SOME URBAN POLICY CONSIDERATIONS OF RURAL JOURNEY-TO-WORK COMMUTING

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A primary cause of many of the current inner-city urban problems has been the large number of unskilled and untrained rural-to-urban migrants who moved to the cities because of a lack of job opportunity in their home communities. Many of these migrants were almost completely unprepared for either the social or economic demands of urban life. As a result, a large portion of the group failed to be absorbed into the mainstream of economic activity, thereby leading to increased expenditures of public funds and intensifying urban social problems. Therefore, although this flow of rural-to-urban migrants has moderated in recent years, it still appears that if the cities are to solve many of their present problems, the tide of rural-to-urban migrants must be reduced substantially.

Since migration has been away from areas of high underemployment or unemployment toward areas of actual or supposed economic opportunity, it seems that the most effective means of stemming this rural-to-urban shift is to create more opportunity for rural residents. Development policy attempted to do this by creating jobs in depressed rural areas. It was discovered, however, that this type policy was not effective since the underdeveloped areas generally lack locational advantages, other than a low-cost labor force, and therefore, direct public investment had little economic impact or effect.

Modification of previous policies resulted in the concept of direct investment in regional "growth centers." This policy attempts to invest funds in a growing locality and to affect not only the immediate community but also a surrounding "labor-shed" which is economically depressed. Therefore, for the program to succeed, individuals in outlying depressed areas must have the ability and willingness to commute.

Since the ability and willingness of rural area workers to commute are so critical to the success of the growth center strategy, this paper will examine the experience of several Georgia employers. The firms are two electrical equipment manufacturers in Athens, a designated Economic Development Administration "growth center," Lockheed Georgia Corporation in Marietta, and Warner Robins Air Force Base in Warner Robins.

TABLE I. EMPLOYEES BY COUNTY

County	Reliance Elec. Co.	Percent of Total	Other Elec. Co.	Percent of Total
Clarke	71	47.0	331	37.4
Madison	27	17.9	193	21.8
Jackson	21	13.9	161	18.2
Oconee	14	9.3	82	9.2
Franklin	9	6.0	24	2.7
Oglethorpe	5	3.3	-	-
Barrow	-	-	21	2.4
Other	4	2.6	72	8.1
TOTAL	151	100.0	884	100.0

Source: Personnel Departments of Subject Companies

FIGURE 1
ELECTRICAL COMPANIES LABOR SHED

The two electrical equipment manufacturing firms have very similar labor-sheds. One, Reliance Electric Company, having begun operation only recently, has extended the spatial extent of commuting slightly further than the other firm which was already established. Table I and Table II, indicating the resident counties of employees of both firms and their commuting distances, suggest that these firms draw upon a rural labor force which resides from ten to forty miles away. Figure graphically illustrates both the labor-shed and main commuting routes used in the journey to work.

TABLE II. EMPLOYEES BY DISTANCE TO RESIDENCE

Miles	Reliance Elec. Co.	Percent of Total	Other Elec. Co.	Percent of Total
0-9	69	49.3	424	52.1
10-14	20	14.3	66	8.1
15-19	18	12.8	240	29.6
20-24	18	12.8	58	7.1
25-29	6	4.3	-	-
30+	9	6.5	24	3.0
TOTAL	140	100.0	812	100.0

Source: Personnel Departments of Subject Firms

The Reliance Electric Company, which benefited from an Economic Development Administration grant to the City of Athens, can also be utilized as a measure of the impact of a new firm in a growth center. The data in Table III give an indication of the firm's economic impact on and relative importance to surrounding low income counties. The wages paid by both electrical manufacturing firms accounted for large portions of manufacturing incomes in Madison, Oconee, and Oglethorpe counties, equal to 54.4 percent of manufacturing wages and salaries earned in Madison County to 3.1 percent of manufacturing wages and salaries earned in Oglethorpe County. Reliance, a new firm not yet developed to planned capacity, still accounted for significant portions of the incomes in the three counties, 7.0 percent in Madison County to 3.1 percent in Oglethorpe County.

TABLE III. EARNINGS BY RESIDENTS IN SUBJECT COMPANIES
COMPARED TO MANUFACTURING EARNINGS OF COUNTIES

County	1967 Manufacturing Income (000's)	Reliance Elec. Wages and Salaries	Percent of County Total	Other Firm Wages and Salaries	Percent of County Total
Barrow	12,622	-	-	97,440	.7
Clarke	36,476	329,440	.9	1,535,840	4.2
Franklin	5,723	41,760	.7	111,360	1.9
Jackson	14,444	97,440	.7	747,040	5.2
Madison	1,792	125,280	7.0	849,120	47.4
Oconee	1,868	64,960	3.5	380,480	20.4
Oglethorpe	749	23,230	3.1	-	-
TOTAL	73,674	755,784	1.0	3,721,280	5.1

Source: Estimated from data received from subject companies and Regional Economic Division, Office of Business Economics

Lockheed-Georgia Company, a large aircraft manufacturer, employed 22,597 Georgia residents in 1968. The indication of the data in Table IV is that workers will commute quite long distances to relatively high wage jobs, 20.3 percent of the Lockheed-Georgia workers commuting over 20 miles. These figures do not include persons commuting from out of state, mainly from Tennessee and Alabama. The labor area and main commuting routes are shown in Figure II.

FIGURE 2
LOCKHEED - GEORGIA COMMUTING AREA

TABLE IV. LOCKHEED-GEORGIA EMPLOYEES - DISTANCE TO RESIDENCE

<u>Miles</u>	<u>Number of Employees</u>	<u>Percent of Total</u>
0-9	12,461	55.1
10-19	5,559	24.6
20-29	2,305	10.2
30-39	536	2.4
40-49	1,386	6.1
50-59	120	.5
60-69	40	.2
70-79	70	.3
80-89	91	.4
90-99	10	.1
100+	19	.1
TOTAL	22,597	100.0

Source: Lockheed-Georgia Co.

Another large employer, Warner Robins Air Force Base, has a labor-shed around the Macon SMSA in central Georgia. Table V and Figure III indicate widespread residence of employees with 19 percent of the work force of 18,541 traveling farther than 20 miles and 11.4 percent from farther than 30 miles.

TABLE V. WARNER ROBINS AIR FORCE BASE
EMPLOYEES BY DISTANCE TO RESIDENCE

<u>Miles</u>	<u>Number of Employees</u>	<u>Percent of Total</u>
0-9	7,606	41.2
10-19	7,287	39.5
20-29	1,401	7.6
30-39	1,356	7.3
40+	801	4.1
TOTAL	18,451	100.0

Source: Public Information Office, Warner Robins Air Force Base

The evidence presented by this study and a study of two North Carolina firms by Lonsdale seems to verify the contention that workers will commute relatively long distances to work, but that the size of the labor-shed is limited by the wage levels offered by the employing firm and also by the presence or absence of adequate transportation routes.² Both relatively high wages and good transportation are present in the Lockheed-Georgia case and offer an explanation as to why that labor-shed extends over so wide an area. On the other hand, the residences of the apparel workers studied by Lonsdale, who received very low wages in comparison with most manufacturing employees, were concentrated within fifteen miles of the employer.³ The commuting field for the lower wage Warner Robins workers was also considerably smaller than for the higher wage personnel. The implication is that if additional employment in the growth centers is to be of significant benefit to the surrounding rural areas, the wage levels offered by new employers must be relatively higher than existing wage levels in outlying areas to make commuting feasible. Also, an adequate system of transportation is essential.

FIGURE 3

WARNER ROBINS LABOR SHED

LEGEND

- WARNER ROBINS
- INTERSTATE
- OTHER ROADS

MILES 0 5 10 20 30

SOURCE: OFFICE OF INFORMATION, WRAMA, WARNER ROBINS AIR FORCE BASE

Policy Conclusions

It appears that rural residents will commute relatively long distances to work over extended periods if job opportunity and wage levels are considerably higher in the employment center than in their home communities. An important policy consideration is, therefore, whether it might be less expensive and more feasible to create rural jobs by subsidizing journey-to-work commuting for certain workers than to subsidize industrial location in rural areas or rural-to-urban migration.

Over the past few years, several programs have subsidized relocation of unemployed and underemployed rural workers in urban centers. Generally, the programs have been only moderately successful. First, the return rate is very high. For example, in one North Carolina project, only one-third of those relocated remained in the relocation area for as long as one year.⁴ Even for the successful migrants, the public costs were quite large.⁵ In addition, even when the relocated workers can gain employment, they often are still not prepared for urban life and thereby intensify urban social problems. Subsidized commuting, on the other hand, requires only an adjustment to different employment habits, not the complete adjustment to an urban way of life.

Some of the rural poor lack not only the skills necessary to qualify them for employment in growth centers but also lack the ability to commute to available jobs or to job training. For the workers, free or heavily subsidized transportation to training or employment may be necessary in order for them to enter the non-agricultural labor force. These subsidies would not have to be of a permanent nature, since once employed, the rural residents could accumulate the means necessary to purchase transportation services.

Other workers could be encouraged to remain in rural areas by providing a tax incentive for journey-to-work commuting. If commuting expenses for rural workers were made income tax deductible, this would make commuting relatively more desirable compared to migration, and would reduce the incentive to leave the rural area.

FOOTNOTES

¹The authors wish to thank Howard B. Montgomery and James N. Adams for their help in gathering the commuting data.

²Richard E. Lonsdale, "Two North Carolina Commuting Patterns," Economic Geography, XLII, April, 1966, pp. 114-148.

³Ibid., p. 128.

⁴Charles K. Fairchild, "Subsidized Relocation of the Rural Unemployed: Benefits and Costs," Paper delivered at the meeting of the Southern Economic Association, St. Louis, Mo., November, 1969, p. 7.

⁵Ibid.