

# Population, Employment and Mobility in the Rural South

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*“As important as prior transportation innovations have been, the car has had a more dramatic effect on the city than anything before it. Unlike the earlier transportation innovations, the car has radically reshaped cities because it eliminates walking almost entirely . . . Public transportation made it possible for consumers to live far from their work, but they still needed to live at high densities. Cars have changed that and as a result, inalterably changed city living forever.”*

– Edward Glaeser and Matthew Kahn [4]

## INTRODUCTION

The passage quoted above appeared in an article published by the National Bureau of Economic Research entitled, “Sprawl and Urban Growth” [4]. In the article, the authors provide strong support for the proposition that the root cause of deconcentration of urban centers — a.k.a. “sprawl” — is the significant cost efficiency of automobiles and trucks, *vis-à-vis* alternative forms of commercial and human transport (e.g., railways, buses and ferries). Other popular explanations, such as inappropriate government policy or bad urban planning, are found to be of minor significance at best in explaining the ubiquitous nature of sprawl in America.

That cost advantages associated with a cornerstone technology (automobile-based transportation) are at the root of a widely observable and hotly debated social phenomenon (sprawl) is a finding that comes as little surprise to most economists. However, the inexorability of sprawl — at least up until such time as more cost efficient transportation alternatives emerge and/or the individual preferences of consumers and workers change — implied by Glaeser’s and Kahn’s [4] research is likely disconcerting to those seeking policy- or planning-based approaches to urban development.

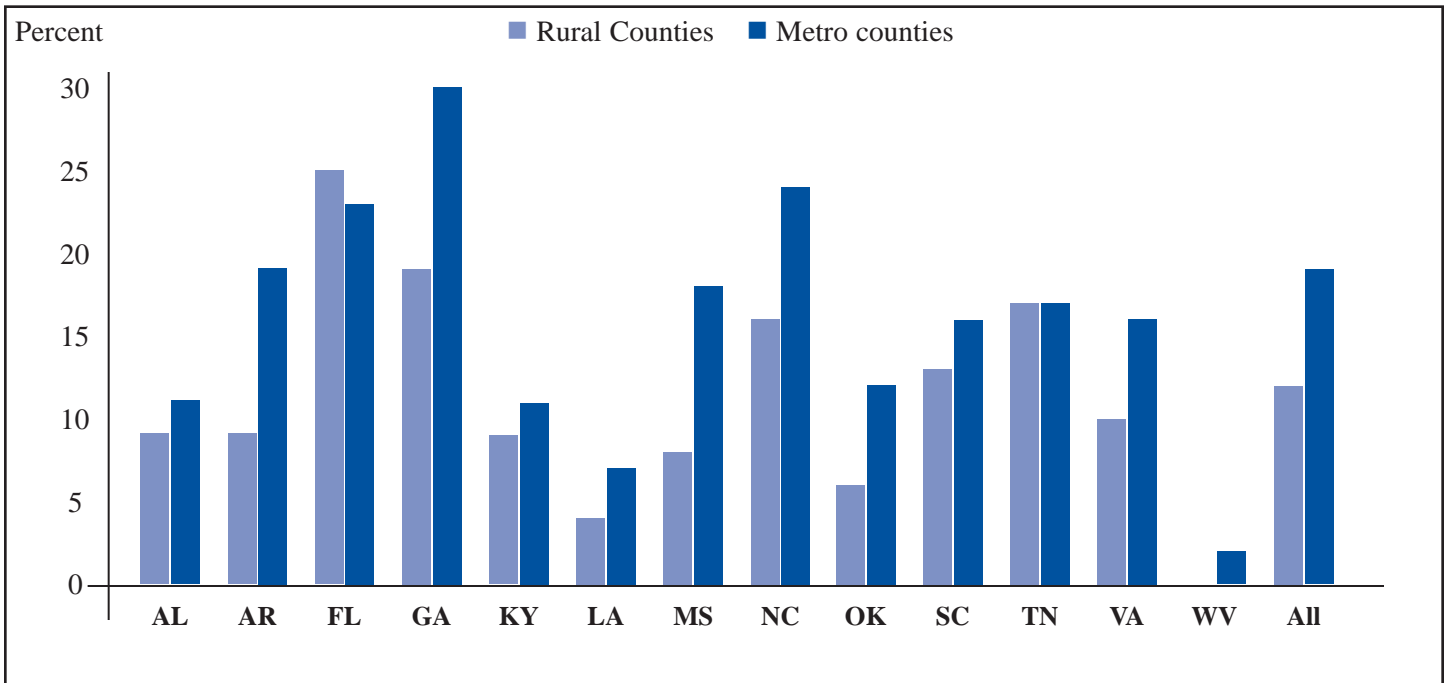
Against this backdrop, this article discusses recent trends in population and employment growth in the South and the attendant impacts on rural communities [a]. The South is no exception to the nationwide phenomenon of deconcentration of people and jobs, a phenomenon that bears very significant consequences both for the residents of rural communities and the local governments that provide (and must pay for) essential public services.

The dominant manifestation of deconcentration is the remarkable rise in the mobility of workers, which is in turn reflected by changing commuting and migration patterns. The first part of the article presents data illuminating this increasing mobility over the decade of the 1990s using county-level data. Two factors motivate the choice of the county as the basic observational unit. First, the county is the smallest geographical unit for which complete data are available for detailing where workers live and work. Second, and more importantly, county governments are on the front lines of current debates over sprawl and land use planning policies, in large part because it is county governments which pay for public services and develop the land use plans which under-



**Figure 1.**

**Population growth in the South, 1990-2000.**



Source: U.S. Census Bureau

pin observed development patterns in most places (and especially in rural areas).

Increased mobility reflects an evermore tenuous connection between where people choose to live and where they work. In earlier periods of history, the lion's share of new jobs associated with employment growth in a particular location were taken by local residents. In those times, an elected local government official who was instrumental — or at least who *claimed* to be instrumental — in landing a new factory or processing plant in a rural county could take credit for enhancing the economic prospects of his or her constituents. But as workers have demonstrated an ever greater propensity to commute or migrate, only a fraction of the new jobs associated with local employment growth are taken by local residents. The second section of this article reports on research into how new jobs are allocated among different groups — current residents, nonresident in-commuters and new migrants. The key finding presented here is that in the South, a substantial fraction of new jobs within a given county are taken by residents of *other* counties, underscoring the fact that geographic spillovers of the economic

and fiscal impacts of employment growth are substantial.

The findings regarding the allocation of employment growth are consistent with the evidence of continuing deconcentration of population and employment in the South. They are also indicative of

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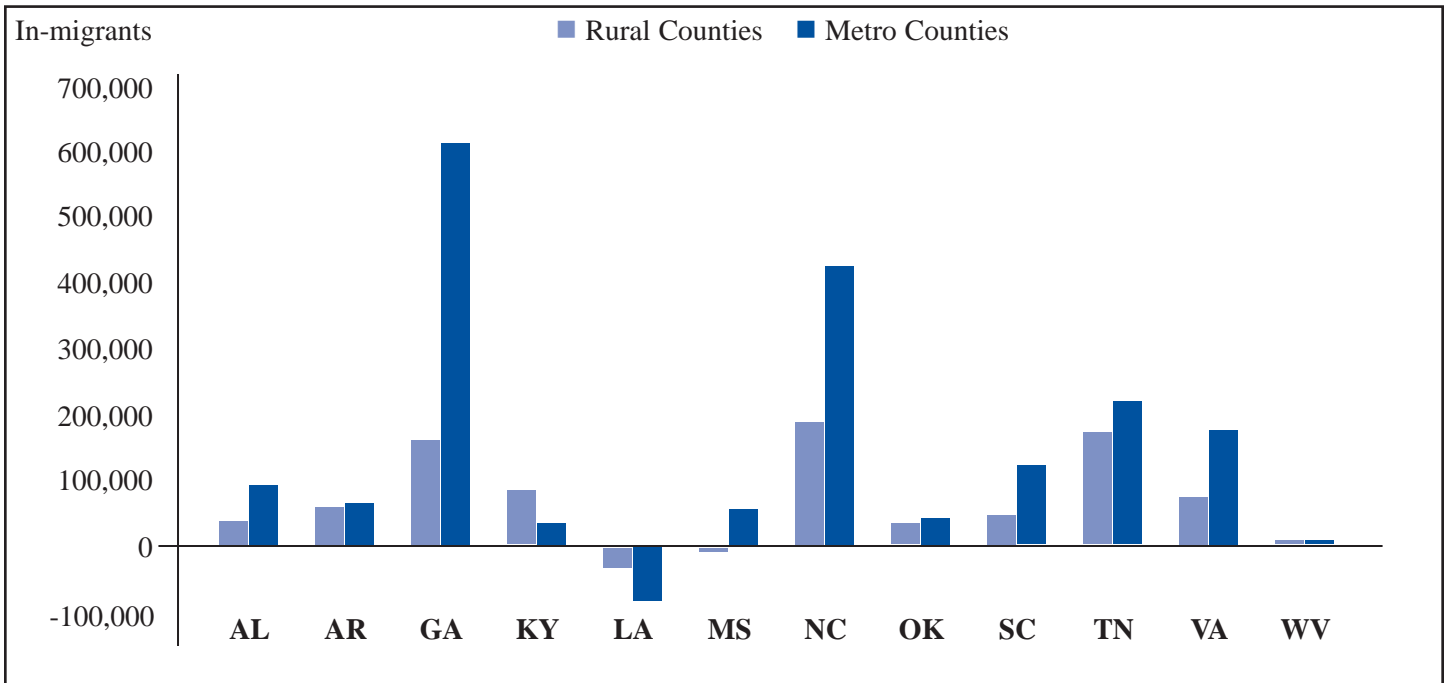
a growing connectedness of different communities via spillovers from economic development activities. It is precisely this connection that underlies the public finance challenges to local communities that are induced by sprawl. The final section of this article offers some thoughts concerning these challenges and mechanisms available to local governments to help address them.

## POPULATION AND COMMUTING TRENDS

Population in the 13 Southern states grew by 16.6 percent between 1990 and 2000. But as Figure 1 makes clear, population growth was quite variable both across and within individual states. Florida, Georgia and North Carolina grew by more than 20 percent during the decade, while there was very little change in population in Louisiana and West Virginia. Within states, metro counties generally grew by more than rural counties [b]. Metro counties grew at more than twice the pace of rural counties in Arkansas, Mississippi, Oklahoma and West Virginia. Elsewhere, rural-urban differences in population growth were more modest, and in two states (Florida and Tennessee) rural counties

**Figure 2.**

Net migration into Southern counties in the 1990s.\*



\*To maximize the utility of the scale employed in this figure, Florida was excluded due to its higher rate of net migration relative to other states in the region.

Source: U.S. Census Bureau

actually grew slightly faster than metro counties.

Just over 13 percent of counties in the South experienced population declines in the 1990s (Table 1). The great majority of these – in excess of 85 percent – were rural counties, mainly remote counties located at some distance from the nearest metro county. On the other hand, rural counties located adjacent to a metro county grew at close to the same rate as metro counties (14.1 percent versus 18.8 percent).

A substantial fraction of recent population growth in the rural South is attributable to in-migration. However, migration flows varied widely across states (Figure 2). Two states (Louisiana and Mississippi) experienced net outflows during the 1990s, while all other states experienced a demographic “rebound” akin to that observed during the 1970s. (Net out-migration from Southern rural counties was observed during the 1980s.) Research reported by the Economic Research Service/U.S. Department of Agriculture indicates that migration flows into the rural South during the 1990s were largely confined to two

groups of counties: those located in proximity to metro areas and thus possessing greater availability of such urban-based

amenities as access to jobs, suburban housing, and superior schools and public services and the more remote counties possessing significant natural amenities that are particularly attractive to retirees [2].

While trends in population growth varied substantially throughout the 1990s, trends in commuting were considerably more regular across states. Average one-way commute times across all Southern states increased by 11 percent to just over 26 minutes per worker (Table 2). The share of workers traveling less than 30 minutes each way to work declined in each state; correspondingly, the proportion of workers spending over one hour per day commuting to and from work increased in all states (Figure 3). Moreover, the great bulk of travel to work — over 80 percent in both metro and rural counties alike — was accounted for by individuals traveling alone in private vehicles. In no state did more than 4 percent of (overwhelmingly urban-dwelling) workers use public transportation.

The increase in time spent commuting is no doubt due to a combination of

**Table 1.**

Southern counties losing population during the 1990s.

| State             | Number of Counties | Percent of Counties |
|-------------------|--------------------|---------------------|
| AL                | 12                 | 17.9                |
| AR                | 20                 | 26.7                |
| FL                | 0                  | 0.0                 |
| GA                | 8                  | 5.0                 |
| KY                | 14                 | 11.7                |
| LA                | 14                 | 21.9                |
| MS                | 13                 | 15.9                |
| NC                | 3                  | 3.0                 |
| OK                | 20                 | 26.0                |
| SC                | 4                  | 8.7                 |
| TN                | 0                  | 0.0                 |
| VA                | 11                 | 10.5                |
| WV                | 27                 | 49.1                |
| <b>All states</b> | <b>146</b>         | <b>13.1</b>         |

Source: U.S. Census Bureau

**Table 2.**

Average one-way commuting time (in minutes) for all workers, 1990 and 2000.

| State             | 1990        | 2000        | Percent of commuters traveling alone, 2000 |
|-------------------|-------------|-------------|--|
| AL                | 23.3        | 25.5        | 84.7                                       |
| AR                | 20.9        | 23.7        | 82.1                                       |
| FL                | 23.9        | 27.0        | 81.2                                       |
| GA                | 25.0        | 28.6        | 79.7                                       |
| KY                | 22.7        | 24.6        | 82.4                                       |
| LA                | 24.8        | 26.0        | 79.8                                       |
| MS                | 22.9        | 25.1        | 81.0                                       |
| NC                | 21.7        | 24.8        | 81.6                                       |
| OK                | 21.2        | 23.3        | 82.5                                       |
| SC                | 22.5        | 25.1        | 81.1                                       |
| TN                | 23.6        | 25.4        | 83.9                                       |
| VA                | 26.1        | 27.8        | 79.7                                       |
| WV                | 23.2        | 26.7        | 82.3                                       |
| <b>All states</b> | <b>23.6</b> | <b>26.2</b> | <b>81.4</b>                                |

Source: U.S. Census Bureau

greater congestion and longer distances traveled. Difficulty in measuring congestion precludes a precise breakdown of the relative importance of these two factors. However, good data exist on the amount of cross-county commuting, and these indicate that the share of workers crossing county lines to go to work every day increased substantially during the 1990s. Figure 4 illustrates cross-county commuters' share of the workforce in rural counties in the South (the numbers for metro counties are quite similar). In 2000 more than 31 percent of workers in the rural South worked in a county other than the one in which they lived (up from 25.9 percent in 1990).

The evidence of increasing worker mobility represented by the commuting and migration data suggests a continuing weakening of the link between workplace and residence in the South, reinforcing trends that have been identified for specific Southern states in the previous decade [1, 5]. Put another way, the geographical extent of local labor markets appears to have been expanding such that

workers are living ever further from their places of employment. One very important implication of this trend is that employment growth in one county may

generate significant "spillovers" to nearby counties, both in the form of economic benefits to workers in those counties and increased fiscal costs to the local governments of those counties due to greater demands for publicly provided services. It is to this issue that we now turn.

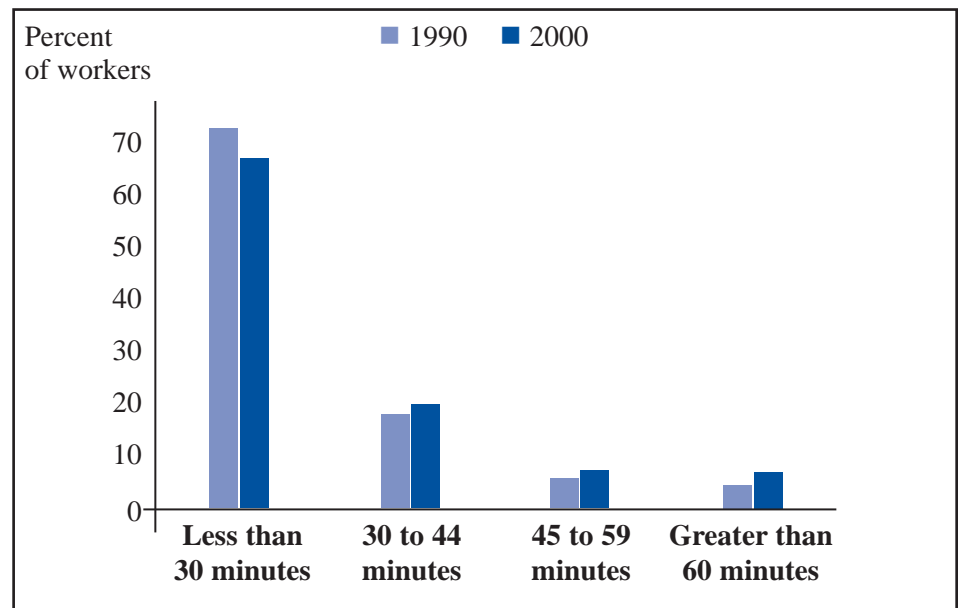
### EMPLOYMENT GROWTH AND GEOGRAPHIC SPILLOVERS

Local economic development policies are often oriented toward stimulating employment growth. The measuring stick most commonly used for gauging the success of a particular municipal or county development effort — as well as the individuals charged with formulating and implementing it — is the number of new jobs it creates. Widespread appreciation for beneficial multiplier effects of bringing in new firms or promoting expansion of existing firms reinforces the competition among jurisdictions of all sizes for attracting new firms and industries.

The emphasis on job creation is particularly strong in rural communities. Industrial recruitment is almost universally viewed as a central element in revitalizing the local economy, especially where significant declines have occurred

**Figure 3.**

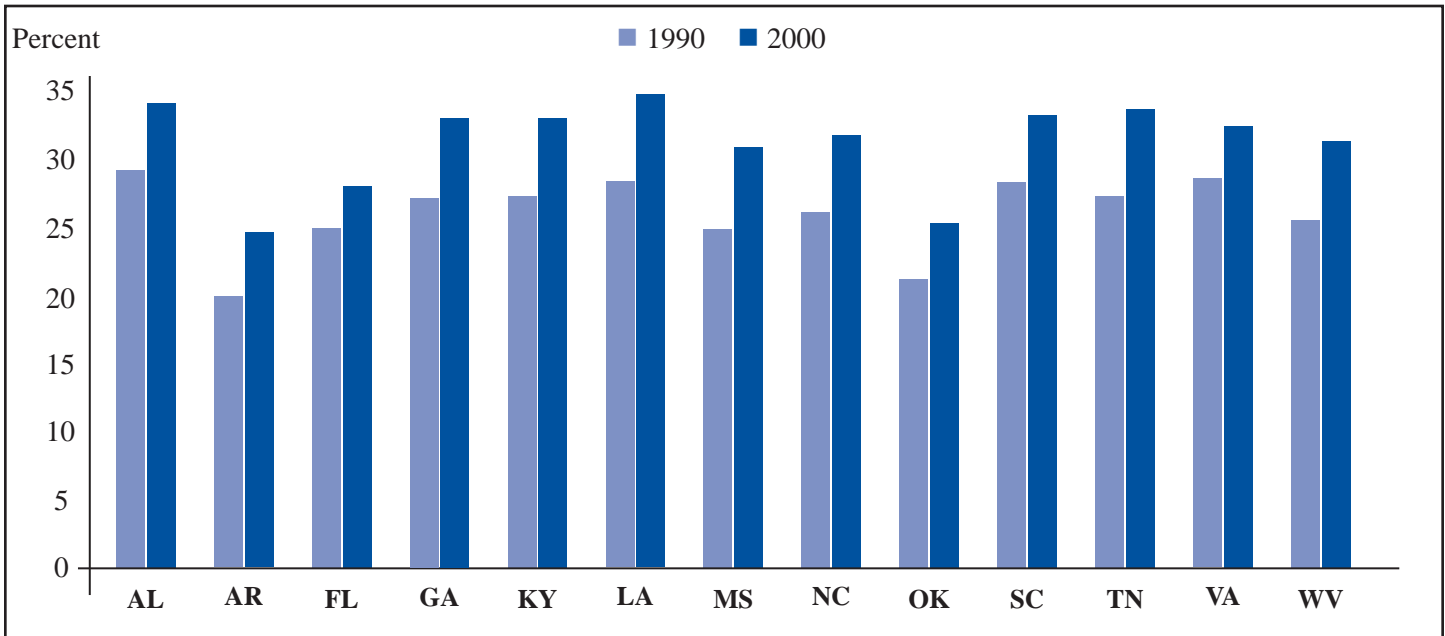
Average commuting time in Southern states, 1990 and 2000.



Source: U.S. Census Bureau

**Figure 4.**

Cross-county commuters' share of the workforce in the rural South, 1990 and 2000.



Source: U.S. Census Bureau

in historically important rural industries (such as agriculture and textiles). In large measure, this results from the perception that bringing in new firms is required in order to compensate for the reduction in the earnings of local citizens and businesses that follow on the heels of job losses in traditional industries.

Public finance considerations are also important. Declines in the local tax base that occur when a major plant closes can be devastating, particularly in an era in which an ever-increasing share of the overall burden of providing infrastructure and other public goods is falling on local governments. Recruiting new businesses to replace old ones facilitates provision of the same level of publicly financed services without significant, and politically unpopular, changes in property tax rates.

However, the weakening of linkages between where people live and where they work has altered significantly the potential for local employment growth to redress local income and public finance problems. In earlier periods of history, the lion's share of new jobs associated with employment growth in a particular location were taken by local residents. But as workers have demonstrated an ever greater propensity to commute or

migrate, only a fraction of the new jobs associated with local employment growth are taken by local residents. Just how those new jobs are allocated among differently located workers bears significant economic consequences for workers, taxpayers and local governments.

#### Worker Mobility and Income

Much of the emphasis that is placed on promoting job creation by local government officials stems from a desire to enhance the incomes of their constituents, both through provision of jobs to unemployed individuals and through the stimulus to existing businesses that increased purchasing power brings. The extent to which new jobs are in fact taken by individuals other than current residents will have a direct impact on the degree to which this goal is met.

Consider, for example, the case of a new firm locating in a rural county and bringing with it 100 new jobs each paying \$30,000 per year. If all of these jobs taken exclusively by previously unemployed local residents, this would amount to a direct infusion of \$3 million per year worth of salaries into the local economy, plus indirect (multiplier) effects induced by the spending of that "new" money. If, on the other hand, half of the new jobs

were taken by residents of neighboring counties, then the local income effects would be only half as large.

On the opposite side of the coin, the fact that workers are mobile means that the successful economic development efforts of a particular community may produce significant benefits to nearby communities in the form of greater incomes for *their* residents. Thus, purely from the standpoint of income generation, it may make little difference where a new firm locates as long as it is within range of feasible commuting distances.

Finally, the shopping habits of cross-county commuters will affect the overall economic and fiscal impacts of employment growth. To the extent that workers patronize retail outlets in the county in which they work, the economic stimulus and attendant multiplier effects associated with that spending will be captured by businesses in the workplace county rather than the residence county. Spending by nonresident commuters also boosts sales tax revenues for the workplace county, while at the same time causing a "leakage" of sales tax revenues from the commuters' residence county.

#### Public Finance Implications

A second important reason for under-



standing the allocation of new jobs between local residents and nonresidents relates to local public finance considerations. When job creation leads to substantial in-migration of new residents, the demands on local governments to provide public services increase correspondingly.

On the other hand, if a significant share of new employment opportunities are taken by nonresidents who commute into the community from elsewhere, then employment growth in one location may give rise to substantial spillovers of fiscal impacts to other communities. For example, employment growth in one location that leads to significant residential development in a nearby “bedroom” community can give rise to considerable strains on the fiscal resources of the latter community. This phenomenon has been observed widely in the rural South in counties located adjacent to fast-growing urban employment.

### Evidence on the Allocation of New Jobs in the South

A recent study funded by the Southern Rural Development Center analyzed employment, commuting and migration data for the 1,112 counties of the 13 Southern states [6]. Econometric tech-

**Table 3.**

**Proportion of employment growth accounted for by different activities.**

| Activity                   | Rural Counties | Metro Counties |
|----------------------------|----------------|----------------|
| Increased in-commuting     | 27.3%          | 52.9%          |
| Decreased out-commuting    | 41.6%          | 9.8%           |
| Increased unemployment     | 3.9%           | 4.4%           |
| Increased labor force size | 34.9%          | 41.6%          |

Source: Renkow [6]

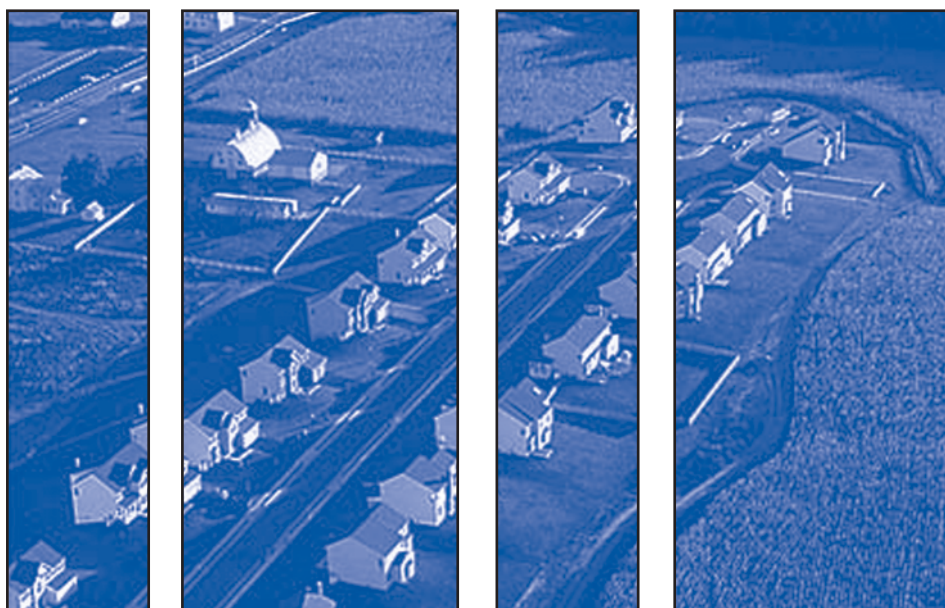
niques were used to partition observed county employment growth among residents of nearby counties (in-commuters), local residents currently working in a different county (out-commuters), currently unemployed residents, and increases in the size of the local labor force. This latter category encompasses primarily in-migrants but also includes entry into the job market of current residents who had previously chosen not to participate in the labor force.

The results of that research are reported in Table 3. These indicate that between 60 and 70 percent of local labor market adjustment to new employment opportunities during the 1990s was accounted for by changes in commuting

patterns, and that the remainder (30 to 40 percent) was accounted for by labor force growth (primarily taking the form of in-migration). Interestingly, the results additionally indicate that employment growth is *positively* associated with unemployment growth. This implies that there is some “over-shooting” in the adjustment of labor force to new employment opportunities, possibly due to in-migrating dual worker households whose migration resulted from a job opportunity for only one of the household’s workers.

Significant rural-urban differences in the allocation of new jobs were found to exist as well, particularly in regards to commuting flows. A much greater share of new jobs in metro counties were filled by (nonresident) in-commuters than is the case for rural counties, while employment growth in rural counties appears to be accommodated to a much greater extent by reductions in out-commuting. Two implications may be inferred from these rural-urban differences. First, urban employers appear to draw their workers from a wider geographic area (including nearby rural counties) than do rural businesses. Second, new jobs generated by successful economic development efforts in rural counties are likely to be taken by local residents to a much greater degree than is the case for metro counties. This will be especially the case for rural counties in which a substantial portion of increases in the size of the labor force is attributable to increased labor force participation of current residents (as opposed to in-migration). This effect is in turn dependent on the degree to which newly created jobs match the skill levels

**If a significant share of new employment opportunities are taken by non-residents who commute into the community from elsewhere, then employment growth in one location may give rise to substantial spillovers of fiscal impacts to other communities.**



of county residents who were previously nonparticipants in the labor force, and offer wages sufficiently large to entice them back into the labor force.

## IMPLICATIONS FOR LOCAL GOVERNMENTS

The findings presented above regarding the allocation of employment growth are consistent with the evidence of continuing deconcentration of population and employment in the South. They highlight a growing connectedness of different communities via spillovers from economic growth. This is a mixture of good and bad news for local government officials seeking to enhance the economic well-being of their constituents. On the one hand, some substantial amount of the direct income generation effects of industrial recruitment and other local job creation strategies will likely end up in the pockets of residents of other jurisdictions. On the other hand, some communities — notably rural communities located near fast growing urban counties — may be able to “free ride” on the success of others communities’ industrial recruitment efforts. A key implication here is that old assumptions about the economic and fiscal impacts of employment growth are no longer tenable. Individual communities’ ability to capture the benefits of new industries and businesses is clearly much reduced relative to the past and in some instances may be quite small.

The findings that have been reported here also carry an important message for county governments worried about providing, and paying for, public services for local residents. A growing body of empirical evidence from studies of the fiscal costs of providing community services demonstrates that residential land uses, on average, represent a net drain on local fiscal resources and that commercial land uses tend to subsidize residen-

tial development [3]. The fact that a significant amount of urban economic growth translates into substantial residential development in a nearby rural communities poses a difficult fiscal challenge to local officials in those “bedroom” communities — at least up to such time that commercial development occurs, which often accompanies such residential development.

Creative strategies will be required of rural communities seeking solutions to the economic development and public finance challenges associated with continuing population deconcentration. At a minimum, counties might implement more regular assessment of real estate value. In many locations, long lags in revaluations, combined with a reluctance to alter property tax rates, represent a drain on county public finances [7].

Two mechanisms that one hears mentioned with increasing frequency by local government officials and planners are regional economic development strategies and zoning. Both are heavily laden with political baggage — zoning because it runs counter to longstanding traditions of landowner independence, and regionalism because it entails elected officials addressing the interests of constituencies other than the ones that elect them. However, the increasing number of communities experimenting with “smart growth” initiatives and multi-jurisdictional partnerships indicates that the perceived economic benefits of these sort of public policy experiments may be beginning to outweigh their political costs.

## ENDNOTE

[a] For purposes of this study, the South includes the following states: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Virginia, and West Virginia.

[b] The delineation of metro and rural counties used throughout this article are defined by the U.S. Department of Commerce's Bureau of Economic Analysis.

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