

Changing Intraurban Location of the Elderly and Access to Nutrition Services: A Case Study of Toledo, Ohio¹

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ABSTRACT. Literature focusing on the intraurban location patterns of the elderly, based on 1970 and earlier data, generally suggests that they are concentrated in the inner city and have good access to services. Recent literature and data from the 1980 Census of Population and Housing suggest that the location of the elderly in urban areas is changing. In a case study of Toledo, Ohio, concentrations of elderly increased in the periphery of the city, while the inner city lost elderly between 1970 and 1980. Although Title III-C nutrition services are accessible now to the inner city residents, the periphery of the city is poorly served.

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INTRODUCTION

Various social scientists have focused their research endeavors on the spatial distribution of the elderly population. A common theme in this literature is that the elderly are concentrated in poorer neighborhoods in the nation's central cities as are the various racial minorities. For example, La Gory et al. (1981) in their study of 70 Standard Metropolitan Statistical Areas concluded:

"The elderly are disproportionately found in areas with a high concentration of unattached persons, and older, rental, multiple-unit housing . . . These patterns indicate that older people are concentrated near the city center . . ."

In addition, Massey (1980) found in New Jersey that needy elderly ". . . tended to congregate in older, low-income neighborhoods of high-density, multiple-unit, low-rent housing, often in overcrowded, racially or ethnically mixed areas."

Other analysts have argued that the elderly are a spatially heterogeneous population, and that one cannot simply characterize their spatial distribution as being one of central-city concentration. For example, Pampel and Choldin (1978), in their study of San Diego and Cleveland, stated that: "Although older persons tend to be located near the city centers in multi-unit housing, they are not concentrated on blocks with low value housing, high population potential, and high crowding. In fact, the aged are relatively dispersed throughout the cities."

Recently, some researchers have noted a trend of suburbanization among the elderly. Perhaps the most comprehensive analysis of aged suburbanization was Fitzpatrick and Logan's (1985) study of 810 suburban areas in 54 metropolitan areas throughout the United States. They documented a growth in the numbers of senior citizens in suburban locales between 1960 and 1980 (10.1 million in 1980 vs. 8.1 million in 1960), which resulted in the number of aged in the suburbs exceeding their central city peers by 1980. They also observed a general tendency for the segregation of the aged to diminish over time. This they attributed to aging in place.

In a study of Toledo, Ohio, Hiltner and Smith (1975) found that there was evidence that the elderly

were primarily residents of older neighborhoods, lived in multiple-family dwelling units, and were concentrated in the central city. Furthermore, that location pattern had been consistent over several decades.

However, by 1980 a new distribution pattern for the elderly had emerged. In contrast to earlier years, higher concentrations of elderly were observed in the peripheral sections of Toledo, particularly in the northwestern sector of the city and in south Toledo. Many tracts in the inner city also had lower percentages of elderly in 1980 than they had had in 1970. These were primarily tracts which by 1980 had large Hispanic and black populations. On the other hand, most inner city tracts, which still had high percentages of elderly in 1980, were the sites of nursing homes or apartment complexes for the elderly.

The factors that explain the 1980 distribution of the elderly population in Toledo are most probably "aging in place" and "dying in place." Aging in place is a demographic process which results in high concentrations of elderly in certain neighborhoods. In Toledo, the tracts in the northwestern and southern sectors of the city, which have high percentages of elderly, are neighborhoods in which young families located just prior to or immediately after World War II. For example, in one tract, nearly 40% of the 1980 home owners had lived in their dwelling units longer than 20 years. These families have now aged. These tracts, although they lie within the city boundaries of Toledo, exhibit those characteristics of one type of mature suburb described by Fitzpatrick and Logan (1985), which they characterize as having high elderly proportions, high home values, and high rents.

Dying in place, much less discussed in the literature, is a more important factor in explaining the change in the distribution of elderly in the inner city. Most inner-city tracts which had high elderly percentages in 1970 now have percentages below the city-wide mean. Considerable numbers of elderly either died or migrated from the inner city during the period of 1970 to 1980, with the seven tracts, including the Central Business District and those contiguous to it, experiencing a net elderly loss of nearly 200 individuals during the decade.

An understanding of the elderly's spatial pattern and dynamics has important ramifications for the delivery of services to the elderly. As La Gory et al. (1981) noted, a central city location has an advantage for some aged be-

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cause it "... maximizes their accessibility to urban services, a factor of some importance given their general reliance on public transportation." Chevan (1982) also argued that those senior citizens living in newer apartments in the suburbs and on the edge of the city where services are less available are often more segregated than the central city elderly.

The purpose of this study is to compare the 1980 intraurban distribution pattern of the elderly with the availability of Title III-C (Older Americans Act) nutrition programs for the elderly in Toledo. Specifically, this will permit an assessment of the current proximity of these programs to the elderly as well as program additions or modifications that might have to be made in light of changing elderly location patterns.

METHODS

Title III-C nutrition sites were selected as the focus of the analysis for several reasons. First, good nutrition is a critical element in maintaining the independence and quality of life of some senior citizens. Furthermore, many persons gain access to other services through their participation in nutrition services. Also, the service areas of the Toledo nutrition sites could be demarcated easily, and the necessary data could be acquired (Bowers 1983).

To more precisely gauge the differential accessibility of Toledo's elderly populace to nutrition sites, the weighted mean distance of each site to the census tracts within its service area was computed. The mean distance from the center of each census tract within each site's service area was measured as straight-line distance and weighted by the number of senior citizens residing in each tract of the service area (Table 1). Although the absolute distance values are of little value, their comparative sizes are indicative of the relative accessibility of each nutrition site to its service area. The lowest mean distance was observed in the case of site A, 1.36 km (0.85 mi), which encompasses the Central Business District. In contrast, service areas on the perimeter of the city have high mean dis-

tances, such as 2.35 km (1.46 mi) for site I, 3.11 km (1.93 mi) for site H, and 2.82 km (1.75 mi) for site M. Generally, the mean distances for inner-city sites were lower than for outer-city sites.

RESULTS AND DISCUSSION

The 1986 intraurban distribution of nutrition sites and the service area of each in Toledo are shown on Figure 1. The concentration of nutrition sites within the inner-city neighborhoods of Toledo is most striking. Seven of the 11 sites (64%) are situated within 3.22 km (2.0 mi) of the Central Business District. Furthermore, the only areas not currently served by a nutrition facility are on the western limits of the city.

The location of the facilities within their respective service areas further reflects the inner-city orientation of this service. Many of the facilities are situated on the inner-city side of their service areas, such as sites E, H, and M (Fig. 1). Even more noteworthy is the fact that two sites (B, J) are located outside their service areas toward the inner city. Although the location of nutrition sites is contingent on a number of variables such as facility availability, zoning, public transportation, local traffic patterns, and the like, the inner-city orientation is distinctive. Certainly the needs of the residents of the respective service areas might be better met if each nutrition facility was more centrally located with respect to its service area (e.g., sites G and D) because the distance that clients would have to travel would be reduced. Although senior citizens do not have to patronize any given nutrition site, certainly good planning would suggest a more central site location.

Not only does the distribution of nutrition sites and the location of facilities within their respective service

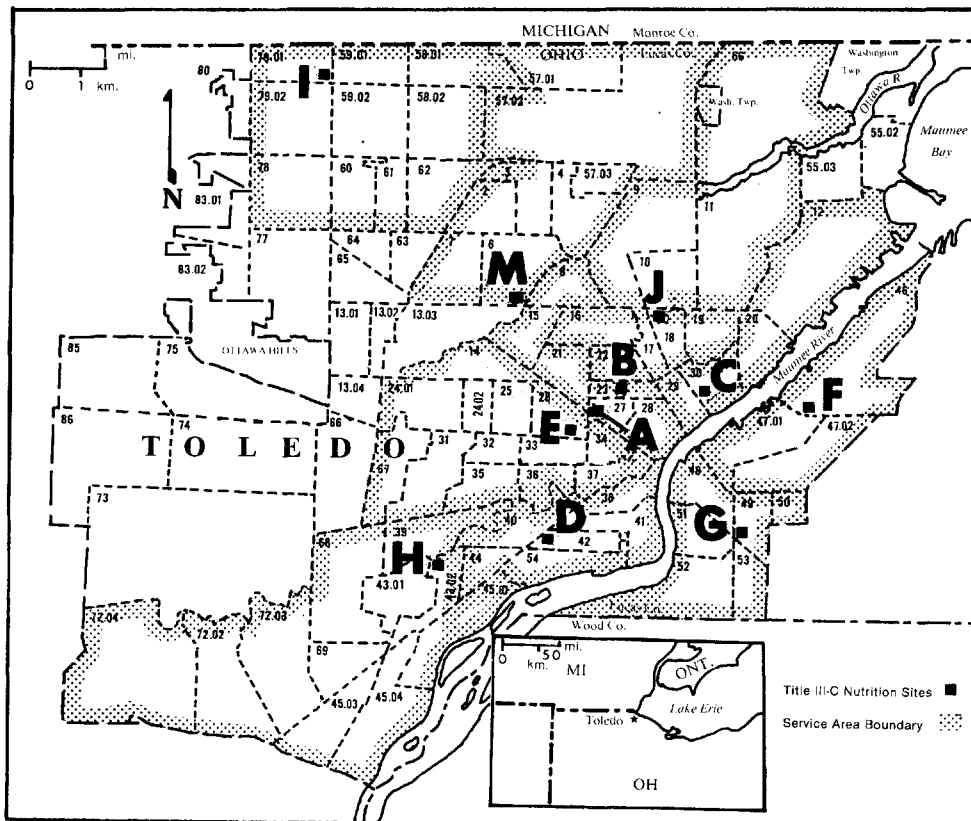


FIGURE 1. Title III-C nutrition sites and service areas.

TABLE 1
Mean distances and population sizes of service areas

Nutrition site	Mean distance		Elderly population		Daily meals
	(km)	(mi)	1970	1980	
A	1.37	0.85	4364	2986	126
B	1.61	1.00	4027	2945	168
C	2.29	1.42	2374	2505	101
D	1.22	0.76	3923	2898	53
E	1.71	1.06	7952	6227	72
F	1.71	1.06	2745	2049	50
G	1.66	1.03	4828	3304	66
H	3.11	1.93	6628	8072	118
I	2.35	1.46	4838	6878	45
J	2.40	1.49	2616	2803	117
M	2.82	1.75	7598	6136	n.a.

areas reflect an inner-city orientation, but also the shape of the service areas is suggestive of that phenomenon (Fig. 1). Most of the service areas are elongated in the direction of the Central Business District, instead of having a more compact shape (e.g., service area of site D). If service areas were shaped more rectangularly, then one or two service areas would encompass the entire inner city. Of course, the service areas have evolved over time, with the earliest sites (sites A-G) opening in the 1970-1973 period and the others initiating operations in the 1980s. Any location pattern which evolves through time may not seem as well designed as one which is systematically planned at one point in time, particularly since specific location qualifications for nutrition sites are minimal and most have been located on a space-available basis.

Although the inner-city sites generally are more accessible to their client populations and serve more meals, the size of their client populations are lower (Table 1). For example, the client populations of sites A and C in 1980 were, respectively, 2,986 and 2,505 persons aged 60 and older. In contrast, the service areas of sites H and I were 8,072 and 6,878, respectively.

The inner-city orientation of nutritional services is more understandable when one considers that the Older Americans Act (1985) mandates that the greatest priority be given to those elderly with the greatest social and economic needs. A comparison of outer- and inner-city tracts demonstrated that the greatest need is in the inner city. For example, 80.5% of the older persons living in service area A had 1979 incomes below the poverty line, as compared to only 6.4% for the tracts in service area I. Also, greater numbers of the "old old" were located in the inner city: 31.5% of the aged in

service area A were 75 years old or older in contrast to 16.6% in service area I. Similarly, the minority elderly population was more concentrated in the inner city. Whereas 25.4% of the elderly populace of service area A was black, service area I contained no census tracts with black populations exceeding 400. These few indicators vividly illustrate the greater need for nutritional services in the inner city.

In general, the inner-city elderly possess superior access to nutritional services as compared to their outer-city peers. Although greater need can be demonstrated in the inner city, the latent demand on the perimeter of the city cannot be overlooked. As aging in place occurs, the need in the outer city will inflate. Service planners and providers in Toledo have been responding to that need by expanding the availability of nutrition sites into the city perimeter during the 1980s. Nonetheless, the accessibility of senior citizens on the edges of the city still lags behind the accessibility of their inner city counterparts. Furthermore, if the decline of the elderly population of the inner city continues, attention will have to be paid to the continued viability of several of the inner-city sites. It might well be that in the 1990s nutrition sites in the inner city will have to be located in elderly apartment complexes, and that those inner-city seniors who still live in their own homes or apartments will have to travel to apartment complexes for services.

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