I-40 Economic Development Study: Growth Points Analysis

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A study was undertaken to determine optimal economic development opportunities provided by the opening of the Interstate 40 segment between Raleigh and Wilmington, North Carolina, with an emphasis on strategic locations on the highway within the corridor counties. While providing an overall advantage to the corridor, the highway's opening actually may draw some forms of development from the more rural counties in the corridor to the end-point metropolitan areas of Raleigh and Wilmington, which would accentuate existing disparities between the middle counties and the metropolitan counties. The strategy, built around growth pole theory, is an effort to allow the middle counties to share in the advantages of the highway opening. The study includes a review of the economic structure of the corridor counties in relation to the rest of the state, taking into account future trends likely to affect the corridor. Out of this was developed a growth center strategy that realizes the corridor's greatest economic development potential. The suggested growth center strategy is built around industrial and wholesaling opportunities in the counties closer to metropolitan areas and large retail clusters in the middle, more rural counties. Without strategic planning and cooperation the opportunity to realize the growth potential of I-40 will be lost or reduced.

The purpose of this study was to determine optimal economic development opportunities provided by the opening of the Interstate 40 segment between Raleigh and Wilmington, North Carolina, with an emphasis on strategic locations on the highway within the corridor counties (Figure 1). The study includes a review of the economic structure of the corridor counties in relation to the rest of the state, taking into account future trends likely to affect the corridor. Out of this was developed a growth center strategy that realizes the corridor's greatest economic development potential.

The corridor is composed of ten counties with a metropolitan area at either end. Raleigh, at the northern end, is the state capital and also the center of one of the largest and the fastest growing metropolitan areas in the state. At the southern end lies Wilmington. Neither as large nor as fast growing as Raleigh, Wilmington is also a vigorous metropolitan area, deriving special status from the large state port facility and from its role as a major coastal recreational and historical area. The economies of these metropolitan areas are driven largely by external factors that are causing economic growth nationally to focus on metropolitan areas, especially larger ones. These factors include increasing globalization of the economy, the emergence of the information processing/service economy, and the consequent need for good external communications, especially air service. The office building is replacing the factory as the primary place of work, and white-collar office workers and store clerks outnumber blue-collar factory workers. Conversely, an era of strong industrial growth in rural areas that began in the 1950s peaked in the 1970s and has largely ended. More and more, the fate of rural economies is determined by their relative proximity to metropolitan areas.

The counties lying between Raleigh and Wilmington seem to be very much in that situation. They share the mixed agricultural-industrial economy that is so characteristic of much of nonmetropolitan North Carolina. In addition, two smaller metropolitan areas, Fayetteville and Jacksonville, flank the corridor. They and Wayne county (Goldsboro) are the sites of major military establishments that have a substantial economic impact on the corridor's economy. All three join Raleigh and Wilmington as major North Carolina retail trade centers.

The opening of the I-40 segment is viewed by many as offering the corridor an economic bonanza because of enhanced accessibility and increased traffic flow through the region. The assumption that highway improvements will automatically encourage economic development is subject to debate. Some studies have shown that new highway construction, rather than spreading economic growth, instead tends to benefit major urban centers. A study of Minnesota, for example, found that long-term new highway construction benefits were confined to urban centers (*1*). In rural areas the primary benefits were short-term impacts of the construction phase only. In some instances, it appears that businesses left the rural areas and relocated in the now more-accessible cities.

A Southern Growth Policies Board study (*2*) concluded that "Interstate highways appear to influence growth, particularly when the county with the interstate is also adjacent to a metro area . . . Remoteness from both interstates and metro areas . . . seems to be a deterrent to growth." Forkenbrock and Foster (*3*) detail the lack of consensus on highway construction benefits overall and also point out that highways are more likely to be associated with metropolitan growth than rural growth. This is the situation in the new I-40 corridor, where the more rural "middle" counties may benefit less from the highway than the metropolitan counties at each end.

A 1988 study of North Carolina found that statewide $5,796 per year was spent on new highway construction between 1974 and 1985 for every new job that was created (*4*). Even though

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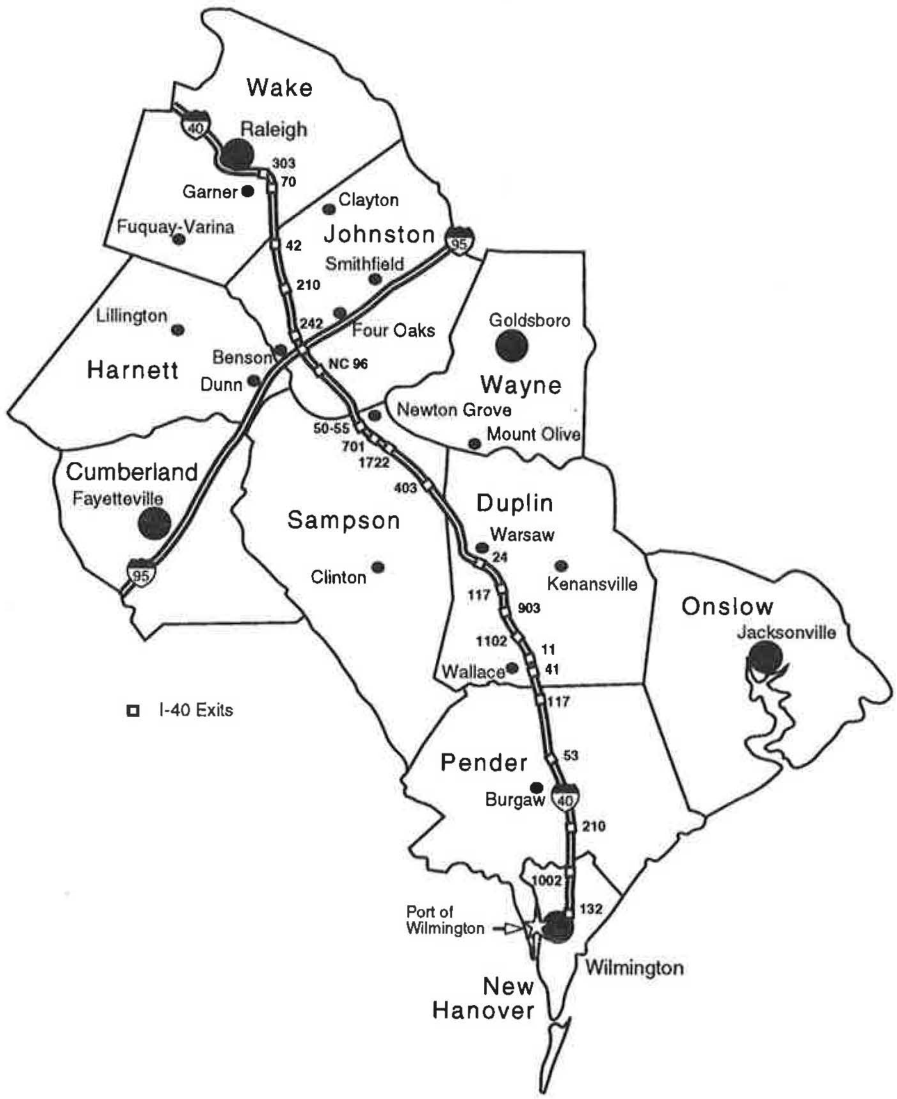

FIGURE 1 Interstate 40 corridor.

the actual cost of highway construction in metropolitan areas was high, the average annual highway expenditure per new job was only $3,276, whereas in the most rural counties the average annual highway expenditure was $11,093, even though highway construction costs per mile were lower in the rural areas. These wide differentials in the relationship between highway construction and economic growth illustrate the point that many more factors than highways are involved in generating economic growth.

These and other studies make it clear that economic growth is not necessarily assured just because a new interstate highway is opened through an area, especially for those parts distant from a metropolitan area. It is possible that vigorous economic growth centering on the end-point metropolitan areas will have an even greater impact on the corridor since a major new highway allows those urban centers greater access to labor and shoppers within the corridor. It is not the intent of this paper to argue the benefits of highway investment, but rather to investigate an appropriate growth strategy for the corridor, given the existence of the new highway and economic trends.

Given the above discussion, an economic development strategy for the I-40 corridor must consider not only the corridor in general but also how to maximize the benefits for those areas (referred to as the "middle counties") that lie between the terminal metropolitan areas. The strategy put forth here for the I-40 corridor arises out of growth pole theory and involves creating growth points (or centers) within the corridor.

Growth pole theory, first suggested by Perroux and discussed by others (*5,6*), is based on the idea that growth or development is not evenly distributed, but instead concentrates around nodes or "poles." Many studies have used interchangeably the terms growth poles, growth centers, and growth points. In the original sense, the poles are not geographical, but rather are industries capable of promoting growth, termed propulsive industries. While Perroux's growth poles skirt the issue of geographic location (*5*), it has become common for the same concept to apply to places as well. Therefore, although the textbook approach to growth pole theory assumes the existence of a propulsive industry as the pole, many studies focus on specific locations as growth poles, centers, or points. Indeed, it is common to use the term growth pole when speaking explicitly of a propulsive industry and growth center or point when introducing the geographical aspect (*5*) or the enhancement of services or physical infrastructure (*7*) in a location.

In general, it is assumed that, even if the geographical concept of a growth center is used, that growth center will include or be built around propulsive industries and firms. Thomas (*6*) provides a good discussion of economic growth theory relative to propulsive industries, including a discussion of the structural changes associated with growth, multiplier effects, and interindustry linkages. The industries often associated with growth pole theory are manufacturing industries (see, for example, Auty's [*8*] study concerning South Korea's heavy industry growth poles), although Thomas (*6*) suggests that some service industries may exhibit high productivity growth and propulsive tendencies. This fact is important to the I-40 corridor because some growth points have more potential to be built around service industries, whereas others will offer more manufacturing or residential potential. These points will be discussed in more detail later.

A final point concerning growth points in the I-40 corridor relates to the issue of size. It is often assumed that larger urban areas will provide the most potential and best return on investments as growth centers because they already have some development in place (*5*). On the other hand, clusters of smaller towns can serve as growth centers, provided a transportation link exists, although Moseley responds that this is true only if a large enough labor pool is encompassed within the cluster (*5*). Obviously, in the I-40 case, a transportation link does exist. Furthermore, North Carolina is unique because the population is spread out over the state rather than concentrated in large cities; this reflects the economic history of the state (*4*) and results in a relatively large labor pool (and market) within the I-40 corridor. These considerations suggest that a growth center approach is feasible along the corridor.

The following section provides an analysis of key elements of the corridor counties' economies. This leads to the formulation of an overall economic development strategy, including a consideration of the major growth centers and their respective "propulsive industries" in and along the corridor.

ECONOMIC OVERVIEW

Population

The counties in the I-40 corridor (Figure 1) contained over 1.3 million residents in 1990, nearly 20.2 percent of the North Carolina total (Table 1). This share increased from 1980 since the corridor growth rate during the decade far exceeded the statewide rate. However, most of this rapid growth was caused by the 40 percent increase in Wake county and the 16.2 percent rise in New Hanover. Otherwise, the eight middle counties grew less vigorously but, at 13.5 percent, they still managed to outperform the state as a whole.

TABLE 1 Population In I-40 Corridor

County	1980	1990	Change 1980-1990
Cumberland	247,160	274,566	11.1%
Duplin	40,952	39,995	-2.3%
Harnett	59,570	67,822	13.9%
Johnston	70,599	81,306	15.2%
Onslow	112,784	149,838	32.9%
Pender	22,262	28,855	29.6%
Sampson	49,687	47,297	-4.8%
Wayne	97,054	104,666	7.8%
Total Middle Counties	700,068	794,345	13.5%
New Hanover	103,471	120,284	16.2%
Wake	301,429	423,380	40.5%
Total I-40 Corridor	1,104,968	1,338,009	21.1%
North Carolina	5,880,096	6,628,637	12.7%

Source: U.S. Census, 1980 and 1990

As shown in Table 1, the middle counties experienced uneven growth, with two actually losing population. Overall, it seems that strong growth counties were either metropolitan or suburban. Otherwise, substantial growth was driven by increases in military employment. Lacking sharp military increases or proximity to an end-point metropolitan area, growth was either modest or even negative.

Employment Change

Table 2 summarizes civilian nonagricultural wage and salary employment in the I-40 corridor, which represented 17.5 percent of the North Carolina total in 1988. Corridor-wide increases in nonfarm jobs were dominated by Wake County's phenomenal surge of 82 percent during the period. Otherwise, the middle counties nonagricultural employment gains average rate was close to the statewide rate, with some variation among them.

These data do not include military employment. However, the U.S. Bureau of Economic Analysis reports that, for 1986, military employment in the corridor totaled 93,370 persons, a 10 percent gain over the 1980 sum of 84,917. The military personnel were concentrated in Cumberland, Onslow, and Wayne counties, which accounted for 96.2 percent of the military personnel in the entire corridor. For once, the statistics were not dominated by either Wake or New Hanover county.

Wage and Income Levels

In the fourth quarter of 1989, private-sector weekly wages in the corridor were substantially below the North Carolina average (Table 3). Wages rose considerably between 1984 and 1989, but most corridor counties did not keep up with the statewide figure. New Hanover almost kept up with the statewide increase and Wake slightly exceeded it. The corridor's per capita income levels were right at the North Carolina mean only because of Wake County's high incomes (Table

TABLE 2 Nonagricultural Wage And Salary Employment

County	1977 Total	MFG	Non-Mfg.	1988 Total	MFG	Non-Mfg.
Cumberland	60,390	10,340	50,050	83,680	12,160	71,520
Duplin	9,470	3,880	5,590	13,220	6,180	7,040
Harnett	13,970	4,970	9,000	17,220	4,560	12,660
Johnston	17,650	7,730	9,920	25,100	9,240	15,860
Onslow	19,090	1,950	17,140	29,080	3,000	26,080
Pender	3,080	350	2,730	5,800	1,070	4,730
Sampson	11,980	5,220	6,760	14,010	5,040	8,970
Wayne	29,330	7,410	21,920	39,180	9,200	29,980
Total Middle Counties	164,960	41,850	123,110	227,290	50,450	176,840
New Hanover	47,890	13,320	34,570	58,420	8,810	49,610
Wake	129,250	18,800	110,450	235,830	26,550	209,280
Total I-40 Corridor	342,100	73,970	268,130	521,540	85,810	435,730
North Carolina	2,170,400	780,900	1,389,500	2,986,600	867,500	2,119,100

	Growth Rates, 1977-1988 Total Employment	MFG Employment	Non-Mfg Employment
Middle Counties	38.8%	20.9%	43.6%
1-40 Corridor	52.5%	16.0%	200.5%
North Carolina	37.6%	11.1%	52.5%

Source: N.C. Employment Security Commission, Civilian Labor Force Estimates, 1987 and 1988

TABLE 3 Average Weekly Wage Private Insured Employment

County	1984	1989	Change
Cumberland	$262.82	330.82	25.9%
Duplin	217.77	279.56	28.4%
Harnett	217.78	288.90	32.7%
Johnston	230.08	309.63	34.6%
Onslow	208.66	249.12	19.4%
Pender	192.12	245.85	28.0%
Sampson	222.41	293.95	32.1%
Wayne	247.77	311.70	25.8%
Average for Middle Counties	238.98	305.64	27.9%
New Hanover	272.49	358.95	31.7%
Wake	312.13	413.96	32.6%
Average for I-40 Corridor	275.90	360.47	30.7%
North Carolina	$294.66	$388.69	31.9%

Source: N. C. Employment Security Commission

TABLE 4 Personal Income

County	1982 Per Capita	% N.C. Average	1988 Per Capita	% N. C. Average
Cumberland	$8,421	90.7%	$12,612	88.2%
Duplin	$6,395	68.9%	$10,595	74.1%
Harnett	$7,059	76.0%	$10,361	72.5%
Johnston	$8,085	87.1%	$12,491	87.4%
Onslow	$7,996	86.1%	$11,262	78.8%
Pender	$7,380	79.5%	$11,677	81.7%
Sampson	$7,464	80.4%	$10,743	75.1%
Wayne	$8,259	89.0%	$12,292	86.0%
Total For Middle Counties	$7,957	85.7%	$11,849	82.9%
New Hanover	$9,377	101.1%	$14,546	101.7%
Wake	$11,944	128.7%	$18,734	131.0%
Total For I-40 Corridor	$9,203	99.1%	$14,300	100.1%
North Carolina	$9,283	100.0%	$14,297	100.0%

Source: U. S. Bureau of Economic Analysis

4). Note that North Carolina ranked 35th nationwide in income, at only 86.7 percent of the U.S. average. Also, average per capita income gained slightly on the North Carolina mean between 1982 and 1988, again because of Wake County. The middle counties declined as a percentage of the statewide average. Performance varied within the middle counties, with all but three counties suffering relative declines in income levels.

Strong job growth, especially in nonmanufacturing, has apparently come at the lower end of the wage scale, with a high proportion of the middle counties' job increases occurring in low-end service and trade jobs; in addition, many jobs are recreationally oriented and thereby seasonal. Conversely, in an area such as Raleigh, growth is largely in high-tech industries, professional occupations, and skilled white-collar areas, as well as in fast-food restaurants and other retail stores.

Manufacturing

In the I-40 corridor, factory jobs grew by 16 percent between 1977 and 1988, well above the statewide average increase of 11 percent. The rise was even more dramatic in the middle counties, where the manufacturing employment total went up 20 percent.

Table 5 offers a detailed view of the corridor's manufacturing structure and points to significant differences between the more urban counties and those in the middle. Overall, about 61 percent of all factory workers in the middle counties are employed in industry groups paying wages below the North Carolina average, which is already one of the lowest in the United States. In Wake and New Hanover counties, by contrast, only about 20 percent of factory jobs are in industries that pay less than the statewide average, whereas over 26 percent are in industries that pay 25 percent or more above the North Carolina mean.

Industrialization historically has served North Carolina well as the leading edge of economic development efforts, but it is becoming an increasingly problematic strategy for the future. For one thing, the types of manufacturing that have been traditionally drawn to rural areas (such as textiles and apparel) are declining, at least as employers. A principal reason for these declines is that many labor-intensive operations have relocated to other countries, either directly as multinational companies redeploy facilities to cheaper labor environments, or indirectly as lower cost foreign producers import their goods and take a larger share of the domestic market.

These declines reflect national trends that also foresee drops in areas such as electrical equipment and industrial machinery. Growth is projected for industries requiring more highly skilled labor forces and that tend to locate in and around major metropolitan areas. Manufacturing generally is expected to drop from 16.4 percent of national employment in 1988 to only 14 percent in 2000. The number of factory jobs is expected to fall by 316,000, with the biggest losses coming in textiles and apparel. The projections for North Carolina call for a steady drop throughout the 1990s, totaling about 43,000 factory jobs. Thus, proponents of an economic development strategy for the I-40 corridor that continues the historic emphasis on industrialization will be attempting to buck strong statewide and national trends.

Nonmanufacturing

Unlike factory employment, strong continued growth is expected in the nonmanufacturing sectors of the economy. Nationally, it is projected that consumer and government services, transportation and trade, business and professional services, hospitality and recreational services, and finance-insurance-real estate will be the strongest employment growth sectors during the 1990s. These sectors will be oriented toward larger metropolitan areas. Only trade, especially retail, recreation-oriented services, and government, among the listed sectors, would seem to have a significant orientation to areas such as the middle counties.

Consistent with these national trends, the largest part of nonagricultural jobs in the corridor is in the nonmanufacturing components, and growth in them was impressive. However, there was a pronounced disparity within the corridor, with the middle counties and New Hanover below the statewide mean, and Wake county recording a gain of 89.5 percent. Wake County accounted for 48 percent of the total corridor nonmanufacturing employment, in constrast with its 31 percent share of factory employment.

Travel and Tourism

Recreational travel is significant in Eastern North Carolina and I-40 is expected to increase accessibility to the state's beaches and other recreational resources. Data in Table 6 show that travelers spent over $1.1 billion in the I-40 corridor counties in 1988. Again, these totals were dominated by Wake and New Hanover counties, which together accounted for nearly 70 percent of the corridor figure. The middle counties' $359 million in traveler expenditures is impressive, but the proportion is far less than the middle counties' 12 percent of population. The number of jobs (6,611) estimated to be supported in the middle counties by travelers' expenditures is also significant but modest in terms of the full employment base of the area.

TABLE 5 Manufacturing Employment, 1988

	Industry (SIC)								
County	Food (20)	Textiles (22)	Apparel (23)	Wood (24)	Chemical (28)	Machinery (35)	Electrical	Other	Total
Cumberland	615	1,131	1,265	483	568	1,178	878	6,042	12,160
Duplin	2,639	2,114	915	334	0	49	0	129	6,180
Harnett	333	1,263	739	447	9	36	985	748	4,560
Johnston	249	564	2,467	434	711	1,515	2,319	3,201	11,460
Onslow	645	3	927	324	3	33	0	1,065	3,000
Pender	140	95	147	220	0	300	16	152	1,070
Sampson	1,220	438	1,109	328	0	35	539	1,371	5,040
Wayne	1,050	740	1,700	710	62	56	720	4,162	9,200
Total Middle Counties	6,891	6,348	9,269	3,280	1,353	3,202	5,457	16,870	52,670
New Hanover	520	130	1,120	430	1,970	867	1,054	2,719	8,810
Wake	1,920	1,220	1,010	860	1,190	3,140	6,200	11,010	26,550
Total I-40 Corridor	9,331	7,698	11,399	4,570	4,513	7,209	12,711	30,599	88,030

Source: North Carolina Employment Security Commission

TABLE 6 Travel Expenditures, 1988

County	Travel Expenditures (thousands)	% N.C. Total	Jobs
Cumberland	166,443	2.7%	3,267
Duplin	3,113	.05%	48
Harnett	25,986	.42%	510
Johnston	42,069	.68%	826
Onslow	53,597	.87%	824
Pender	26,358	.43%	405
Sampson	4,643	.08%	9
Wayne	36,789	0.6%	722
Total Middle Counties	358,998	5.83%	6,611
New Hanover	252,588	3.98%	3,886
Wake	564,585	9.08%	11,081
Total I-40 Corridor	$1,176,171	19.43%	21,578

Source: NC Division of Travel and Tourism, 1988 North Carolina Travel Study

The high levels of traveler expenditures for Cumberland, Onslow, and Wayne Counties strongly suggest that the primary source of traveler expenditures in them is related to military personnel and their visitors. Any change in that impact thus is apt to be more a matter of national defense policy than highway accessibility.

Retail Trade

A major growth sector in the I-40 corridor has been retail trade, reflecting sales to transients, visitors, and residents. Trade employment, in both retail and wholesale trade, rose by 70.6 percent between 1977 and 1988. The rate was only 50.6 percent in the middle counties, whereas higher levels in New Hanover (72.5 percent) and Wake (96 percent) counties raised the overall corridor average to its high level.

The corridor's more rural counties (Duplin, Harnett, Pender, and Sampson) each recorded net retail "leakages" totaling nearly $190 million (Table 7). Leakage is a measure of the extent to which residents shop outside their home counties. It suggests that purchases by travelers and visitors are not sufficient to offset lost sales to residents. Generally, leakage of this magnitude can mean that the range and variety of goods offered by local stores are not sufficient to meet many consumer needs.

The completion of I-40 could augment retail demand in the corridor as more through traffic is channeled onto the new, high-speed, limited-access highway. However, the faster highway may also make it more convenient to travel the length of the corridor without stopping for gas, food, or restrooms. Transients will likely stop at larger, more visible concentrations of stores in either Raleigh or Wilmington with greater selection. A better road will also make it easier for corridor residents to travel major retail clusters in Wilmington, Fayetteville, Jacksonville, Goldsboro, and Raleigh, especially for more expensive "big ticket" items, for which comparison shopping is feasible. Corridor residents also receive heavier television advertising for the larger retail outlets in the end-point metropolitan areas.

The relatively small "surplus" recorded by Wake county retailers in 1987 suggests underutilized retail capacity in Raleigh stores and that the opening of the northern end of I-40 may expand dramatically the leakage out of those northern counties into the Raleigh area. Additional highway improvements in the corridor will improve access to other urban areas, such as Fayetteville, Jacksonville, and Goldsboro. This suggests that, with these other improvements, I-40 may permit a greater concentration of retailing to occur in a few, highly accessible locations.

SUMMARY AND CONCLUSIONS

The preceding economic analysis points out the corridor's uneven growth, where income and wages in the middle coun-

TABLE 7 Actual And Potential Retail Sales

County	Total Personal Income -1987 (thousands)	Potential Retail Sales (thousands)	Actual Retail Sales - 1987 (thousands)	Net "Surplus" or (Leakage) in Retail Sales (thousands)
Cumberland	$2,971,611	$1,358,026	$1,519,688	$161,662
Duplin	$402,046	$183,735	$152,097	($31,638)
Harnett	$624,890	$285,575	$239,494	($46,081)
Johnston	$922,641	$421,647	$429,977	$8,330
Onslow	$1,343,425	$613,945	$651,671	$37,726
Pender	$280,054	$127,985	$62,331	($65,654)
Sampson	$505,719	$231,114	$185,951	($46,163)
Wayne	$1,146,136	$523,784	$526,772	$2,988
Total Middle Counties	$8,196,522	$3,745,811	$3,767,981	$21,170
New Hanover	$1,568,102	$716,623	$947,902	$231,279
Wake	$6,637,715	$3,033,436	$3,092,724	$59,288
Total I-40 Corridor	$16,402,339	$7,495,870	$7,808,607	$311,737

Sources: Income from Bureau of Economic Analysis.
Retail sales data from 1987 Census of Retail Trade, North Carolina, RC 87-A-34

ties are falling further behind statewide averages. Growth in virtually every category except military employment has been dominated by Wake county and, in some instances, especially retail sales, by New Hanover county. Given recent global changes, future military levels are uncertain in those counties relying on it. Travel expenditures, as well, are dominated by Wake and New Hanover. Potential exists for I-40 to further focus retail sales on existing major retail clusters, thereby draining off a large part of future retail sales. In addition, Wake's increasingly higher wages will attract I-40 workers who will find these jobs even more accessible. Wilmington's role will be similar but less intense. Finally, the outlook for manufacturing is not promising (especially in those industry groups that are dominant in the corridor), making a reliance on industrial growth as an economic development strategy an ill advised option. The following section builds on these findings and presents suggestions for improved development opportunities in the corridor.

The preceding section suggests that the new I-40 segment can be as much of a threat as an opportunity. Without an overall development strategy, especially for the middle counties, the threat of most growth around major urban centers will be stronger and the chance to realize new growth opportunities elsewhere will be diminished. This section provides recommendations for such a development strategy, with specific reference to some of the growth points depicted in Figure 2. This analysis is tentative, and implementation would require further detailed studies. The key point now is to emphasize opportunities available primarily close to the end-point metropolitan areas and to cluster retail developments to help capture a greater part of the corridor's market potential. Although it is expected to decline as a means of employment, manufacturing will remain a vital part of the state and corridor economy. The key will be to target industry groups that are likely to grow nationally. Generally, companies in these groups will not be attracted to rural locations or supplies of undereducated labor. Rather, they will tend to need more skilled, or at least trainable, workers, proximity to commercial airports and accessibility to urban amenities, and educational resources. The northern and southern ends

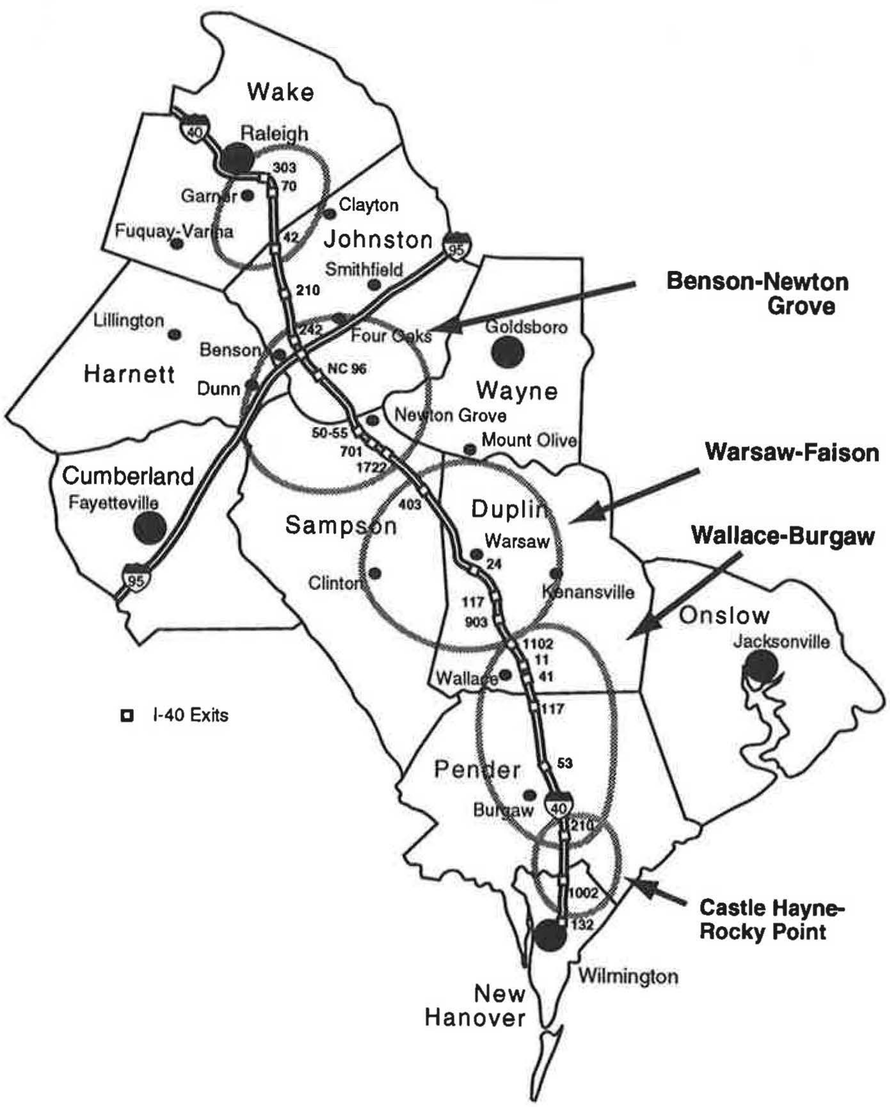

FIGURE 2 I-40 corridor: major growth centers.

of the middle counties could be ideal for such facilities even if the more rural parts might not be. Industrial sites offering easy access to the Research Triangle and to the Raleigh-Durham airport, as well as a large labor supply and less expensive land in areas to the south, could be attractive to companies in these growth industries. The draw will not be as great at the Wilmington end, but the port and the high-amenity quality of that historic city may be an attraction to some companies. Examples of this type of growth point might include Benson-Newton Grove at the Raleigh end and Wallace-Burgaw and Rocky-Point Castle Hayne at the Wilmington end of the corridor. In addition, improved highway accessibility, urban amenities, and business services in Fayetteville, and to some extent in Goldsboro and Jacksonville, may attract additional manufacturing plants to those cities as well. An industrial park would serve well the interests of the entire corridor because it would put jobs within reach of many workers in the corridor. In any event, an industrial development strategy with the best chance for success in the otherwise pessimistic industrial sectors would be one focusing on the advantages of proximity to the two end-point metropolitan areas.

The agricultural resources of the I-40 counties are the basis for a substantial food processing industry, and this should not be ignored. Although that manufacturing sector is expected to decline in employment, it probably will always be important in this area. Every effort should continue to be made to attract further such operations to the corridor. The Warsaw-Faison area has a strong potential for such development.

Just as certain types of manufacturing might find attractive sites in the I-40 corridor near the end metropolitan areas, so might major wholesale distributors. These operations typically require extensive space and ready access to their customers. A location on I-40, especially one near I-95, could be attractive, especially for distributors that need to serve a multicounty or multistate region. For example, Benson-Newton Grove is well situated for this type of development.

The best chance to reduce retail leakage out of the corridor and to capture more trade from visitors and transients will be to cluster new retail space on one or several sites at strategic locations along I-40. The aggregate retail leakage from Duplin, Harnett, Pender, and Sampson counties was estimated to be \$190 million, enough to support 1.3 million ft^2 at \$150 per ft^2. Obviously one or even several shopping centers cannot hope to capture all of those sales, but one or two in the 100,000- to 150,000-ft^2 range could intercept a significant part and, in the process, draw more shoppers off the interstate if the centers are well located, attractive, and visible and offer sufficient shopping variety. Garner, Benson-Newton Grove, Warsaw-Faison all represent potential retail cluster opportunities. The alternative is to have a scattering of retail stores without the mass to support enough variety to hold local shoppers, whereupon the new highway would continue to channel shoppers into Raleigh, Fayetteville, Jacksonville, Goldsboro, and Wilmington.

The imperative to cluster economic development at strategic locations along the corridor is based on economic logic. however, political logic calls for dividing growth equitably among all of the counties and towns in the area. Thus, there is a tension between an economic strategy that calls for clustering and a political strategy that calls for dispersion. Every community-based organization or elected official understandably will want to obtain a piece of the economic pie for its constituency, which could create such an internally competitive environment that some growth opportunities go unrealized. All parties, for example, need to understand that an industrial park located in only one county will provide jobs for workers from a number of counties within the corridor. Furthermore, the best means of developing such a park, obtaining extra state funding for infrastructure for it, and effectively marketing the park would be through a regional organization that presents a unified face to the General Assembly and to others. Therefore, one of the first prerequisites to an effective economic development strategy for the corridor is to develop a sense of regional identity to help overcome any internal competitiveness that may undermine cooperation and coordination. Regular steering committee meetings, held throughout the course of this study, have laid the basis for such a sense of regional identity. They could serve as a prototype for a permanent organization to foster this sense of identity and to lead in the formation of a more specific program of economic development for the corridor.

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