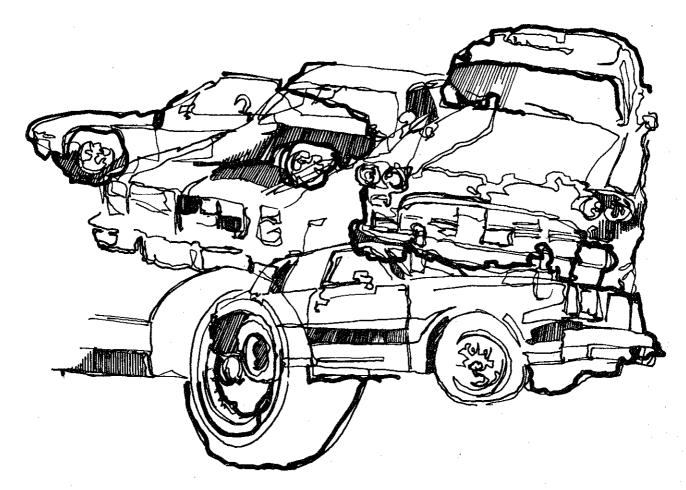
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# Changes in Commuting in Mississippi from 1960 to 1970



Ellen S. Bryant



MISSISSIPPI AGRICULTURAL & FORESTRY EXPERIMENT STATION R. RODNEY FOIL, DIRECTOR MISSISSIPPI STATE, MS 39762

Mississippi State University

James D. McComas, President

Louis N. Wise, Vice President



Ellen S. Bryant,
assistant professor and assistant sociologist,
Mississippi State University
Department of Sociology and Rural Life

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Communting to work by automobile is a widely observed phenomenon in the United States. The daily exchange of workers between city and suburb and between rural and urban areas involves distances as great as the span of several counties, with commuting sometimes exceeding two hours one way.<sup>1</sup>

Employed Mississippians have commuted to work from their county of residence to other Mississippi counties and to adjoining states for many years. The 1960 and 1970 national censuses documented the volume and direction of intercounty journeys to work. This publication presents a summary of these data for Mississippi. It includes sets of tables and maps that depict and compare patterns and volumes of intercounty commuting for 13 designated commuting areas in the state in 1960 and 1970.

The purpose of this publication is to present the commuting pattern of Mississippi workers in 1970, with highlights of changes in the pattern since 1960. The information is presented as an aid to individuals and groups in assessing more fully the dynamics and interdependence of economic change in and around their local areas and to provide a background for future studies of commuting and its impact on rural and industrial development.

Statewide Commuting Patterns

Employment growth in Mississippi between 1960 and 1970 incorporated a disproportionate increase in numbers of intercounty

commuters. Commuters increased by 76% while numbers of employed residents increased by only 11.4%, leaving the number of noncommuting workers essentially unchanged (Table A).<sup>2</sup>

TABLE A. CHANGE IN NUMBERS OF COMMUTERS CROSSING STATE AND COUNTY LINES ON THEIR JOURNEY TO WORK, MISSISSIPPI RESIDENTS AND RESIDENTS OF ADJOINING STATES, 1960 AND 1970.

	Number Working			
Type of Worker	1970	1960	Percent Change	
Mississippi Residents Working	-		<del></del>	
Total	743,100	666,712	11.4	
Inside County of Residence	574,921	587,961	-2.2*	
Outside County of Residence	100,627	57,089	76.3	
In Place not Reported	58,552	21,662	170.3*	
Working Outside State in				
Alabama	3,045	2,560	18.9	
Arkansas	234	209	12.0	
Louisiana	5,831	3,812	53.0	
Tennessee	9,867	3,426	188.0	
Total	18,977	10,007	89.6	
Working in Mississippi, but				
Resident of Alabama	5,220	2,567	103.4	
Resident of Arkansas	468	248	88.7	
Resident of Louisiana	4,413	2,351	87.7	
Resident of Tennessee	3,529	1,622	177.6	
Total	13,630	6,788	100.7	

\* If all the non-reported workers were arbitrarily assigned to the "work inside county of residence" category, that group would show an increase of 7.7 percent rather than the -2.2 decrease shown, but compared to the increase of 76.3% for commuting workers it still would be unimpressive.

<sup>1</sup>James N. Morgan, "A Note on the Time Spent on the Journey to Work," Demography, Vol. 4, No. 1 (1967), pp. 360-2.

<sup>2</sup>No effort was made to assign commuting or non-commuting status to the employed residents for whom place-of-work data were not available. Therefore, the volume of commuting undoubtedly exceeds that presented here. Nevertheless, it is felt that the data do depict major changes in commuting patterns in the state.

Exchange of commuters with adjoining states almost doubled in both directions between 1960 and 1970, but the increased flow into the state was slightly ahead of the out-of-state flow---for each out-of-state resident working in Mississippi in 1960, 1.47 Mississippians were working in a neighboring state. This ratio had decreased to 1.39 by 1970, a change that incorporated proportionately more worker exports to Tennessee and more worker imports from Louisiana, Alabama and Arkansas.

Mississippi exchanged the largest number of workers with Tennessee, with commuting between the two states totaling more than 13,000 in 1970. The number of Mississippians commuting to Tennessee to work in

1970 was almost three times the number doing so in 1960, but the number going in the opposite direction only doubled. The worker exchange ratio (the number of Mississippians working in Tennessee per Tennessean working in Mississippi) was 2.79 in 1970 and 2.1 in 1960, indicating a decrease in the relative economic strength of the Mississippi counties that border Tennessee.

Exchanges with Louisiana totaled more than 10,000 in 1970, and the exchange ratios (1.32 in 1970 and 1.62 in 1960) indicate a declining and relatively low level of economic dominance of Louisiana over southwest Mississippi.

The number of workers exchanged with Alabama was more than 8,000 in 1970---an increase of about 3,000 over 1960, but this resulted in

a decrease in the exchange ratio from parity in the earlier decade to one of economic dominance by Mississippi in 1970 (1.0 in 1960 and .58 in 1970).

Worker exchange with Arkansas was minimal in both census counts, and imports into Mississippi were larger than exports.

County Typology

Changes in numbers of employed residents and in the number of commuters per 100 non-commuters from 1960 to 1970 were used to set up a commuting typology of counties to facilitate summarization of general commuting tendencies in Mississippi and to establish the relation of commuting tendencies to employment growth. Counties were assigned to one of four groups (Type I, Type II, Type III or Type IV) with characteristics as follow:

N R	ercent Change in Number of Employed Lesidents From 1960 to 1970	Change in Number of Commuters per 100 Non-Commuters From 1960 to 1970	Rank of Number of Commuters per 100 Non-Commuters 1970		Percent Change in Number of Employed Residents From 1960 to 1970	Change in Number of Commuters per 100 Non-Commuters From 1960 to 1970	Rank in Number of Commuters per 10 Non-Commuters 1970
Type I	+	_		Benton	1.3	22,2	. 12
Rankin	43.2	- 52.1	62	Jasper	1.2	34.5	4
Hancock	37.4	- 2.6	20	Chickasaw	.8	8.5	51
Lee	24.9	- 1.3	69	Choctaw	.6	22.4	. 8
Hinds	15.8	- 2.7	73	Clarke	-4	11.5	29
Okt1bbeha	14.8	- 1.7	. 64				
Forrest	14.7	- 2.1	65	Type III	~	. +	
Grenada	12.1	- 1.0	76	Jefferson l	Davis ~ .3	20.6	25
Warren	8.5	- 2.3	82	Calhoun	4	5.1	47
Neshoba	5.5	- 5.7	48	Winston	- 1.0	8.1	46
Lauderdale	5.0	- 2.5	80	Marshall	- 1.3	24.0	22
Clay	2.1	- 1.0	63	Webster	- 1.4	20.0	23
Attala	1.2	- 2.0	57	Panola	- 3.9	7.4	50
Lafayette	1.2	- 1,4	60	Marion	- 4.4	3.2	54
,				Alcorn	- 5.2	1.9	66
				Claiborne	- 6.8	15.0	40
Type II	+	+		Bolivar	- 7.8	.6	70
Jackson	68.8	3.4	53	Copiah	- 10.4	8.4	37
De Soto	65.4	107.6	ī	W11kinson	- 10.6	16.6	18
Stone	34.9	7.6	27	Walthall	- 10.7	25.6	. 16
Pearl River	31.0	27.1	15	Franklin	- 11.0	8.3	17
Prentiss	26.2	9.2	38	Smith	- 12.3	13.1	28
George	19.9	21.5	7	Madison	- 12.3	20.1	21
Harrison	17.4	2.9	72	Carroll	- 12.4	67.9	2
Greene	17.2	2.1	9	Amite	- 14.9	. 20.5	24
Union	16.2	4.4	39	Noxubee	- 18.0	3.6	55 .
Itawamba	16.1	23.1	6	Holmes	- 20.0	1.7	58
Pontotoc	15.5	19.5	<b>i</b> 3	Issaquena	- 20.2	31.4	10
Wayne	14.4	1.8	42	Sunflower	- 23.7	4.4	56
Lamar	13.3	39.5	. 3	Jefferson	- 24.8	26.5	11
Loundes	13.0	1.2	78	Kemper	- 25.1	29.9	14
Tippah	9.6	9.1	52	Sharkey	- 31,1	3.2	61
Covington	8-6	15.2	19	Tallahatch	ie - 34.6	7.0	44
Tishomingo	8.3	14.1	. 26	Tunica	- 45.0	2.8	75
Lawrence	7.8	7.2	30	Quitman	- 72.4	15.3	36
Simpson	7.2	1.5	33	,		•	
Yalobusha	5.6	13.5	34		•		
Scott	5.6	6.0	49	Type IV	<b>-</b> .	— · · · · · ·	
Monroe	5.3	2.5	45	Adams	- 3.8	- 2.0	74
Tate	4.6	17.5	วัน	P1ke	- 9.4	- 2.9	67
Montgomery	4.3	10.3	43	Leflore	- 11.9	- 1.6	77
Jones	4.0	2,9	59	Yazoo	- 12.4	- 1,4	68
Newton	4.0	8.3	35	Washington	- 16.6	- 2.2	81
Perry	3.9	26.0	ž	Conhoma	- 20.7	- 0.1	79
Leake	3.8	7.5	32	llumphroys	- 24.9	- 0.4	71
Lincoln	3.4	4.9	41				• •

Type I---counties with an increase in number of employed residents and a decrease in number of commuters per 100 non-commuters;

Type II---counties with an increase in number of employed residents and in number of commuters per 100 non-commuters:

Type III---counties with a decrease in number of employed residents and an increase in number of commuters per 100 non-commuters:

Type IV---counties with a decrease in number of employed residents and in number of commuters per 100 non-commuters (Table B).

Commuting Patterns by Designated Areas

Thirteen commuting areas were delineated by plotting commuter streams on county outline maps and identifying their major confluences. Commuters from Mississippi counties streamed out in several directions and some counties seem to be parts of more than one commuting hinterland. These counties were assigned to two commuting areas (Table C), and the overlaps are described in the discussion of the separate areas. Four of the areas were named after SMSA (Standard Metropolitan Statistical Area) cities (Areas, 1, 4, 5 and 13), eight after the dominant (hub or 'nodal'3) county or counties they contain (Areas 2, 3, 6, 7, 8, 9, 11 and 12) and one after the area name of its three central counties (Area 10). Commuting data for each area are presented in two tables (Tables 1A and 1B - 13A and 13B) two maps (Figures 1A and 1B - 13A and 13B).

The first table for each area reports the number of residents who were employed, the number of non-commuters, the number of commuters and the number of

employed residents for whom place-of-work data were not available. The second table for each area reports the number of commuters per 100 non-commuters.

The first map for each area presents commuting patterns for 1970, and the second map presents commuting patterns for 1960. Commuter streams are depicted by arrows, with the points showing

TABLE C. COMMUTING AREA LOCATIONS OF MISSISSIPPI COUNTIES

County	Area No.	County	Area No.	
Adams	6	Leflore	2	
Alcorn	8	Lincoln	7	
Amite	6 <b>,</b> 7	Lowndes	10	
Attala	4	Madison	4, 5	
Benton	8	Marion	7, 12	
Bolivar	2	Marshall	1, 8	
Calhoun	3	Monroe	9, 10	
Carrol1	2, 3	Montgomery	3	
Chickasaw	3, 9	Neshoba	11	
Choctaw	3, 10	Newton	11	
Claiborne	4, 6	Noxubee	10	
Clarke	11, 12	Oktibbeha	10	
Clav	10	Pano1a	ĩ	
Coahoma	2	Pearl River	13	
Copiah	5 <b>,</b> 7	Perry	12	
Covington	12	Pike	. 7	
De Soto	1	Pontotoc	9	
Forrest	12	Prentiss	8, 9	
Franklin	6, 7	Quitman	1	
George	13	Rankin	5	
Greene	12	Scott	5, 11	
Grenada	2, 3	Sharkey	2, 4	
Hancock	13	Simpson		
Harrison	13	Smith		
Hinds			5, 12	
Holmes	4, 5 2, 4	Stone Sunflower	1.3	
			2	
Humphreys	2	Tallahatchie	2, 3	
Issaquena	2, 4	Tate	1	
Itawamba	9	Tippah	8	
Jackson	13	Tishomingo	8	
Jasper	11, 12	Tunica	1	
Jefferson	6	Union	8, 9	
Jefferson Davis	7, 12	Walthall	7	
Jones	12	Warren	4	
Kemper	11	Washington	2	
Lafayette	1, 3	Wayne	12	
Lamar	12	Webster	3, 10	
Lauderdale	11	Wilkinson	6	
Lawrence	7	Winston	10, 11	
Leake -	5, 11	Yalobusha	3 .	
Lee	√9	Yazoo	2, 4	

<sup>3</sup>The term "node" (or "nodal" area or county) was used by Bogue in developing his functional area concept (as opposed to homogeneous regions such as state economic areas) and refers to the center of exchange in an economically heterogeneous area---in this case a county attracting sizable streams of incommuters but sending out few workers to other counties. See Donald J. Bogue, Principles of Demography, New York: John Wiley and Sons, Inc., 1969, pp. 464-5.

the place of work of commuters and the base showing the number of commuters by county of origin. Commuter streams of 20 or less were omitted from counties within an area but were included for counties outside an area when it appeared that doing so would Most commuting in the state in facilitate comparisons. Reference 1970 occurred between adjoining

to the maps for both areas is necessary to obtain a complete description of the commuting pattern of counties assigned to two

Variations and Similarities ---

counties as local exchanges. Commuting across more than one county boundary appeared to have decreased except for the travel of workers to SMSA cities or large commercial centers.

Each commuting area contains at least one hub (or nodal) county that attracted a disproportionate number of commuting workers. Commuter to non-commuter ratios decreased from 1960 to 1970 in 70%of the nodal counties, indicating employment of larger proportions of their own residents in addition to employment of more workers from surrounding counties. Therefore, economic development of such counties may have been greater than their population growth suggests.

Numbers of employed residents and numbers of commuters in most counties in the eastern one half of the state increased from 1960 to 1970. Most counties in the western one half of the state experienced a decrease in numbers of employed residents and in numbers of com-

The largest commuter streams associated with SMSA "nodes"4 and large urban centers, and commuters to these centers in 1970 often were more likely to be urban than rural residents, suggesting that counties adjoining larger urban centers tend to become "bedroom" counties for such centers. However, commuting in 1970 generally was more characteristic of rural than of urban populations. Therefore, commuting appeared to be associated with two types of worker distribution---one accommodating the influx of workers to urban fringes, the other providing a means for rural people to find employment without having to move from their home communities.

TABLE 1A. EMPLOYED RESIDENTS, TOTAL AND BY COMMUTING STATUS, AREA 1 (Memphis, SMSA), BY COUNTY, MISSISSIPPI, 1970 AND 1960.

		Commuting Status					
	Number of	Non- Commuters	Commut	ers	Unaccounted for/or Not Reported		
Counties	Employed Residents*		Destination Given	Destination Not Given			
			<u>1970</u>				
De Soto	11,474	4,148	6,020	284	1,022		
Lafayette	7,947	6,839	661	103	344		
Marshall	6,453	4,239	1,539	149	526		
Panola	8,277	6,606	1,020	143	508		
Quitman	4,041	3,078	637	137	189		
Tate	5,691	3,630	1,126	76	859		
Tunica	2,695	2,330	123	4	238		
			1960				
De Soto	6,936	4,620	1,869	182	265		
Lafayette	6,666	5,664	377	335	290		
Marshall	6,535	5,261	549	280	445		
Panola	8,610	7,171	466	262	711		
Quitman	5,580	4,217	331	87	945		
Tate	5,443	4,299	486	184	474		
Tunica	4,900	3,973	77	30	820		

Sources: U. S. Bureau of the Census, <u>Summary Tape of the 1970, U. S. Census Population</u> (Mississippi State, Mississippi: Summary Tape Processing Center), Fourth Count, Tab 35; <u>1970 Census of Population</u>, Report PC (1)-C26 (Washington, D. C.: USGPO), Table 123; 1960. Report PC (1)-26C, Table 83.

TABLE 1B. COMMUTERS\* PER 100 NON-COMMUTERS AREA 1 (Memphis SMSA), BY COUNTY, MISSISSIPPI, 1970 AND 1960.

		1970		1960
Counties	Total	Urban	Rural	Total
De Soto	152.0	587.0	97.5	44.4
Lafayette	11.2	6.7	18.1	12.6
Marshall	39.8	5,2	60.9	15.8
Panola	17.6	11.8	18.9	10.2
Quitman	25.2	7.5	30.2	9.9
Tate	33.1	16.5	41.7	15.6
Tunica	5.5		5.5	2.7

Source: Computed from Table 1A and comparable Census data for rural/ urban areas, 1970.

\*Computations do not include employed residents for whom place-of-work data were not available. However, it is assumed that the missing data were distributed uniformly between commuters and non-commuters and that their exclusion did not affect the accuracy of described commuting patterns appreciably.

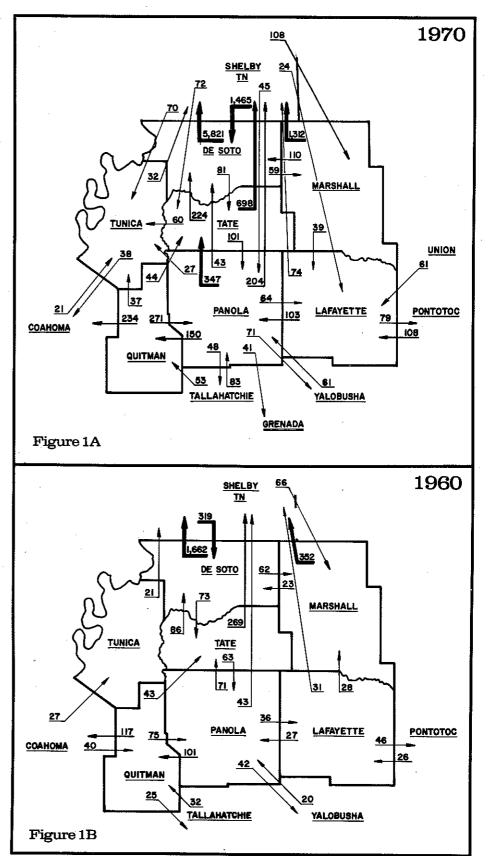
<sup>\*</sup>Based on the population aged 16 and over in 1970 and 14 and over in 1960.

<sup>&</sup>lt;sup>4</sup> See footnote 3.

Commuting Area 1: Memphis SMSA

The number of commuters from each county was larger in 1970 than in 1960 (Table 1A), but, despite the increase in commuting only three counties (DeSoto, Lafayette and Tate) experienced increases in the number of employed residents. The number of commuters per 100 noncommuters(Table 1B) decreased in Lafayette County (Type I) but increased in DeSoto and Tate Counties (Type II) and in Marshall, Panola, Quitman and Tunica Counties (Type III), with DeSoto having the highest commuter to non-commuter ratio of any county in the state in 1970.5 Commuter to non-commuter ratios were higher for rural than for urban residents in all counties except DeSoto.

Travel of workers to jobs in Shelby County, Tennessee, dominated the commuter streams of the area in 1970 and 1960 (Figures 1A and 1B). Commuter interchange among the counties in the area increased from 1960 to 1970, and commuting by area residents to jobs in other Mississippi counties decreased relative to commuting into the area by residents of other Mississippi counties.



<sup>5</sup>A decrease in the commuter to non-commuter ratio does not imply that the number of residents commuting to other counties necessarily decreased.

#### Commuting Area 2: Bolivar, Leflore and Washington Counties

Commuting from two of the Type III counties (Bolivar and Holmes) decreased from 1960 to 1970 (Table

2A), and Bolivar County attained the status of a commuting hub as indicated by commuting streams (Figures 2A and 2B) and by the low commuter to non-commuter ratio in 1970 (Table 2B). Numbers com-

muting from the other Type III counties (Carroll, Issaquena, Sunflower and Tallahatchie) increased even though the number of employed residents in each county decreased.

	EMPLOYED RESIDENTS			
AREA 2, (Bolivar, Leflo	re, Washington Coun	ties), BY COUNTY, I	MISSISSIPPI, 1970	AND 1960.

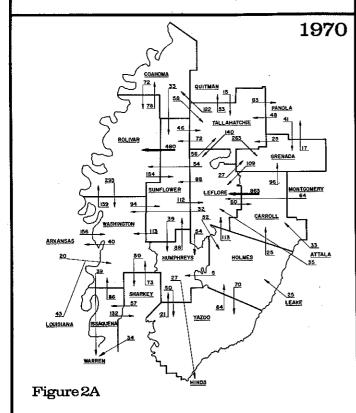
	Number of	Non- Commuters	Commut	Commuters	
Counties	Employed Residents*		Destination Given	Destination Not, Given	for/or Not Reported
,			1970		
Bolivar	13,942	11,829	596	225	1,290
Carroll	2,822	1,333	1,228	52	209
Coahoma	11,018	10,009	293	166	550
Grenada	7,122	6,211	199	137	575
Holmes	5,967	4,679	419	117	752
Humphreys	3,951	3,472	221	8	250
Issaguena	749	470	252		27
Lef lore	13,471	12,312	466	199	494
Sharkey	2,432	2,061	190	33	148
Sunf lower	9,851	7,347	827	65	1,612
Tallahatchie	4,932	3,811	788	33	300
Washington	21,983	19,327	438	309	1,909
Yazoo	8,299	6,576	495	20	1,208
			1960		
Bolivar	15,119	12,625	527	385	1,682
Carroll	3,287	2,370	616	51.	250
Coahoma	13,888	11,419	272	262	1,935
Grenada	6,351	5,725	274	93	259
Holmes	7,462	6,182	444	160	676
Humphreys	5,261	4,407	170	138	546
Issaquena	938	679	99	52	108
Leflore	15,285	12,760	360	532	1,633
Sharkey	3,527	2,481	105	84	857
Sunflower	12,914	10,288	492	295	1,839
Tallahatchie	7,539	4,990	373	350	1,826
Washington	26,352	23,005	670	729	1,948
Yazoo .	9,475	8,306	293	473	402

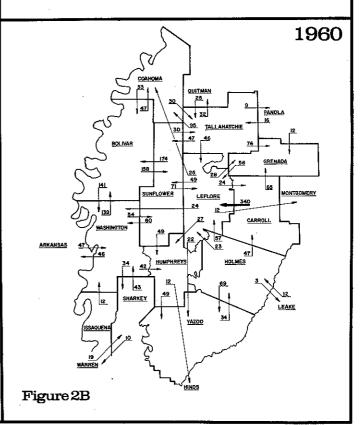
Source: See Table 1A.

TABLE 2B. COMMUTERS \* PER 100 NON-COMMUTERS AREA 2 (Bolivar, Leflore, Washington Counties), BY COUNTY, MISSISSIPPI, 1970 AND 1960.

		1960		
Countles	Total	Urban	Rural	Total
Bolivar	7,0	7.2	6.7	6.4
Carroll .	96.0		96.0	28.1
Coahoma	4.6	4.5	4.7	4.7
Grenada	5.4	5.2	5.7	6.4
Holmes	11.5	8.6	12,7	9.8
Humphreys '	6.6	3.9	7.4	7.0
Issaquena	53.6		53.6	22,2
Leflore	5,4	4.0	7.9	7.0
Sharkey	10.8		10.8	7.6
Sunflower	12.1	9.6	13.8	7.7
Tallahatchie	21.5	5.6	25.7	14.5
Washington	3.9	3.7	4.5	6.1
Yazoo	7.8	4.6	10.4	9.2

Source: Computed from Table 2A and comparable Census data for rural/urban areas, 1970.





<sup>\*</sup>Based on the population aged 16 and over in 1970 and 14 and over in 1960.

<sup>\*</sup>See Footnote, Table 1B.

Two Type IV counties (Leflore status (Figures 3A and 3B). and Washington) met the criteria for commuting-hub status in 1970. The flow of commuters that brought commuting-hub status to Leflore County in 1960 more than doubled in the next decade. Washington County attained commuting-hub status in 1970 as a result of increases in numbers of commuters from other Mississippi counties and chiefly from Arkansas and Louisiana. Grenada County (Type I) retained commuting hub

#### Commuting Area 3: **Grenada County**

The commuting hub status of Grenada County increased between 1960 and 1970 primarily because of the substantial increase in numbers of commuters from Calhoun, Montgomery and Yalobusha Counties (Figures 3A) and 3B). Changes in the number of employed residents (Table 3A) and in the commuter to non-commuter

ratios (Table 3B) indicate that Lafayette County is approaching commuter hub status.

The considerable increase in the exchange of workers among other counties in the area indicates that industrial development of the area has become more diffuse. The impact of commuting-hub counties in adjoining areas (Figures 2A, 2B, 9A, 9B, 10A and 10B) is shown by the increase in numbers of commuters to these areas from Area 3.

TABLE 3A. EMPLOYED RESIDENTS, TOTAL AND BY COMMUTING STATUS, AREA 3 (Grenada County), BY COUNTY, MISSISSIPPI, 1970 AND 1960.

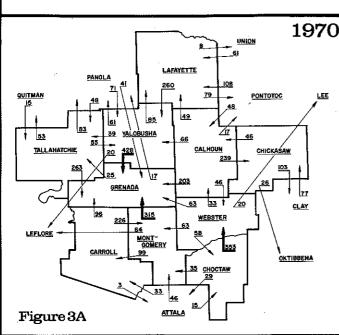
		Commuting Status					
		Non-					
	Number of	Commuters	Commut		Unaccounted		
	Employed *		Destination	Destination	for/or		
Counties	Residents		G1ven	Not Given	Not Reporte		
			1970				
Calhoun	4,860	3,752	648	75	385		
Carroll	2.882	1,333	1,228	52	209		
Chickasaw	5,724	4,603	721	80	320		
Choctaw	2,515	1,524	785	45	161		
Grenada	7,122	6,211	199	137	575		
Lafayette	7,947	6.839	661	103	344		
Montgomery	4.277	3,221	524	177	355		
Tallahatchie	4,932	3,811	788	33	300		
Webster	3,220	2.298	876	38	8		
Yalobusha	4,022	2,671	675	68	608		
			1960				
Calhoun	4,880	4,015	300	270	295		
Carroll	3,287	2,370	616	51 .	250		
Chickssaw	5,678	4,922	370	70	316		
Choctaw	2,501	1,731	476	79	215		
Grenada	6,351	5,725	274	93	259		
Lafayette	6,666	5,664	377	335	290		
Montgomery	4,100	3,467	314	86	233		
Tallahatchie	7,539	4,990	373	350	1,826		
Webster	3,264	2,658	440	83	83		
Yalobusha	3,809	3,135	290	159	225		

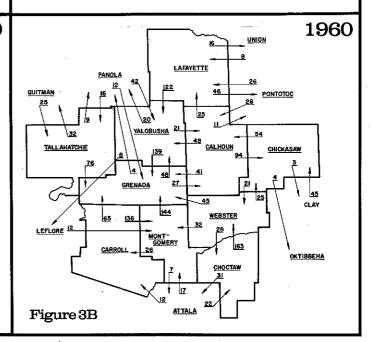
\*Based on the population aged 16 and over in 1970 and 14 and over in 1960,

TABLE 3B. COMMUTERS PER 100 NON-COMMUTERS AREA 3, (Grenada County), BY COUNTY, MISSISSIPPI, 1970 AND 1960.

		1960		
Counties	Total	Urban	Rura1	Total
Calhoun	19.3		19.3	14.2
Carroll	96.0		96.0	28.1
Chickasaw	17.4	11.5	21.7	9.0
Choctaw	54.5		54.5	32.1
Grenada	5.4	5.2	5.7	6.4
Lafavette	11,2	6.7	18.1	12.6
Montgomery	21.8	20,3	23,2	11.5
Tallahatchie	21.5	5.6	25.7	14.5
Webster	39.8		39.8	19.7
Yalobusha	27.8	10.2	33.7	14.3

Source: Computed from Table  $3\mbox{\ensuremath{A}}$  and comparable Census data for rural/urban areas, 1970.





#### Commuting Area 4: Jackson SMSA---West and North

Numbers of commuters from Attala, Hinds and Warren Counties (Type I) decreased from 1960 to 1970, despite the increase in numbers of employed residents in each county (Table 4A). The result was that numbers of commuters

per 100 non-commuters decreased in these counties (Table 4B) and in Holmes and Yazoo Counties (Type III).

Warren and Hinds counties are commuting hubs, and both contain nucleated industrial development. Commuting to Warren County from Hinds County was about four times that in the opposite direction

and, while the volume of the streams more than doubled between 1960 and 1970, this relative difference persisted (Figures 4A and 4B). The largest flow of commuters into Hinds County in both years was from Madison County, and commuting to Hinds from Madison almost doubled from 1960 to 1970.

TABLE 4A.	EMPLOYED RES	IDENTS, TO	TAL AND BY	COMMUTING	STATUS.
AREA 4, (Jackson SM	N-West and N	lorth), BY (	COUNTY, MI	SSISSIPPI,	1970 AND 1960.

			uting Status		
		Non-			
	Number of	Commuters	Commut		Unaccounted
Countles	Employed * Residents		Destination Given	Destination Not Given	for/or Not Reported
			1970		
Attala	6,188	5,124	518	72	474
Claiborne	2,765	2,046	429	- 59	231
Hinds	82,001	70,805	3,017	1,374	6,805
Holmes	5,967	4,679	419	117	752
Issaquena	749	470	252		27
Madison	8,882	6,065	2,406	94	317
Sharkey .	2,432	2,061	190	33	148
Warren	15,784	14,277	284	167	996
Yazoo	8,299	6,576	495	20	1,208
			1960		
Attala	6,114	5,183	457	244	230
Claiborne	2,967	2,676	168	71	52
Hinds	70,827	63,279	3,210	2,450	1,888
Holmes	7,462	6,182	444	160	676
Issaquena	938	679	99	52.	108
Madison	10,127	7,685	1,263	357	822
Sharkey	3,527	2,481	105	84	857
Warren	14,542	13,296	256	479	511
Yazoo	9,475	8,306	293	473	402

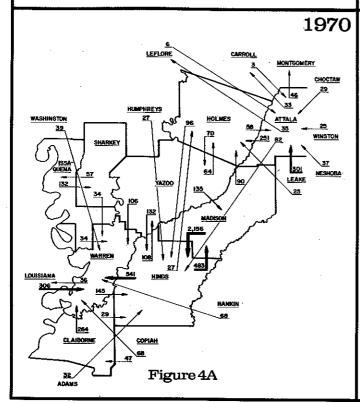
Source: See Table 1A.

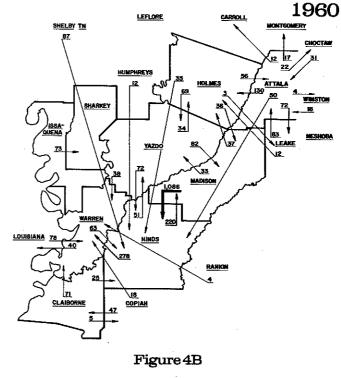
\*Based on the population aged 16 and over in 1970 and 14 and over in 1960.

TABLE 4B. COMMUTERS \* PER 100 NON-COMMUTERS AREA 4, (Jackson SMSA-West and North), BY COUNTY, MISSISSIPPI, 1970 AND 1980.

		1970		1960
Counties	Total	Urban	Rural	Total
Attala	11.5	6.3	15.8	13,5
Claiborne	23.9	11.5	31.4	8.9
Hinds	6.2	5,8	9.5	8.9
Holmes	11.5	8.6	12,7	9.8
Issaquena	53.6		53.6	22.2
Madison	41.2	24.1	57.6	21.1
Sharkey	10,8		10.8	7.6
Warren	3.2	3.0	3.3	5.5
Yazoo	7.8	4.6	10.4	9.2

Source: Computed from Table 4A and comparable Census data for rural/urban areas, 1970.





#### Commuting Areas 5: Jackson SMSA---East and South

The commuting pattern of the area in 1960 and 1970 was dominated by the interchange of commuters between Hinds (Type I) and Rankin (Type I) and Hinds and Madison Counties (Table 5A). However, commuters per 100 noncommuters in 1960 and 1970, respectively, decreased from 8.9 to

6.2 in Hinds County and from 62.2 to only 10.1 in Rankin County (Table 5B) despite the relatively larger numbers of employed residents in Rankin County in 1970.

Numbers of commuters from counties in the periphery of the area increased much less dramatically from 1960 to 1970, and the increase in flow between them and Rankin, Madison or

other contiguous counties was often greater than the increase to Hinds (Figures 5A and 5B). Commuting from outside the area increased over the ten years, primarily as the result of increases in commuting to Hinds County from Neshoba, Newton, Jones and Pike Counties (Figures 7A, 7B, 11A, 11B, 12A and 12B).

	TABLE 5A. EMPLOYE	RESIDENTS, TO	TAL AND BY COMMUTING S	TATUS.
AREA 5,	(Jackson SMSA ~ Ess	and South), B	Y COÚNTY, MISSISSIPPI,	1970 AND 1960.

		Commuting Status				
		Non-				
	Number of	Commuters	Commut	ers	Unaccounted	
	Employed		Destination	Destination	for/or	
Counties	Residents		Given	Not Given	Not Reported	
			1970			
Copiah	7,471	5,714	1,261	173	323	
Hinds	82,001	70,805	3,017	1,374	6,805	
Leake	5,402	3,726	999	104	573	
Madison	8,882	6,065	2,406	94	317	
Rankin	15,081	7,020	6,781	287	993	
Scott	7,032	5,313	783	171	765	
Simpson	6,607	4,321	1,143	122	1,021	
Smith	4,576	2,567	801	134	1,074	
			1960			
Copiah	8,337	6,857	882	264	334	
Hinds	70,827	63,279	3,210	2,450	1,888	
Leake	5,206	4,062	688	208	248	
Madison	10,127	7,685	1,263	357	822	
Rankin	10,530	6,284	3,618	291	337	
Scott	6,659	5,656	548	140	315	
Simpson	6,161	4,701	1,104	201	155	
Smith	5,217	4,141	850	114	112	

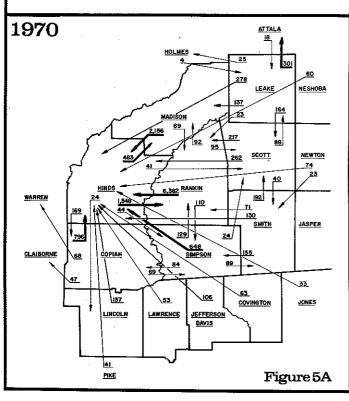
Source: See Table 1A.

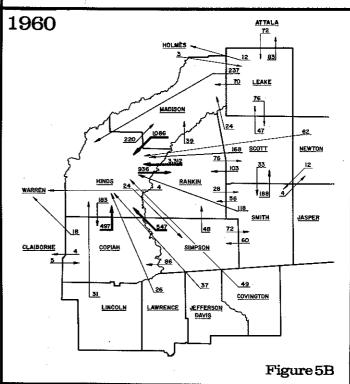
\*Based on the population aged 16 and over in 1970 and 14 and over in 1960.

TABLE 5B. COMMUTERS \* PER 100 NON-COMMUTERS AREA 5, (Jackson, SMSA-East and South), BY COUNTY, MISSISSIPPI, 1970 AND 1960.

		1970				
Counties	Total	Urban	Rural	Total		
Copiah	25.1	18.0	29.6	16,7		
Hinds	6.2	5.8	9.5	8.9		
Leake	29.6	10.3	37.1	22.1		
Madison	41.2	24.1	57.6	21.1		
Rankin	10.1	15.1	82.0	62.2		
Scott	18.0	10.4	23.3	12.2		
Simpson	29.3	25.1	29.8	27.8		
Smith	-36.4		36.4	23.3		

Source: Computed from Table SA and comparable Census data for rural/urban areas, 1970.





Commuting Area 6: Adams County

Numbers of employed residents in each county except Adams declined from 1960 to 1970 (Table 6A), but commuters per 100 noncommuters increased (Table 6B). The commuting-hub status of Adams County (Type III) in 1960 became more apparent in 1970, primarily because of the large increase in numbers of commuters from Concordia Parish, Louisiana. Commuting into Adams County from adjacent Mississippi counties changed between the two census

periods, primarily as the result of increases in commuting to Louisiana parishes south of the area (Figues 6A and 6B) and from Pike County in Area 7 (Figures 7A and 7B).

TABLE 6A. EMPLOYED RESIDENTS, TOTAL AND BY COMMUTING STATUS, AREA 5; (Adams County), BY COUNTY, MISSISSIPPI, 1970 AND 1960.

		Count	uting Status		•
		Non-			Unaccounted
	Number of	Commuters	Commut	Destination	for/or
Counties	Employed *- Residents		Destination Given	Not Given	Not Reporte
			1970		
Adams	12,101	10,167	455	1.55	1,324
	3,948	2,552	870	138	388
Amite Claiborne	2,765	2,046	429	59	231
	2,380	1,351	481	93	455
Franklin Jefferson	2,038	1,243	575	45	175
Wilkinson	2,992	1,915	699	3.15	263
			1960		
Adams	12,574	11,279	.529	373	393
Amite	4,639	3,478	832	176	. 153
Claiborne	2,967	2,676	168	71	52
Franklin	2,674	1,935	586	· 76	77
Jefferson	2,709	2,076	369	119	145
Wilkinson	3,348	2,552	439	221	136

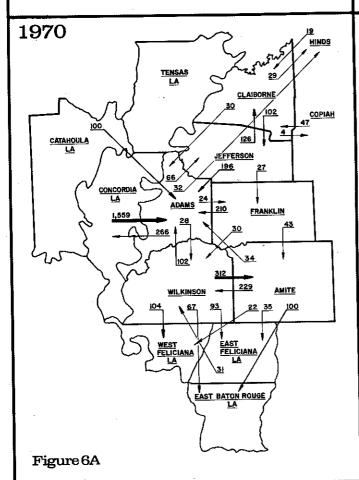
Source: See Table 1A.

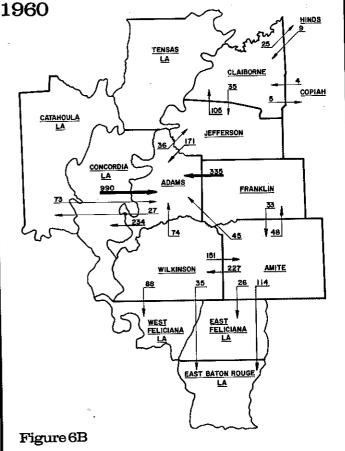
\*Based on the population aged 16 and over in 1970 and 14 and over in 1960.

TABLE 6B. COMMUTERS\* PER 100 NON-COMMUTERS
AREA 6, (Adams County), BY COUNTY, MISSISSIPPI, 1970 AND 1960.

		1960		
Countles	Total	Urban	Rural	Total
Adams	6.0	6.5	5.3	8.0
Amite	39.5		39.5	29.0
Claiborne	23.9	11.5	31.4	9.0
Franklin	42.5		42.5	34.2
Jefferson	50.0		50.0	23.5
Wilkinson	42.5		42.5	25.9

Source: Computed from Table 6A and comparable Census data for rural/urban areas, 1970.





### Commuting Area 7: Pike County

Only two counties (Type II counties Lawrence and Lincoln) reported increases in numbers of employed residents from 1960 to 1970 (Table 7A). Six counties experienced increases in numbers of

commuters per 100 non-commuters (TAble 7B), despite decreases in numbers of employed residents.

Pike County (Type IV) became more dominant as a commuting hub, primarily as a result of increases in numbers of commuters from adjoining counties (Figures 7A and 7B). Commuting to jobs outside the area increased between the two census periods, with new streams reported to East Baton Rouge and New Orleans and to counties in other designated areas (Figures, 4A, 4B, 12A, 12B, 13A and 13B).

TABLE 7A. EMPLOYED RESIDENTS, TOTAL AND BY COMMUTING STATUS, AREA 7, (Pike County), BY COUNTY, MISSISSIPPI, 1970 AND 1960.

		Com	uting Status		
		Non-			
	Number of	Commuters	Commut		Unaccounted
Counties	Employed Residents		Destination Given	Destination Not Given	for/or Not Reported
			1970		
Amite	3,948	2,552	870	138	388
Copiah	7,471	5,714	1,261	178	323
Franklin Jefferson	2,380	1,351	481	. 93	455
Davis	3,607	2,503	788	190	126
Lawrence	3,101	1,907	426	206	562
Lincoln	8.942	6,489	1,001	516	936
Marion	6,917	5.137	459	413	90B
Pike	10.333	8,616	515	212	990
Walthall	3,890	2,437	951	158	344
			1960		
Amite	4,639	3,478	832	176	153
Coolah	8.337	6,857	882	264	334
Franklin Jefferson	2,674	1,935	586 `	76	77
Davis	3,617	2,951	482	64	120
Lawrence	2,877	2,206	486	85	100
Lincoln	8,645	7,066	1,095	215	269
Marion	7.236	6,144	642	207	243
Pike	11,403	9.866	636	480	421
Walthall	4,358	3,536	573	129	120

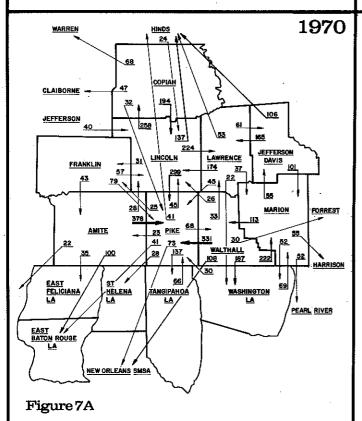
Source: See Table 1A.

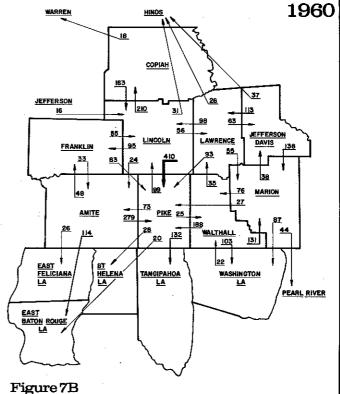
\*Based on the population aged 16 and over in 1970 and 14 and over in 1960.

TABLE 7B. COMMUTERS PER 100 NON-COMMUTERS AREA 7, (Pike County), BY COUNTY, MISSISSIPPI, 1970 AND 1960.

		1970				
Counties	Total	Urban	Rural	Total		
Amite	39.5		39.5	29.0		
Copiah	25.1	18.0	29.6	16.7		
Franklin	42.5		42.5	34.2		
Jefferson Davis	39.1		39,1	18,5		
Lawrence	33.1		33.1	25.9		
Lincoln	23.4	19.9	26.4	18.5		
Marion	17.0	13.4	19.3	13.8		
Pike	8.4	6.1	10.1	11.3		
Walthall	45.5		45.5	19.9		

Source: Computed from Table 7A and comparable Census data for rural/urban areas, 1970.





#### Commuting Area 8: Alcorn County

The decline in numbers of employed residents in Alcorn and Marshall Counties was more than offset by increases in the other counties, and the total resident labor force of the area increased by almost 11% from 1960 to 1970. Commuting from each county

increased over the decade (Table 8A), and the ratio of commuters to non-commuters in each county was larger in 1970 than in 1960 (Table 8B).

Alcorn County clearly had attained commuting hub status by 1960, and the stature of the county as a commuting hub improved by 1970 (Figures 8A and 8B). Com-

muter exchanges within the area in 1970 were largely between adjoining counties, but the number of resident workers who commuted to jobs in Tennessee and Alabama and in other Mississippi counties was appreciably higher in 1970 than in 1960 (Figures 1A, 1B, 9A and 9B).

TABLE SA.	EMPLOYED	RESIDE	NTS, TOT	AL AND	BY	COMMUTING	STATUS,
AREA B. (Al-	corn Coun	ty), BY	COUNTY.	MISSI	SSIP	PI, 1970	AND 1960.

		Com	uting Status		
	Number of	Non- Commuters	Commut	crs	Unaccounted
Counties	Employed Residents		Destination Given	Destination Not Given	for/or Not Reporte
			1970		
Alcorn	9.793	8,807	527	174	1,005
Benton	2,251	1,316	618	32	285
Marshall	6,453	4.239	1,539	149	526
Prentiss	7.735	5.846	1,328	114	447
Tippah	5.747	4.378	696	65	608
Tishowingo	5,042	3,269	1,016	237	520
Union	6,982	5,248	1,138	130	466
			1960		
Alcorn	10,335	7,738	446	78	2,073
Benton	2,222	1,645	415	32	130
Marshall	6,535	5,261	549	280	445
Prentiss	6,128	5.068	685	102	273
Tippah	5,244	4,714	270	121	138
Tishowingo	4,654	3,555	724	1.37	238
Union	6,008	4,881	603	363	161

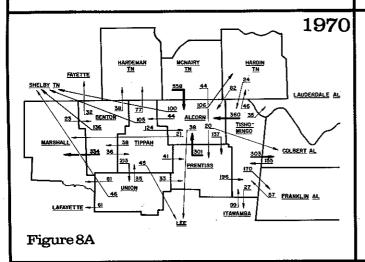
Source: See Table IA.

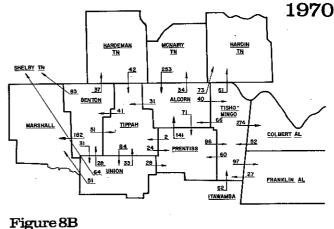
\*Based on the population 16 and over in 1970 and 14 and over in 1960.

TABLE 8B. COMMUTERS PER 100 NON-COMMUTERS AREA 8, (Alcorn County), BY COUNTY, MISSISSIPPI, 1970 AND 1960.

		1970	1960	
Counties	Total	Urban	Rural	Total
Alcore	8,7	8.8	8,6	6.8
Benton	49.4		49.4	27.2
Marshall	39.8	5.2	60.9	15.8
Prentiss	24.7	12.0	31.7	15.5
Tippah	17.4	8.8	20.7	8.3
Tishomingo	38.3		38,3	24.2
Union	24.2	8,5	34.5	19.8

Source: Computed from Table 8A and comparable Census data for rural/urban areas, 1970.





Commuting Area 9: Lee County

Numbers of employed residents and numbers of commuters increased in each county between 1960 and 1970 (Table 9A), and the number of commuters per 100 noncommuters increased in all counties except Lee (Table 9B). The economic dominance of Lee County had been well established by 1960, and notable gains were made by 1970. Commuting by residents of the area increased by more than 40% from 1960 to 1970, with commuting into Lee County from

adjoining Mississippi counties accounting for most of the increase (Figures 9A and 9B). Workers were exchanged in both years with Tennessee and Alabama and with Mississippi counties south and west of the area (Figures 3A, 3B, 8A, 8B, 10A and 10B).

TABLE 9A. EMPLOYED RESIDENTS, TOTAL AND BY COMMUTING STATUS, AREA 9, (Lee County), BY COUNTY, MISSISSIPPI, 1970 AND 1960.

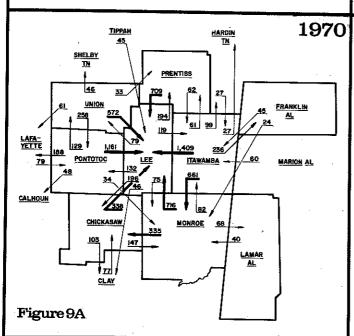
			uting Status		
	Number of	Non- Commuters	Commut		
Counties	Employed Residents*	Ocanacers	Destination Given	Destination Not Given	Unaccounted for/or Not Reported
			1970		
Chickasaw	5,274	4,603	721	80	320
Itawamba	6,424	3,745	2,106	165	408
Lce	18,713	16,144	877	277	1,415
Monroe	12,759	10,198	1,787	247	527
Pontotoc	6,033	3,851	1,828	57	297
Prentiss	7,735	5,846	1,328	114	447
Union	6,982	5,248	1,138	130	466
			1960		·
Chickasaw	5,678	4,922	370	70	316
Itawamba	5,533	3,857	1,391	57	228
Lee	14,980	13,362	750	371	497
Monroe	12,122	9,844	1,313	404	561
Pontotoe	5,225	3,880	992	149	204
Prentiss	6,128	5,068	685	102	273
Union	6,197	4,881	603	363	350

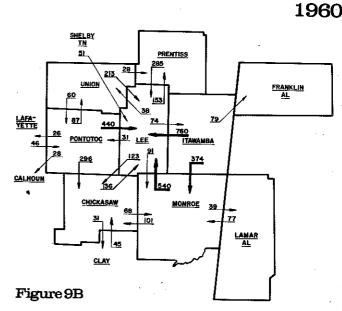
Source: See Table 1A,

TABLE 9B. COMMUTERS PER 100 NON-COMMUTERS
AREA 9, (Lee County), BY COUNTY, MISSISSIPPI, 1970 AND 1960.

		1970		1960
Counties	Total	Urban	Rural	1960 Total
Chickesew	17.4	11.5	21.7	8.9
Itawamba	60.6	19.2	75.4	37.5
Lee	7.1	4.5	9.5	8.4
Monroe	19.9	8.2	30.3	17.4
Pontotoc	48.9	21.5	61.0	29.4
Prentiss	24.7	12.0	31.7	15.5
Union	24.2	8,5	34.5	19.8

Source: Computed from Table 9A and comparable Census data for rural/urban areas, 1970.





<sup>\*</sup>Based on the population 16 and over in 1970 and 14 and over in 1960.

Commuting Area 10: Golden Triangle

Two counties (Clay and Oktibbeha) were Type I counties and the decreases in numbers of commuters per 100 non-commuters from 1960 to 1970 (Table 10B) were associated with decreases in total numbers of commuters (Table 10A). Increases in numbers of employed residents in the three Type II counties (Choctaw, Lowndes and Monroe) were accompanied by increases in numbers of commuters and in numbers of commuters and in numbers of commuters per 100 non-

commuters. Numbers commuting from the three Type III counties (Noxubee, Webster and Winston) increased over the ten-year period, despite decreases in numbers of employed residents.

The relatively low ratio of commuters to non-commuters for Clay, Oktibbeha and Lowndes Counties indicate that all three were commuter hubs in 1970. Lowndes County's strongest commuter linkages were with Alabama in both years, but Lowndes also attracted the largest numbers of commuters from surrounding Mis-

sissippi counties (Figures 10A and Commuter exchanges 10B). between Lowndes and Oktibbeha and between Lowndes and Clay became more nearly equal in 1970, commuter streams from and Oktibbeha, Monroe and Webster increased sufficiently to elevate Clay County to the status of a secondary commuter hub. Commuting patterns of the areas were linked weakly to Areas 3, 9 and 11 in both census periods (Figures 3A, 3B, 9A, 9B, 11A and 11B).

	TABLE	10A.	EMPLOYED	RESID	ENTS, 7	COTAL	AND	BY	COM	MUTIN	IG \$7	ratus,	
ARE	A 10,	(Golden	Triangle	e), BY	COUNTY	t, MIS	SSISS	IPE	ı,	1970	AND	1960.	

			uting Status		
		Non-			Unaccounted
Counties	Number of Employed Residents*	Commuters	Destination Given	Destination Not Given	for/or Not Reported
	-		1970	- <del>-</del>	
Chactas	2,515	1,524	785	45	161
Clay	6,331	5,348	412	117	454
Ciay Lowndes	19,008	16,576	487	353	3,539
Monroe	12,759	10,198	1,787	247	527
Noxubee	3,932	3,236	417	31	248
Oktibbeha	9,530	8,090	648	117	675
Vebster	3,220	2,298	876	38	8
Winston	5,575	4,288	487	345	455
			1960		
Choctav	2,501	1,731	476	79	215
Clay	6,199	5,418	441	148	192
Loundes	16,818	15,738	326	288	466
Monroe	12,122	9,844	1,313	404	561
Noxubee	4,796	4,121	257	162	256
Oktibbeha	8,304	7,167	462	388	337
Webster	3,264	2,658	440	83	83
Winston	5,635	4,915	424	129	167

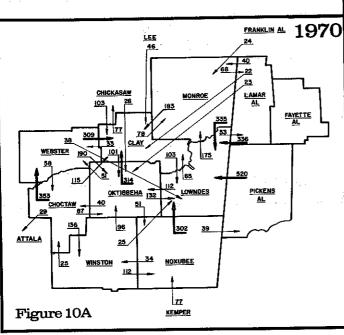
Source: See Table 1A.

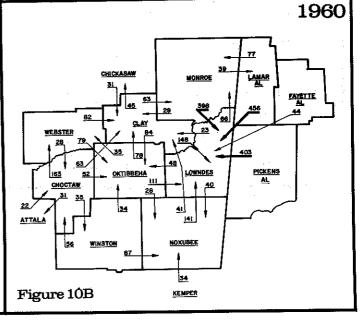
\*Based on the population 16 and over in 1970 and 14 and over in 1960

TABLE 10B. COMMUTERS PER 100 NON-COMMUTERS AREA 10, (Golden Triangle), BY COUNTY, MISSISSIPPI, 1970 AND 1960.

		1970		1960
Countles	Total	Urban	Rural	Total
Choctaw	54.5		54.5	32.1
Choctaw . Clay	9.9	7.4	12.8	10.9
Lowndes	5.1	4.2	6.6	3.9
	19.9	8.2	30.3	17.4
Monroe	13.8	7.1	16.6	10.2
Noxubee	9.5	7.9	11.9	11.2
Okt1bbeha	39.8		39.8	19.7
Webster Winston	19.4	21.2	18.0	11.3

Source: Computed from Table 10A and comparable Census data for rural/urban areas, 1979.





Commuting Area 11: Lauderdale County

Two counties (Lauderdale and Neshoba) were Type I counties and the decreases in numbers of commuters per 100 non-commuters from 1960 to 1970 (Table 11B) were associated with decreases in total numbers of commuters (Table 11A). Increases in numbers of employed residents in the five Type II counties (Clarke, Jasper, Leake, Newton and Scott) were accom-

panied by increases in numbers of commuters and in numbers of commuters per 100 non-commuters. Numbers commuting from the two Type III counties (Kemper and Winston) increased over the decade, despite decreases in numbers of employed residents, and these changes were associated with increases in numbers of commuters per 100 non-commuters.

Commuting into Lauderdale County from almost all other

counties in the area increased from 1960 to 1970, with the flows from Newton and Clarke Counties growing by 50 and 75%, respectively, and the flow from Kemper County doubling (Figures 11A and 11B). Numbers commuting from Lauderdale County to other counties in the area also increased. Several counties in the area had closer commuting ties with Mississippi counties outside the area (Figures 5A, 5B, 10A, 10B, 12A and 12B).

TABLE 11A.	EMPLOYED RESI	DENTS,	TOTAL AND	BY COMM	TING	STATUS,
AREA 11, (Laude:	rdale County),	BY COU	NTY, MISS	ISSIPPI,	1970	AND 1980.

		Conn	uting Status		
		Non-			
	Number of	Commuters	Commut		Unaccounted
	Employed		Destination	Destination	for/or
Counties	Residents*		Given	Not Given	Not Reported
			1970		
Clarke	4,960	3,316	823	229	592
Jasver	4,622	2,368	1,419	116	719
Kemper	2,673	1,678	771	38	186
Lauderdale	25,121	21,794	475	484	2,368
Leake	5,402	3.726	999	104	573
Neshoba	7,120	5,644	957	125	394
Newton	6,599	4,937	1.164	126	372
Scott	7,032	5,313	783	171	765
Winston	5,575	4,288	487	345	455
			1960		
Clarke	4,940	3,953	683	1.1.5	189
Jasper	4,569	3,349	872	144	204
Kemper	3,572	2,838	379	141	214
Lauderdale	23,921	21,719	788	717	697
Leake	5,206	4,062	688	208	248
Neshoba	6,748	5,150	1,035	247	316
Newton	6,343	5,184	734	187	238
Scott	6,659	5,656	548	140	315
Winston	5,635	4,915	424	129	167

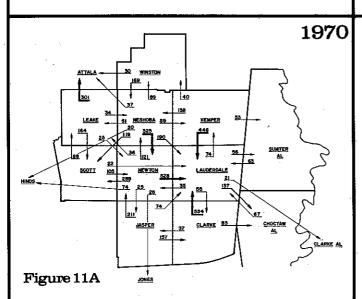
Source: See Table 1A.

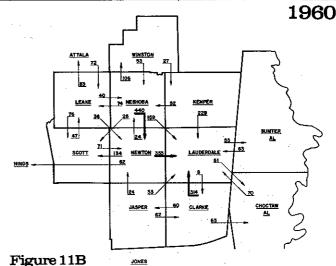
\*Based on the population 16 and over in 1970 and 14 and over in 1960.

TABLE 11B. COMMUTERS FER 100 NON-COMMUTERS
AREA 11, (Lauderdale County), BY COUNTY, MISSISSIPPI, 1970 AND 1960.

		1970		1960
Counties	Total	Urban	Rural	Total
Clarke	31.7	18.5	36.0	20.2
Jasper	64.8		64.8	30.3
Kemper	48.2		48.2	18.3
Lauderdale	4.4	3.9	5.5	6.9
Leake	29.6	10.3	37.1	22.1
Neshoba	19.2	6.7	27.2	24.9
Newton	26.1	8.5	32.2	17.8
Scott	18.0	10.4	23.3	12.2
Winston	19.4	21.6	18.0	11.3

Source: Computed from Table 11A and comparable Census data for rural/urban areas, 1970.





#### Commuting Area 12: Forrest and Jones Counties

The decrease in numbers of commuters per 100 non-commuters in Forrest County (Type I) from 1960 to 1970 (Table 12B) was associated with a decrease in total numbers of commuters (Table 12A). Increases in the commuter to non-commuter ratio in two of the

Type II counties (Simpson and Wayne) and in Smith County (Type III) were accompanied by decreases in total numbers of commuters. Other counties in the area experienced increases in numbers of commuters per 100 non-commuters and in total numbers of commuters.

The exchange of commuters between the two commuting hub

counties (Forrest and Jones) increased between the two census dates (Figures 12A and 12B), with Forrest roughly holding a 2 to 1 exchange ratio in both years. Lamar County had the second highest commuter to noncommuter ratio in the state in 1970, indicating the extent to which the county is serving as a suburban

	TAR	BLE 12A.	EMPLOY	ED RESIDEN	TS,	, TOTAL AND BY COMMUTING STATUS,	
REA	12,	(Forrest	Jones	Counties),	ВY	COUNTY, MISSISSIPPI, 1970 AND 1960.	

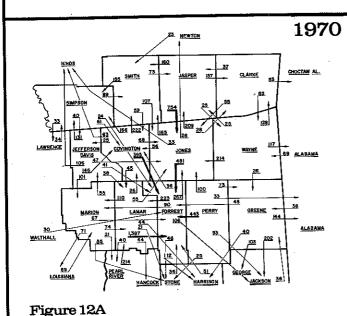
		Соди	uting Status		
		Non-			
	Number of	Commuters	Commut		Unaccounted
	Employed .		Destination	Destination	for/or
Counties	Residents~		Given	Not Given	Not Reporte
-			1970		
Clarke	4,960	3,316	823	229	592
Covington	4,405	2,794	996	180	435
Forrest	20,877	17,301	998	651	1,927
Greene	2,441	1,383	68I	71	306
Jasper	4,622	2,368	1,419	116	719
Jefferson D		2,503	788	190	126
Jones	18,977	15,185	1,110	619	2,063
Lanar	4,697	2,339	1,771	187	. 400
Marion	6,917	5,137	459	413	908
Perry	2,846	1,470	813	116	444
Simpson	6,607	4,321	1,143	122	1,021
Smith	4,576	2.567	801	134	1,074
Wayne	4,972	2,988	553	131	1,300
			1960		
Clarke	4,940	3.953	683	115	189
Covington	4.057	3.095	685	147	130
Forrest	18,201	15.828	1,134	705	534
Greene	2,083	1,308	541	143	91
Jasper	4,569	3,349	872	144	204
Jefferson I		2,951	482	54	120
Jones	18,237	16,265	736	640	596
Jones Lamar	4.146	2,781	1.084	139	142
Marion	7,236	6,144	642	207	243
Perry	2,738	1,904	629	84	121
Perry Simpson	6,161	4,701	1.104	201	155
Smith	5,217	4,141	850	114	112
Wayne	4,347	3,490	635	102	120

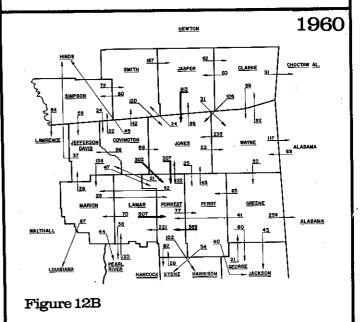
Source: See Table IA.

TABLE 12B. COMMUTERS PER 100 NON-COMMUTERS
AREA 12, (Forrest-Jones Counties), BY COUNTY, MISSISSIPPI, 1970 AND 1960.

		1970		1960_
Counties	Total	Urban	Rural	Total
01	31.7	18,5	36.0	20.2
Clarke Covington	42.1		42.1	26.9
Covingion Forrest	9.5	9.0	12.0	11.6
Greene	54.4		54.4	52.3
Jasper	64.8		64.8	30.3
Jefferson Davis	39.1		39.1	18.5
Jones	11.4	6.4	17.0	8.5
Jones Lamar	83.5	466.6	79.6	44.0
Marion	17.0	13.4	19.3	13.8
Perry	63.4		63.4	37.4
Simpson	29.3	25.1	29.8	27.8
Smith	36.4		36.4	23.3
Wayne	22.9	3.8	32.1	21.1

Source: Computed from Table 12A and comparable Census data for rural/urban areas, 1970.





<sup>\*</sup>Based on population 16 and over in 1970 and 14 and over in 1960.

expansion from Forrest County.

Aside from the increase in total numbers of commuters from 1960 to 1970, the commuting pattern within the area was similar in both years. Many counties in the periphery of the area maintained commuter linkages with Mississippi counties in other areas, primarily the linkage of Clarke County with Lauderdale County (Figures 11A and 11B), Greene and Marion Counties with the coastal counties (Figures 13A and 13B) and Marion County with Area 7 (Figures 7A) and 7B). New commuter streams from Harrison County to Forrest County and from Louisiana to Marion County developed over the decade.

#### Commuting Area 13: Biloxi-Gulfport and

Pascagoula-Moss Point SMSAs

All counties in the area experienced increases in numbers of resident workers, in numbers of non-commuters and in numbers of commuters (Table 13A), but the ratio of commuters to non-commuters in 1970 still was higher than in 1960 for all counties except Hancock (Table 13B). Jackson and Harrison Counties (Type II) are major commuting hubs and Hancock County (Type I and a "growing hub") is developing the characteristics of a commuting hub.

The area demonstrates more than any of the other designated areas the extent to which intercounty commuting can mushroom in all directions in an industrially developing area (Figures 13A and 13B). Numbers of workers crossing at least one county line to reach their place of work almost doubled from 1960 to 1970, and workers traveling to jobs from outside the six-county area increased from 15% of the total commuting stream in 1960 to 30% in 1970. Commuting from the area to Alabama and Louisiana decreased over the decade, while commuting from these states into the area increased. Commuting into the area from other Mississippi counties (Figures 12A and 12B) also increased appreciably over the decade.

TABLE 13A. PMPLOYED RESIDENTS, TOTAL AND BY COMMUTING STATUS, AREA 13, (Biloxi, Culfport and Pascagoula-Moss Point SMSAs), BY COUNTY, MISSISSIPPI, 1970 AND 1960.

			uting Status	<u></u>		
	_		Non- Commuters Commuters			
Counties	Number of Employed * Residents	<u>Commuters</u>	Destination Given	Destination Not Given	Unaccounted for/or Not Reported	
			1970			
George	3,827	2,184	1,191	109	343	
Hancock	5.525	3,506	1,255	192	572	
Harrison	53,357	45,620	2,209	658	4,870	
Jackson	30,832	23,554	3,594	456	3,228	
Pearl River	9.015	5,754	2,519	198	544	
Stone	2,832	1,815	653	15	349	
			1960			
	3,192	2,141	793	21	237	
George Hancock	4,022	2,500	999	99	424	
Harrison	45,443	41.376	1,024	372	2,671	
Jackson	18,264	14,970	1,914	150	1,230	
Pearl River	6,883	5,401	925	161	396	
Stone	2,100	1,523	402	43	132	

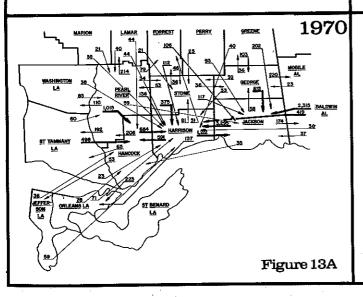
Source: See Table 1A.

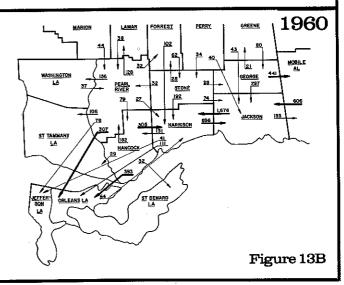
\*Based on the population aged 16 and over in 1970 and 14 and over in 1960.

TABLE 13B. COMMUTERS PER 100 NON-COMMUTERS
AREA 13, (Biloxi-Gulfport and Pascagoula-Moss Point, SMSAs),
BY COUNTY, MISSISSIPPI, 1970 AND 1960.

		1970		1960
Countles	Total	Urban	Rural	Total
George	59.5		59.5	38.0
Hancock	41.3	28.4	68.5	43.9
Harrison	6.3	5.9	8.5	3.4
Jackson	17.2	15.5	22.1	13.8
Pearl River	47.2	44.1	49.3	20.1
Stone	36.8	20.5	49.2	29.2

Source: Computed from Table 13A and comparable Census data for rural/urban areas, 1970.





<sup>\*</sup>See Footnote, Table 1B.

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