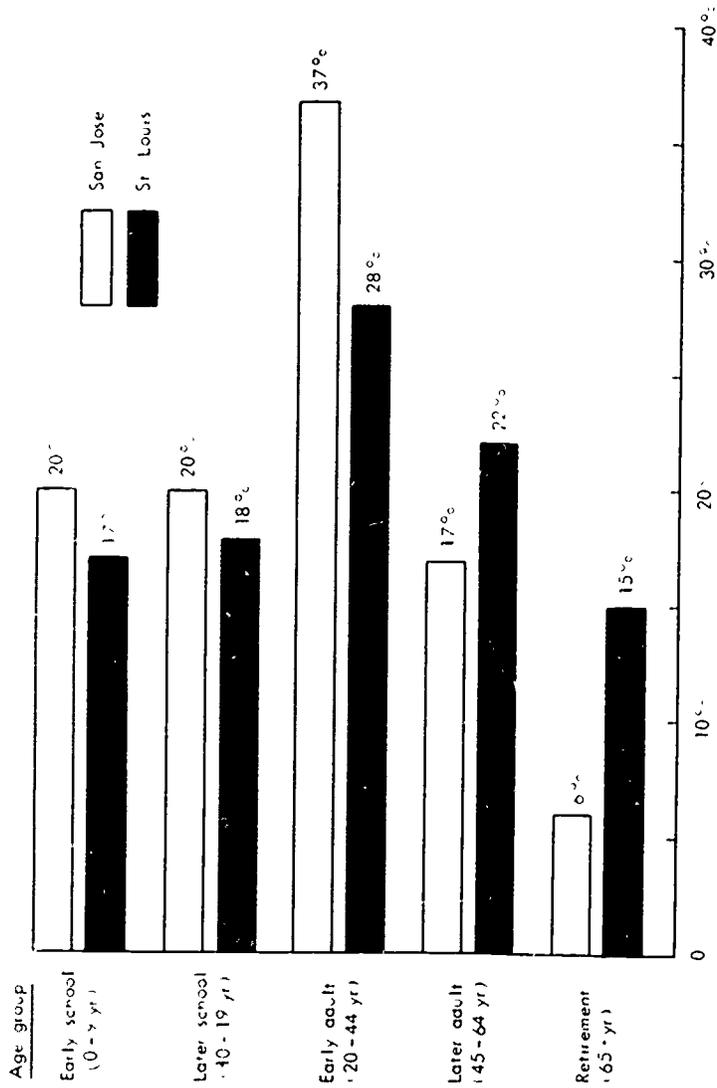


Fig. 2 -- Contrasting age distributions: San Jose SMSA and the City of St. Louis, 1970.

10 actual moves for each "net migrant" added).<sup>\*</sup> About 7 of these 17 outmigrants, though, had moved into San Jose only the year before. Indeed, fully one-third of the migrants attracted to San Jose had moved away a year later.

Thus, San Jose's rapid population growth rests on a rather precarious arithmetic balance between immigration and outmigration. Although many of its immigrants subsequently leave, San Jose manages to grow by attracting more than enough new arrivals each year to offset this considerable loss. Any moderate decline in the rate of gross immigration could easily bring net migration down to a small fraction of its present level. For example, if San Jose attracted only 16 (instead of 21) immigrants per hundred residents, its net migratory gain would stand at less than 1 percent (instead of 4 percent) annually.<sup>\*\*</sup>

On the other hand, because it is highly mobile, San Jose's population can probably accommodate change quite quickly. Adjustment to changes in the overall demand for labor, or to shifts in the mix of required skills, can occur promptly because of the brisk inflow and outflow of workers. For this reason, San Jose's labor market is likely to show an uncommon resiliency to change.

---

<sup>\*</sup> Based on data from the Social Security Continuous Work History Sample, which covers approximately 9 in 10 wage and salary workers nationally. These data are not directly comparable to the Census figures analyzed above. The Social Security data shown here refer only to employed civilians in Social-Security-covered jobs -- a subset of the entire population 5 years and older to which the Census data refer. Thus, the Continuous Work History Sample excludes completely self-employed and unemployed workers, persons not in the labor force, and certain classes of workers (principally Federal civilian employees, some State and local government employees, and railroad workers). We have also excluded migrants entering or leaving military service.

<sup>\*\*</sup> This estimate is a rough approximation only. It assumes that the lower rate of immigration would, by reducing the stock of chronic movers, lower the rate of subsequent outmigration from 17 to 15 per hundred. All estimates here refer to the period to which these Continuous Work History Sample data apply (1957 through 1966) and to San Jose residents working in Social-Security-covered jobs.

#### IV. DECLINE IN THE CITY OF ST. LOUIS

The St. Louis SMSA, shown in Fig. 3, encompasses the City of St. Louis and six counties lying on both sides of the Mississippi River: St. Louis, St. Charles, Franklin, and Jefferson Counties in Missouri, and St. Clair and Madison Counties in Illinois. The City of St. Louis is entirely separate in area and jurisdiction from the County of St. Louis. (Hereafter "St. Louis" will refer to the city, while St. Louis County will be so designated.) The closest metropolitan area of comparable size is the Kansas City SMSA, about 275 miles to the west.

In 1970, the population of metropolitan St. Louis stood at about two and a half million. It had increased by 12 percent since 1960, a rate lower than the average national metropolitan increase of 17 percent. After 1970, population in metropolitan St. Louis, like that in 21 other formerly growing SMSAs, began to decline.

#### COMPARATIVE TRENDS IN ST. LOUIS AND ITS METROPOLITAN RING

St. Louis attained a peak population of 880,000 in the early 1950s. But by 1972, it had dwindled to a city of less than 590,000 in a metropolitan area of about 2.4 million. During the 1960s, St. Louis's population declined 17 percent while its metropolitan ring population increased 29 percent. The central-city decline was acute, compared with that of most cities. Examination of the demographic change components reveals why (see Table 5).

The white population declined mostly because of massive outward migration, chiefly to the suburbs. Between 1960 and 1970, a net 34 percent of the white city-dwellers moved away. But whites also declined because their death rate steadily approached their birth rate, and since 1965 has exceeded it. Those who remained in the city added only 2 percent to their numbers (nationally, the decade increase in the white metropolitan population was 11 percent).

It was a different picture for blacks. There was no gain or loss through net migration during the 1960s, but the black population rose

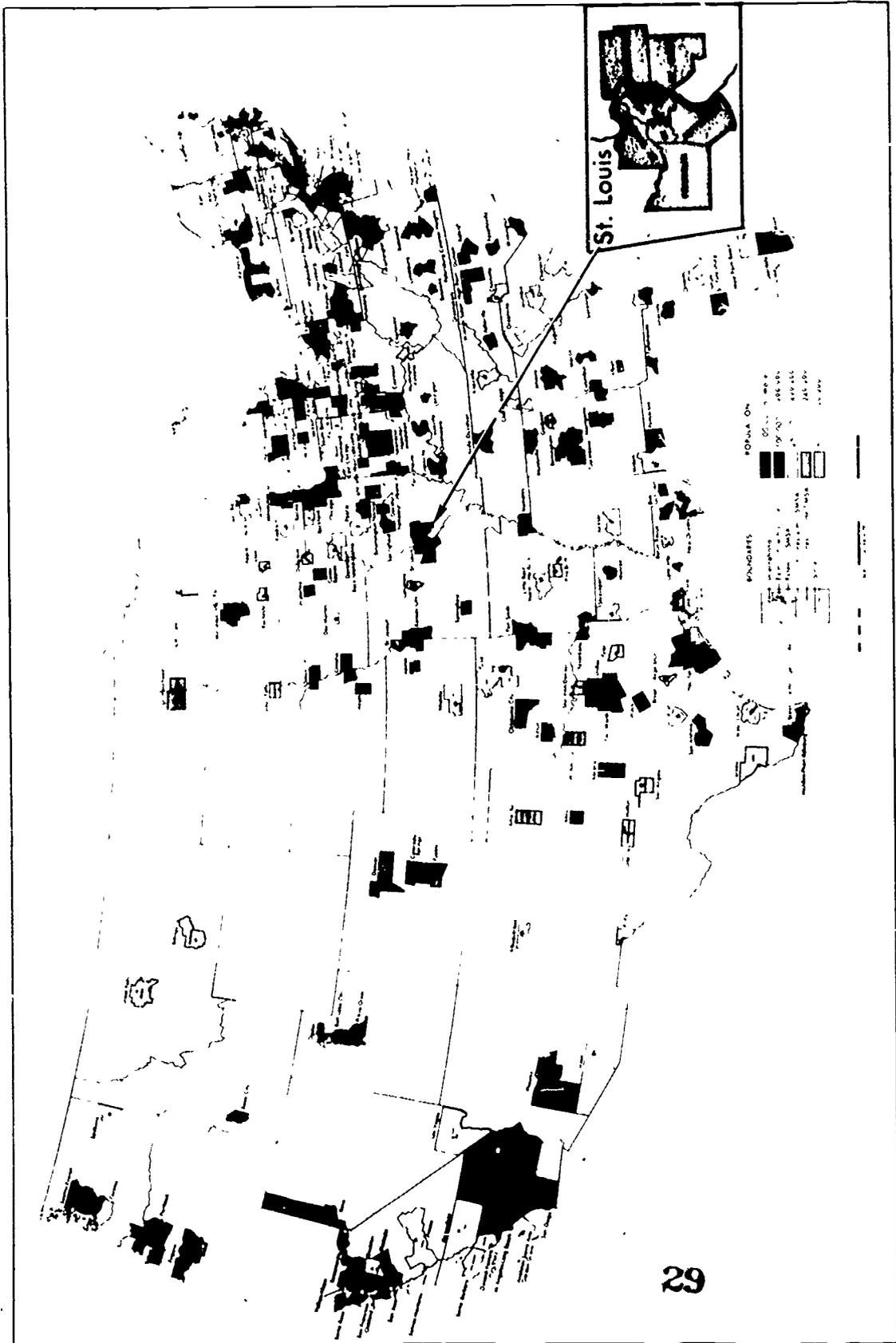


Fig. 5 -- U.S. Standard Metropolitan Statistical Areas, 1970

Table 5

COMPONENTS OF POPULATION CHANGE IN ST. LOUIS,  
1960-1970

(Rates per hundred 1960 residents)

Area	Total Change	Natural Increase <sup>a</sup>	Net Migration
<b>Both Races</b>			
St. Louis SMSA	12.3	11.5	0.8
St. Louis City	-17.0	7.3	-24.4
Remainder of SMSA (metropolitan ring)	28.5	13.8	14.7
<b>Whites</b>			
St. Louis SMSA	9.4	10.1	-0.7
St. Louis City	-31.6	2.4	-34.0
Remainder of SMSA (metropolitan ring)	26.6	13.3	13.3
<b>Nonwhites<sup>b</sup></b>			
St. Louis SMSA	28.2	20.2	9.7
St. Louis City	18.6	19.5	-0.4
Remainder of SMSA (metropolitan ring)	53.8	22.0	37.2

SOURCE: U.S. Bureau of the Census, *Census of Population and Housing: 1970; General Demographic Trends for Metropolitan Areas, 1960 to 1970*, Final Report PHC(2)-1, Tables 10-12; PHC(2)-27, Table 3; PHC(2)-15, Table 3.

<sup>a</sup>Rate of increase attributed to excess of births over deaths.

<sup>b</sup>In this section of the table, "Total Change" applies only to the black population. "Natural Increase" and "Net Migration" apply to the nonwhite population as a whole, but virtually all nonwhites in the St. Louis SMSA are blacks, as noted above.

19.5 percent through natural increase, very close to its national rate of 21.6 percent. Annual population estimates, however, show St. Louis's nonwhite population to have peaked in 1968 at around 269,000.<sup>A</sup> By 1972, it is estimated to have dropped below 250,000. In view of the black population's positive natural increase, the only explanation is that blacks have been migrating out of the city since at least 1968 (and almost certainly before).

The number and composition of households in the city also changed during the decade. The number of households declined somewhat slower than the population (13 versus 17 percent), and the average size of a household went down slightly. Households with only one person increased from 21 percent in 1960 to 28 percent in 1970, a reflection primarily of the growing frequency of widowed elderly persons.

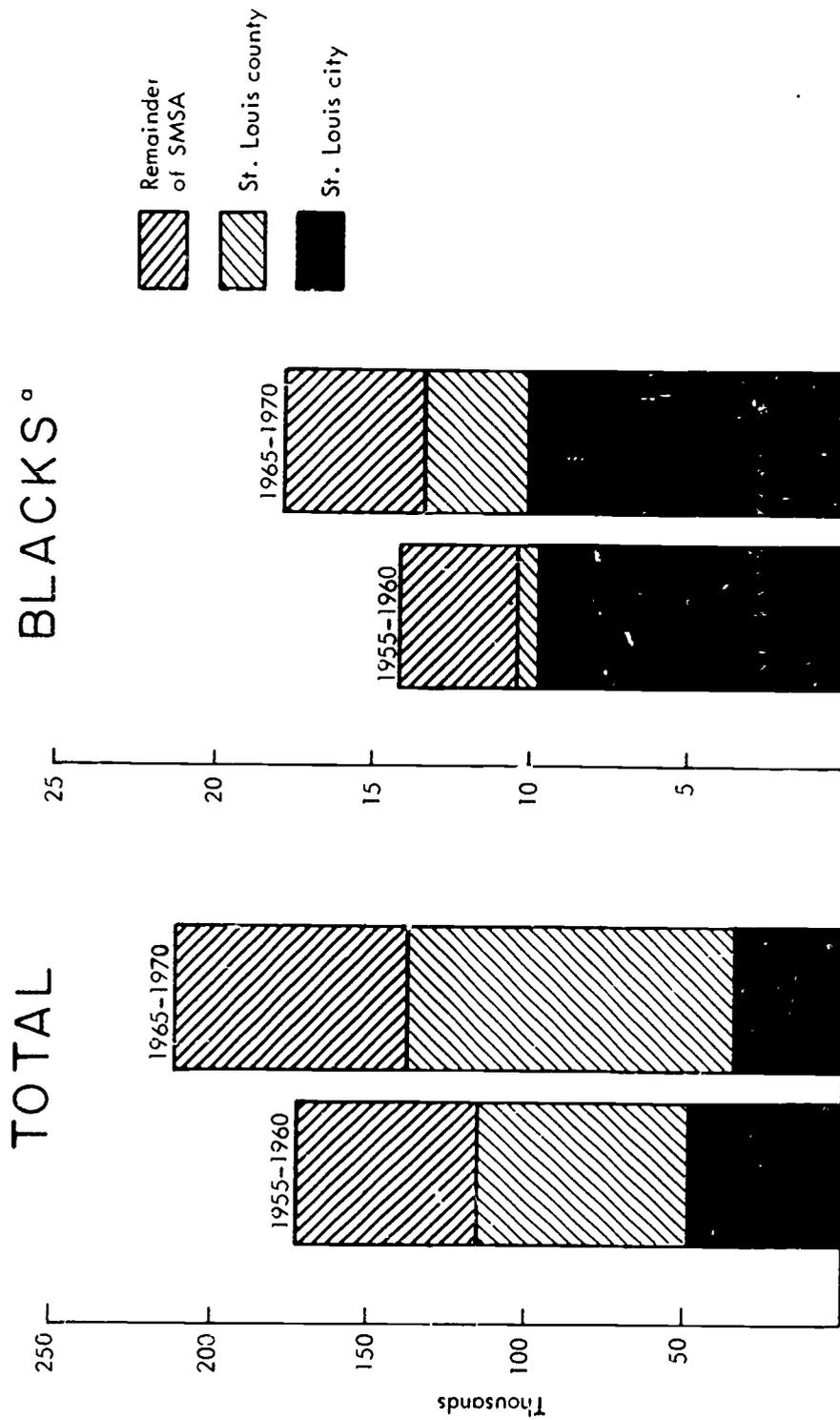
Demographic trends were somewhat more uniform outside the city (Table 5). Natural increase and net migration contributed equally to the white population's 26.6 percent increase during the 1960s. The black population's 53.8 percent suburban growth was attributable more to net migration than to natural increase.<sup>\*\*</sup> St. Louis's suburbs attracted migrants largely from the city but also from outside the metropolitan area. Increasingly, migrants of both races entering the St. Louis SMSA bypassed the city and settled in the suburbs (mainly in St. Louis County). It can be seen in Fig. 4 that the total stream of new arrivals to St. Louis City between 1965 and 1970 was smaller (both absolutely and relatively) than it had been a decade earlier. For blacks, the inbound stream was numerically about the same; but in relative terms, newly arriving blacks increasingly favored the suburbs.

#### CONSEQUENCES OF DEMOGRAPHIC CHANGE

Persistent and severe migration away from St. Louis has altered the structure of its population. These changes bear heavily on the city's capacity to meet the needs of the increasingly disadvantaged population that remains and on this population's very capacity to regenerate itself.

<sup>\*</sup>In St. Louis, blacks make up 99 percent of the nonwhite population. Hence the terms "nonwhite" and "black" are used synonymously in the following discussion.

<sup>\*\*</sup>Suburban blacks registered a high overall rate of growth between 1960 and 1970 because their 1960 base was miniscule.



<sup>a</sup> Data shown for 1955-1960 refer to nonwhites.

Fig. 4 — Destinations of migrants entering the St. Louis SMSA, 1955-1960 and 1965-1970 (persons 5 years old and over, residing outside SMSA or at least five years previously)

### Diminished Replacement Capacity

The white population's capacity to replace itself diminished during the 1960s. Heavy and prolonged outmigration among whites drew away potential parents and left behind an elderly population that no longer replaces itself.

We can gauge the severity of outmigration by young white adults by following individual age cohorts from 1960 to 1970 (Fig. 5). For example, in the absence of migratory change, people 5 to 14 years old in 1960 would reappear as the same number of people 15 to 24 years old in 1970, less a small allowance for mortality. Since this allowance is negligible below age 45 (at most 5 percent), any sizable discrepancy between 1960 and 1970 indicates the extent of migration that has taken place in that cohort. Figure 5 gives stark evidence of extensive outmigration from St. Louis in the early adult years. For example, in 1960 there were 37,900 white females 15 to 24, but by 1970 only 17,900 aged 25 to 34 remained -- a 53 percent reduction. There were 31,100 white males 25 to 34 in 1960, but only 15,900 aged 35 to 44 in 1970 -- a 49 percent reduction. Overall, 46 percent of whites 15 to 34 in 1960 were gone by 1970, leaving St. Louis with a sharply diminished pool of prospective parents.

The resultant modifications in replacement capacity are illustrated more directly in Table 6, from which we can see that:

- o Women in the middle and later childbearing years had grown more scarce. In 1960, white women aged 25 to 44 made up 22.1 percent of all white women in the city; by 1970 the figure had dropped to 17.6 percent. (Part of this drop stemmed from the changing national age distribution; for white women nationally, this age group declined from 26.4 to 23.5 percent of the total population between 1960 and 1970.)
- o The proportion of elderly whites had risen. Whites 65 and over made up 14.5 percent of the population in 1960, but 19.2 percent in 1970. (The corresponding figure nationally was 10 percent in both years.)

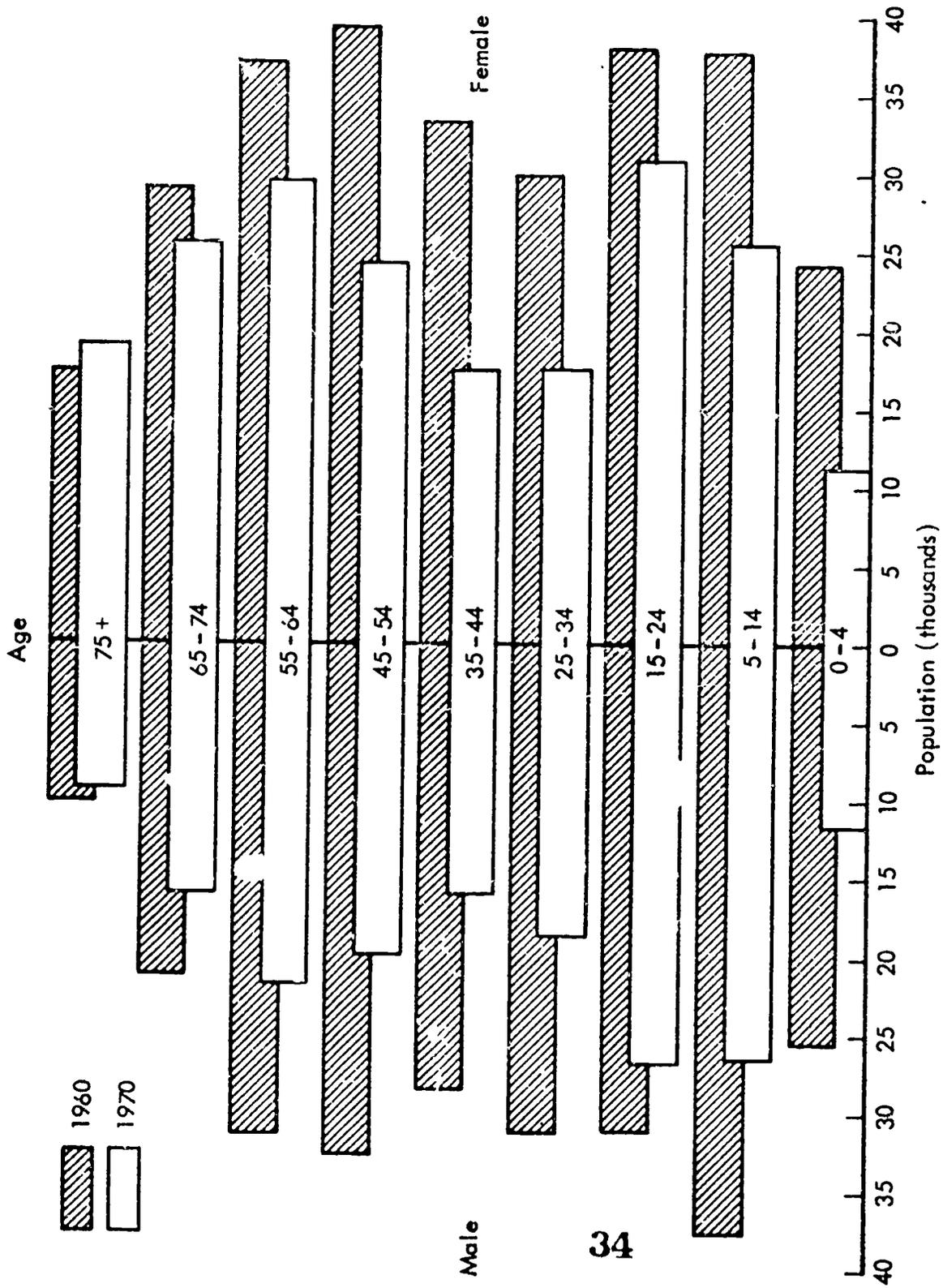


Fig. 5 — Age distribution of white population, St. Louis City, 1960 and 1970

Table 6

INDICES OF CHANGE IN REPLACEMENT CAPACITY FOR ST. LOUIS'S  
BLACK AND WHITE POPULATION, 1960-1972

Indicator	1960	1970	1972
Percentage of women in later child-bearing years (age 25-44)			
White	22.1%	17.6%	N.A. <sup>a</sup>
Black	27.1%	22.7%	N.A.
Percentage of population age 65+			
White	14.5%	19.2%	N.A.
Black	6.8%	8.3%	N.A.
Crude birth rate per thousand			
White	22.1	14.5	12.0
Black	34.4	25.1	24.9
Crude death rate per thousand			
White	14.8	17.7	18.0
Black	11.4	11.3	11.2

<sup>a</sup>N.A. = not available.

- o Partially as a result of these changes in age structure, the crude birth rate per thousand whites declined from 22.1 in 1960 to 12.0 in 1972; and the crude death rate per thousand whites rose from 14.8 to 18.0. (Part of the decline in the birth rate, of course, was a consequence of the national trend in the birth rate, which dropped nearly 25 percent during the 1960s.)

Since 1965, the white population has ceased to replace itself, its death rate having exceeded its birth rate. By 1972, the services of the undertaker exceeded those of the obstetrician by a margin of 3 to 2. Since it is now undergoing natural decrease, St. Louis's white population will continue to shrink whether or not net outmigration continues. Only a dramatic rise in fertility or a massive influx of childbearing families can alter this situation.\*

The city's black population has not undergone severe migratory change and retains its strong replacement capacity: in 1972 its crude birth rate was 24.9 per thousand, but its crude death rate was only 11.2. In 1969, however, the black population began to decline, indicating a net migratory loss severe enough to offset its natural increase. This recent shift could signify an increase in departing migrants, a reduction in entering migrants, or a combination of both. Indications favor the first of these explanations.\*\*

#### Accumulation of Disadvantaged Citizens

As migration has changed the metropolitan-wide distribution of population, St. Louis has come to be composed disproportionately of those citizens who are disadvantaged or have special needs, as the following comparisons show:

---

\* Because changes in fertility are difficult to forecast, a dramatic rise cannot be entirely ruled out, although it seems highly unlikely at this time. Foreseeable changes in mortality have no appreciable bearing on the population's replacement capacity.

\*\* Data in Fig. 4 indicate that the gross number of black migrants entering St. Louis between 1965 and 1970 was about the same as between 1955 and 1960 -- around 10,000. Thus only an increase in gross out-migration could account for the change in net migration.

- o Between 1960 and 1970, the black percentage of the city's population rose from 29 percent to 41; it increased only from 6 percent to 7 in the rest of the metropolitan area.
- o The city's residents aged 65 years and older increased from 12 percent to constitute 15 percent of the population; they stayed at 8 percent in the rest of the metropolitan area.
- o For families and unrelated individuals, median income in the city was 79 percent of that for the St. Louis SMSA in 1959; by 1969 city income was only 68 percent of the SMSA income.
- o The proportion of relatively high-income families declined sharply. In 1959, 11 percent of families in the city had incomes at least double the city's median family income; ten years later, only 4 percent had incomes double the 1969 median.
- o The proportion of relatively low-income families rose slightly. In 1959, 16 percent of families in the city had incomes less than half the city's median family income; ten years later, 21 percent had incomes less than half the 1969 median.

Through selective outmigration, then, problems of dependency and poverty -- not exclusively problems of St. Louis -- have come increasingly to be located in St. Louis.

#### THE DILEMMA OF POLICY: COPING WITH DECLINE

The degree of population decline in St. Louis may be exceptional, but St. Louis is no exception to the rule. The phenomenon of local population decline is widespread now -- a characteristic of entire metropolitan areas, not just their central cities. The policy dilemma in coping with decline and its local consequences is likely to intensify during the 1970s.

The dilemma is this. The local official responsible for what happens in a place like St. Louis is understandably alarmed by severe population loss and the bleak future in store for the city if it continues. The city's boundaries, which have not changed since 1876, separate the problems within St. Louis from resources in its suburbs. But from the standpoint of individual welfare, it can be argued that the people who left

St. Louis now enjoy living conditions they prefer, and those who remain have benefited from a thinning-out of people from formerly overcrowded areas.\* Even the widespread abandoned housing in St. Louis can be viewed as a positive sign that many people have upgraded their living conditions, leaving behind a residue of housing no longer competitive within the market. Both views have validity, the choice depending on whether one's perspective is that of a local policymaker or of a freely mobile citizen.

But that line of argument may amount to no more than a confusing piece of sophistry for the policymaker, or even the objective student of urban affairs, who looks at careful statistics from respectable sources telling him unequivocally that St. Louis is much worse off than it used to be. Part of the confusion is due to the paradox that statistics can be deceptive even when they are accurate. They can mislead us here, for example, if they beguile us into confining our attention to the plight of *places* whereas our central concern is with the well-being of *people*. It is hard to escape that situation, however. A major difficulty in our way is that standard social and economic statistics are compiled and organized mostly by areas rather than by groups of people. Consequently, we can observe the experience of places, but not of people. These experiences can differ sharply. For instance, black immigrants from impoverished rural areas in states like Mississippi may be less affluent or employable, on the average, than the mostly white population they join in St. Louis. If this is true in St. Louis as it is in other cities,\*\* then area indicators (e.g., unemployment or poverty now, compared with what it was before they came to St. Louis) may show marked improvement. In short, the place we call St. Louis may be worse off because of immigration while the immigrant people are better off than they were.

---

\*Taking persons per room as the conventional index of overcrowding, census data show that only 12.7 percent of all occupied housing units in St. Louis contained more than one person per room in 1970, compared with 16.4 percent in 1960.

\*\*

Evidence on this point is reviewed in studies listed on p. 9, second footnote.

## V. SUMMARY AND CONCLUSIONS

The population changes in San Jose and St. Louis between 1960 and 1970 exemplify the two broad trends -- urban formation followed by metropolitan dispersal -- that have shaped twentieth-century urbanization in this country. The fact that these developmental trends were expressed through demographic processes found to be common to both cities, despite their contrasting recent experiences, suggests that generalizations can be made about the complex forces underlying urbanization.

The formation of metropolitan San Jose's population parallels the traditional process whereby a region's growth comes to be focused, through migration, on a few urban centers. The modern variant is not characterized by a rural-to-urban shift, however, but by migration flows among urban areas, and particularly to a few most-favored areas, such as San Jose.

Migratory growth has left a powerful demographic legacy in San Jose. This legacy is also instructive for studying the migratory formation of any new city's population. Its demographic character determines its demographic destiny, whose likely variations we can now perceive with some clarity. San Jose's population is both youthful and chronically migratory. The presence of many prospective parents and relative few elderly persons lays a broad foundation for the population's continued growth through natural increase, despite the national downturn in fertility.\* Even without further net immigration the population of new cities like San Jose would continue to grow at an above-average rate.

The hypermobility of San Jose's population (i.e., its propensity for further migration) also has an important bearing on the future. With about 21 migrants entering and 17 departing each year per hundred residents, San Jose's rapid migratory growth rests (as it would in other new cities) on a precarious arithmetic balance. A significant dip in local employment growth could easily reduce net migration to a small fraction of its present high level. Even a slight decline would result in the inflow's no longer

---

\*The exact rate of San Jose's natural increase, although dependent on the future course of U.S. fertility, will remain above the national metropolitan average.

exceeding the high volume of outflow. Demographic analysis alone cannot foresee such an employment downturn, but if it happened, the migratory downturn probably would be swift. Hypermobility also works the other way; and given San Jose's focal position in California's expanding metropolitan structure (with its virtually endless supply of migratory growth), net migration could resume with equal swiftness.

The outward dispersal of population from central cities that has occurred in St. Louis has been accelerating in other cities as well, and will remain a prominent feature of U.S. urban growth. It may seem paradoxical that in a period noted for something called "urban growth" there are so many declining central cities, but that is merely one indication that the "central city" no longer is the *real* city, except in name. Real city or not, the central city can expect to come into political conflict with other jurisdictions created in the process of dispersion. In cities like St. Louis, where population is dispersing but old political boundaries are fixed, the problems of the central city are separated from the resources in the suburbs. Transitional problems associated with persistent and severe outmigration also arise: accumulation of disadvantaged citizens, declining demand for city housing, and a diminished replacement capacity in the population.

Carried far enough, the last of these results in natural decrease, and thereafter the population's decline acquires its own dynamic. As noted earlier, the white population in St. Louis has reached this point: the number of persons dying now exceeds the number being born. For two reasons, this natural decrease can do little other than intensify. First, a substantial proportion of whites are either entering or already within the high-mortality age brackets. The white population's crude death rate therefore will continue to rise. Second, prospective parents are becoming scarce among St. Louis's whites, and the national evidence that parents in general will choose to have smaller families continues to mount. The white population's crude birth rate is therefore likely to fall, barring a dramatic increase in fertility or a strong and sustained inflow of child-bearing families. Nor is St. Louis's black population likely to grow substantially. It is expanding steadily through natural increase, but black migration out of the city is more than enough to cancel that increase.