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ZONING AS A MEANS OF CONTROLLING COMMERCIAL STRIP DEVELOPMENT

by

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**ABSTRACT**

The Naval Submarine Base Kings Bay is responsible for the increased growth in the communities of St. Marys and Kingsland, Georgia. Along with such growth are impacts to the basic infrastructure of this area. A major impact to this region is the development occurring along Georgia Highway 40. This highway links the two cities and is a primary business thoroughfare in southern Camden County.

In response to this growth the cities of St. Marys and Kingsland have used traditional zoning methods along Highway 40 to direct development away from the city center. Such methods are producing unwanted growth such as hopscotch and commercial strip development.

Two innovations to traditional zoning can be used to coordinate this growth in a more desirable manner. The Planned Unit Development and the Expressway Interchange District represent a means of allowing development to continue while preserving community character.

Thesis Supervisor: Dr. Edwin Melendez

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## INTRODUCTION

The following research project concerns the issue of zoning and its use and implementation in a rapidly growing area in southeastern Georgia. The purpose of this thesis is to show how traditional zoning methods in St. Marys and Kingsland have resulted in uncoordinated development in the newer growth areas along Georgia Highway 40. In addition, what innovations exist to traditional zoning that could be used to control such development and to preserve the character of these two cities and the entire region.

Naval Submarine Base Kings Bay is being developed to serve as the east coast home for the new Trident class nuclear submarines. Associated with such development are increases in population, business activity and a basic socio-economic change in the area from a predominately rural status to a more suburban status.

Much of this new development associated with NSB Kings Bay is occurring in the communities of St. Marys and Kingsland. Impacts associated with this growth such as increased housing construction and increased infrastructure are all being absorbed by these communities. In particular, growth in this area is occurring along a single highway. Highway 40 is the only link between St. Marys and Kingsland, and it is a defense access road serving NSB Kings Bay.

In response to this growth, Highway 40 has become the

primary business thoroughfare through this area. As a result, it is rapidly becoming commercialized with a hodgepodge of development ranging from businesses, housing units, and industrial parks.

In order for these communities to control such rapid growth, the following thesis suggests two innovations to more traditional zoning methods; the Planned Unit Development District (PUD) and the Expressway Interchange District (EID). Restated as a question, the thesis will try to answer "What innovations to more traditional zoning methods can the cities of St. Marys and Kingsland use to control and direct development in a more coordinated and comprehensive manner?"

Chapter two will present background information concerning the Kings Bay study area. Population and traffic level tables will be included to provide the reader with a statistical view of the area, while emphasizing the tremendous growth affecting the area.

Chapter three will define zoning and present basic information concerning traditional zoning, its problems and results. Two innovations to traditional zoning will also be discussed, the Planned Unit Development and the Expressway Interchange District.

Chapter four will discuss how the basic problems and results of traditional zoning affect the cities of St. Marys and Kingsland. Examples of such problems and results will be discussed in relation to Highway 40. In addition, the current

status of development along Highway 40 will be presented in order to provide the reader with a clearer understanding of how development trends have occurred over the past six years.

Chapter five will then discuss the two innovations and how they could be used by St. Marys and Kingsland in controlling growth. The object is not to prevent growth, but rather to coordinate it within the communities character. It is hoped that these reforms will serve to help reduce traffic congestion, promote an integrated mix in housing types and family incomes, and to cluster services on a given site to reduce public cost.

Finally, chapter six will conclude the research, summarizing the major ideas presented in the previous chapters.

## CHAPTER 2

### INTRODUCTION

The following chapter will provide a brief overview of the Kings Bay region. This area includes the cities of St. Marys, Kingsland, Camden County, and the Naval Submarine Base, Kings Bay.

The purpose of this chapter is to present basic geographic and demographic data related to the study area, Highway 40. In addition, Graphs, tables, and maps will provide a spatial and analytical framework of the area.

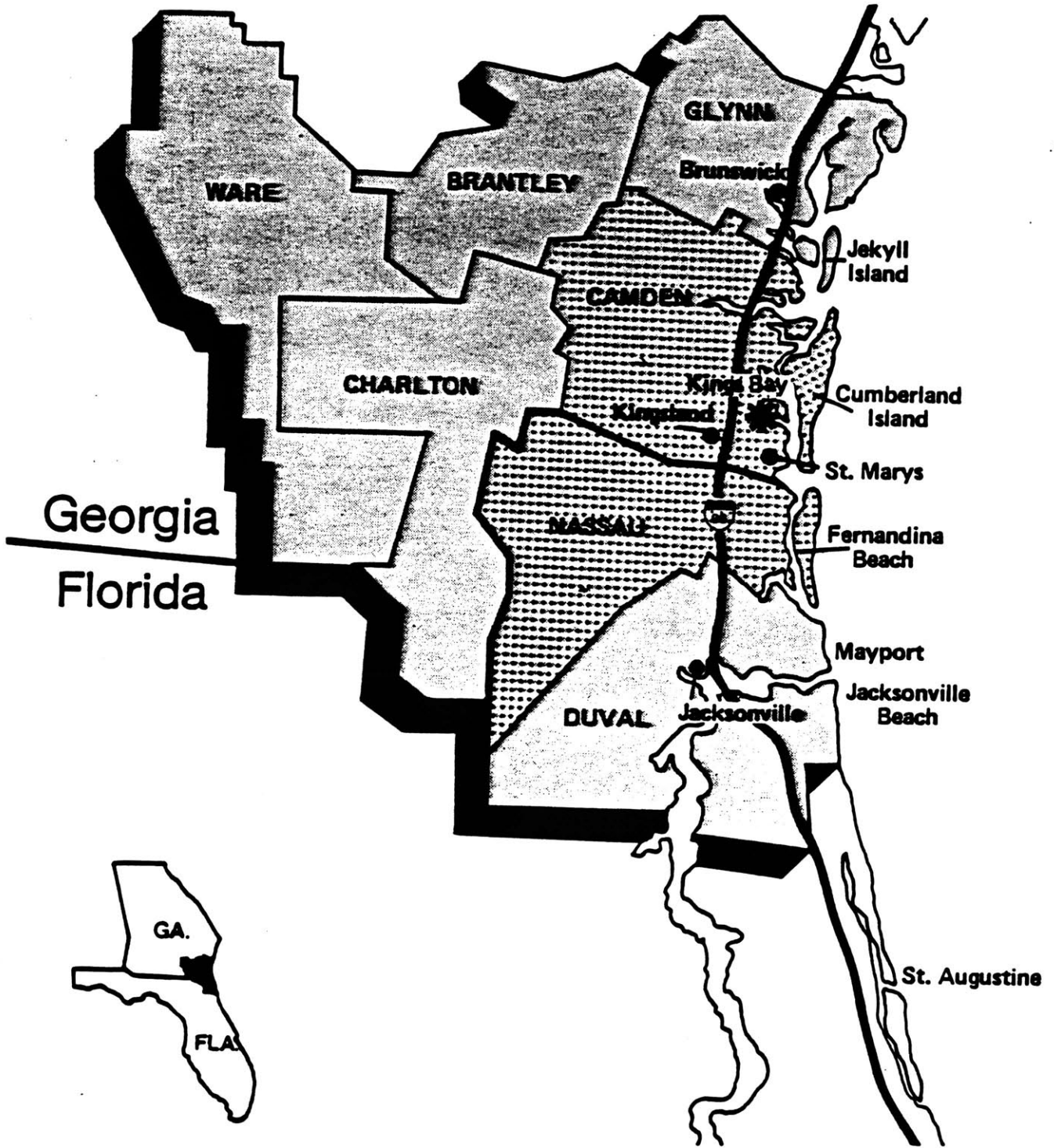
Finally, the chapter will present some background information concerning the Highway 40 study area, and current development trends along the highway will be presented.

### KINGS BAY

The area known as Kings Bay was originally the site of several former plantations in the 1700's and early 1800's. This area was located in the eastern part of Camden County adjacent to the Cumberland and Crooked Rivers. Such a location provided the necessary resources for sugar cane, rice and cotton production, which were grown for export and local consumption. However, as the need for such crops diminished locally and fishing became more prominent, these plantations were abandoned and the area was allowed to return to its previous woodland state.

In the 1950's the government bought the area known as Kings





**Figure 1**  
**Trident Impact Region**

Source: PLANTEC CORPORATION ]984

Bay and used the site for an Army ocean terminal. During the early stages of the Vietnam War, Kings Bay was used to store ammunitions for the war, yet, by the mid 1960's the base was inactive and control was given to the Blue Star shipping company. By the early 1970's, however, Kings Bay was virtually non-operative.

Kings Bay Began its current status as a Naval Submarine Base in the mid 1970's, when it was established as a Naval facility to support the nuclear powered Atlantic Fleet Ballistic Missile, Poseidon-Class submarine in 1978. Presently, Poseidon submarine crew members are homeported in Charleston, South Carolina. The major changes anticipated for the Kings Bay area are related to the base's selection in October, 1980, as the site of the United States Navy's East Coast strategic submarine base to support a fleet of Trident class submarines. As a Trident facility, Naval Submarine Base (NSB) Kings Bay will become the homeport for the Trident submarine crews who will also receive their training in facilities being constructed at Kings Bay. The base is expected to be fully operational as a Trident facility in 1989, when the first Trident submarine is scheduled to arrive.

Located on the Atlantic coast, NSB Kings Bay will serve two submarine squadrons and employ over 11,000 people. Due to this military construction activity, the area's pleasant climate, and attractive location, significant secondary development is taking place.

The Kings Bay area is close enough to the Jacksonville metropolitan area to provide a full range of support services for business and industry. The center of current development

activity, along Georgia Highway 40 between Kingsland and St. Marys, lies just over 30 minutes from Jacksonville International Airport. Other urban areas near Kings Bay are Brunswick, Georgia, about one hour away, and Savannah, Georgia, about two hours away.

When completed in 1995, the Navy's \$1.8-billion Kings Bay submarine base, with its 11,000 civilian and military jobs, will generate major impacts in Camden County. Many of the most basic impacts--and the opportunities they raise--are clearly in view.

1. About \$250-million in added annual Navy base and multiplier "spin-off" payroll.
2. Some 400,000 to 500,000 square feet of added retail trade floor space, of which a significant portion has already been constructed.
3. Additional commercial-service office space and related facilities, requiring 100,000 to 200,000 square feet.
4. Another \$800-million, or more, in added community building construction.
5. Prospectively \$5-million in yearly Navy base procurement of goods and services from local vendors. (Kings Bay Impact Office Housing Profile, 1986)

Overall, NSB Kings Bay will add new development, an increase in population, a greater skilled labor force, and greater economic opportunities to Camden County.

#### **CAMDEN COUNTY**

Camden County, Georgia is located on the Atlantic Ocean in the extreme southeastern part of the state. It is adjacent to the Florida border, and it covers an area of over 600 square miles. Much of Camden County is covered with pine and hardwood (oak) forests, with palmettos growing within these same forests. The

rest of Camden is lowlying swamp land and marsh. Rivers also play an important role to the county as it is bounded by the Satilla River on the north, the Intercoastal Waterway on the east, and the St. Marys river on the south.

For much of its history, Camden County was basically rural, poor, and predominately industry free. Plantations were not common in Camden due to the poor soils for agriculture. Most people gained their livelihood from fishing or shrimping. In the late 1800's and early 1900's lumbering became a small industry. By the 1940's, however, paper manufacturing came to this area, and for over 40 years, the production of paper has been the number one industry.

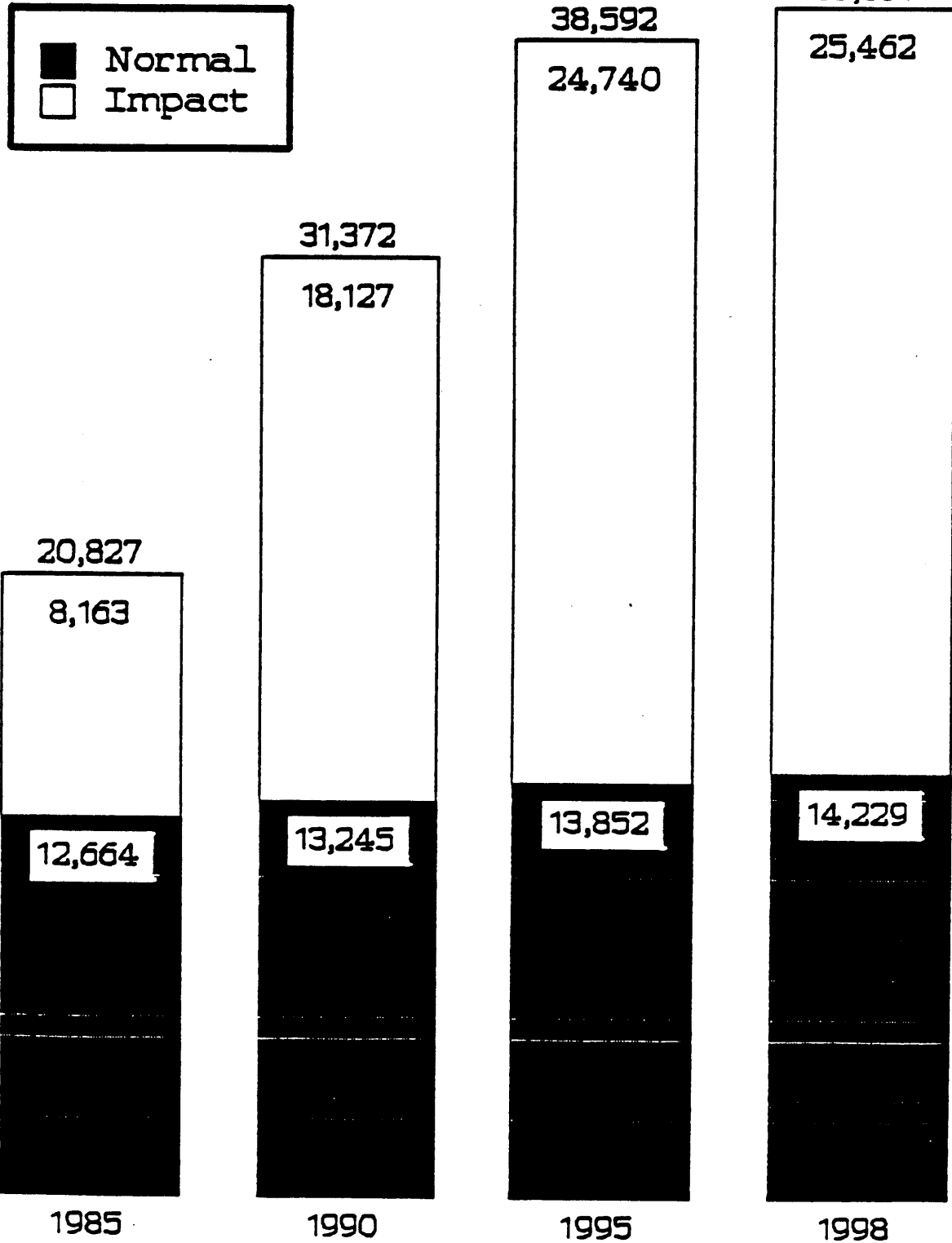
Camden's role as the home for the NSB Kings Bay is very important. For one, the military is now the major industry in the county, and also, the population has increased due to an influx in military and civilian personnel. Much of this growth would not have occurred had the Navy not located in Camden County. Normal growth rates for Camden as well as many other rural south Georgia counties is typically slow in the absence of significant economic or industrial growth. For example, in 1970, Camden's population was 11,334; in 1980, 14,210; and in 1986, 22,239. By 1998 the population expected for the county will reach about 40,000.

The county seat of Camden County is Woodbine, and its other principal cities are St. Marys and Kingsland. While Woodbine is the county seat, it is also the smallest city. Since it is located in the northern portion of the county



# Population Projections Camden County, Georgia

Figure 4



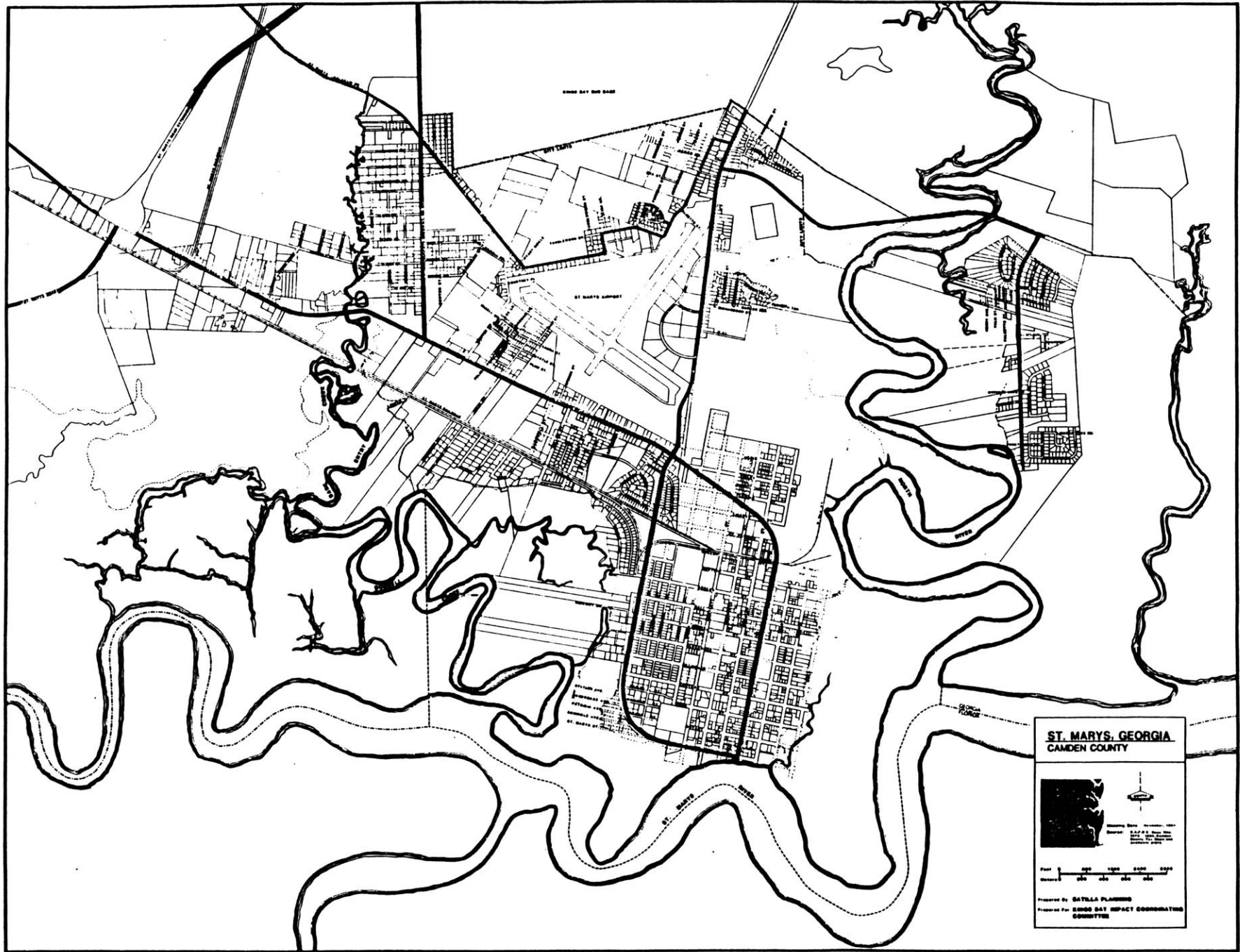
its population growth has not been significantly affected by the base in southern Camden.

## **SAINT MARYS**

St. Marys, Georgia is located in extreme southeastern Camden County on the northern banks of the St. Marys River. This river serves as the border between Georgia and Florida as well as the city's southern boundary. St. Marys is also adjacent to NSB Kings Bay.

St. Marys is the largest city in the county, and it is also the oldest settlement. Settled in 1735, St. Marys was also the most important and southernmost port in the United States during the late 1700's and early 1800's. As a result of its long historical roots, St. Marys contains many examples of colonial and Greek revival architecture. In fact, many of the buildings within its Historical District are listed on the National Register of historical buildings.

The primary industries in this city were generally oriented around the sea. Fishing, shrimping, and the processing of these products was always a mainstay for the residents of St. Marys and the surrounding area. In the 1940's paper manufacturing was established in St. Marys with the opening of the Gilman Paper Company. Paper remained the dominant industry in the county as well as the surrounding area for many years. Today, however, the NSB Kings Bay represents the primary income generator for the city. Although paper manufacturing is still important to the local economy, modern storage methods such as plastic bags and rubber containers as well as a national decline in the paper

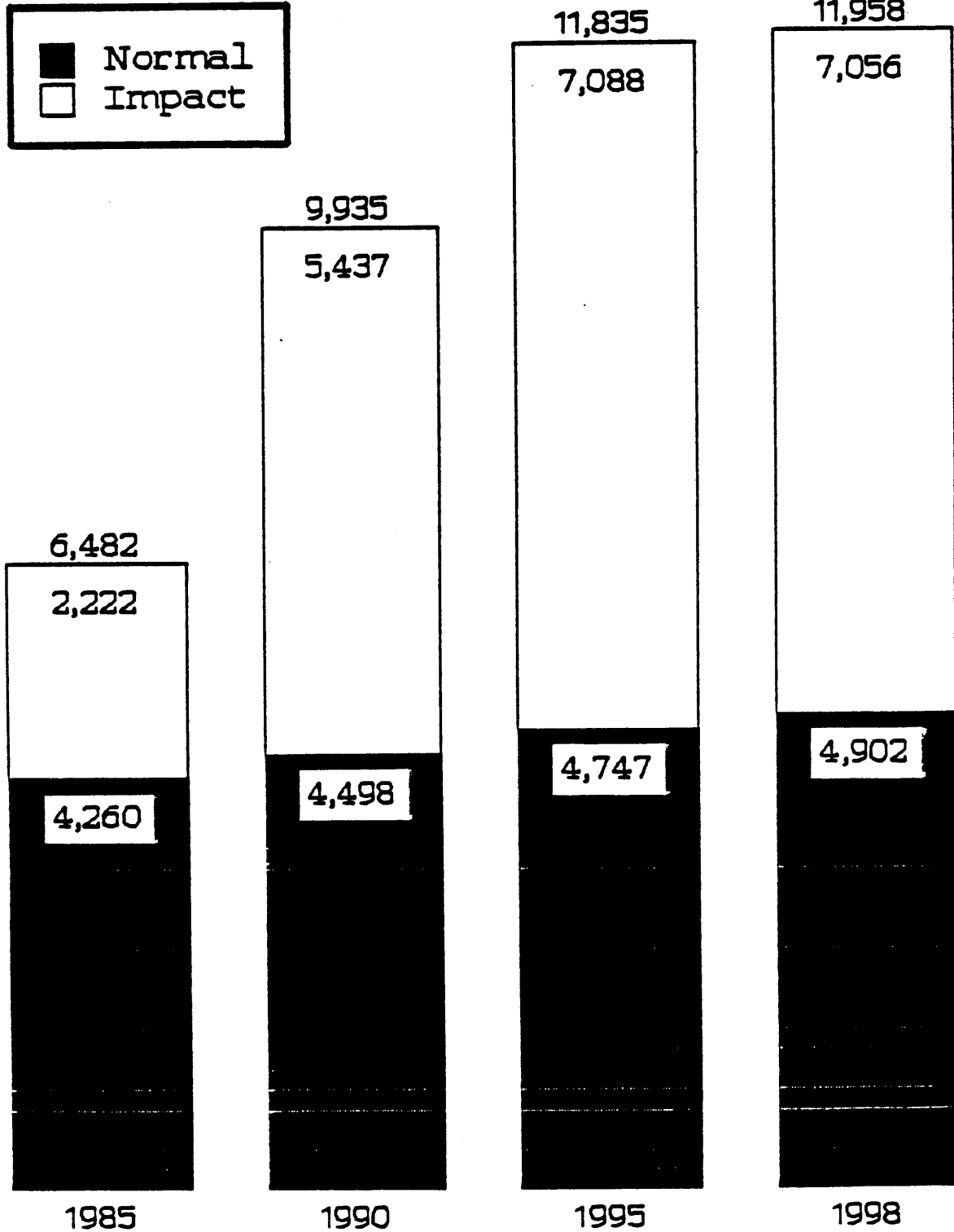


MAP 3 ST. MARYS, GEORGIA



# Population Projections St. Marys, Georgia (and Service Area)

Figure 5



industry have created a sluggish industrial economy in the local area.

St. Marys has always been a small city. Population has remained fairly constant throughout the last 20-25 years. However, during the 1970's some growth occurred. For example, in 1970 the city's population was 3,408; in 1980 its population was 4,220; and in the latest (1986) census its population was 7,004. By 1998 the city's population will be approximately 12,000. It is no doubt that this population growth is directly related to NSB Kings Bay.

#### **KINGSLAND**

Kingsland, Georgia is also located in southern Camden County. It is approximately 5 miles north of the Florida state line, and 11 miles from the center of St. Marys.


Kingsland is also the second largest city in the county. It was founded in the late 1800's on the site of a former plantation. During the late 19th and early 20th centuries, the Seaboard Coastline Railroad was built through land near the plantation, and eventually a small commercial center formed in response to the railroad.

The primary industries in Kingsland were lumber and some agriculture, usually rice or cotton. With the advent of the automobile and truck farming, Kingsland became an important rest stop for gas and ice (for refrigerated trucks). U.S. Route 17, the Coastal Highway, brought many tourists through Kingsland on their way to Florida. Today, Interstate Highway 95 continues to

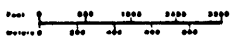
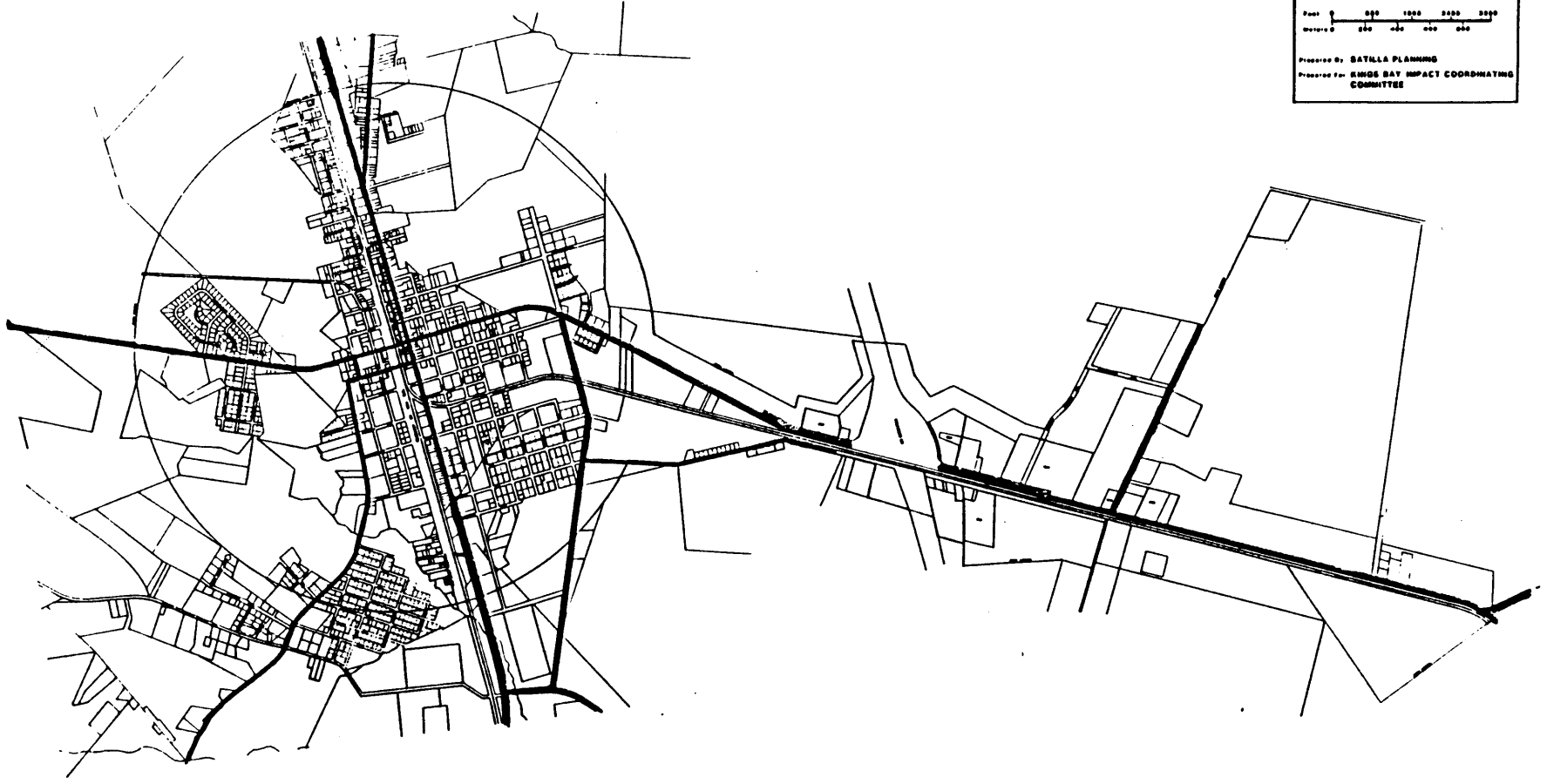
bring tourists through Kingsland for rest, food, and fuel. For the most part, many of Kingsland's residents rely on Gilman Paper Company and NSB Kings Bay for jobs.

During the past quarter of a century, Kingsland's population remained stable, much like that of St. Marys'. In 1970, its population was 1,831; in 1980 its population was 2,750; and in 1986 Kingsland's population was 5,760. As is the case for St. Marys, Kingsland's rapid population is a direct result of NSB Kings Bay. By 1998 Kingsland is expected to have a total population of approximately 11,000.

**KINGSLAND, GEORGIA**  
**CAMDEN COUNTY**



Planning Date: November, 1988  
 Prepared by: SATILLA PLANNING  
 For: KINGSBAY IMPACT COORDINATING COMMITTEE

11-A

MAP 4 KINGSLAND, GEORGIA

# Population Projections Kingsland, Georgia (and Service Area)

Figure 6

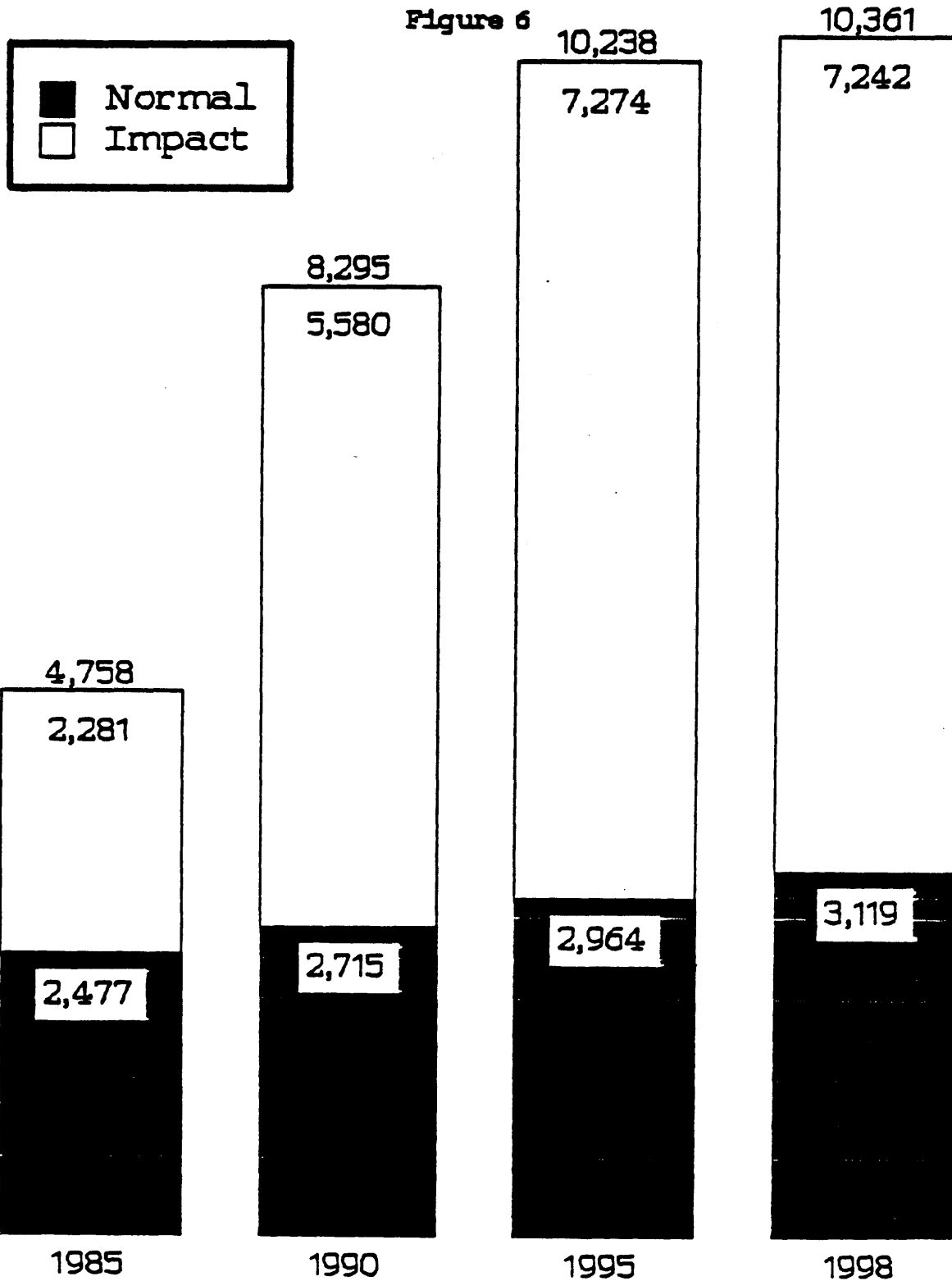
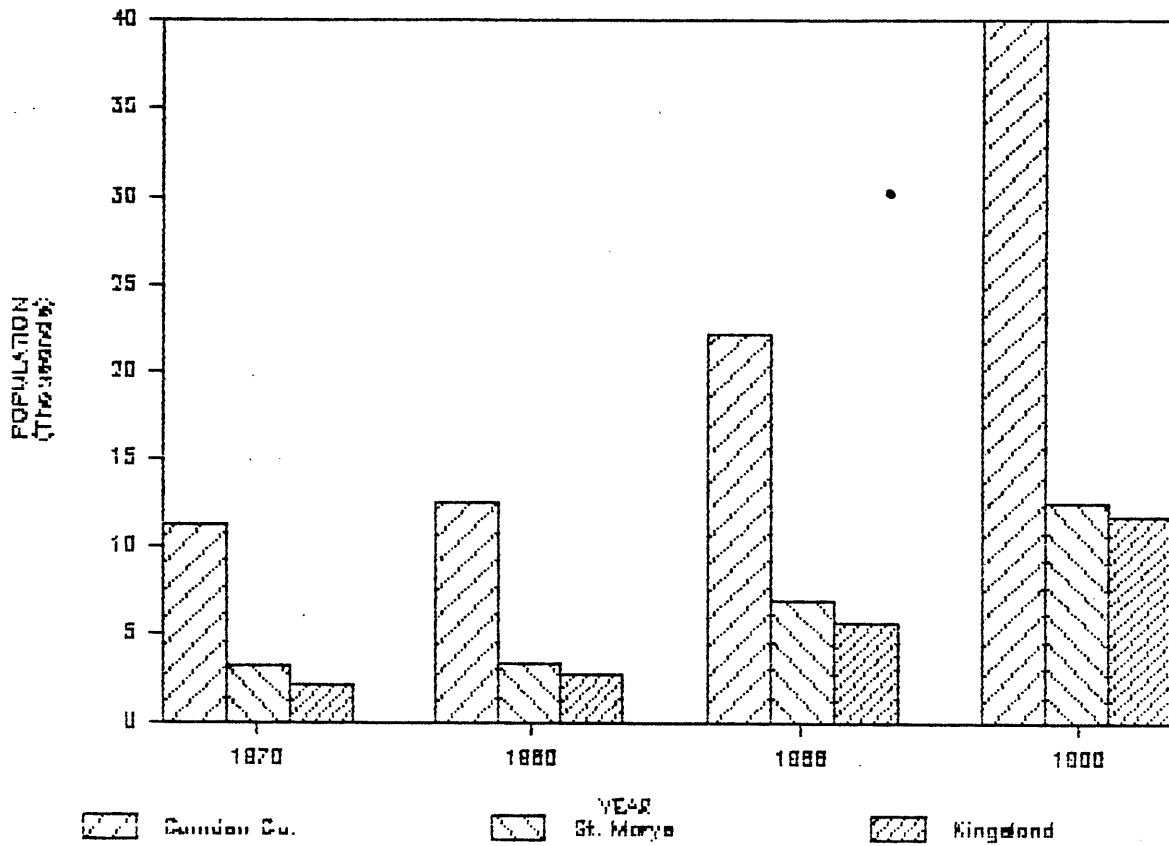


TABLE 4

POPULATION TRENDS 1970-1990



KBICL

POPULATION PROJECTIONS

1985-1998

4/11/95

JURISDICTION	1995		1996		1997		1998		1999		2000		2001	
	TOTAL	NAVY	TOTAL	NAVY	TOTAL	NAVY	TOTAL	NAVY	TOTAL	NAVY	TOTAL	NAVY	TOTAL	NAVY
Carden County	26827	8163	22239	9460	24545	11651	27432	14422	27489	16362	31372	18127	33552	20163
St. Marys	6492	2222	7094	2698	7854	3510	8975	4473	9588	5138	9935	5437	10571	6124
Kingsland	4758	2281	5293	2769	6173	3602	7210	4591	7940	5273	8295	5580	9050	6286
Woodbine	1553	526	1669	639	1865	831	2096	1059	2253	1217	2331	1297	2496	1450

JURISDICTION	1992		1993		1994		1995		1996		1997		1998	
	TOTAL	NAVY	TOTAL	NAVY	TOTAL	NAVY	TOTAL	NAVY	TOTAL	NAVY	TOTAL	NAVY	TOTAL	NAVY
Carden County	35052	21577	36790	23184	37304	24076	38592	24740	39789	24812	39573	25170	39671	25462
St. Marys	10932	6335	11508	6862	11570	6874	11835	7068	11646	6848	11909	7060	11958	7056
Kingsland	9316	5502	9905	7042	9969	7055	10238	7274	10043	7028	10311	7245	10361	7242
Woodbine	2551	1500	2680	1625	2687	1628	2749	1687	2687	1621	2742	1672	2745	1671

TABLE 5  
Source: Kings Bay Impact Office, 1986

TABLE 6

Population Increase in Camden County, State of Georgia and the United States,  
1940 - 1978

	1940	1950	1960	1970	1978
St. Marys	733	1,384	3,272	3,408	3,568
Kingsland	619	1,169	1,536	1,831	2,015
Woodbine	373	750	845	1,002	1,075
Unincorporated Camden County	4,185	4,019	4,322	5,093	7,282
Camden County	5,910	7,322	9,975	11,334	13,940
State of Georgia	3,123,723	3,444,578	3,943,116	4,589,575	-----
United States	132,164,569	151,325,798	197,323,175	203,235,298	-----

Source: United States Bureau of Census, Census of the Population - 1970.

Coastal Area Planning and Development Commission Land Use and Housing Survey, 1978



## GEORGIA HIGHWAY 40

Georgia Highway 40 is the major transportation facility through southern Camden County. The road extends from St. Marys to Folkston, Georgia. The total distance of Highway 40 within the study area is 9 miles. State route 40 is an East-West highway, and the only direct connector between the cities of St. Marys and Kingsland.

The importance of Highway 40 is due to its role as a vital transportation link between St. Marys and Kingsland. For over 50 years some road, dirt or paved, existed between these two cities. With the impact of NSB Kings Bay, however, Highway 40 became an even more important transportation link. Workers commuting from outside Camden County, construction trucks and machinery, and general local service vehicles rely upon Highway 40 for travel.

With an increase in traffic counts in the late 1970's and early 1980's, the Georgia Department of Transportation financed the four laning of Highway 40 from St. Marys to Kingsland. The project cost over \$1.5 million, and at the time, the most expensive road project ever undertaken in Camden County. (Neal, 1985 pE1) The widening aided traffic flow for a while, yet, today the highway is in poor condition. For example, heavy industrial trucks and machinery have caused the road to settle, creating depressions which hold water during even light rains. Also, poor road design has created inadequate water drainage

along the highway. As a result, some parts of Highway 40 are completely covered with water during steady or heavy rains. This is a serious problem for motorists since driving conditions can worsen quickly during rains. (Neal, 1985 pE1)

The basic design of Highway 40 is also important. Although the road was four laned in the late 1970's, not turn lanes or emergency lanes were constructed. Basically, Highway 40 is an undivided four lane roadway experiencing increased residential and commercial development along its entire length. During peak afternoon traffic periods, vehicles making left turns along Highway 40 create delays in traffic flow. The Level of Service (LOS) along Highway 40 between the two cities is currently at level "C". \* (See Tables 7 and 8)

One significant study conducted by the Georgia DOT summarizes the average daily traffic projections (ADT) for Highway 40 through 1998 under different scenarios. (See charts following this section) The projections for ADT by 1998 range from an LOS of "A" to "C" along Highway 40, but the average LOS with no improvements predict an LOS of "C" within the study area.

The first scenario, that of accelerated development predicts the LOS will range from "A" to "D" along Highway 40; however, within the study area, an LOS of "D" is projected. These previous predictions assume no additional roadway improvements through 1998.

However, with additional roadway improvements, a 1998 LOS ranging from "A" to "C" could be achieved. Within the study area,

an acceptable LOS of "B" could be achieved. This scenario is assuming no intensive development along Highway 40.

The final 1998 scenario, that of accelerated development with additional roadway improvements, predicts the Level of Service along Highway 40 could range from "A" to "D", with the average LOS within the study area being "C".

It is also important to note the maximum possible traffic level for Highway 40. The Georgia DOT study shows that Highway 40 under any reasonable design improvements could handle approximately 36,800 vehicles per day. This is the worst possible scenario, or the maximum capacity for this roadway. If such traffic levels were reached the LOS would be "E".

Also, it is equally important to note the latest figures for Highway 40. These figures released early in 1987 show Highway 40 already reaching its potential for traffic volumes rapidly. (See chart following this section) Currently money has been approved by the state for the cities of St. Marys and Kingsland to complete necessary improvements along Highway 40.

## CONCLUSION

The information presented in the preceding chapter reflects the increased growth affecting Camden County and the cities of St. Marys and Kingsland, Georgia. Population reports from the Kings Bay Impact Coordinating Office (KBICO) and the U.S. Census Bureau both indicate a rapid population increase during the 1980-1986

period. Likewise, these same reports predict population levels will rise into the late 1990's following the completion of NSB Kings Bay in 1989. This increase in population will affect the demand for housing, public services and commercial development within the Highway 40 study area.

Of equal importance is the fact that this area was once a small rural and single industry region. Paper manufacturing was once the predominant industry, however, NSB Kings Bay has usurped the dominant role of paper in the communities of St. Marys and Kingsland.

An increase in growth has also resulted in higher traffic counts along the area's primary highway. Highway 40 was formally a rural service road, yet, today it is an important business thoroughfare, as well as a designated defense access road. This Government designation further signifies the importance of Highway 40 not only as a business thoroughfare, but also as a highway used for moving defense personnel and machinery in times of national crisis.

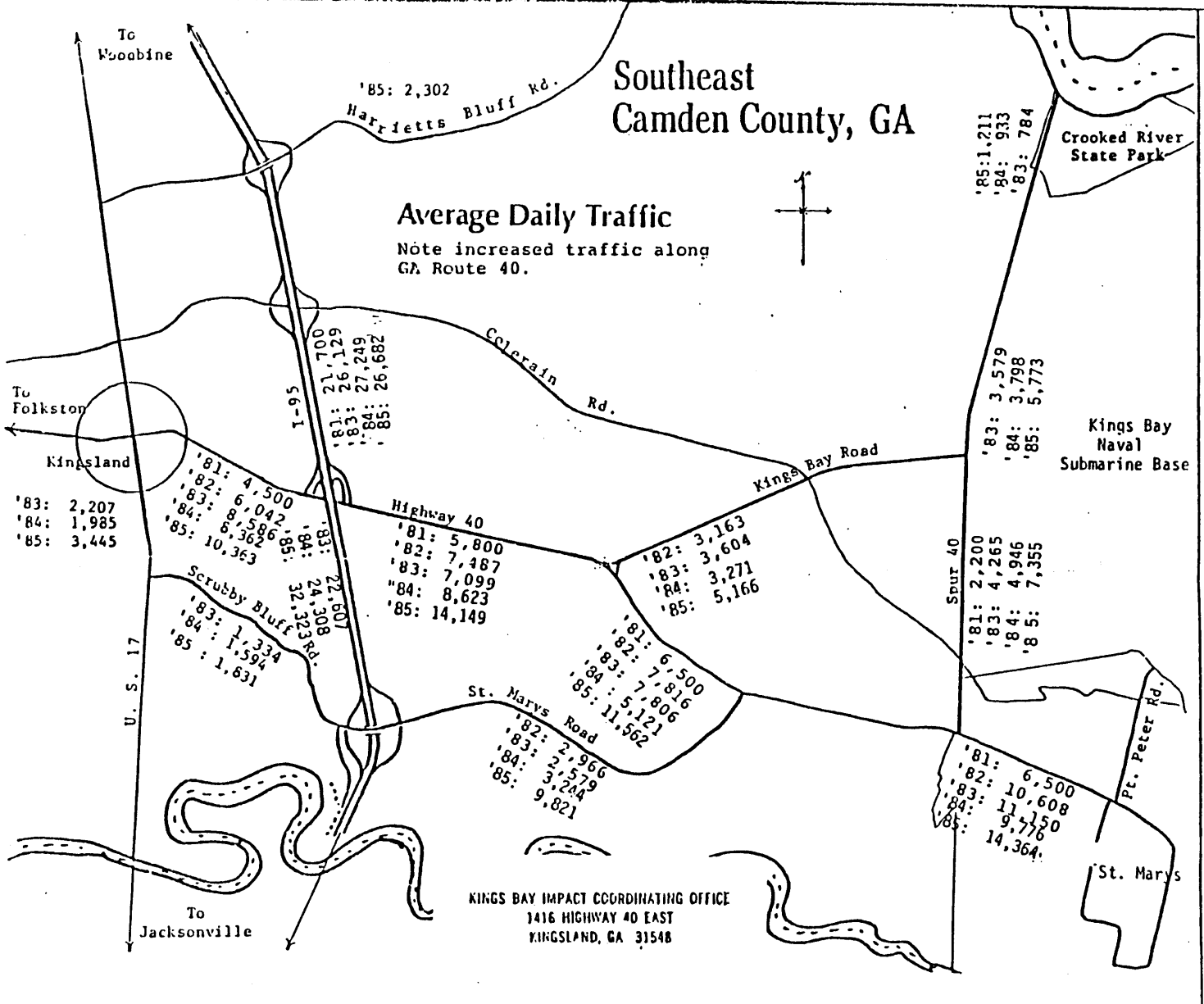
Thus, Highway 40 is significant to this area for one important reason: to provide a growth axis for future development. In this regard, the next several chapters will discuss how the cities of St. Marys and Kingsland have directed growth and development outside traditional city centers to outlying areas. In addition, because much of the growth is occurring along Highway 40, both St. Marys and Kingsland should consider a new development plan for coordinating and controlling

such growth so that it does not become too great to handle.

# Southeast Camden County, GA

## Average Daily Traffic

Note increased traffic along GA Route 40.



KINGS BAY IMPACT COORDINATING OFFICE  
1416 HIGHWAY 40 EAST  
KINGSLAND, GA 31548

TABLE 7

## AVERAGE DAILY TRAFFIC PROJECTIONS FOR HIGHWAY 40

LOCATION	I	II	III	IV
Kingsland to I-95	19,000	22,400	19,000	22,000
I-95 to Gross Road	21,100	26,100	19,800	24,500
Gross Road to Kings Bay Road	19,200	26,100	19,300	24,800
Kings Bay Road to St. Marys Road	12,100	17,200	11,500	16,300
St. Marys Road to Spur 40	22,100	30,400	21,500	29,500

I- 1998 Average Daily Traffic Projections

II- 1998 ADT Projections, Accelerated Development Scenario

III- 1998 ADT Projections, With Additional Roadway Improvements

IV- 1998 ADT Projections, Accelerated Development Scenario  
With Additional Roadway Improvements

TABLE 8

## PROJECTED LEVELS OF SERVICE FOR HIGHWAY 40

LOCATION	I	II	III	IV
Kingsland to I-95	C	C	C	C
I-95 to Gross Road	C	D	B	C
Gross Road to Kings Bay Road	D	D	E	C
Kings Bay Road to St. Marys Road	A	E	A	E
St. Marys Road to Spur 40	C	D	C	D

Source: Georgia Department of Transportation, Atlanta, Georgia.  
1985

## \* Levels Of Service (LOS)

The Level Of Service (LOS) is a designation of highway efficiency. The LOS consists of letters from "A" to "E", or most efficient to least efficient. For example, a road with an LOS of "A" represents one in which there is free flowing traffic with no delays or congestion. Roads with an LOS of "E" are those which have numerous delays (due to traffic signals and turning vehicles), much congestion, and a constricted flow of traffic.



## CHAPTER 3

### Traditional Zoning

#### INTRODUCTION

The concept of zoning has been around for centuries. Ancient Greeks and Romans had some plan for the designation of certain parcels of land for specific uses. (Wickersham, 1981) Yet, the actual implementation of a "police power" or zoning ordinance to dictate how a certain parcel of land is to be used, has existed in use, in the United States, since the early 1900's.

Today, zoning is a very important issue in planning. With suburban sprawl becoming commonplace in the United States many cities have resorted to zoning to control land use. Related to land use control, communities have also turned to zoning to limit growth in overbuilt areas, to generate growth in available areas, and to protect sensitive areas within the community.

However, many of these same suburban and urban communities have typically used traditional zoning methods in order to control growth and development. As a result, many problems have surfaced related to such traditional land use controls.

The following chapter will define what traditional zoning is, and also why we have land use regulations. In addition, problems and results of traditional zoning will be discussed, and several basic reforms to zoning will be addressed. These reforms, then, will serve as possible alternatives to current zoning practices in the cities of St. Marys and Kingsland, Georgia.

## WHAT IS ZONING?

Zoning is a basic police power used to designate parcels of land for specific uses. Zoning, then, groups different land uses into a few broad categories, usually represented by different colors on a map. Each zone is assigned uses by right and prohibited uses. Zoning is changed on a lot by lot basis to accommodate development proposals. (Wickersham, 1981)

## WHY LAND REGULATION?

Since zoning is a method of land use regulation, one should understand why such policies are necessary, and what they should try to accomplish.

First, the purpose of land regulations is to gain from the community as many of the good impacts of development as possible, and to avoid or eliminate as many of the bad impacts as possible. (Wickersham, 1981)

In any community, a good land use regulation should give consideration to what uses a piece of land is best suited, and then designate such land accordingly. For example, lowlying land prone to flooding should be regulated so as to prevent over development. Zoning can be used to regulate what can or cannot be built upon such land in order to prevent water or floods from

damaging any structures built upon the land.

Land use regulations should be comprehensive. In other words, any and all public concerns should be considered. If some tract of land is to be zoned commercial, the public should be allowed to express their opinions regarding such land, and any regulation should express public concerns.

Land use regulations should also encourage creativity from the developer. That a particular piece of land is hilly or lowlying, regulations should allow the developer the means to develop a site using the characteristics of the land as a guide to the type and style of development.

Land use regulations should be dynamic or easily changed to meet new conditions. Land that was once zoned residential may no longer be suitable for such development. Thus, regulations should be facile to allow other types of development to occur.

Finally, land regulations should be fair and predictable. In other words, similar projects should be treated alike regardless of who is preparing them. The public as well as the developer should know all the rules applied to the development proposal according to the community's bylaws, and what the developer has to do in order to obtain approval.

## **PROBLEMS WITH TRADITIONAL ZONING**

Traditional zoning practices have been scrutinized by planners and consultants for many years, especially in regard to suburban

growth. Many of these concerns express drawbacks to the zoning system and philosophy. For example, traditional zoning is coarse. Parcels of land, each with its own special characteristic, are lumped into a few broad categories. In some suburban areas large acres of undeveloped land are zoned, say, residential. Yet, one must take into account that not all of the land may be suitable for residential development. If parts of the land are environmentally sensitive, then those parts could be zoned to forbid any type of development. (Wickersham, 1981)

Also, traditional zoning policies are narrow, addressing only a few limited factors such as use, density, setback, and bulk. Again, few policies consider other features such as the contour of the land, the type of soil (loose or boggy), or the character of the surrounding area. (Wickersham, 1981)

Under traditional zoning it is difficult for land to be rezoned quickly in response to changes within a community. Thus, a problem of time becomes a key issue because it is usually through a long arduous process that land can be rezoned quickly.

## RESULTS OF TRADITIONAL ZONING

Many of the effects of traditional zoning can be seen all across the United States, primarily in older planned communities as well as in newer suburban sprawl areas. The typical tract housing which developed after World War II in "Levittowns" is a primary example. These suburbs were uniform with very little variation in

housing design. Streets were usually straight and narrow, although a few curves were added for safety purposes. In such a community, all houses had equal setbacks from the street, and all were situated on equal sized lots. Thus, most homes were priced in one basic price range, therefore, most homeowners were people from similar socio-economic backgrounds. In short, such zoning resulted in a very homogenous population with very little variation--both socially or economically. Even today, many suburban communities have tract housing patterns, although new creative site and architectural designs are creating more diverse structures to appeal to a wide range of interests. (Wickersham, 1981)

Another result of traditional zoning is the development of commercial strips, also found in most suburban areas. These strips consist of vast stretches of fast food restaurants, discount stores, and car dealerships. At night these strips resemble a neon potpourri of large flashing or glaring signs. Likewise, the heat, glare and noise generated by such strips is annoying to most motorists. Also, numerous driveway cuts and traffic signals create dangerous driving conditions especially during afternoon rush hours. But, much of the problem with such development lies not only with the zoning ordinance, but also with the city politicians. It is far easier to remain consistent with the current pattern of development than to try to change through rezoning. After all, much time and money is wasted and a political battle could arise if one developer is denied his or

her right to build within a commercial strip. (Wickersham, 1981)

Hopscotch development also results from traditional zoning. Such development occurs in outlying suburban areas or smaller communities that are experiencing rapid growth. What occurs in hopscotch development is a tendency not to build or develop land close to the city center, but to develop land far from the city in a more rural setting. Eventually the development area and the older city center will connect--usually along a commercial strip. One of the major concerns of such development is its costliness. Being located far from the city center, water and sewer lines must be expanded to handle the new demand. This in turn leads to an extra tax burden on behalf of the entire community. Residents or patrons of such developments must drive long distances for services such as food, fuel, or entertainment. This is true, of course, assuming such services are not already provided at the site. Hopscotch development is basically out of phase or sequence in relation to the community. Design and density of such developments are usually not sensitive to the surrounding area or the community for which it serves. (Wickersham, 1981)

Overall, traditional zoning fails to serve public interest in producing a safe, economical, functional, and beautiful living environment. It also fails to serve the interests of those who participate in the process. (Wickersham, 1981)

#### **SOME REFORMS TO TRADITIONAL ZONING**

There are two important reforms and innovations to traditional zoning which will be discussed in the following chapters. One innovation is that of creating a special zoning district specifically for expressway interchanges. Adequate zoning controls are very important at intersections with major arterial streets and suburban highways.

This idea is true especially at expressway interchanges because they serve as focal points for development, particularly any development that is business oriented. Because the land-use controls employed there may have profound impacts on the quality of traffic movement, they should be designed to protect these areas for efficient traffic operation in addition to preserving present community values and potentials for future land development. (Witthford, 1972)

The main objectives for instituting such a special control over expressway interchanges are:

- (1) Balancing the transportation system and the land uses it serves.
- (2) Securing the optimum amount of access control.
- (3) Reserving and acquiring right-of-way for future use.

If attention is given to these considerations, a comprehensive plan for the affected area of highway interchange can be developed that will relate highway operation to land uses and thus produce and maintain a mutually compatible environment. (Witthford, 1972)

A major reform to traditional zoning methods is called the Planned Unit Development or PUD. A PUD is a means of land regulation which promotes large scale, unified land development via mid-range, realizable programs in pursuit of physically curable, social and economic deficiencies in peripheral land and cityscapes. Where appropriate this development control advocates: (1) A mixture of land uses, one or more of the land uses being regional in nature, (2) The clustering of residential land uses providing common and public open space. The former to be maintained for and by the residents of the development. (3) Increased administrative discretion to a local professional planning staff and the setting aside of preset land use regulations and rigid plat approval processes, and finally (4) The enhancement of the bargaining process between developer and municipality thereby strengthening the municipality's site plan review function and control over tempo and sequence of development in return for potentially increased profits available to the developer as a result of land efficiency... (Sternlieb, 1972)

The use of the PUD system allows more freedom and creativity on behalf of the developer. It also allows large parcels of land to be developed under a mixed-use plan, where residential units, schools, parks, and local business services are provided on the same site. The city in return can have control over the development process by regulating the timing and sequence of the development. Thus the city planning department has a major role



in approving final plat design, and the developer is basically free to create on the available land. Under a PUD system, the higher densities of use on such lands can be a positive means to ending negative impacts such as commercial strip development.

## CONCLUSION

In summary, zoning is a police power used to designate parcels of land for specific uses. While traditional zoning methods have been the norm for years, some innovative reforms have been introduced within the last twenty years. Such innovations include the Planned Unit Development and the Expressway Interchange District. These reforms were developed to help alleviate the rigidity of traditional zoning, especially in suburban growth areas. In addition, such innovations were developed to allow more coordinated development within suburban communities rather than uncoordinated sprawling development.

With regard to the Highway 40 study area, many results of traditional zoning are present. Numerous problems faced by St. Marys and Kingsland are the result of traditional zoning methods incorporated in city zoning ordinances. Hopscotch development and commercial strip development are noticeable within the study area. As shown in the previous chapter, this region is experiencing rapid growth, thus, many development problems associated with traditional zoning methods are directly related to such growth.

If the growth has created problems for St. Marys and Kingsland, and part of the cause can be found within their respective zoning methods, then some alternatives to traditional zoning should be considered.

First, however, the following chapter will analyze the current situation within the study area in more detail. The next chapter will try to provide the reader with a clear understanding as to what the problems and results of traditional zoning are as they relate to St. Marys and Kingsland.

## CHAPTER 4

### Traditional Zoning In The Kings Bay Study Area

#### INTRODUCTION

The following chapter will present the problems of traditional zoning with regard to the Highway 40 study area in the cities of St. Marys and Kingsland. Both cities are experiencing rapid development within their fringe areas bordering Highway 40. Problems such as the coarseness and narrowness of traditional zoning will be discussed using the zoning ordinances of the two cities as a model.

Results of traditional zoning will be presented. This chapter will discuss hopscotch development and commercial strip development as it relates to the Highway 40 study area in both communities.

Finally, the current status of development will be discussed within the Highway 40 study area. A map will be provided to visually express current development trends along this roadway.

Since the majority of the Highway 40 study area was not originally within the jurisdictions of either St. Marys or Kingsland, a brief historical overview of the annexation policies within the last several years follows.

## ANNEXATION

One of the primary results of NSB Kings Bay in Camden County was an increase in growth and development. Much of the growth in population was absorbed by the cities of St. Marys and Kingsland. However, in many suburban communities, and especially those experiencing rapid growth, land speculation is common. Vacant, undeveloped land was prime property for developers wishing to construct new housing and businesses to serve the residents.

Much of the new development, however, was occurring outside the traditional city boundaries, where land was less expensive. In order to take advantage of possible tax base expansion, the cities of St. Marys and Kingsland began to annex undeveloped land. This process began in 1982 and is still continuing. Already both cities have doubled their original sizes in land area. Water and sewer lines were constructed in these newly annexed areas with hopes of attracting new residential development and business.

For the city of St. Marys, the annexation process was very crucial. Because St. Marys was adjacent to NSB Kings Bay, many military personnel preferred to live as close to the base as possible. Thus, in 1982, the city tried to have the base itself annexed in order to increase its population. (Lipsett, 1982 pA1) This plan was not successful since many local residents opposed the idea. Land surrounding the base was eventually annexed,

however, and new residential communities are currently being built.

Along Highway 40, land was annexed much later. The city realized, however, the importance of Highway 40 to the area. Because it was the primary business thoroughfare through southern Camden County, land speculation increased. Land was put on the market and developers were buying. For example, an even larger tax base could be achieved, and studies completed by the Kings Bay Impact Coordinating Committee (KBICC) expressed the fact that future growth would occur along this road. AS a result, St. Marys annexed land along Highway 40; again in order to take advantage of the new growth. Currently, the city limits along Highway 40 are now three miles beyond the former city limits, and commercial development is proceeding rapidly along this three mile strip.

The city of Kingsland also began to annex land in 1982. Its purpose was identical to that of St. Marys', which was to increase the city's tax base. (Brown, 1983 pA1) One significant difference should be noted, however. Approximately one mile outside the former city limits a major expressway interchange was built in the mid 1970's. I-95, a major North-South tourist route, and Highway 40 was, and still is a center of business activity. With the proximity of the expressway being advantageous to Kingsland, and because it was not within the city's boundaries, the city decided to annex this land for tax purposes. Land speculation was increasing, and many retail services such as restaurants, motels, and service stations were planning to locate



at this intersection.

Thus, this intersection was important to Kingsland. Annexing this area would vastly increase its tax base, and provide the necessary money to proceed with the expansion of its water and sewer systems. Also, land speculation along Highway 40 was an added incentive to annex more land because KBICC reports showed that Highway 40 would become the primary growth corridor over the next several years. Based upon this data, Kingsland proceeded to annex land along Highway 40. Water and sewer lines were extended into the undeveloped areas as an incentive to developers. The city limits were extended over four miles along Highway 40 towards the east--or towards St. Marys. Currently, the city limits of St. Marys and Kingsland coincide, whereas, only six years ago, the boundaries of the two cities were over seven miles apart. Today, Highway 40 lies within the jurisdiction of both cities.

#### ZONING PROBLEMS IN THE STUDY AREA

One significant problem associated with traditional zoning is its coarseness or generality. Within the Highway 40 corridor this problem is very evident. For example, after the city of St. Marys annexed land along Highway 40, it was automatically zoned single-family residential (R-1). This precise provision was in accordance with the city's zoning ordinance and has not been altered.

The problem with such a classification is twofold. First, not all the land within the Highway 40 corridor is developable. Many lowlying areas and swamps stretch on either side of the highway. Certainly this land could not possibly be developed for residential uses since a large area of land would have to be filled in order to support any type of building. In addition, that Highway 40 is a major business thoroughfare, it is unwise to zone such an area as single-family residential when noise, traffic, and other impacts might seriously affect the quality of life in such an area. (Respass, 1983 pA1)

Second, although the land was immediately classified as single-family residential upon annexation into the city, obviously, the city did grant special permit uses for businesses and commercial activity to locate within this area. Thus, if a developer or landowner wished to open a business establishment he or she would apply for a special permit in order to do so. This action has occurred repeatedly over the past two years in lieu of annexation. (Respass, 1983 pA1)

The reason for the city's willingness to grant special business permits in land zoned for single-family residential is due to the profits which could be generated by such a designation. If permits for business are allowed instead of residential developments, then the city could realize a higher tax base due to the higher cost of the newly classified land.

The same problem of coarseness is also noticed in the Kingsland zoning ordinance. Like St. Marys, the city of



Kingsland, upon annexing land, zoned the new land as single-family residential (R-1). Again, not all of the land was suitable for such a classification. Likewise, a landowner or businessperson was granted a variance or special permit in order to build a commercial establishment on such lands.

Another problem associated with the traditional zoning methods is narrowness. In other words, some zoning policies address only specific factors such as the use of the land, the density of the land, or the setback of buildings on such land. However, the main issue of land characteristics is not considered.

The idea of narrowness idea is especially true within the Highway 40 study area. The city of St. Marys makes no mention in its zoning policy as to how buildings on a parcel of land must conform to specific land types. For example, new buildings, commercial establishments, were and are being constructed on lowlying, flood prone lands. The issue is not to dissuade one from building upon such land, but rather to use the land's own unique feature as a guide. Instead of building on lowlying land, one could fill in the land or contour the land in order to promote proper water drainage and storm runoff. Currently, many businesses along Highway 40 are frequently inundated with water during steady or heavy rains.

Again, this is a major problem in the city of Kingsland. Many new commercial developments become flooded because, according to the zoning ordinance, one could build in whatever

manner possible, while disregarding the land's own unique character.

## RESULTS OF ZONING IN THE STUDY AREA

One of the results of traditional zoning which is evident in the Highway 40 study area is "hopscotch" development. This type of development occurs in rapidly growing cities and suburbs, where spots of land are developed outside the traditional city center. These developments are uncoordinated due to their isolation and separateness from the main community.

In St. Marys hopscotch development is occurring. Along Highway 40 certain parcels of land are developed as commercial centers or residential neighborhoods, yet, they are located basically in the "middle-of-nowhere". They are connected to the rest of the city by a highway, and they seem very isolated from the rest of the city. One commercial center (business park) known as Saturday Park is located three miles from the downtown area, and on either side of the development are thick swamps. In addition, a single-family residential development is being built along Highway 40, miles from services such as grocery stores, service stations, medical services, and schools.

In Kingsland the conditions are similar. Much of the new development is occurring four miles from the city center along Highway 40. Driving along this stretch of roadway, one sees isolated pockets of commercial activity separated by large

parcels of undeveloped land. As is the case in St. Marys, three new single-family residential developments are either built or being planned in the "middle-of-nowhere".

Basically hopscotch development causes a sense of discordance with the existing community. Families in these newer residential areas must drive 4 or 5 miles to the nearest school or food store. Thus, these residential areas and commercial establishments are like islands of activity, cut off from the main city. True, the older city will eventually grow and develop around these areas; yet, the tax burden upon the city's of St. Marys and Kingsland is heavy. Water and sewer lines must be expanded over great distances and at high costs. Eventually, hopscotch development can lead to another result of traditional zoning, commercial strips.

Commercial strips result when, according to the hopscotch theory, a few establishments (business/commercial) locate along a busy thoroughfare in order to attract customers. Initially this business, as in hopscotch development, may be isolated along this particular highway. Soon another business is granted a permit to build across the street; then more permits are granted until the entire length of the street is lined with businesses.

Currently, this problem has not manifested itself in the study area, however, if present trends are accurate, then Highway 40 in St. Marys and Kingsland will soon become a commercial strip. Although the study area is experiencing hopscotch development, new construction is occurring rapidly. Permits are

being granted indiscreetly to local businesspersons and out of town developers. Vacant wooded lots are being bulldozed and parking lots are taking their place. Again, the land is zoned single-family residential, yet the conversion to commercial activity is now occurring.

#### CURRENT STATUS OF DEVELOPMENT IN THE STUDY AREA

Today Highway 40 is undergoing rapid change. New businesses and residential developments are locating along this busy thoroughfare from St. Marys to Kingsland.

An overall assessment of the condition can be seen on the maps following this section. In 1980 there were only 9 commercial establishments along the seven mile stretch of Highway 40 between St. Marys and Kingsland. Today along the same stretch of roadway, Highway 40 is the location for 43 commercial establishments.

Likewise, residential construction has increased considerably along Highway 40. Before 1985 there were no new residential communities within the study area. Today four new residential developments are under construction. Eventually, the Highway 40 corridor will support over 800 units of single-family units and apartments. (Kings Bay Impact Office, 1986)

Also under construction are two major shopping centers. Camden Place and Camden Wood are both located within the study area in the city of Kingsland. In St. Marys 1 shopping center is

under construction within the Highway 40 corridor. Soon Highway 40 will be the location for five shopping centers, each with a total floor area in excess of 75,000 square feet of retail space. (Kings Bay Impact Office, 1986)

The I-95 and Highway 40 interchange is also a center of commercial activity. In 1980 only 3 businesses were located at this interchange. Six years later, this interchange now supports 14 businesses, and more are planned. (Kings Bay Impact Office, 1986)

Thus, development along Highway 40 has not subsided. Since water and sewer lines have been constructed in these outlying areas, more construction of homes, apartments, and businesses is likely to occur. This is especially true given the fact that the peak year for construction activity at the NSB Kings Bay will be in 1989, the arrival date for the Trident nuclear submarines. Therefore, most of the new population will not arrive for at least two years. In lieu of this peak on construction activity, the cities of St. Marys and Kingsland can control some of this growth, or at least direct the growth along Highway 40 in order to minimize the effects of commercial strip development.

## CONCLUSION

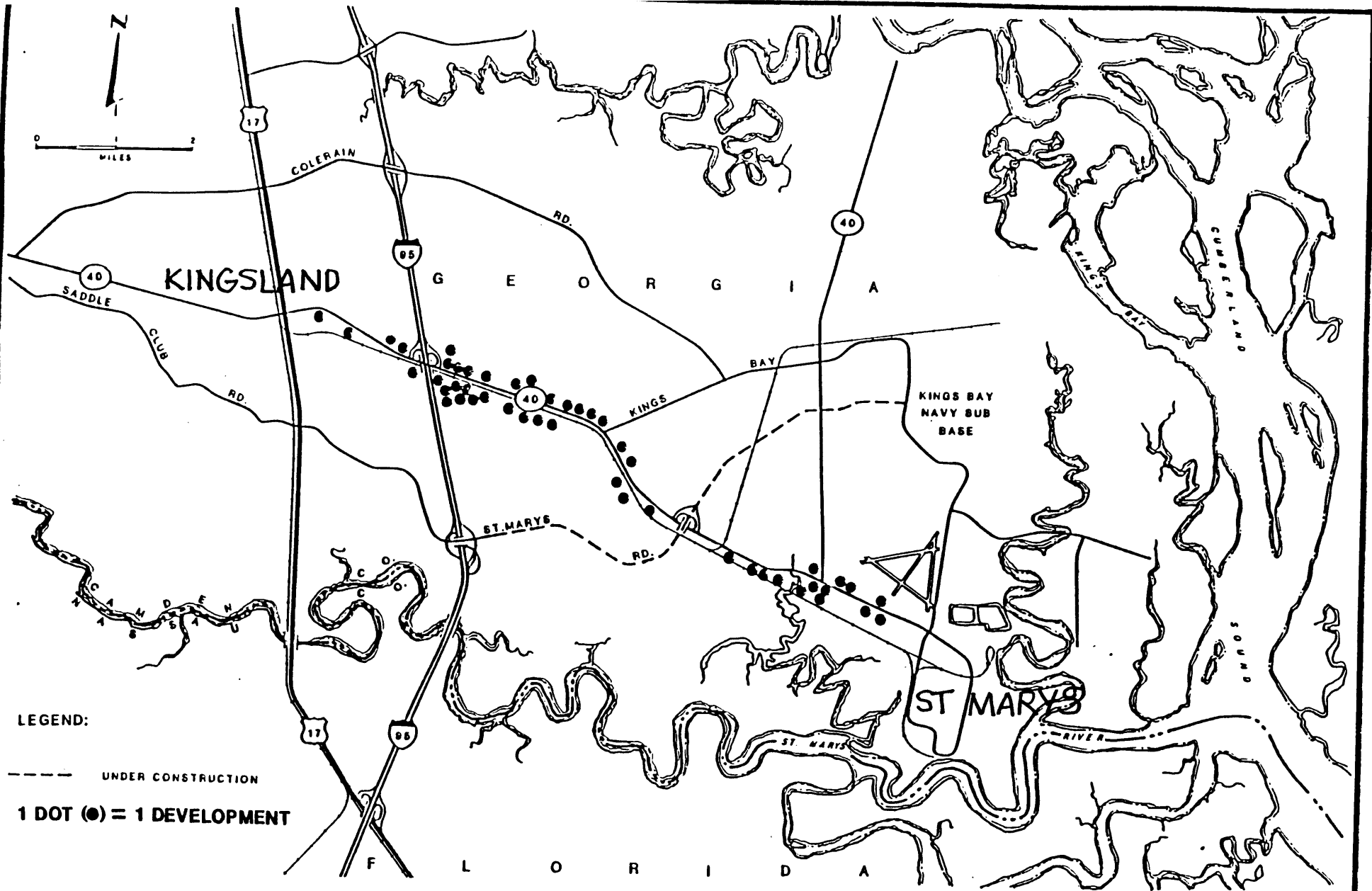
Through the annexation of land along Highway 40, both St. Marys and Kingsland have doubled their city sizes in terms of land area. The primary reason for completing this process was to take

advantage of possible development and the increased tax base that would result upon annexation. Likewise, businesspersons and developers decided to locate along Highway 40 because it was a primary thoroughfare, and the benefits from increased visibility would help to promote business activity.

However, with annexation the cities of St. Marys and Kingsland are now faced with the prospect of Highway 40 possibly becoming a seven mile commercial strip. Hopscotch development is a primary characteristic of the type of development occurring along this road. Much of this development is supported through the zoning ordinances of both cities. The ordinances allow development to proceed uncoordinated and with no continuity to the town's character. In essence, a developer or businessperson is granted a permit to build anywhere along Highway 40. No effort to control type, size or density of development is mentioned within either the St. Marys or Kingsland city zoning ordinances.

As a result, one finds single-family residential developments surrounded by industrial parks, which are in turn across the road from shopping centers, which are adjacent to doctor's offices and night clubs.

St. Marys and Kingsland can control growth along this highway while continuing to provide a mix in services. One primary means of achieving this end is through a Planned Unit Development, which will be discussed in the following chapter. In addition, land development could be coordinated through the creation of an Expressway Interchange District at the Interstate



**HIGHWAY 40 DEVELOPMENTS, 1980-1986**

95/ Highway 40 interchange. This idea will also be discussed in the next chapter. It is believed that these two innovations to current traditional zoning methods could help reduce the chances of Highway 40 becoming a commercial strip.



## CHAPTER 5

### Using The Innovations of PUD and EID In The Study Area

#### INTRODUCTION

The following chapter will present some reforms and innovative alternatives to those suggested through more traditional zoning methods. One innovation which will be discussed is the Expressway Interchange District. What is it? What should its area of influence be? What are some of the objective of an Expressway Interchange District? These questions will be analyzed, and then form a basis for an alternative plan for the city of Kingsland in controlling development at the Interstate-95/ Highway 40 interchange. Currently, Kingsland has no policy or growth control at this interchange, however, creating an Expressway Interchange District may be a solution.

Planned Urban Developments (PUD's) will also be presented in the following chapter. What are they? Why are PUD's important? These questions will be analyzed using the Highway 40 study area as a model. Currently, there are no Planned Unit Developments proposed for the Highway 40 corridor, yet, the cities of St. Marys and Kingsland could alter current zoning ordinances to allow for the creation of a Planned Unit Development District in which scattered low density development would be discouraged. Hopefully, these alternative means to traditional zoning can control the rate of development as well as limit the transformation of Highway 40 into a major commercial strip.

## EXPRESSWAY INTERCHANGE DISTRICT

Adequate zoning controls are very important at intersections with major arterial streets and suburban highways because they serve as focal points for development, particularly any development that is business oriented. Because the land-use controls employed at expressway interchanges may have profound impacts on the quality of traffic movement, they should be designed to protect these areas for efficient traffic operation in addition to preserving present community values and the potentials for future land development. (Witthford, 1972).

If zoning is to have an impact within a special interchange district, how extensive, or how great an area should such a district include? Half a mile to one mile radii have been proposed. The higher figure was adopted in the California state legislation establishing the Highway Interchange Districts for Interstate Route 5, in which local jurisdictions were to establish land-use controls. (Witthford, 1972)

One important aspect of interchange areas is that they permit the application of the several forms of land-use control. For example, the powers of eminent domain, nuisance laws, contractual agreements, the official map, subdivision regulations, licensing and permit procedures for driveways, and police powers may all be brought to bear. Thus, zoning controls,

as part of police powers, can be as useful here as in other circumstances. (Witheford, 1972)

What should the objectives of such zoning controls at expressway interchanges be? Zoning at interchanges should be directed toward two objectives: development control and preservation of traffic service qualities. First, zoning can be used to regulate the timing or programming of physical improvements. This may permit planning solutions to be implemented before imbalances occur between development and traffic capabilities. (Witheford, 1972)

Second, since zoning controls the type of land uses and their location, it may be used to locate traffic generators most advantageously (or at least disadvantageously) with respect to the traffic operations of the interchange. The effectiveness of zoning here depends on the calibre of local boards and their ability to resist appeals for variances. (Witheford, 1972)

Therefore, planning for an interchange district should seek to meet the objectives of:

- (1) Balancing the transportation system and the land uses it serves
- (2) Securing the optimum amount of access control
- (3) Reserving and acquiring right-of-way for future use

If attention is given to these considerations, a comprehensive plan for the affected area of highway interchange can be developed that will relate highway operation to land uses and thus produce and maintain a mutually compatible environment.

(Witheford, 1972)

The locational preferences of different activities at typical interchanges offer valuable guidance for realistic planning. Highway-related businesses demand high visibility and ready access for expressway travelers, and their tendencies are to cluster in the near right quadrant from the viewpoint of expressway users. Secondary businesses, more oriented to the community, develop along the connecting highway. Successful zoning controls recognize these preferences and balance them against the simultaneous needs for adequate traffic operations.

(Witheford, 1972)

Finally, zoning at interchanges may be used to maintain or to prevent the destruction of aesthetic values. In many small communities, the interchange serves as a "front door". Controls over billboards and other signs, requirements for screening, fencing, landscaping, and even architectural controls may be warranted in these gateway locations. In addition, zoning restrictions against unattractive activities like dumps and auto graveyards could be appropriate in the interchange area. Here, too, the emphasis is twofold; preserving the quality of traffic experience and preserving community values. (Witheford, 1972)

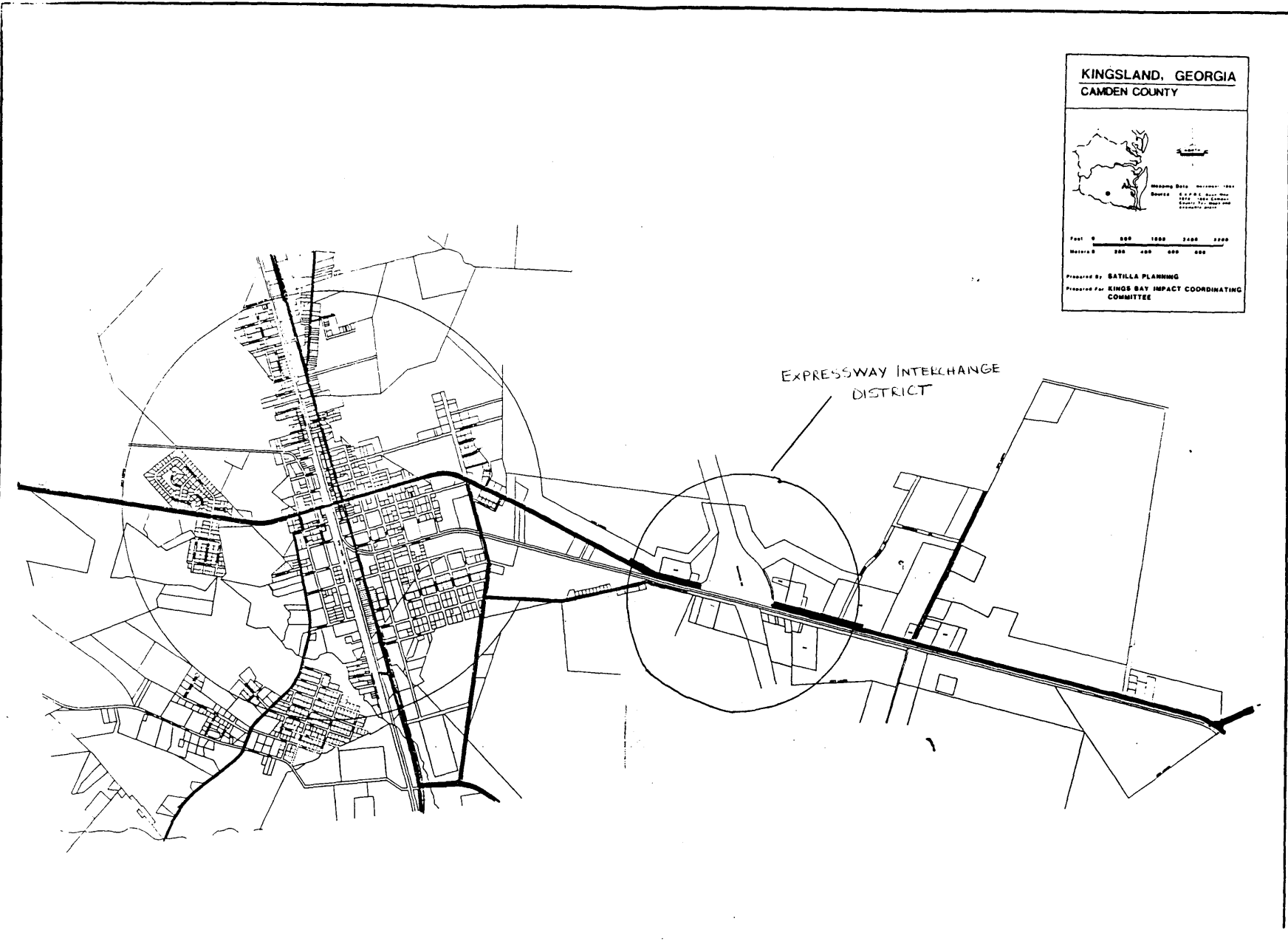
#### THE INTERSTATE 95-HIGHWAY 40 INTERCHANGE

Based on the objectives for proper interchange district planning, the city of Kingsland should re-evaluate current zoning policies

for the Interstate 95/Highway 40 interchange. According to present Kingsland zoning policies, land surrounding this interchange is designated Highway Commercial (C-2). This designation was considered adequate before the intensive development which is now occurring. Today, however, the city should alter this classification by establishing a new Expressway Interchange District (C-3).

The reasons for such a new zoning classification are as follows. First, establishing an Expressway Interchange District with its own specific guidelines separates this area from the Central Business (C-1) and Highway Commercial (C-2) classes. Basically, the Expressway Interchange District would be a separate entry within the current zoning ordinance. It would also serve as a special planning area within Kingsland in which city officials could better control growth and development suitable to expressway interchanges.

Second, by establishing an Expressway Interchange District Kingsland could limit the types of services allowed to locate in this district. For example, highway travel and tourist oriented businesses such as motels, fast food restaurants, and service stations would be allowed, while shopping centers, medical offices, or other local-use establishments would not be allowed. Also, the city could control the density of development at the interchange by establishing a one-half mile radius around the interchange in which these acceptable businesses would be allowed. Highway oriented businesses locating outside this



**KINGSLAND, GEORGIA**  
**CAMDEN COUNTY**

Map of Georgia showing the location of Kingsland, Georgia.

Map Date: November 1964  
 Drawn by: E. J. R. [unclear]  
 1964 - 1965 Camden County, Georgia Planning Committee

Feet 0 500 1000 1500 2000 2500  
 Meters 0 200 400 600 800

Prepared by: SATILLA PLANNING  
 Prepared for: KINGSBAY IMPACT COORDINATING COMMITTEE

EXPRESSWAY INTERCHANGE  
 DISTRICT

district would have to pay higher permit fees, or may be denied permission to build. In addition, the city of Kingsland could enforce architectural conformity, billboard laws, or any other laws to enhance aesthetic values much easier within an Expressway Interchange District.

Third, the city could balance the transportation system and the land uses it serves. For example, controlling density or restricting the number of establishments such as shopping centers in this zone may reduce traffic congestion at the interchange as well as the number of turning vehicles off the main roadway (Highway 40).

Finally, by creating such a district, Kingsland could enhance its existing tax base. Businesses wishing to locate along a major tourist thoroughfare, especially Interstate-95, are usually willing to pay for such a prime location. Therefore, the city could assess a higher tax rate on such property. Currently, the city of Kingsland has no special tax for businesses at the Interstate-95/ Highway 40 interchange. In an Expressway Interchange District the city could charge higher service fees (taxes) to help offset future water and sewer expansion costs in outlying parts of the city.

Overall, the city of Kingsland would have an excellent opportunity to control growth along Highway 40 by creating an Expressway Interchange District. With strip commercial development beginning to occur, Kingsland could direct some of this development at specific areas within the city, rather than

have the development sprawl along Highway 40 towards St. Marys. Thus, the Interstate-95/ Highway 40 interchange could serve as a commercial center for tourists as well as for local residents.

#### WHAT IS A PLANNED UNIT DEVELOPMENT?

A Planned Unit Development (PUD) is a means of residential land development which sets aside traditional present land use controls in favor of more administrative discretion to local authorities. It permits a mixture of land uses such as residential, commercial, and industrial, creativity in design including both the clustering and mixing of types of units and family, the provision of common public open space, the former to be used by and maintained for the residents of the proposed development. The tract of land is developed as a whole according to a plan with one or more of its nonresidential elements serving regional as well as local needs. (Sternlieb, 1972)

PUD is a derivative of the most current ideas in planning which call for a program-oriented, mid-range plan, legally binding upon participants. PUD also follows from modern zoning, continuing a trend towards flexibility in land use, thereby emphasizing a mixture of land uses, unit development and a wide ranging administrative discretion to local officials. Finally, PUD also continues the movement away from present regulation in subdivision control, fostering new interest in the municipal



developer bargaining process and as a result, offering a more streamlined platting process and potentially larger developer profits in exchange for increased municipal site plan review powers and a procedural mechanism for assembling usable amounts of contiguous open space. PUD even goes one step further, however, for the first time it represents a land use control that will enable a municipality to control effectively, both the tempo and sequence of an area's development. (Sternlieb, 1972)

One of the reasons the PUD is so attractive today is due to its use of creativity on behalf of the developer in designing a new development. It also allows the developer to mix many uses of activity on a single large parcel of land. In addition, the Floor-Area-Ration (ration between the total floor area of the building and the ground area of the site) permits the designer to choose from several options, varying height of building and lot coverage, in developing a particular plot. (Sternlieb, 1972)

Also, nonvariable yard requirements have been used through such techniques as maximum lot coverage/minimum unobstructed open space requirements, cluster or density zoning and finally, the Land Use Intensity (LUI) Ratio. In the first case the only yard specifications which are made are those requiring maximum square foot requirements for a structure covering a lot and minimum requirements for open space respectively. Cluster or density zoning merely specifies a number of permissible dwelling units per acre which may not be exceeded by the developer, yet...he or she is free to both place and arrange structures, and select the

type of dwellings in the development of his or her lot. The LUI modifies the FAR in establishing total permitted development intensity at a particular point according to use, location, and growth stage of the land parcel. (Sternlieb, 1972)

#### **A PLANNED UNIT DEVELOPMENT DISTRICT FOR HIGHWAY 40**

Since development along Highway 40 is proceeding rapidly, the cities of St. Marys and Kingsland should consider the designation of this corridor as a Planned Unit Development District. Lands surrounding Highway 40 would not be affected by the current zoning laws of the two cities, yet, a more controlled development of the highway would result.

One of the major reasons for creating a PUD District can be found within the local zoning ordinances for the two cities. Currently, there are two large residential developments under construction within the Highway 40 corridor, Mariner's Landing and Shadowlawn. These developments are being developed according to the current zoning laws of Kingsland and St. Marys respectively. However, the current zoning laws for Single-Family Residential (R-1) do not allow for creativity and diversity within these developments.

The St. Marys and Kingsland zoning ordinances (Single-Family Residential) state:

- (1) Minimum lot area: 10,000 square feet.
- (2) Minimum lot width at the building line: 75 feet.

- (3) Minimum front yard setback from street: 25 feet.
- (4) Minimum side yard, setback from street: 25 feet; setback from other property line: 15 feet.
- (5) Minimum rear yard, setback from street: 25 feet; setback from other property line: 15 feet.
- (6) Maximum percentage of lot coverage: 30%.
- (7) Maximum building height: 35 feet.

The policies for single-family residential developments are very narrow and they do not allow for any diversity on part of the developer. As a result, many of the new developments are very homogeneous and do not allow for different family types or variances in design types. These new developments are typically designed for one family income type. Thus many new developments are segregated economically because they do not encourage a mix in family incomes. Also these new developments do not make provisions for low income housing, again, economic segregation of becomes apparent. Thus a mix in In addition, there is no mention of open space requirements for these developments (parks), and the yard requirements are too rigid.

Within a PUD District, residential developments could be incorporated with other services such as neighborhood convenience stores, schools, and local services such as banks or medical offices. Thus the encouragement of Highway 40 as a PUD District could result in a mix in land uses. Within a PUD District the developer would have more freedom in designing units and site plans, and the cities of St. Marys and Kingsland would still have

control over site plan reviews, the timing, and the phasing of the developments.

Highway 40 is also experiencing non-residential development at a very fast pace. Currently there are 46 non-residential establishments ranging from government offices and doctor's offices to fast food restaurants and shopping centers. Yet, these establishments are the result of the policies set aside by the St. Marys and the Kingsland zoning ordinances.

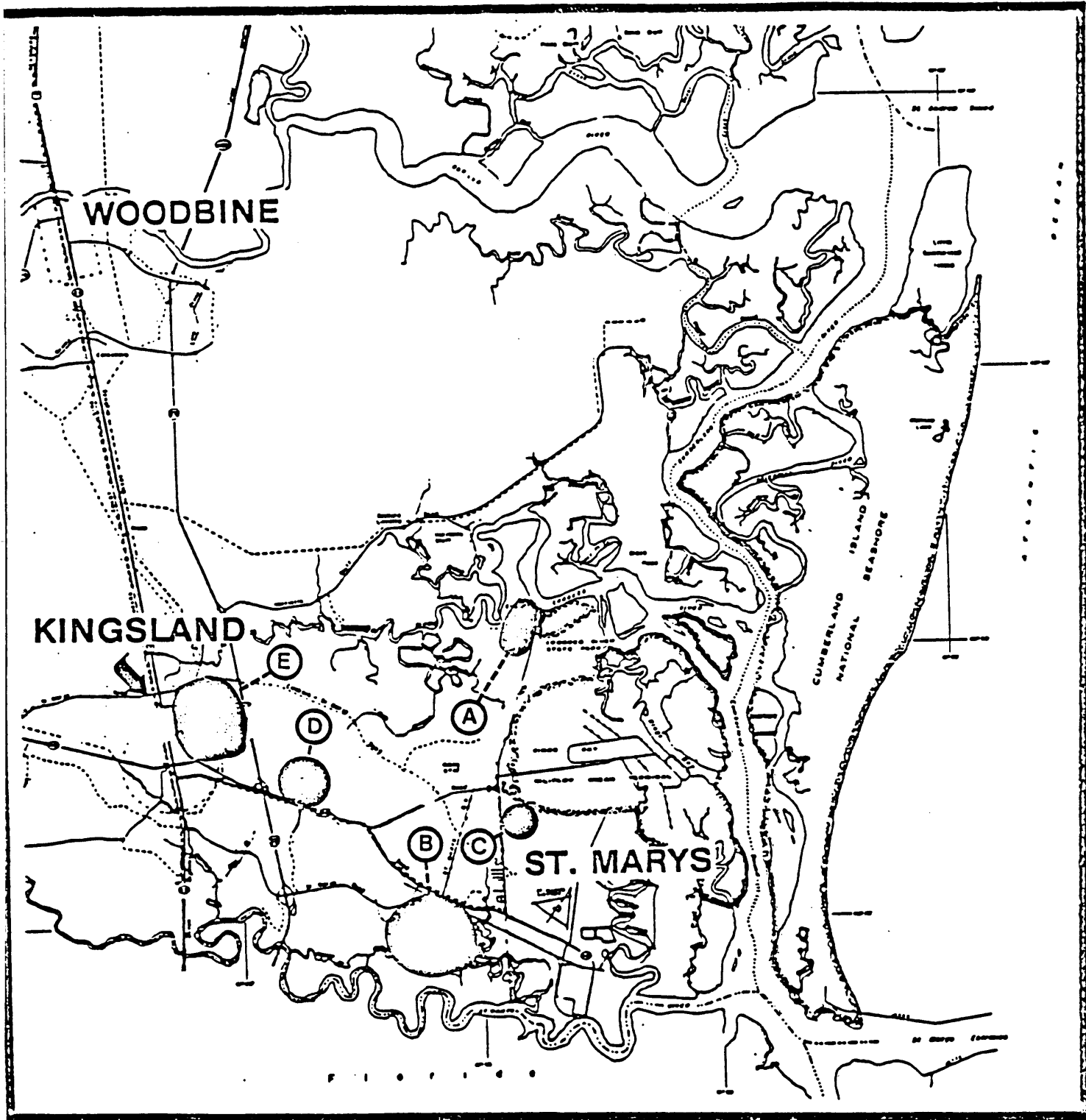
The two zoning ordinances designate the highway 40 area as Highway Commercial (C-2) Yet, there is a paradox here because as previously stated in this report, newly annexed lands within the two cities are automatically classified as Single-Family Residential. Highway 40, however, is a commercial highway, so land abutting the roadway is reclassified as Highway Commercial in order to promote business development.

Again, even with such a designation, some problems still arise which may lead to commercial strip development. For example, the St. Marys and Kingsland zoning policies for Highway Commercial (C-2) are:

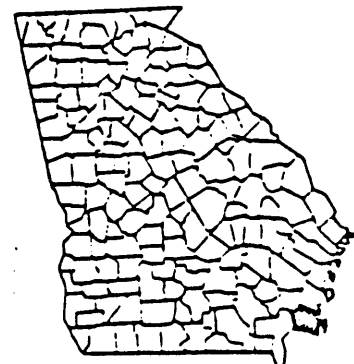
- (1) Encourage the formation of continuance of a compatible environment for highway oriented users.

- (2) Ensure adequate and properly designed means of ingress and egress while considering and providing for overall safe and adequate traffic flow on the highways.

- (3) Discourage encroachment by industrial, residential or other uses which may be incompatible with the specialized



MAP 9  
**Location Map,  
 Potential Future Residential  
 Development Sites**  
 SOURCE: PLANTEC, 1986.



character of this district.

At this time, the development occurring along the Highway 40 corridor does not address these issues contained within the zoning ordinances. Already one industrial park is under development within the Highway 40 corridor across the road from a new shopping center and adjacent to a Single-Family Residential development.

In addition, the zoning ordinances further state:

- (1) Minimum lot area: 7,500 square feet.
- (2) Minimum lot width at building line: 75 feet.
- (3) Minimum front yard setbacks from State Route 40, 40 feet; minimum setback from other public rights-of-way: 25 feet.
- (4) Minimum side yard: setback from property line 7 feet; 25 feet from street rights-of-way.
- (5) Minimum rear yard setback: 7 feet.
- (6) Maximum building height: 35 feet.

Currently Highway 40 is experiencing a melange of buildings with differing setbacks on smaller lot sizes. The city officials within these cities do grant variances to the zoning ordinances very regularly. The results can be seen on the maps following this chapter.

Today not all of the land along Highway 40 has been developed. St. Marys and Kingsland could assemble large parcels of city owned lands along Highway 40 and designate such lands as a PUD District. In addition, these lands would be developed in accordance with a Planned Unit Development Ordinance which could

be a supplement to the current city's zoning ordinances.

One major reason for acquiring and designating such lands for a PUD District is to concentrate development and increase residential densities within certain areas. Instead of Highway 40 becoming a commercial strip, land within a PUD District could be developed so as to maximize the land potential. In other words, large acreages of land would be intensely developed rather than each parcel of land being developed on a lot by lot basis. Basically strip development and sprawl would be reduced. According to the current zoning laws, land can be sold on a lot by lot basis to any developer or businessperson.

The designation of Highway 40 as a PUD District could also encourage a mix in land uses. Land bordering Highway 40 is currently re-zoned by lots to allow as much development as possible. Yet, within a PUD District the city could still grant permits for a wide range of businesses and services, yet the city could grant these permits to a developer wishing to develop the land in accordance with a PUD ordinance. In essence, the developer could plan for a variety of services on the property without separating residential uses. Also the city would be creating higher densities on such lands, while reserving other lands for open space. It is hoped that creating such a district would reduce the strip commercialization of the Highway 40 corridor.

## CONCLUSION

In summary, the Planned Unit Development represents an innovation which could prove beneficial to St. Marys and Kingsland. Development along Highway 40 could proceed, yet, within the Planned Unit Development District mixed uses could be developed on larger parcels of land. Basically, the new district would encourage higher density uses on such land while discouraging mixed uses from developing individually along the entire length of Highway 40.

The Expressway Interchange District is another innovation which could be useful within the study area. The Interstate 95/ Highway 40 interchange could become a special service area, similar to a central business area, in which higher density uses are encouraged. Certain services related to highway/tourist travel would be permitted, while other services such as more local establishments would not be permitted.

From such innovations several advantages should be noted. First, the local government would retain its role in the plat review process for new developments. In terms of the Planned Unit Development District, the city government would still have final approval over the type and density of new development.

Second, the local governments would enhance its tax base through the creation of an Expressway Interchange District because businesses wishing to locate within such a zone would be willing to pay for such a location. Otherwise penalties would be assessed for locating outside this district.



Third, the public would gain from such innovations. Aesthetic values, community character, less traffic congestion, better on site services, and the preservation of open space could each be attained through either the Planned Unit Development District or the Expressway Interchange District. Within either district the city government could enforce rules that apply to sign control or architectural design. Also by creating higher density service areas more natural open space could be preserved. The concentration of services on one site rather than in a sprawl would help to retain the rural character of the area. In addition, the innovations could be used to plan for social concerns such as a mix in housing types, family incomes and racial integration.

Traditional zoning methods do not allow for a diversity of development especially on one site. Rigid rules control the density, setback and street width, yet, they do not allow the developer to use creativity in designing a site in accordance with the site's characteristics. This idea within itself is a bonus for developers. Thus, traditional zoning tends to create very homogenous neighborhoods and communities both socially and economically. In essence, social integration of neighborhoods could not be achieved as easily under traditional zoning, since traditional zoning promotes the segregation of economic classes and races through strict design guidelines.

## CONCLUSION

The Kings Bay area in southeastern Georgia is experiencing tremendous growth due to the buildup of the Naval Submarine Base. Population has increased steadily through the early to mid 1980's, and the growth is creating a definite impact on the communities of St. Marys and Kingsland, Georgia.

In response to this growth, St. Marys and Kingsland have annexed land along Highway 40, the primary business thoroughfare in southern Camden County. This annexation is also in response to possible tax base expansion, which in turn attracts businesses along this highway, taking advantage of the high traffic levels and prime locational attributes.

Yet, through this increase in development along Highway 40, St. Marys and Kingsland also face some problems. For example, the traditional zoning methods used by these communities promote hopscotch or uneven development. New neighborhoods are built miles from basic services, and the burden to provide infrastructure to these areas is expensive to the communities due to the remoteness of the areas of concern.

Also, the zoning methods allow the development of land along Highway 40 on a permit basis. Any person wishing to buy and develop the land on a single lot basis may do so. There are no restrictions as to what types of establishments are acceptable and what types are unacceptable. The result, then, is a mix of development ranging from night clubs, shopping centers, and

industrial parks, each within close proximity to one another, and all spread along the length of Highway 40. Thus much of Highway 40 is slowly transforming into a commercial strip, as is common in many fast growing suburban areas.

The purpose of this research was to explore the Kings Bay region. A background of the area was provided to familiarize the reader with the area, its history and its future growth trends. The point here was to establish the fact that this once rural area is now a fast growing suburbanizing region. Information from the Kings Bay Impact Office indicate that over 400,000 to 500,000 square feet of retail space will be built within the next few years, as well as 100,000 to 200,000 square feet of service office space. In addition, over \$800-million in added community building construction will occur by 1989.

A review of basic traditional zoning methods, its problems and its results was presented to familiarize the reader with zoning and its principles. Specific problems and results of traditional zoning were chosen in response to the issues of concern in St. Marys and Kingsland. For example, because hopscotch development is a result of traditional zoning, it was chosen for analysis since it was relevant to the study area.

Likewise, the innovations presented in this thesis were chosen to reflect realistic goals for the study area. The Planned Unit Development District and the Expressway Interchange District are policy recommendations chosen for analysis because these innovations could easily be adopted under current city bylaws

without much political intervention. Also since the area is still predominately undeveloped, the Planned Unit Development District represents a means to the city and developer of tapping into the land resource, while doing as little destruction as possible to aesthetics and community character. As indicated earilie in this report, Highway 40 currently supports 46 commercial establishments. Projections from the Kings Bay Impact Office indicate the this number will increase by at least 20 new developments within the next five years. Land assemblage is easier in this area and large parcels of land could be designated as a PUD District.

The Expressway Interchange District concept was also chosen for this area since Interstate 95 and Highway 40 intersect within the city of Kingsland. This district could have positive economic advantages over the long term.

This thesis is not intended to serve as a plan for the communities of St. Marys and Kingsland, but rather as a suggestion of two specific public policies to deal with the impact of rapid economic growth. The innovations are intended to serve as possibilities in the control of new land uses induced by growth and development along Highway 40. For the reader this research is intended to provide a general understanding of traditional zoning and its problems, as well as a basic introduction to the idea of Planned Unit Development Districts and Expressway Interchange Districts. Moreover, these innovations are to be considered within the context of the study area

presented in this document.

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