

ECONOMIC DEVELOPMENT OF SOUTH CAROLINA'S I-95 CORRIDOR: A PRELIMINARY EXAMINATION

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ABSTRACT

Eleven counties situated along I-95 in South Carolina have been dubbed the "Corridor of Shame" by film producer Bud Ferillo because of their poor economies, health and education relative to the rest of the state. In this preliminary study we examine the economies of the counties along the I-95 Corridor region to understand why the region has lagged behind the rest of the state and to gain insights into how the region can foster a more healthy level of economic development.

INTRODUCTION

The I-95 Corridor Region of South Carolina consists of the 11 counties through which the I-95 Interstate passes. This region as a whole has not developed economically at the pace of the state, although having interstate-level highways is generally felt to foster economic development. The lack of economic progress in the region is reflected in the fact that in four of the counties more than 10 percent of the White population and more than 30 percent of the Black population had incomes below the poverty level in 1999.

This region is in contrast to three other regions of South Carolina that have enjoyed healthy economic development during recent decades. These three regions are The I-85 Corridor through the northwestern part of the state, the region around the capitol of Columbia, with I-20, I-26, and I-77, and the coastal counties, with tourism and retirement communities. In this paper we examine two aspects of this problem. First, we look at some characteristics of the counties of the I-95 Corridor Region to show how the economic development of this region has lagged behind the development of the state as a whole. Second, we outline the initial steps in a long-range research program to foster economic development in the I-95 Corridor Region.

I-95 CORRIDOR ECONOMIC DEVELOPMENT IN PERSPECTIVE

The economic development progress in the 11-county I-95 Corridor Region during recent decades is evident through examining two basic measures of economic progress: population and per capita income. Economic progress for an area such as a county is closely associated with population increase. Intuitively this makes sense, since if the economy of an area is improving fewer people will leave and more will move into the area; and, in addition, this relationship between economic progress and population growth is supported by the statistical evidence. Per capita income also is a comprehensive measure of economic well-being for an area. The product of population and annual per capita income is a measure of the annual income of the individuals in an area and the year-to-year changes in an area's income provides a comprehensive measure of economic progress.

Analysis of Population Change

Tables 1 and 2 provide population data for the I-95 Corridor counties for the decennial census years in the 40-year period 1960-2000. Table 1 provides population levels and Table 2 shows the population of the I-

95 region counties as a percent of the South Carolina population in the specified years. From Table 1 it is seen that South Carolina's population increased from about 2.38 million in 1960 to 4.01 million in 2000, which represents an increase of 68.4 percent over that 40-year period. Over the same period the 11 county I-95 Corridor region increased from 0.45 million to 0.66 million, representing a 45.8 percent increase. Thus, there was substantially slower population growth in the I-95 Corridor region than in the state as a whole. Dorchester County showed the highest growth rate with 295.4 percent, and this is probably due in large part to the county's proximity to rapidly growing Charleston County and the Charleston metropolitan area. The second fastest growing county is Jasper County with a population increase of 68.9 percent during the 1960-2000 period. Jasper County has probably benefited from its proximity to rapidly growing Beaufort County and the Savannah metropolitan area. Four counties in the region showed good growth: Florence with 48.9 percent, Sumter with 39.6 percent, Colleton with 37.5 percent, and Orangeburg County with 33.6 percent. Three counties showed a more moderate rate of growth: Darlington County with a 27.3 percent increase, Hampton with a 22.7 percent increase, and Clarendon with a 10.2 percent increase. The lowest growth rates were shown by Marlboro County with a 1.0 percent increase and Dillon County with a 0.4 percent increase.

Table 1. Population of I-95 Corridor Counties: 1960-2000 (in 1,000).

County	1960	1970	1980	1990	2000
Clarendon	29.49	25.60	27.46	28.45	32.50
Colleton	27.82	27.62	31.78	34.38	38.26
Darlington	52.93	53.44	62.72	61.85	67.39
Dillon	30.58	28.84	31.08	29.11	30.72
Dorchester	24.38	32.28	58.76	83.06	96.41
Florence	84.44	89.64	110.16	114.34	125.76
Hampton	17.43	15.88	18.16	18.19	21.39
Jasper	12.24	11.88	14.50	15.49	20.68
Marlboro	28.53	27.15	31.63	29.36	28.82
Orangeburg	68.56	69.79	82.28	84.80	91.58
Sumter	74.94	79.42	88.24	102.64	104.65
Total	451.33	461.55	556.78	601.67	658.17
South Carolina	2382.60	2590.50	3121.8	3486.7	4012.00

Table 2 is based on the same population data as Table 1, but provides a different perspective by showing the population of the I-95 Corridor Region counties as a percent of the state's population. Again it is apparent that the I-95 Corridor Region did not grow as rapidly as the state since as shown in 1960 the region had 18.9 percent of the state's population but by 2000 had only 16.4 percent. From Table 2, it also is clear that only Dorchester County and Jasper County grew faster than the state as a whole.

Table 2. Population of I-95 Corridor Counties as a Percent of South Carolina Population

County	1960	1970	1980	1990	2000
Clarendon	1.2	1.0	0.9	0.8	0.8
Colleton	1.2	1.1	1.0	1.0	1.0
Darlington	2.2	2.1	2.0	1.8	1.7
Dillon	1.3	1.1	1.0	0.8	0.8
Dorchester	1.0	1.2	1.9	2.4	2.4
Florence	3.5	3.5	3.5	3.3	3.1
Hampton	0.7	0.6	0.6	0.5	0.5
Jasper	0.5	0.5	0.5	0.4	0.6
Marlboro	1.2	1.0	1.0	0.8	0.7
Orangeburg	2.9	2.7	2.6	2.4	2.3
Sumter	3.1	3.1	2.8	2.9	2.6
Corridor Total	18.9	17.8	17.8	17.3	16.4

Analysis of Per Capita Income Changes

Tables 3 and 4 provide information on the per capita income of the I-95 Corridor counties. From Table 3, the per capita income of the region was \$20,539 in 2000, well below the South Carolina per capita income of \$23,988. In 2000 only Florence County, with a per capita income of \$24,517, exceeded the state per capita income. In addition to Florence County, only Darlington County and Dorchester County exceeded the region's per capita income of \$20,539. From Table 4, the per capita income of the I-95 Corridor Region in 2000 is only 85.6 percent of South Carolina's level. It is useful to summarize the levels of per capita income for 2000 as follows:

Percent of South Carolina's

<u>Per Capita Income</u>	<u>Counties</u>
More than 100	Florence
90, but less than 100	none
80, but less than 90	Darlington Dorchester Orangeburg Sumter
70, but less than 80	Clarendon Colleton Dillon Hampton
60, but less than 70	Jasper Marlboro

From this summary it is clear that six, more than half, of the region's counties have a per capita income less than 80 percent of the state's per capita income.

Table 3. Per Capita Income of I-95 Corridor Counties: 1960-2000 (in dollars)

County	1960	1970	1980	1990	2000
Clarendon	\$593	\$1,339	\$4,175	\$8,181	\$17,727
Colleton	\$766	\$1,763	\$4,633	\$9,193	\$18,672
Darlington	\$943	\$2,103	\$5,141	\$10,510	\$21,038
Dillon	\$692	\$1,613	\$4,162	\$8,077	\$17,580
Dorchester	\$911	\$2,063	\$6,013	\$11,884	\$20,906
Florence	\$997	\$2,218	\$5,526	\$11,007	\$24,517
Hampton	\$805	\$1,732	\$4,827	\$8,578	\$19,028
Jasper	\$703	\$1,522	\$4,312	\$7,984	\$16,716
Marlboro	\$759	\$1,743	\$4,483	\$7,948	\$16,546
Orangeburg	\$830	\$1,820	\$4,713	\$9,004	\$19,619
Sumter	\$1002	\$1,970	\$4,774	\$9,943	\$20,493
Total	\$870	\$1,915	\$4,987	\$9,943	\$20,539
South Carolina	\$1,142	\$2,312	\$5,886	\$11,897	\$23,988

Table 4. Per Capita Income of I-95 Corridor Counties as a Percent of South Carolina per Capita Income (in percents)

County	1960	1970	1980	1990	2000
Clarendon	51.9	57.9	70.9	68.8	73.9
Colleton	67.1	76.2	78.7	77.3	77.8
Darlington	82.5	91.0	87.3	88.3	87.7
Dillon	60.6	70.0	70.7	67.9	73.3
Dorchester	79.7	89.2	102.1	99.9	87.2
Florence	87.3	95.9	93.8	92.5	102.2
Hampton	70.5	74.9	82.0	72.1	79.3
Jasper	61.5	65.8	73.2	67.1	69.7
Marlboro	66.4	75.3	76.2	66.8	69.0
Orangeburg	72.7	78.7	80.0	75.7	81.8
Sumter	87.7	85.2	81.1	84.0	85.4
Total	76.2	82.8	84.7	83.6	85.6

LONG-RANGE ECONOMIC DEVELOPMENT STRATEGY

In regional economic development there are two generic strategies. The most basic approach focuses on addressing the human or social needs of the area population by investing in improving education, medical services, social services, and in other improvements to bring the well-being of the population to an acceptable level. In the long run these improvements in the human factors of the area and its residents will lead to increases in the population level and per capita income, as well as other measures of economic progress. This approach requires a long time horizon, but the approach has the merit of focusing on improving the quality of the lives of the residents of the area. The second approach focuses directly on creating jobs. This is accomplished most frequently by attracting business firms to locate facilities in the area, and this often requires making improvements in infrastructure required by the incoming businesses. In addition, businesses are often given incentives such as tax relief for some period of time to encourage their relocation to the area. The jobs created are usually filled by a combination of local residents and workers moving into the area, often as relocated employees of the incoming firm.

These new businesses and the associated employment increase the area's tax base and its general economic well-being. Over time these improvements from job creation lead to improvements in the human and social conditions of the area residents.

In the I-95 Corridor Region there is a need to pursue both of these economic development strategies simultaneously. The resident population is largely rural, and the area is below an acceptable level with respect to human factors. Thus, there is an urgent need to address directly the human and social needs of the region's resident population. However, this strategy alone would take a very long period and the resources required to pursue this strategy over a very long period, say decades, will likely not be available. Thus, there is a need to pursue the job creation strategy in parallel with the improvement of human factors strategy. In the early years of implementing the improvement of human and social needs strategy resources from the government and grants will be required. However, over time the expectation is that as the population reaches an acceptable human factors level the job creation strategy will be strong enough to generate the resources to promote further improvements in the human factors level of the population.

During the current year, the underpinning is being established for developing and implementing this two-pronged economic development strategy. This involves pursuing the two complementary parts of the strategy in two different ways. First, an assessment is being undertaken of the human factors needs of the I-95 Corridor Region. Second, some preliminary research in the job creation strategy is being undertaken.

Human Factors Needs Assessment

South Carolina State University and Francis Marion University are jointly sponsoring a study of the human factors needs of residents in counties along the I-95 Corridor. The study will use information from a variety of sources. Similar studies conducted within the past ten years in other areas of the country should help establish a framework. State and federal data bases and other documents will set the statistical foundation for the study. Town meetings will be held in the affected counties. Interviews with economic development leaders, leaders in health care, and leading educators will help to establish this list of human factors needs.

The study should provide recommendations on:

- Working within the state government to gain the most benefits for the I-95 residents
- Coordinating local government efforts for the benefit of the region
- Working with federal government agencies to assist the process
- List advantages for future development
- List disadvantages of the region
- Using students to help with research and carrying out policies

Preliminary Job Creation Research

The job creation research projects currently ongoing are broad in nature with the expectation that this will pave the way for more targeted job creation research in the next phase of this research. Three of the current projects are related to attracting retirees to the I-95 Corridor Region as an approach to job creation. Another project deals with the feasibility of biodiesel production in the I-95 Corridor. The final project focuses on South Carolina's need for additional seaport capacity and approaches to achieving it. The thrust of these projects is described below.

Project #1: Retirement Migration Patterns: Recent and Future

The general purpose of this research is to examine the migration of the 60+ population into South Carolina and into South Carolina's counties or county groups. The results from this research are intended to provide the empirical basis for examining the potential role of attracting retirees as a component of the economic development strategy for South Carolina and its counties. In this research emphasis will be focused on the 11 counties of the I-95 Corridor Region, which is a focus of our policy analysis. This research will rely on data from the 2000 decennial census and other published works.

Project #2: Strategies and Tactics for Attracting Retirees

The purpose in this project is to identify policies and actions that can be instrumental in attracting retirees to live in South Carolina and in the 11 counties of the I-95 Corridor Region in particular. These policies and actions may be strategic, being broad and longer-term, or of a tactical nature, being shorter-term and operational. To the extent possible literature and other evidence should be brought to bear on the discussions of policies and actions. For example, if Mississippi has implemented a program to attract military retirees to their state, it is of interest to describe the specific actions taken, the success of those actions and the program, and related information. Some of the questions that come to mind are: (1) Which states represent South Carolina's competitors in attracting retirees from other states? (2) What do retirees, or different groups of retirees, want (need): transportation (highways, air service, etc), medical facilities, financial services, recreational opportunities, restaurants, etc. (3) What are the competitive advantages of South Carolina and the counties of the I-95 Corridor in attracting retirees? (4) What areas of the South Carolina I-95 Corridor Region offer what retirees want (need)? (5) What strategic and tactical initiatives could the prime areas of the I-95 Corridor Region employ that have potential for attracting retirees?

Project #3: Feasibility of Retirement Communities

In recent decades there has been strong growth in the development of retirement communities in many parts of the country. This growth continues, and it promises to accelerate with the baby boom generation moving into retirement. These communities often are located in regions of the country that have a mild climate, and in areas of those regions that can provide the housing, transportation, medical services, and other things that families need in the retirement phase of their life. While retirement communities are located in all regions of the country, they are more likely to be located in the milder climates of the southeastern states, the southwest, and California. South Carolina with its mild climate has attracted a number of retirement communities, including Sun City at Hilton Head (developed by Del Webb), Country Lakes in Little River (developed by Jensen Residential Communities), and Wyboo Plantation on Lake Marion (developed by Wyboo Plantation, Inc). The purpose of this study is to assess the feasibility of attracting the development of additional retirement communities to South Carolina and to the counties of the I-95 Corridor Region in particular. A number of questions come to mind: (1) What types of retirement communities would best fit the counties of the I-95 Corridor Region? (2) Given the types of retirement communities that fit into the I-95 Corridor Region, what are the requirements the developers of such communities need, in terms land, size of development in term of numbers of housing units, water and sewer infrastructure, availability of transportation services, medical services, recreational opportunities, and others? (3) Which counties or parts of the I-95 Corridor counties meet the basic requirements of developers as these requirements were identified in Step 2? (4) Do the counties that seem to be likely candidates to be retirement community sites have the economic development leadership capability to provide assistance to developers?

Project #4: Feasibility of Biodiesel Production

In recent years a strong interest has developed in fuels that are alternatives to petroleum derived fuels. These alternative fuels include ethanol, natural gas, propane, hydrogen, biodiesel, electricity, and methanol. On a worldwide basis, these fuels already are being used in a variety of vehicle applications. The attractiveness of alternative fuels are: (1) their use generally reduces pollutants and exhaust emissions and (2) many of them can be domestically produced from renewable sources. One possible strategy for South Carolina in alternative fuels is to grow agricultural products, such as soybeans and switch grass, and to attract companies to build plants to convert these products into biodiesel or ethanol. The I-95 Corridor Region has competitive advantages that can support this strategy: (1) ample farm acreage for producing crops that can be converted to biodiesel fuels, (2) experienced farmers that already grow soybeans and that can readily move into growing other crops suitable for biodiesel fuel, (3) proximity to the I-95 Interstate that provides the effective transportation linkages to market biodiesel products, and (4) communities that can support the infrastructure and service needs of biodiesel plants. Questions that come to mind are: (1) What requirements do biodiesel firms have for establishing a plant in an area: land requirements, infrastructure (water, electricity, etc), labor force, and community attributes (services, schools, entertainment, etc)? (2) Which I-95 corridor counties are suitable for growing the crops, such as soybeans and switch grass that can be converted into biodiesel fuel? (3) Related to the first two questions there are questions about the trade-offs between the types of processing plants and the agricultural product that plants process. (4) How should an agreement be negotiated between a biodiesel firm and a county in the I-95 Corridor Region to build and operate a biodiesel plant in the county.

Project #5: South Carolina Port Capacity

East Coast and Gulf ports in the US are in the midst of a strong increase in traffic volume, particularly container cargo volume. In South Carolina the Port of Charleston is experiencing this surge. Already Charleston is the busiest container port in the Southeast and Gulf Coasts and ranks fourth nationwide in container cargo volume. Charleston ranks as the nation's sixth largest port in the dollar value of international shipments. Global Insights, a firm specializing in trade data, projects that the cargo volume passing through Charleston will increase 257 percent over the next 15 years. The Port of Charleston is the principal port in South Carolina. Shippers from more than 20 states use Charleston's port to access foreign customers and suppliers, but about 45 percent of the tonnage through the port is on behalf of more than 700 South Carolina businesses. Thus the Charleston port is a major competitive advantage for the state. South Carolina must increase port capacity during the next decade in order to retain their competitive advantage. Two types of proposals have been made to increase port capacity: (1) inland ports and (2) a new port on the Savannah River. Inland ports specialize in the staging and transfer of container seaborne freight. The objective in inland ports is to position container facilities at uncongested inland locations where rail or truck access is easy, where land is more readily available, and where economic development is desired.

CONCLUSION

Improving health, educational, and economic conditions along the I-95 Corridor of Shame is critical to the region. The strategies reported here may be the start on the road to success. The authors will provide updates on the progress of these and other efforts to help the region grow and prosper.

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