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Appendix A – NRCS Farmlands Consultation Letter

Acronyms and Abbreviations Used in this Report

AADT	Average Annual Daily Traffic
AWT	Average Weekday Traffic
CR	County Road
DEIS	Draft Environmental Impact Statement
DRI	Development of Regional Impact
EIS	Environmental Impact Statement
FCOB	First Coast Outer Beltway
FDOT	Florida Department of Transportation
FHWA	Federal Highway Administration
GIS	Geographic Information System
L RTP	Long Range Transportation Plan
MSF	Million Square Feet
NEPA	National Environmental Policy Act
NRCS	Natural Resource Conservation Service
ROW	Right-of-Way
PUD	Planned Unit Development
SF	Square Feet
SR	State Road
TPO	North Florida Transportation Planning Organization
USDA	United States Department of Agriculture
USDA	United States Department of Transportation
VPD	Vehicles Per Day

Summary

Population growth in Clay and St. Johns Counties is dependent largely on economic and job growth in Duval County. Clay and St. Johns Counties have grown rapidly in recent decades, fueled by the rise of Jacksonville to national recognition as a place to live, work, and invest.

The population of Clay County increased 29 percent from 140,814 in 2000 to an estimated 182,023 in 2007, according to the United States Census Bureau. The population is projected by county planners to grow at a faster rate in the future, adding 149,000 more residents by 2025, or approximately 8,300 per year. St. Johns County is among the fastest growing counties in Florida and the United States; its population increased 43 percent from 123,135 in 2000 to an estimated 175,446 in 2007, according to the United States Census Bureau. Another 154,000 residents are projected by 2025, averaging 8,600 per year.

According to the 2000 Census, 60 percent of employed residents of Clay County and 40 percent of workers living in St. Johns County worked outside these counties. The great majority of outbound commuters in both counties traveled to Jacksonville/Duval County in the year 2000, including some 35,000 in Clay County and 20,000 in St. Johns County. Based on population growth, over 10,000 more workers would be expected to be commuting outside of each county in 2007.

Leading Clay County commuter destinations include business parks and regional retail centers in southeast Jacksonville, which are accessed mainly by the Buckman Bridge (I-295); office, institutional, and governmental facilities in and near downtown Jacksonville; the Jacksonville Naval Air Station on US17 north of I-295; and a number of industrial parks in west and north Jacksonville. Business parks, regional retail centers, and institutional facilities in southeast Jacksonville constitute the leading St. Johns County commuter destinations. Office, institutional, and governmental facilities in and near Downtown are also prominent destinations for St. Johns County commuters. I-95 and US1 are the principal commuter routes.

Permits were issued for 17,000 new single family homes and 2,500 new multifamily units in Clay County from 2000 through 2007, averaging over 2,400 single family homes and over 300 multifamily units annually over the past seven years. This is a substantial increase in activity from the 1990s and reflects the continuing dispersal of residential growth in the Jacksonville region to areas outside the traditional urban core county (Duval) as well as a growing regional housing market. Permits were issued for 23,500 new single family homes and 4,600 new multifamily units in St. Johns County from 2000 through 2007, averaging over 2,900 single family homes and nearly 600 multifamily units annually over the past seven years. As with Clay County, this is a substantial increase in activity from the 1990s and reflects the continuing dispersal of residential growth in the Jacksonville region to suburban areas outside the traditional urban core county (Duval) as well as a growing regional housing market.

A number of large-scale real estate developments and special planning areas are profiled in this report, including six projects and two special planning areas in central and southeast Clay County and 13 projects in and adjacent to northwest St. Johns County. These projects and planned areas will account for the vast majority of future development in and near the alternative corridors and nearly all are undeveloped, sparsely developed, or developed to less than half of their approved or planned capacity. Development time frames vary generally from 10 to 25 years, and impacts on the pace and value of development would depend on the project's alignment, timing, and proximity of local access interchanges.

Most of these areas are expected to be developed even in the event that this project is not constructed. However, the presence of the alternatives, in particular the location of interchanges, could impact the pace at which these developments occur. The application of tolls, however, is not expected to be a substantial deterrent to corridor usage, except in comparatively few segments, and so should not have a significant impact on development patterns.

Clay County is one of only two Florida counties with a population greater than 150,000 not served by an Interstate Highway or Interstate-type, multilane, limited access highway. The proposed alternatives would make Clay County less isolated in the perception of the marketplace as a result of its being more accessible to inbound traffic as well as commuting by residents to employment and shopping centers primarily in southeast and west Jacksonville. This would also help promote employment-based office and industrial development by making the County more accessible to workers, customers, and suppliers from outside the County. However, the alternatives are unlikely to draw significant non-local traffic (i.e., both external origins and destinations) as a toll road because of toll costs and, in some cases, longer point-to-point travel distances versus existing highways.

For St. Johns County, the alternatives would have less impact, as the county has six I-95 interchanges that are expected to serve as economic generators well into the future. Key benefits of the project to St. Johns County include diversion of Clay County commuter and shopper traffic away from local roads, in addition to providing alternative routes to I-95 for St. Johns County commuters and shoppers living in the Northwest section of the County.

In regards to the developments focused on in this analysis, the Brown 1 and 2 and Orange 1 and 2 Alternatives would rate highest in terms of potential economic benefit by serving twelve developments within two miles of their interchanges. The Black Alternative has the next highest number of developments served, ten, with local access interchanges adjacent or within two miles, and the Purple, Green 1 and 2 and Pink 1 and 2 Alternatives serve eight each.

Since the development of those DRIs and planning areas discussed in this analysis is likely to occur, the only impacts that may occur to land use in these areas is the rate at which these DRIs may be built out. There could be some impacts to the total number of housing and commercial units available as a result of land use conversions to right-of-way depending on which

alternative would be selected. A large number of properties will be converted from their current use to road right-of-way. This will also result in a decrease in tax revenue to both counties. Where acquisition causes the relocation of business or residences, the extent of this impact is considered in the relocation services and payments made under the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (42 U.S.C. 4601 *et seq*). No prime or unique farmlands are found in the project area. However, nearly 1000 acres of agricultural property would be converted to right-of-way by the project.

Construction of the project could result in some temporary land use for staging areas and access roads. FDOT and its contractors would not use any properties that had not been purchased for this project without first consulting with those properties owners that might be impacted. These impacts would be considered minor and short term. Restoration of the property to its pre-existing condition would mitigate any such impacts.

1. Introduction

The Florida Department of Transportation (FDOT) identified the need for an improved highway corridor and bridge crossing in the area of the St. Johns River between Clay and St. Johns Counties. The St. Johns River Crossing Project is an effort to decide what the best solution to address that need is, while trying to minimize the effect that solution might have on the communities and the environment in the two counties.

Three goals were established to guide the FDOT in developing potential solutions to existing transportation problems in the project area (further defined below):

- Provide additional capacity to improve current and future transportation network deficiencies
- Promote and support employment and economic development
- Improve emergency evacuation

These goals were then consolidated into a statement of purpose to be used to evaluate alternatives and identify the one that would best serve the area's transportation needs:

To address population growth and resulting traffic by providing additional capacity that meets the area's transportation, economic, employment and safety needs while avoiding, minimizing, and/or mitigating effects on the affected communities and the environment.

Rapid population growth in the project area has resulted in additional traffic and congestion on local roads, a situation that is expected to worsen in the future. Providing additional capacity to improve current and future transportation network deficiencies in the near term would help alleviate the congestion while providing access for residents to local employment centers, thus promoting and supporting economic development. Perhaps most important, an improved crossing of the St. Johns River would result in more efficient emergency evacuation, thus potentially saving lives.

1.1 Study Objectives

The objective of this analysis was to determine the potential impacts construction of the various St. Johns River Crossing Project alternatives could have on land use in the project area and economics, including accessibility of the area residents to job centers as well as the project's ability to foster new development in the Clay and St. Johns Counties. The analysis was performed by gathering the existing economic and land use data for the counties, and then overlaying the proposed corridors on that information to see whether it would, from an economic and land use standpoint, have either a beneficial or detrimental effect on both existing and planned developments.

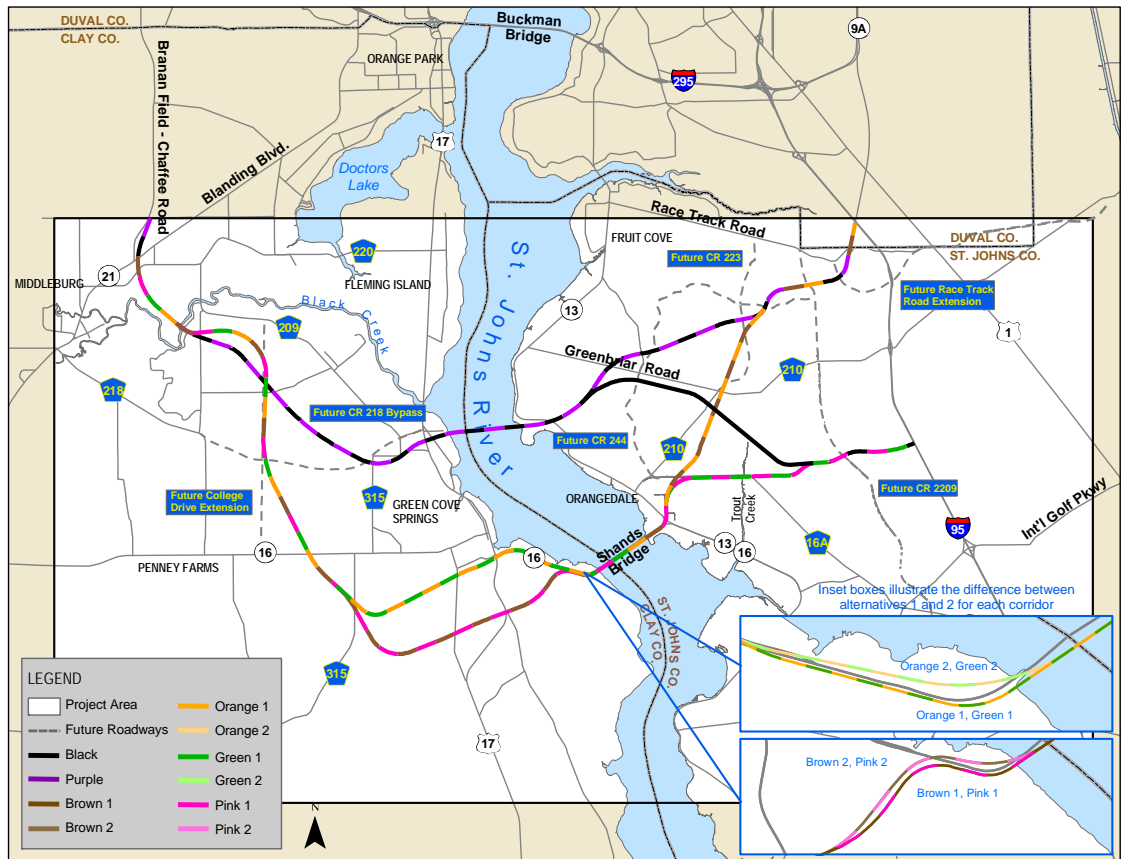
2. Project Description

The St. Johns River Crossing Project is the development of a new limited-access highway corridor from Branan Field-Chaffee Road to I-95, including the construction of a new bridge over the St. Johns River. The project would look similar to existing highway facilities in the area including Interstate 10 and Interstate 295. The proposed right-of-way (ROW) width used during the alternatives analysis was 324 feet. The facility would consist of a combination of four, six or eight lanes depending on the traffic needs for each corridor, but still within 324-feet.

2.1. Build Alternatives

Along with the No Build Alternative, the alternatives examined in this analysis are: Purple, Black, Orange 1, Orange 2, Green 1, Green 2, Pink 1, Pink 2, Brown 1 and Brown 2. These ten alternatives are illustrated in *Figure 1* and described below.

Figure 1: Project Alternatives



The first segment for all the alternatives starts at the intersection of Branan Field-Chaffee Road and SR 21 in Clay County and continues to the Black Creek crossing. This segment

continues to a point just east of CR 739, where the first independent alternative alignment begins.

2.1.1. Purple Alternative

The Purple Alternative proceeds in a southeasterly direction away from Black Creek toward Green Cove Springs and crosses the St. Johns River at one of its narrower locations, proceeding into St. Johns County. The alternative continues in a northeasterly direction toward the proposed SR 9B/I-95 interchange near the St. Johns County/Duval County line. The Purple Alternative then turns towards the east, intersecting CR 2209 south of Race Track Road. The alternative continues to the northeast, connecting to I-95 at SR 9B.

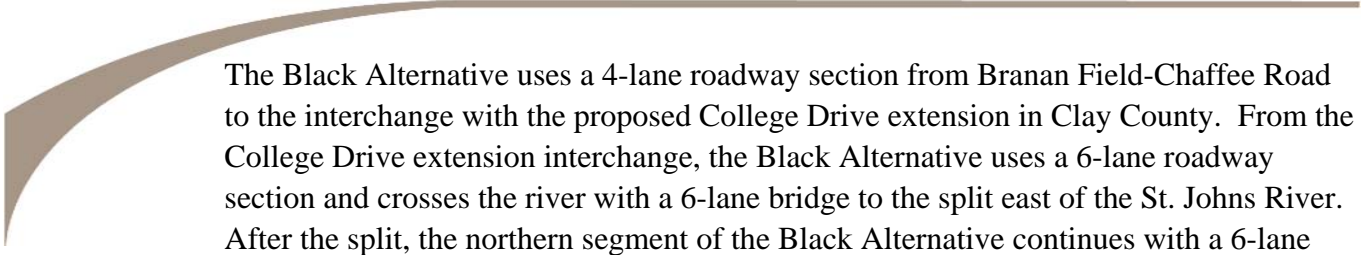
Interchanges along the Purple Alternative would be provided in Clay County at SR 21, the proposed College Drive extension, and US 17. Interchanges in St. Johns County would be provided at Greenbriar Road, CR 2209, the planned Race Track Road Extension, and I-95.

The Purple Alternative uses a 4-lane roadway section from Branan Field-Chaffee Road to the interchange with the proposed College Drive extension in Clay County. From the College Drive extension interchange, the Purple Alternative crosses the river with a 6-lane bridge, continuing with a 6-lane roadway section until a location just west of the interchange at CR 2209 in St. Johns County. From the CR 2209 interchange, the alternative uses an 8-lane roadway section to its terminus at I-95.

2.1.2. Black Alternative

The Black Alternative is the same as the Purple Alternative, but with an additional segment that provides a direct connection to I-95 south of CR 210. The additional segment of the Black Alternative begins by splitting from the northern segment just south of Greenbriar Road and west of the proposed CR 244 in St. Johns County. The alternative continues east, paralleling Greenbriar Road to the south and then proceeds in a southeasterly direction, crossing CR 210 approximately ¼ mile south of the Greenbriar Road/CR 210 intersection. The Black Alternative continues southeasterly, crossing Trout Creek approximately 1 mile north of CR 16A. The alternative then turns east towards I-95, terminating approximately 3 miles south of CR 210 and 3 miles north of International Golf Parkway.

Interchanges along the Black Alternative would be provided in Clay County at SR 21, the proposed College Drive extension, and US 17. Interchanges in St. Johns County would be provided at Greenbriar Road, CR 2209, the planned Race Track Road Extension, and I-95 for the northern segment and at CR 210, CR 2209 and I-95 for the southern segment.



The Black Alternative uses a 4-lane roadway section from Branan Field-Chaffee Road to the interchange with the proposed College Drive extension in Clay County. From the College Drive extension interchange, the Black Alternative uses a 6-lane roadway section and crosses the river with a 6-lane bridge to the split east of the St. Johns River. After the split, the northern segment of the Black Alternative continues with a 6-lane section but then transitions into an 8-lane section from a location just west of the CR 2209 interchange to the segments terminus at I-95. After the split, the southern segment of the Black Alternative uses a 4-lane roadway section to the interchange with I-95.

2.1.3. Pink 1 and Pink 2 Alternatives

After crossing Black Creek, the Pink 1 Alternative turns south towards SR 16, paralleling the proposed College Drive extension on the east. The alternative intercepts a power line easement just south of the proposed CR 218 Bypass and then parallels it on its western side to its intersection with SR 16. The alternative continues to follow the power line on the west side south of SR 16, crossing CR 315. East of CR 315, the Pink 1 Alternative proceeds in a northeasterly direction, intersecting US 17 south of Green Cove Springs. After crossing US 17, the Pink 1 Alternative continues east toward the existing Shands Bridge, just east of the Reynolds Industrial Park. The Pink 1 Alternative then crosses the St. Johns River into St. Johns County, paralleling the existing Shands Bridge and SR 16 on the south. The alternative continues east, paralleling CR 16A to the south and intersecting the proposed CR 2209 roadway just west of I-95. The alternative continues east, terminating at I-95, approximately 2.5 miles north of the I-95/International Golf Parkway interchange.

Interchanges along the Pink 1 Alternative would be provided in Clay County at SR 21, CR 739, the proposed CR 218 Bypass, SR 16, and US 17. Interchanges in St. Johns County would be provided at CR 16A, CR 2209, and I-95.

The Pink 2 Alternative follows the same route as the Pink 1 Alternative with an exception in route location east of the Reynolds Industrial Park in Clay County. The Pink 2 Alternative parallels SR 16 on the north side continuing east towards the St. Johns River. The alternative crosses the St. Johns River parallel and to the south of the existing Shands Bridge, following the same route location as the Pink 1 Alternative.

The Pink 1 and 2 Alternatives use a 4-lane roadway section from Branan Field – Chaffee Road to the interchange with SR 16 in Clay County. From SR 16, the alternatives transition to a 6-lane roadway and bridge section to their terminus at I-95 in St. Johns County.

2.1.4. Brown 1 and Brown 2 Alternatives

The Brown 1 Alternative follows the same route as the Pink 1 Alternative in Clay County to just east of the St. Johns River. The alternative then proceeds north towards the proposed SR 9B/I-95 interchange, intersecting with CR 210 just east of the CR

210/Greenbriar Road intersection. The Brown 1 Alternative continues north across CR 210 and turns east, intersecting the proposed CR 2209 roadway. As with the Purple Alternative, the Brown 1 Alternative connects to I-95 at SR 9B.

Interchanges along the Brown 1 Alternative would be provided in Clay County at SR 21, CR 739, the proposed CR 218 Bypass, SR 16, and US 17. Interchanges in St. Johns County would be provided at CR 16A, CR 210, CR 2209, the planned Race Track Road Extension, and I-95.

The Brown 2 Alternative follows the same route as the Brown 1 Alternative with an exception in route location east of the Reynolds Industrial Park in Clay County. The Brown 2 Alternative parallels SR 16 on the north side continuing east towards the St. Johns River. The alternative crosses the St. Johns River parallel and to the south of the existing Shands Bridge, following the same route location as the Brown 1 Alternative.

The Brown 1 and 2 Alternatives use a 4-lane roadway section from Branan Field – Chaffee Road to the interchange with SR 16 in Clay County. From SR 16, the alternatives transition to a 6-lane roadway and bridge section to a location just west of the interchange with CR 2209 in St. Johns County. From the CR 2209 interchange, the Brown 1 and 2 Alternatives use an 8-lane roadway section to their terminus at I-95.

2.1.5. Green 1 and Green 2 Alternatives

The Green 1 Alternative follows the same route as both the Pink 1 and Brown 1 Alternatives to a point just south of SR 16 in Clay County. The alternative then takes an easterly course north of the Pink 1 and Brown 1 Alternatives. The Green 1 Alternative skirts the southern fringe of Green Cove Springs, intersecting US 17 near the existing SR 16 intersection. From this point to the Shands Bridge, the alternative collocates with SR 16. The new facility would reconstruct SR 16 and have parallel one-way frontage roads on either side, providing local access to the Reynolds Industrial Park and the development north of SR 16. At the western end of the Shands Bridge, the alternative assumes the same route as the Pink 1 Alternative across the St. Johns River, continuing to its terminus with I-95 in St. Johns County.

Interchanges along the Green 1 Alternative would be provided in Clay County at SR 21, CR 739, the proposed CR 218 Bypass, SR 16, and US 17. Interchanges in St. Johns County would be provided at CR 16A, CR 2209 and I-95.

The Green 2 Alternative follows the same route as the Green 1 Alternative with an exception in route location east of the Reynolds Industrial Park in Clay County. The Green 2 Alternative parallels SR 16 on the north side continuing east towards the St. Johns River. The alternative crosses the St. Johns River parallel and to the south of the existing Shands Bridge, following the same route location as the Green 1 Alternative.

The Green 1 and Green 2 Alternatives use a 4-lane roadway section from Branan Field – Chaffee Road to the interchange with SR 16 in Clay County. From SR 16, the alternatives transition to a 6-lane roadway and bridge section to their terminus at I-95 in St. Johns County.

2.1.6. Orange 1 and Orange 2 Alternatives

The Orange 1 Alternative follows the same alignment as the Green 1 Alternative in Clay County and across the St. Johns River to a location just east of SR 13 in St. Johns County. The alternative then assumes the Brown 1 Alternative routing, heading north then east to the proposed SR 9B/I-95 interchange.

Interchanges along the Orange 1 Alternative would be provided in Clay County at SR 21, CR 739, the proposed CR 218 Bypass, SR 16, and US 17. Interchanges in St. Johns County would be provided at CR 16A, CR 210, CR 2209, the planned Race Track Road Extension, and I-95.

The Orange 2 Alternative follows the same route as the Orange 1 Alternative with an exception in route location east of the Reynolds Industrial Park in Clay County. The Orange 2 Alternative parallels SR 16 on the north side continuing east towards the St. Johns River. The alternative crosses the St. Johns River parallel and to the south of the existing Shands Bridge, following the same route location as the Orange 1 Alternative.

The Orange 1 and Orange 2 Alternatives use a 4-lane roadway section from Branan Field – Chaffee Road to the interchange with SR 16 in Clay County. From SR 16, the alternatives transition to a 6-lane roadway and bridge section to a location just west of the interchange with CR 2209 in St. Johns County. From the CR 2209 interchange, the Orange 1 and Orange 2 Alternatives uses an 8-lane roadway section to their terminus at I-95.

2.2. No Build Alternative

Consistent with requirements of NEPA and FHWA guidelines, this analysis considers an alternative that assesses what would happen to the environment in the future if the proposed project were not built. This alternative, called the No Action or No Build Alternative, includes the routine maintenance improvements of the existing roads in the study area and the currently programmed, committed, and funded roadway projects as included in the TPO 2030 LRTP. While the No Build Alternative does not meet the project needs, it provides a baseline condition to compare and measure the effects of all the Build Alternatives.

3. Alignment Characteristics

The ten alternatives being evaluated range from 24.9 to 33.0 miles in length from SR21 to I-95. Two alternatives (Black and Purple) cross the St. Johns River on the north side of the Green Cove Springs and eight alternatives (Brown 1 and 2, Green 1 and 2, Orange 1 and 2, and Pink 1

and 2) cross the St. Johns River on the south side of Green Cove Springs near the existing Shands Bridge.

3.1. Travel Distances

Travel distances for the ten alternatives are shown in **Table 1**. Also shown in the table are comparable end-to-end travel distances using existing routes over either the Buckman Bridge (I-295) or the Shands Bridge (SR 16), as well as the number of local access interchanges for each alternative. Travel distances along the alternatives in relation to existing highways and the application of tolls would affect the extent to which through traffic would be diverted from existing highways. The number and location of local access interchanges would affect the extent to which local traffic would use each alternative for traveling to or from work and other travel, as well as the extent to which local residential and commercial developments can be more readily accessed.

The two northern river crossing alternatives (Black and Purple) have the shortest overall travel distances from SR 21 to I-95, while the southern river crossing alternatives are between five and eight miles longer. The southern leg of the Black Alternative would be six miles shorter than using existing roads to cross the Shands Bridge, while the northern leg of the Black Alternative and the Purple Alternative would be nearly the same as compared to traveling I-295 over the Buckman Bridge. The southern routes range from one miles less for the Green 1 and 2 and Pink 1 and 2, to nearly nine miles more for the Brown 1 and 2 when compared to routes across the existing bridges.

Table 1: **Alternative Travel Distances and Local Access Interchanges** ⁽¹⁾

	Northern Crossing		Southern Crossing			
	Black	Purple	Brown 1 and 2	Orange 1 and 2	Green 1 and 2	Pink 1 and 2
Alternatives Travel Distance (miles)						
SR 21 to I-95	N leg-26 S leg-26	26	34	33	31	31
End-to-End Travel Distance Comparison to Existing Highways (miles)						
Comparative Existing Highway Mileage	N leg- 26 S leg- 32	25	25	25	32	32
Proposed Local Access Interchanges (number)						
Clay - SR 21 to River	3	3	5	5	5	5
St. Johns - River to I-95	N leg - 3 S leg - 2	3	4	4	2	2
SR 21 to I-95	8	6	9	9	7	7

(1) Local access interchanges do not include interchanges with I-95

3.2. Local Access Interchanges

From SR 21 in Clay County to I-95 in St. Johns County or southeast Jacksonville, numbers of local access interchanges vary from six to nine (*Table 1*). Proposed local access interchanges from SR 21 to I-95 are listed by alternative in *Table 2*. Local access interchanges do not include interchanges with I-95.

Several local access interchanges are located at proposed roads, including extensions of CR218 from the west and College Drive from the north into the Lake Asbury section of Clay County and a new alignment for Race Track Road (Durbin Parkway) in northern St. Johns County.

3.3. Traffic Projections

Wilbur Smith Associates (Wilbur Smith, 2007) developed average weekday traffic (AWT) forecasts for the year 2030 for each of the ten alternatives for both tolled and non-tolled scenarios, the latter based on an assumed toll of \$0.15 per mile for passenger cars. These traffic forecasts are summarized by corridor segment in *Table 3*.

The tolled- and non-tolled traffic volumes differ, on average, by approximately ten percent, suggesting that tolls may not be a substantial deterrent to corridor usage, except in comparatively few segments. The most substantial drop-off occurs in AWT volumes on the southern leg of the Black Alternative, where volumes drop 33 percent for the segment between CR 2209 and I-95 and by 23 percent for the segment between CR 210 and CR 2209.

Other forecasted declines greater than 15 percent in toll versus non-toll traffic volumes include segments of the Brown 1 and 2 and Orange 1 and 2 Alternatives from Greenbriar Road to CR 2209 and the segment of the Pink 1 and 2 Alternatives from CR 2209 to I-95. Traffic declines of five percent or less are forecasted for the segments of the Purple, Black (northern leg), Brown 1 and 2, and Orange 1 and 2 Alternatives between Race Track Road and I-95. Segments of these alternatives between CR 2209 and I-95 are shown in the Wilbur Smith traffic report as being non-tolled.

Table 2: Proposed Local Access Interchange Locations ⁽¹⁾

	Northern Crossing		Southern Crossing			
	Black	Purple	Brown 1 and 2	Orange 1 and 2	Green 1 and 2	Pink 1 and 2
Clay County -- SR 21 to St. Johns River						
SR 21	X	X	X	X	X	X
CR 739 (Henley Road)			X	X	X	X
CR 218 Ext. (proposed)			X	X	X	X
College Dr Ext (proposed)	X	X				
SR 16 -- west of GCS			X	X	X	X
US 17 -- north of GCS	X	X				
US 17 -- at SR 16				X	X	
US 17 -- south of GCS			X			X
St. Johns County – St. Johns River to I-95						
CR 16A			X	X	X	X
Greenbriar Rd	N leg	X				
CR 210	S leg		X	X		
CR 2209 -- north of CR 210	N leg	X	X	X		
CR 2209 -- south of CR 210	S leg				X	X
Race Track Rd (proposed)	N leg	X	X	X		

(1) Local access interchanges do not include interchanges with I-95
 Note: GCS: Green Cove Springs

Table 3: St. Johns River Crossing Traffic Projections, 2030 (in thousands)

Alternative	Clay County Segments			Bridge Area	St. Johns County Segments		
	North of SR 21	SR 21- SR 16	SR 16-US 17		CR 16A-G'briar	G'briar-CR 2209	CR 2209-I-95
Northern River Crossings							
Purple							
-- Toll Free	31.1	See Note 1		42.9			See Note2
-- Toll	27.9	26.4-30.1		39.2	33.8		37.1-43.5
		23.5-27.6			31.1		34.8-42.2
Black (North Leg)							
-- Toll Free	31.2	See Note 1		44.6	27.1		See Note2
-- Toll	28.2	27.0-30.9		41.0	24.5		35.6-44.1
		23.8-28.5					32.5-41.9
Black (South Leg)							
-- Toll Free	31.2	See Note 1		44.6	See Note 3		
-- Toll	28.2	27.0-30.9		41.0	10.6-15.2		10.6
		23.8-28.5			8.9-11.7		7.1
Southern River Crossings							
Brown 1 and 2							
-- Toll Free	30.4	See Note 4		42.2	33.8	30.8	See Note2
-- Toll	28.3	22.1-23.7	30.1	39.3	29.7	24.8	36.0-45.5
		19.4-20.7	26.1				33.2-43.5
Orange 1 and 2							
-- Toll Free	29.9	See Note 4		43.7	33.5	30.3	See Note2
-- Toll	27.7	20.8-23.7	29.8	39.1	29.6	24.8	35.5-44.9
		17.3-21.4	26.2				33.2-43.1
Green 1 and 2							
-- Toll Free	30.3	See Note 4		42.7			26.0
-- Toll	28.1	20.8-23.3	28.9	39.1	33.1	30.3	22.7
		17.7-21.6	26.1				
Pink 1 and 2							
-- Toll Free	30.9	See Note 4		43.3			26.3
-- Toll	28.5	22.2-24.5	29.4	39.3	31.5		21.8
		19.0-22.3	26.4		28.3		

(1) Projections are for SR 21 to College Drive (Ext) and College Drive to US 17

(2) Projections are for CR 2209 to Race Track Road and Race Track Road to I-95

(3) Projections are for CR 223 to CR 2209 and CR 16A to CR 223

(4) Projections are for SR 21 to CR 218 (Ext) and CR 218 to SR 16

Projected AWT at the St. Johns River Bridge (St. Johns County end) is within a narrow range for all ten alternatives: 42,200-44,600 vehicles per day (VPD) without tolls and 39,100-41,000 with tolls. The Black Alternative is highest; all others range from 42,200-43,700 VPD without tolls. All alternatives with a northern terminus at I-95 (Black, Purple, Brown 1 and 2, and Orange 1 and 2) have similar projected traffic volumes for segments between CR 2209 and I-95, despite having different routes through Clay County and into St. Johns County. Projected AWT for these six alternatives averages 36,000 VPD between CR 2209 and Race Track Road and 44,500 between Race Track Road and I-95.

A 40 percent drop-off in AWT is projected for the Green 1 and 2 and Pink 1 and 2 Alternatives between CR 2209 and I-95 because of their southerly alignment and link to I-95. These projections emphasize the orientation of Clay County and St. Johns County commuters to centers of employment in southeastern Jacksonville. While some commuter traffic on the Green and Pink Alternatives destined for southeastern Jacksonville may stay on the alternative to I-95, based on the traffic model, many would exit at CR 16A and CR 2209 and proceed north.

Projections for the Black Alternative indicate that “through” traffic or traffic to or from I-95 south, including commuters to the St. Augustine area, is not substantial, particularly with tolls. Whereas projected non-tolled AWT on the northern leg is 44,100 VPD between Race Track Road and I-95, it is only 10,600 VPD on the southbound leg. With tolls, projected AWT on the northern leg is 41,900 VPD and only 7,600 on the southern leg.

Many travelers currently cross the St. Johns River via the Buckman Bridge (I-295), and others cross at the Shands Bridge (SR 16). For the latter group, the existing Shands Bridge would be replaced under eight of the ten alternatives (Brown 1 and 2, Green 1 and 2, Orange 1 and 2, and Pink 1 and 2), making a toll unavoidable, except for motorists traveling the alternative between SR 16 and SR 17 only or diverting north to the Buckman Bridge.

4. County Populations Growth and Housing Activity

Population growth in Clay and St. Johns Counties is dependent largely on economic and job growth in Duval County. Jacksonville is Northeast Florida’s economic engine, and adjacent counties contain largely bedroom communities. Clay and St. Johns Counties have grown rapidly in recent decades, fueled by the rise of Jacksonville to national recognition as a place to live, work, and invest. The Jacksonville Metropolitan Area crossed the one million population threshold in the 1990s and will approach 1.4-1.5 million by 2010.

4.1. Population Growth Trends and Projections

4.1.1. Clay County

The County population increased 29 percent from 140,814 in 2000 to an estimated 182,023 in 2007, according to the United States Census Bureau (USCB) (USCB, 2000). This growth equates to 5,900 new residents per year. The population is projected by county planners to grow at a faster rate in the future, adding 149,000 more residents by 2025, or approximately 8,300 per year (Clay County, 1998).

A majority of growth is projected in three planning areas through which the alternatives pass (*Tables 4 and 5*). These areas form an arc extending from the north central part of the county to the southeast. Their combined 2005 population was about half (49.5%) of the county total and is projected to reach almost two-thirds (63.2%) of the county total by 2025, accounting for 80 percent of all countywide growth during the 20-year period.

Table 4: Population Trends and Projections, Clay County, 2000-2025

County Planning Area	2000	2005	2015	2025
Traversed by St. Johns River Crossing				
Doctor's Inlet/Ridgewood ⁽¹⁾	NA	64,196	104,322	127,140
Penney Farms/Lake Asbury ⁽²⁾	NA	11,534	28,402	50,246
Green Cove Springs ⁽³⁾	NA	14,010	24,055	31,593
Subtotal (percent of county)	NA	89,740 (49.5)	156,779 (58.6)	208,979 (63.2)
Not Traversed by St. Johns River Crossing				
Fleming Island	NA	29,116	30,512	31,744
Middleburg/Clay Hill	NA	18,697	23,031	26,189
Orange Park	NA	25,095	25,774	25,814
Keystone Heights	NA	18,564	31,290	37,977
Subtotal (percent of county)	NA	91,472 (50.5)	110,607 (41.4)	121,724 (36.8)
Clay County Totals	140,814	181,312	267,386	330,703

(1)Area includes Argyle Forest and Branan Field Planning Area

(2)Area includes Lake Asbury Planning Area

(3)Area includes proposed Saratoga Springs and Governor's Park DRIs

Source: Clay County, 1998

Table 5: Population Trends and Projections, St Johns County, 2000-2025

County Planning District ⁽¹⁾	2000	2005	2015	2025
Traversed by St. Johns River Crossing				
Northwest Planning District ⁽²⁾	NA	44,300	81,600	135,600
Subtotal (percent of county)	NA	26.9	34.0	41.1
Not Traversed by St. Johns River Crossing				
Northeast Planning District ⁽³⁾	NA	49,100	69,300	92,400
Southeast Planning District	NA	59,400	71,400	77,800
Southwest Planning District	NA	12,100	17,600	24,100
Subtotal (percent of county)	NA	73.1	66.0	58.9
St. Johns County Totals	123,135	164,900	239,900	329,900

(1)Planning Districts are divided by I-95, north to south, and by SR 16 and CR 208, east to west

(2)Includes seven active and proposed DRIs and major parts of two others

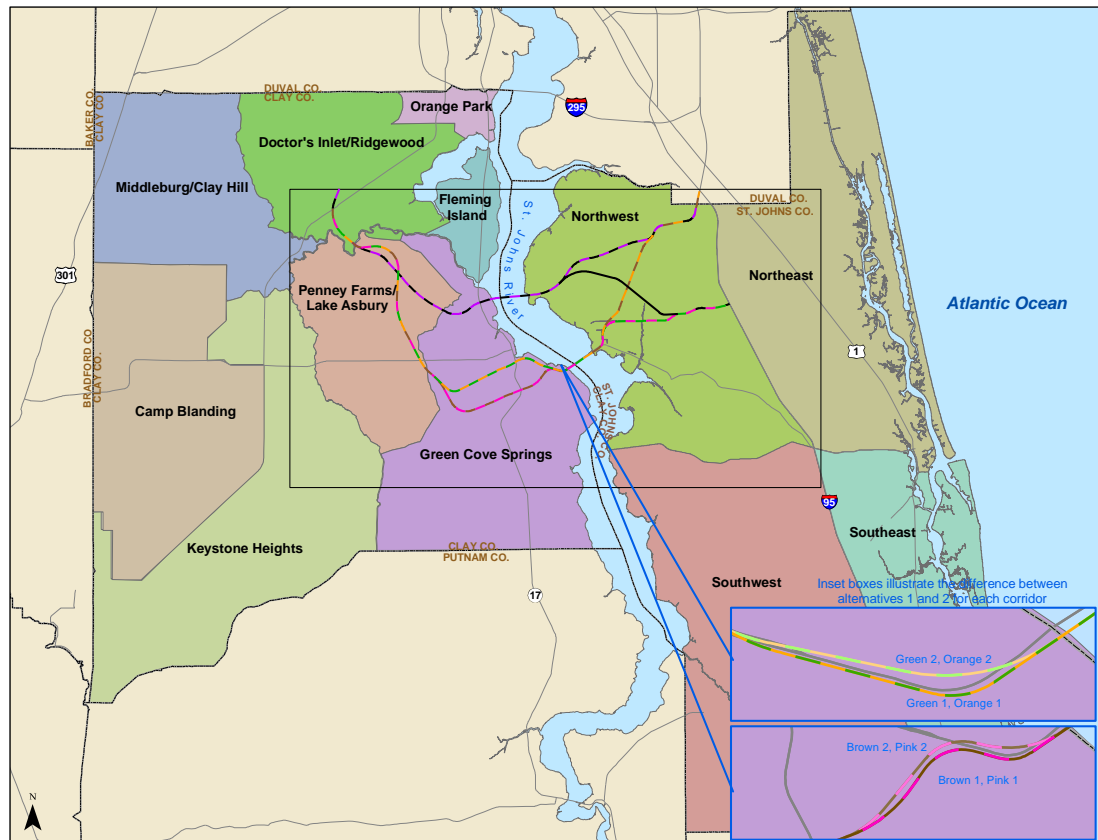
(3)Includes five active and proposed DRIs, including the largest (Nocatee) and parts of two others

Source: St. Johns County, 2000.

The three planning areas contain the county's two principal future master planned growth areas and several active and proposed large-scale real estate developments (*Figure 2*):

- The Doctor's Inlet/Ridgewood Planning Area in the north central part of the county is west of the Orange Park and Fleming Island areas and extends from the Duval County line to Black Creek south of SR 21. This area includes the 6,400-acre, 11,000-unit Argyle Forest community and 18,000-acre Branan Field Planning Area. The Branan Field Planning Area is master planned by the County for up to 11,600 new housing units and 4.0 million square feet (MSF) of commercial/industrial space.
- The Penney Farms/Lake Asbury Planning Area in the central part of the County is south of Orange Park and SR 21. This area includes the 30,000-acre Lake Asbury Planning Area which is master planned by the County for up to 25,000 residential units and 2.5 MSF of commercial/industrial space. The Green Cove Springs Planning Area in the southeastern part of the County encompasses the proposed 3,300-acre Governor's Park DRI west of the City of Green Cove Springs, the proposed 1,000-acre Peters Creek Business Park on SR 16, and the 1,700-acre Reynolds Industrial Park. The proposed 2,400-acre Saratoga Springs DRI is partly in both Planning Areas. Proposed residential and non-residential development in these projects total 13,300 housing units and 4.1 MSF of commercial/industrial space.

Figure 2: Planning Areas and Districts



4.1.2. St. Johns County

St. Johns County is among the fastest growing counties in Florida and the United States (USCB, 2004). The County population increased 43 percent from 123,135 in 2000 to an estimated 175,446 in 2007, according to the USCB (USCB, 2000). This growth averages 7,500 new residents per year. Another 154,000 residents are projected by 2025, averaging 8,600 per year. The majority of this growth (55%) is projected to occur in the Northwest Planning District (*Table 5*). This is the area west of I-95 and north of CR 208 and is traversed by the proposed alternatives.

The Northwest Planning District (*Figure 2*) is the most active development area in the Jacksonville region and includes all or most of nine active and proposed DRIs (Aberdeen, Ashford Mills, Durbin, Durbin Crossing, Julington Creek Plantation, RiverTown, Saint Johns/ World Golf Village, Silverleaf Plantation, and World Commerce Center), a small section of another DRI (Bartram Park), and a large number of residential planned unit developments (PUDs).

The ten DRIs have a combined 32,600 acres of land and are planned for a total of 42,000 residential units and nearly 22.0 MSF of commercial/industrial use. Of the ten, only Julington Creek Plantation and Saint Johns are more than half developed in terms

of residential uses. Development is underway in Aberdeen, Durbin Crossing, RiverTown, World Commerce Center, and the St. Johns County section of Bartram Park (most of this DRI is in Jacksonville/Duval County). The other three currently are undeveloped.

The largest residential DRI in the Jacksonville region, Nocatee, is located in the Northeast Planning District. This 15,000-acre DRI is approved for up to 14,900 residential units and 4.0 MSF of commercial/industrial use, most of which is in St. Johns County. A small portion of the DRI is in Duval County. Development of this DRI, now underway, includes major improvements to CR 210.

4.2. Commuting Patterns

According to the USCB (USCB, 2000), 60 percent of employed residents of Clay County and 40 percent of workers living in St. Johns County worked outside these counties (*Table 6*). In numerical terms, these percentages represented nearly 41,000 outbound commuters in Clay County and over 23,000 outbound commuters in St. Johns. The great majority of outbound commuters in both counties traveled to Jacksonville/Duval County in the year 2000, including some 35,000 in Clay County and 20,000 in St. Johns County. Based on population growth, over 10,000 more workers would be expected to be commuting outside of each county in 2007.

4.2.1. Existing Employment Center Locations

The vast majority of office, industrial, and retail/commercial space and related jobs in the Jacksonville Metropolitan Area are located in Jacksonville/Duval County (Jacksonville Regional Chamber of Commerce, 2006). Major centers of office-based employment are found in the Butler/Baymeadows and Urban Core areas of Jacksonville. Of an estimated 50.0 MSF of office space in the region, 25.0 MSF are in southeastern Jacksonville and another 17.5 MSF are in and near downtown Jacksonville. Neither Clay County nor St. Johns County have significant concentrations of office space. There also are approximately 110.0 MSF feet of industrial space in the region, 90 percent of which is in Jacksonville, including 42.0 MSF in the Westside/Riverside areas, 21.0 MSF in southeast Jacksonville, 17.0 MSF in the Northside/Oceanway areas, and 15.0 MSF near downtown Jacksonville. Clay County has a comparatively minor amount of industrial development and related employment, but St. Johns County has several large industrial employers in the St. Augustine area, notably Northrop Grumman with over 1,000 workers.

Table 6: **Commuting Patterns, Clay and St. Johns Counties, 2000**

Parameter	Clay County (number and percent)	St. Johns County (number and percent)
All Resident Workers Age 16 & Over	67,753	58,878
Worked in County	26,798 (39.6)	35,438 (60.2)
Worked Outside County	40,955 (60.4)	23,440 (39.8)
Commuted to Duval County	34,888 (51.5)	19,929 (33.8)
Commuted to Clay County	-----	830 (1.4)
Commuted to St. Johns County	957 (1.4)	-----

Source: USCB, 2000

4.2.2. Retail Concentrations

Population-dependent retail development is more dispersed. Of an estimated 60.0 MSF in the region, the largest concentration (18.5 MSF), including three regional malls, is found in areas of Jacksonville south and east of the St. Johns River. Clay and St. Johns Counties each have approximately 8.0 MSF of retail space. Retail concentrations in Clay County are in the Blanding Boulevard/Wells Road area west of Orange Park, including the Orange Park Mall, and on Fleming Island south of Orange Park. Principal retail concentrations in St. Johns County are found in the St. Augustine area around the I-95/SR 16 interchange and on US 1 south.

4.2.3. Clay County Commuter Destinations

Leading Clay County commuter destinations include business parks and regional retail centers in southeast Jacksonville, which are accessed mainly by the Buckman Bridge (I-295); office, institutional, and governmental facilities in and near downtown Jacksonville; the Jacksonville Naval Air Station on US 17 north of I-295; and a number of industrial parks in west and north Jacksonville. The proposed alternatives would provide an east-west travel option for the congested Buckman Bridge as well as an improved north-south connection from the county to growing industrial parks in west and north Jacksonville.

4.2.4. St. Johns County Commuter Destinations

Business parks, regional retail centers, and institutional facilities in southeast Jacksonville constitute the leading St. Johns County commuter destinations. Office, institutional, and governmental facilities in and near Downtown are also prominent destinations for St. Johns County commuters. I-95, US 1, and Butler Boulevard are the principal commuter routes. The proposed alternatives would help ease traffic on local roads in the Northwest Sector of the County, notably CR 210, but would provide no particular benefit to commuters from the St. Augustine area, the Ponte Vedra area, and

new large-scale developments east of I-95, including the Nocatee, Palencia, and Twin Creeks DRIs.

4.3. Housing Construction Trends

4.3.1. Clay County

Permits were issued for 17,000 new single family homes and 2,500 new multifamily units in the County from 2000 through 2007, averaging over 2,400 single family homes and over 300 multifamily units annually over the past seven years (Clay County Building Division, 2007) (*Table 7*). This is a substantial increase in activity from the 1990s and reflects the continuing dispersal of residential growth in the Jacksonville region to areas outside the traditional urban core county (Duval) as well as a growing regional housing market. Permitted new single family units peaked at over 3,800 units in 2005 and has fallen steeply since to less than 1,000 units in 2007, as homebuilders locally and nationally deferred investing in new inventory and, instead, attempted to reduce (i.e., sell) existing inventories.

Once current housing and mortgage environments return to more generally expected buying and selling levels, an average annual housing growth rate of 2,500-3,000 units should be sustainable over the long term even without the project due to job growth in the Jacksonville area and a reputation for good schools and a high quality of life in Clay County. However, the project is very likely to increase the rate at which this development occurs.

Table 7: New Housing Construction Trends, Clay County, 2000-2007

Year	Metro Area ⁽¹⁾		Clay County		Share of Metro Area (%)	
	Single Family	Multi-family ⁽²⁾	Single Family	Multi-family ⁽²⁾	Single Family	Multifamily
2000	7,187	2,650	1,520	8	21.1	---
2001	9,600	3,055	1,821	790	19.0	25.9
2002	10,847	3,370	2,131	8	19.6	---
2003	12,784	3,037	2,547	6	19.9	---
2004	14,680	4,645	2,935	213	20.0	4.6
2005	18,311	6,480	3,831	282	20.9	4.4
2006	11,274	5,467	1,336	1,076	11.9	19.7
2007	7,183	3,580	920	113	12.8	3.2
2000-2007	91,866	32,284	17,041	2,496	18.5	7.7

(1) Metro Area includes Clay, Duval, Nassau, and St. Johns Counties

(2) Includes all attached and multifamily units

Source: USCB, 2000

4.3.2. St. Johns County

Permits were issued for 23,500 new single family homes and 4,600 new multifamily units in the County from 2000 through 2007, averaging over 2,900 single family homes and nearly 600 multifamily units annually over the past seven years (St. Johns County Permitting Department, 2007) (Table 8). As with Clay County, this is a substantial increase in activity from the 1990s and reflects the continuing dispersal of residential growth in the Jacksonville region to suburban areas outside the traditional urban core county (Duval) as well as a growing regional housing market. Permitted new single family construction peaked at over 4,750 units in 2005, mirroring national trends, and has fallen to less than half that (about 2,100) in 2007, as homebuilders locally and nationally deferred investing in new inventory and, instead, attempted to reduce (i.e., sell) existing inventories.

Table 8: New Housing Construction Trends, St. Johns County, 2000-2007

Year	Metro Area ⁽¹⁾		St. Johns County		Share of Metro Area (%)	
	Single Family	Multi-family ⁽²⁾	Single Family	Multi-family ⁽²⁾	Single Family	Multifamily
2000	7,187	2,650	2,086	398	26.7	15.0
2001	9,600	3,055	2,134	337	22.2	11.0
2002	10,847	3,370	2,424	594	22.3	17.6
2003	12,784	3,037	3,368	550	26.3	18.1
2004	14,680	4,645	4,119	905	28.1	19.5
2005	18,311	6,480	4,753	966	26.0	14.9
2006	11,274	5,467	2,502	508	22.2	9.3
2007	7,183	3,580	2,139	323	29.8	9.0
2000-2007	91,866	32,284	23,525	4,581	25.6	14.2

(1) Metro Area includes Clay, Duval, Nassau, and St. Johns Counties

(2) Includes all attached and multifamily units

Source: USCB, 2000

St. Johns County began the 1990s with only a 15 percent share of the Jacksonville Metropolitan Area single family housing market but ended the decade with greater than a 23 percent share of the metro area market. For the past seven years, the County has averaged more than 25 percent of metro area activity, reaching nearly a 30 percent market share in 2007, an otherwise “down” year. Once the national and local housing and mortgage environments return to more generally expected buying and selling levels, an average annual housing growth rate of 3,500-4,000 units should be sustainable over the long term with the majority of activity continuing in the Northwest Planning District. Like Clay County, St. Johns County has a reputation for good schools and a high quality of life, which are major draws for new residents. The county is also the most advantageously located in terms of proximity to major employment centers in Jacksonville. As such, it is expected to become a key future location for new regional

office and industrial development as these activities continue to migrate south along the I-95 corridor.

4.4. Residential Sales Trends

Sales of new single family homes in Clay and St. Johns Counties in recent years generally have followed paths similar to new housing construction trends, rising from 2000 to a peak in 2005 before retreating in 2006 (Realty Reporting Services, 2007), as shown in **Table 9**. Average prices, however, continued to increase after 2005, indicating that demand for new, higher priced homes, at least initially, was less affected by the national and regional housing market downturn than lower cost housing.

Table 9: **New Single Family Home Sales Trends, Clay and St. Johns Counties, 2000-2006**

County and Submarket Area	2000	2001	2002	2003	2004	2005	2006
Clay County							
North ⁽¹⁾							
-- No. Closings ⁽³⁾	812	814	981	1,346	1,545	2,165	2,031
-- Mkt. Share (%)	68.2	61.9	64.6	68.5	78.8	75.1	86.7
-- Avg. Price (\$)	127,825	132,513	140,557	157,638	197,119	223,068	279,053
County Total							
-- No. Closings ⁽³⁾	1,191	1,315	1,519	1,965	1,961	2,883	2,343
-- Avg. Price (\$)	152,040	163,050	167,562	176,431	210,285	228,269	282,609
St. Johns County							
North ⁽²⁾							
-- No. Closings ⁽³⁾	973	997	1,122	1,899	2,287	2,791	2,402
-- Mkt. Share (%)	80.6	82.1	81.5	83.0	84.0	84.8	83.2
-- Avg. Price (\$)	185,866	212,075	232,177	240,477	253,675	285,091	349,158
County Total							
-- No. Closings ⁽³⁾	1,207	1,214	1,376	2,289	2,726	3,291	2,886
-- Avg. Price (\$)	207,492	233,230	242,085	251,840	260,725	295,952	349,402

(1)Area north of SR 16, excluding Fleming Island

(2)Area north of SR 16 and CR 208, excluding Ponte Vedra and Beaches area

(3)Closed sales on builder homes only; homes built on pre-owned lots are excluded

Source: Realty Reporting Services, 2007

4.4.1. Clay County

New single family homes sold by builders peaked near 2,900 closed sales in 2005, having risen from less than 1,200 closings in 2000. Average prices of new homes countywide from 2000 to 2005 increased 50 percent from \$152,000 in 2000 to \$228,000 in 2005. Prices increased another 24 percent to \$283,000 in 2006, but sales volume fell 19 percent.

The North submarket area, defined as the area north of SR 16, but excluding Fleming Island, has accounted for 74 percent of closed sales in the County since 2000, peaking at 87 percent of sales in 2006. This submarket area includes the 11,000-unit Argyle Forest community, which has dominated the local housing market in recent years. This 6,400-acre community is less than 40 percent developed. Other potential development areas in this submarket include the Branan Field and Lake Asbury Planning Areas and the Saratoga Springs DRI (*Figure 3*).

4.4.2. St. Johns County

New single family homes sold by builders peaked at close to near 3,300 closed sales in 2005, having increased from only 1,200 in 2000. Average prices of new homes countywide 43 percent from \$207,000 in 2000 to \$296,000 in 2005. Prices jumped another 18 percent to \$349,000 in 2006, although sales volume was down 12 percent in 2006.

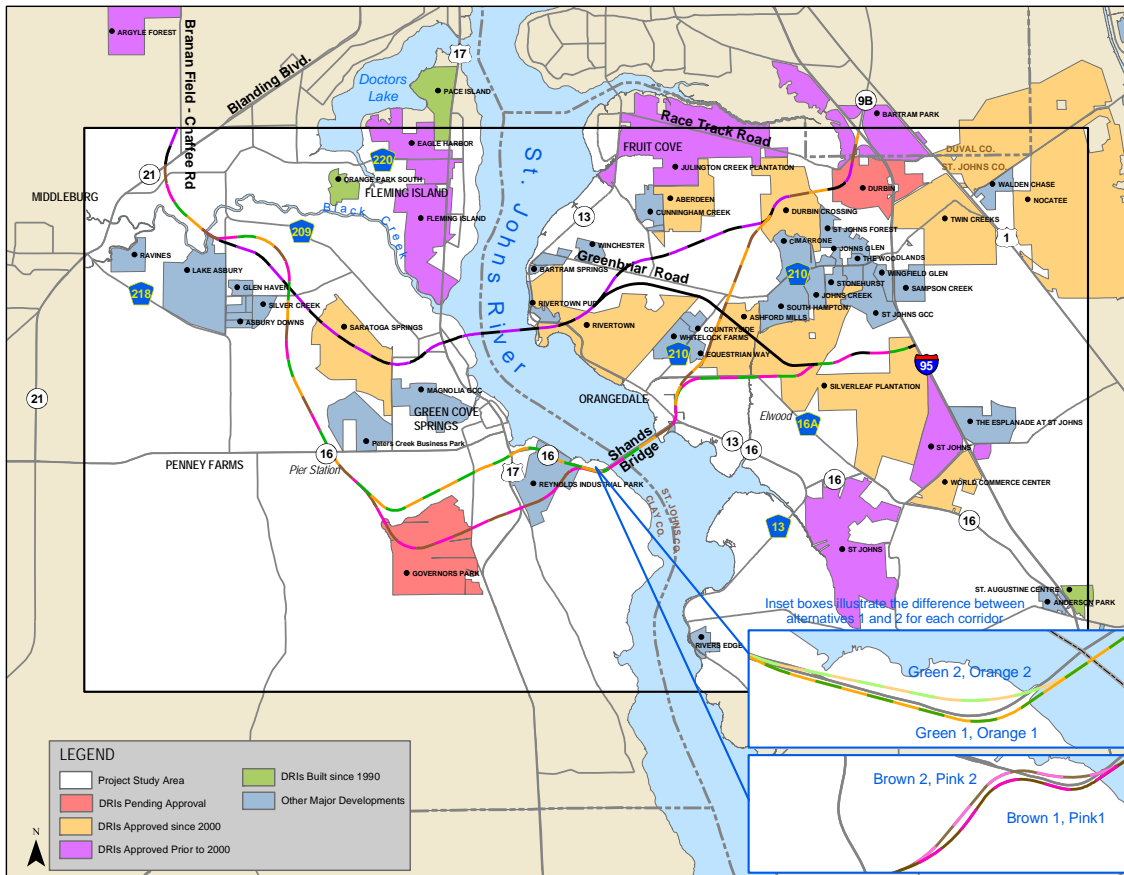
The North submarket area, defined as the area north of SR 16 and CR 208 and west of the Intracoastal Waterway, has accounted for 83 percent of closed sales in the county since 2000. Although this share of countywide sales has been generally consistent in recent years, activity in this submarket area is expected to increase both in number and share of sales in the future, as development pressure continues to spill over into St. Johns County from southeastern Jacksonville.

The North submarket area contains 14 of 15 active and proposed DRIs in the County (*Figure 3*), including five with 5,000 or more planned residential units -- Nocatee (14,920), Silverleaf Plantation (10,700), Saint Johns/World Golf Village (7,200), Julington Creek Plantation (6,292), and Twin Creeks (5,000). Silverleaf Plantation and Twin Creeks presently are undeveloped and Nocatee is just underway. Only Julington Creek Plantation and Saint Johns/World Golf Village are substantially developed.

5. Profiles of Major Developments and Development Areas

A number of large-scale real estate developments and special planning areas are profiled herein, including six projects and two special planning areas in central and southeast Clay County and 13 projects in and adjacent to northwest St. Johns County (*Figure 3*). These projects and planned areas will account for the vast majority of future development in and near the alternative corridors and nearly all are undeveloped, sparsely developed, or developed to less than half of their approved or planned capacity. Development time frames vary generally from 10 to 25 years, and impacts on the pace and value of development would depend on the project's alignment, timing, and proximity of local access interchanges.

Figure 3: Major Developments



5.1. Clay County

Six large-scale real estate projects and two areas master planned by the county for significant new development would be traversed by the alternatives or are located nearby (*Figure 2 and Figure 3*). These projects and areas total over \66,000 acres and are planned for over 64,000 housing units and more than 16.0 MSF of non-residential uses (*Table 10*). Six projects and planning areas are profiled in the following subsections, including discussion of the potential impact of their location in relation to the alternatives and local access interchanges.

Table 10: Major Developments and Development Areas in Clay County

Development	Area (acres)	Housing Units	Non-Residential Uses (square feet X 1,000)			
			Retail	Office	Industrial	Other
Fleming Island Plantation DRI	2,120	3,790	290	1,160		
Governor's Park DRI	3,267	6,000	840	700	2,000	HO: 400R
Lake Asbury Planning Area	30,923	25,000	2,500			
Peters Creek Business Park	1,044	227	8	132	2,400	
Reynolds Industrial Park	1,700	2,800	200	600	400	
Saratoga Springs DRI	2,444	4,256	250	140		HP: 250B

Abbreviations: HO - hotel (rooms); HP - hospital (beds)
 Source:URBANOMICS, Inc.

5.1.1. Fleming Island Plantation DRI

Fleming Island Plantation is the newest of three DRIs located on Fleming Island along US 17 between Orange Park to the north and Green Cove Springs to the south. It is at the southern end nearest Green Cove Springs. The two other DRI's, located to the north of Fleming Island Plantation, are Pace Island and Eagle Harbor, both of which are almost entirely developed. Fleming Island Plantation is substantially developed in terms of housing, but a large portion of a planned 1.16 MSF of office/industrial space is undeveloped. The Black and Purple Alternatives provide the greatest potential benefit to Fleming Island residents and remaining development, because of the proximity of an interchange at US 17 north of Green Cove Springs.

5.1.2. Governor's Park DRI

This proposed DRI is located west of Green Cove Springs and south of SR 16 on the Gustafson Dairy property on the east side of CR 315 near the Clay County Fairgrounds. Proposed uses of this 3,300-acre property include 6,000 housing units, 840,000 square feet (SF) of retail space, 2.7 MSF of office and light industrial space, and 400 hotel rooms. Plans for all southern river crossing alternatives (Brown1 and 2, Green 1 and 2, Orange 1 and 2, and Pink 1 and 2) include a local access interchange at US 17 that would be adjacent to Governor's Park. Other nearby proposed local access interchanges are located at SR 16 to the west. While the Green 1 and 2 and Orange 1 and 2 Alternatives would skirt the northern edge of this development, the Brown 1 and 2 and Pink 1 and 2 Alternatives would cut through a large portion of it, potentially affecting sales and property values.

5.1.3. Lake Asbury Master Plan Area

This 30,900-acre area is situated between Black Creek and SR 16 and between Middleburg and Green Cove Springs. It adjoins the Town of Penney Farms. Approximately 18,000 acres were undeveloped at the time of adoption of the Master Plan by Clay County (Clay County, 1998). Undeveloped areas are planned for up to 25,000 housing units and 2.5 MSF of non-residential use, much of which would be located in a large-scale urban activity center in the proposed project corridor. Major developments are beginning to appear in this area, including a large section of the proposed 2,400-acre Saratoga Springs DRI and the new 562-acre, 761-unit Rolling Hills community.

All alternatives pass through the Lake Asbury Planning Area, with local access interchanges at proposed extensions of CR 218 or College Drive. The proposed CR 218 extension is intended to provide an east-west link between SR 21 in Middleburg and US 17 on the north side of Green Cove Springs. The proposed College Drive extension would provide a more direct north-south connection between Orange Park and SR 16 in Penney Farms. The Black and Purple Alternatives would offer the shortest commuting distances to southeast Jacksonville.

5.1.4. Peters Creek Business Park

This is a proposed 1,044-acre industrial park on the north side of SR 16 near the CR 315 intersection west of Green Cove Springs. Planned land uses include 2.4 MSF of industrial space, 140,000 SF of office and retail space, and 227 residential units. The project is being planned by the Reinhold Corporation, a local family-owned company that owns approximately 28,000 acres of land centered around the Town of Penney Farms, including substantial holdings in the Lake Asbury Special Planning Area. A proposed local access interchange on SR 16 is within two miles under the Brown 1 and 2, Green 1 and 2, Orange 1 and 2, and Pink 1 and 2 Alternatives.

5.1.5. Reynolds Industrial Park

The 1,700-acre Reynolds Industrial Park is located on the St. Johns River near the Shands Bridge just to the southeast of Green Cove Springs. The privately-owned industrial park, a former military airfield and river port, is bisected by SR 16 and features a number of manufacturing, distribution, and marine industry operations, including ship and boat repair, an airfield, and golf course. A market analysis commissioned recently by the owners concluded that the best future use for this waterfront property is not industrial, but instead recommended that the property be redeveloped primarily for residential and resort uses (Urbanomics, 2007). As a result, the current development plan includes 2,800 residential/resort units, many on a network of lagoons, a 200-room resort hotel, marina, and 200,000 SF of retail space. In addition, plans also include 600,000 SF of office space and 40 acres (400,000 SF) for industrial development.

While this project would benefit from the Brown 1 and 2 and Pink 1 and 2 Alternatives, which border the project on the south and have local access via an interchange at US 17 just to the southwest, those alternatives would also require property from the development for right-of-way. The Green 1 and 2 and Orange 1 and 2 Alternatives also pass through this area south of Green Cove Springs, with local access interchanges at US 17, but these alternatives bisect the airfield from the marina and could potentially complicate internal circulation on the property.

5.1.6. Saratoga Springs DRI

This proposed 2,400-acre DRI is located on CR 315 north of SR 16 and northwest of Green Cove Springs on the former Wright Dairy property. The master developer is Jacksonville-based LandMar Group. Proposed land uses include 4,256 housing units, 390,000 SF of retail and office space, and a 250-bed community hospital. No development has taken place to date. While the Black and Purple Alternatives would both benefit this DRI with two nearby local access interchanges, US 17 north of Green Cove Springs and proposed College Drive extended in the Lake Asbury area, they would also impact it directly, potentially affecting sales and property values. These alternatives also offer the shortest commuting distances to southeast Jacksonville. The other eight alternatives (Brown 1 and 2, Green 1 and 2, Orange 1 and 2, and Pink 1 and 2) only have one nearby local access interchange (at CR 218 extended in Lake Asbury).

5.2. St. Johns County

Land use and economic impacts of the proposed alternatives would be confined largely to St. Johns County's Northwest Sector, defined as the area west of I-95 and north of CR 208. A majority of recent and future county growth has occurred and is projected to occur in this area. All or parts of ten DRIs and a large number of residential PUDs are found in this area (*Figure 3*). The DRIs alone total nearly 33,000 acres and are planned for nearly 47,000 housing units and over 22.0 MSF of commercial/industrial use. In the aggregate, the ten DRIs are less than 30 percent developed residentially and are less than 10 percent developed in terms of commercial/industrial potential.

Another three new and proposed major developments are located just east of I-95 in the Northeast Sector. While these are not likely to be impacted by the project to the extent as those in the Northwest Sector, they account for another 19,000 acres, 21,000 housing units, and more than 11.0 MSF of commercial/industrial space. These Northwest and Northeast Sector projects are profiled in the following subsections and summarized in *Table 11*. Potential impacts of their locations in relation to project alternatives and local access interchanges are also discussed.

One other major development not listed in the table is a proposed 288-bed Flagler Hospital community hospital at the intersection of International Golf Parkway and SR 16. The proposed hospital would not be impacted by any project alternative. In addition, less than

one mile from the proposed CR 2209 is a 1,940-acre property on the north side of CR 210 that was purchased by the LandMar Group in 2007. LandMar is an experienced community developer with several projects in Northeast Florida and Southeast Georgia, but as it has not yet announced plans for this property no potential impacts can be determined at this time.

5.2.1. Aberdeen DRI

This 1,316-acre DRI is located immediately south of and adjacent to the Julington Creek Plantation DRI. South Florida-based Southstar Development Partners is the master developer. Aberdeen was approved in 2003 and is planned for up to 2,018 housing units and a comparatively modest 100,000 SF of local retail and office space.

Development to date is less than 30 percent. The DRI is served primarily by two new county roads: CR 244 and CR 223. CR 244 extends from Greenbriar Road at Roberts Road north through Aberdeen then east through the Durbin Crossing DRI to the new CR 2209 at Russell Sampson Road. CR 223 is a north-south road between the Aberdeen and Durbin Crossing developments and, when completed, will extend from Race Track Road to CR 210 at Greenbriar Road. Only the Black and Purple Alternatives could be viewed as benefiting the Aberdeen DRI with two nearby local access interchanges at Greenbriar Road and at CR 2209.

5.2.2. Ashford Mills DRI

This 1,520-acre DRI is located between CR 210 and CR 16A and can be accessed from both roads. The DRI was approved in 2006 and is planned for 2,633 housing units and 280,000 SF of retail and office space. The master developer is locally-based Collins Group, but the project is undeveloped to date. The southern leg of the Black Alternative bisects the site, while the Brown 1 and 2 and Orange 1 and 2 Alternatives form its western boundary and the Green 1 and 2 and Pink 1 and 2 Alternatives form its southern boundary. The Brown 1 and 2 and Orange 1 and 2 Alternatives potentially are most beneficial because of adjacent local access interchanges at both CR 210 and CR16A, provided that their alignment along the western edge of the project does not require right-of-way from the development. The Green 1 and 2 and Pink 1 and 2 Alternatives are less beneficial in terms access and may also require right-of-way.

5.2.3. Durbin DRI

Durbin is a proposed DRI located on Race Track Road at I-95. The majority of the 1,245-acre property is on the south side of Race Track Road and on the west side of I-95, but a small section is located on the east side of I-95. The master developer is Durbin Creek National, LLC, an ownership entity formed by Jacksonville-based Gate Lands Company, which purchased the property from the Cummer Trust. Proposed development includes 4,500 housing units, 3.0 MSF of retail space, 1.7 MSF of office space, and 800 hotel rooms.

The location of the project is such that it may be impacted by major proposed highway improvements, including an extension of proposed SR 9B south of I-95 to join with CR 2209 and a realigned Race Track Road (a.k.a. Durbin Parkway). While the Black (northern leg), Purple, Brown 1 and 2, and Orange 1 and 2 Alternatives could help accelerate buildout of the DRI, they also would directly impact the development, potentially affecting sales and property values.

Table 11: Major Developments and Development Areas in St. Johns County

Development	Area (acres)	Housing Units	Non-Residential Uses (SF X 1,000)			
			Retail	Office	Industrial	Other
Northwest Sector (west of I-95)						
Aberdeen DRI	1,316	2,018	60	40		
Ashford Mills DRI	1,520	2,633	250	30		
Durbin DRI	1,245	4,500	3,000	1,700		HO: 800R
Durbin Crossing DRI	2,086	2,498	100	70		
Julington Creek Plantation DRI	4,150	6,292	740			
RiverTown DRI	4,170	4,500	300	100	100	
Saint Johns DRI (WGV)	6,414	7,200	583	2,493	2,464	HO:1,225R
Silverleaf Plantation DRI	7,285	10,700	1,100	300	330	
World Commerce Ctr DRI	1,000	1,156	909	2,200	454	HO:1,000R
Northeast Sector (east of I-95)						
Esplanade at St. Johns	946	1,400	1,765	847		HO: 110R
Nocatee DRI	15,000	14,920	968	4,118	250	HO: 650R
Twin Creeks DRI	3,050	5,000	600	300	2,000	HO: 175R
Adjacent Major Developments in Southeast Jacksonville						
Bartram Park DRI	3,600	5,288	1,800	3,125		HO: 800R

Abbreviations: HO - hotel (rooms); HP - hospital (beds)
Source:URBANOMICS, Inc.

5.2.4. Durbin Crossing DRI

Durbin Crossing is a companion to the Aberdeen DRI in that Southstar Development Partners is the master developer of both DRIs. The 2,086-acre community is located between Race Track Road and CR 210 and is bounded on the east by the new CR 2209. Major access is provided by CR 2209 on the east, the new CR 223 on the western edge, and by the new CR 244, which traverses the property from east to west. Approved in

2003, Durbin Crossing is planned for up to 2,498 housing units and 170,000 SF of retail and office space. Development to date is less than 25 percent.

The Black (northern leg), Purple, Brown 1 and 2, and Orange 1 and 2 Alternatives all cross the southern half of the DRI in approximately the same location and all have proposed local access interchanges at CR 2209 on the eastern edge of the property. While the convenience of an interchange at CR 2209 is likely to benefit the northern half of the community, direct impacts of the project on the southern half may potentially affect sales and property values.

5.2.5. Julington Creek Plantation DRI

The 4,150-acre Julington Creek Plantation is the oldest and most developed DRI in Northwest St. Johns County, having received development approval in 1982. Originally approved for up to 9,600 housing units, that buildout number was later reduced to 6,292 units, along with 740,000 SF of retail and office space. To date, there are approximately 5,700 existing and permitted housing units in the community. The project is unlikely to factor into the ultimate buildout of the community.

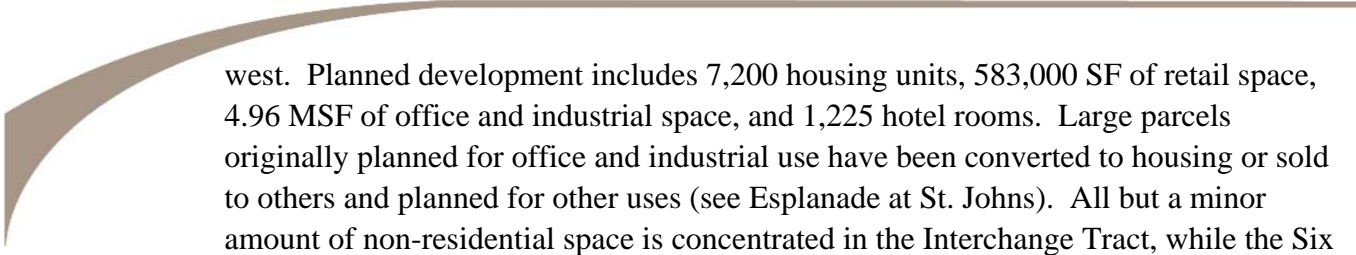
5.2.6. RiverTown DRI

This generally undeveloped 4,170-acre DRI is located along the St. Johns River between Greenbriar Road and CR 16A. It was approved in 2004 for up to 4,500 housing units and 500,000 SF of retail, office, and light industrial use. The master developer is Jacksonville-based St. Joe Company. The property has several miles of river frontage and frontage on SR 13 (William Bartram Scenic Highway). Access will also be provided from Greenbriar Road and CR 210 via a southern extension of Roberts Road through the property.

The Black and Purple Alternatives cross the northwest section of the property and would tend to slow sales and reduce pricing of development in this corner of the property. However, both provide nearby local access interchanges on Greenbriar Road. The Brown 1 and 2 and Orange 1 and 2 Alternatives have two convenient local access interchanges, one near the northeast corner of the project where Greenbriar Road meets CR 210 and the other near the southeast corner on CR 16A just east of CR 210. The Green 1 and 2 and Pink 1 and 2 Alternatives serve the project with a local access interchange on the southeast side near the junction of CR 16A and CR 210.

5.2.7. Saint Johns DRI (World Golf Village)

Initially approved for development in 1985, this older 6,400-acre DRI consists of two separate large land tracts. The 1,900-acre Interchange Tract consists of lands in three of the four quadrants of the I-95/International Golf Parkway interchange. The 4,500-acre Six Mile Creek Tract to the west is located in the area circumscribed by SR 16 on the north, Pacetti Road on the east, CR 208 on the south, and CR 13/Six Mile Creek on the



west. Planned development includes 7,200 housing units, 583,000 SF of retail space, 4.96 MSF of office and industrial space, and 1,225 hotel rooms. Large parcels originally planned for office and industrial use have been converted to housing or sold to others and planned for other uses (see Esplanade at St. Johns). All but a minor amount of non-residential space is concentrated in the Interchange Tract, while the Six Mile Creek Tract is virtually all residential.

Existing and permitted housing is approximately 45-50 percent of estimated buildout. The Interchange Tract includes the World Golf Village entertainment complex, several small multi-tenant and freestanding retail and office centers and facilities, two hotels, and a number of single family and multifamily residential developments with approximately 1,300 existing and permitted units and capacity for approximately 500 units. The Six Mile Creek Tract has an estimated 1,800-1,900 existing and permitted homes and capacity for another 2,800-2,900, including a potential 2,200-unit LandMar community.

The project is unlikely to provide any significant benefit to the Saint Johns/World Golf Village DRI as it already has access to I-95. A possible exception is that alignments with an I-95 interchange just north of International Golf Parkway (i.e., Green 1 and 2, Pink 1 and 2, and the southern leg of Black) could make the World Gold Village appear to be part of a regional crossroads area and more convenient to the Clay County population and workforce. This may help promote additional usage of World Golf Village facilities and attraction of employment and shopping activities to the International Golf Parkway interchange.

5.2.8. Silverleaf Plantation DRI

This 7,285-acre development stretches from the cluster of existing residential PUDs along CR 210 to the Interchange Tract of the Saint Johns DRI on International Golf Parkway. The property has frontage in three locations on CR 16A and SR 16 and a window on I-95. The project received development approval in 2006 for up to 10,700 housing units, 1.1 MSF retail space, and 630,000 SF of office and industrial space. Jacksonville-based The Hutson Companies is the master developer. Hutson is also master developer of the 6,400-acre Oakleaf Plantation community in Clay County. The project would be directly impacted by proposed major roadways, notably CR 2209 which passes through the property from north-to-south. However, the developer has committed to construct the entire central section of CR 2209 from CR 210 to International Golf Parkway.

The DRI would also be bisected by the proposed alternatives, specifically the Black (southern leg), Green 1 and 2, and Pink 1 and 2 Alternatives. These alignments all include a local access interchange at CR 2209, which could generate significant interest and commercial activity on lands adjacent to the interchange. The potential downside of these alternatives is that, in bisecting the property, it may be difficult to plan and

develop the community as cohesive whole with adequate internal circulation. The other alternatives (Purple, Brown 1 and 2, and Orange 1 and 2) have no direct impacts on the project.

5.2.9. World Commerce Center DRI

The 1,000-acre World Commerce Center is located in the southwest quadrant of the I-95/International Golf Parkway interchange across from the World Golf Village complex. It was approved in 2002 for 1,156 housing units, 909,000 SF of retail/commercial space, 2.65 MSF of office and industrial space, and 1,000 hotel rooms. Steinemann & Company is the master developer. Access to the project is provided at several points along International Golf Parkway and on SR 16. Development to date includes about 500 existing and permitted residential units and 500,000 SF of non-residential space, including the headquarters of Ring Power Corporation, a large distributor of construction equipment. A major shopping center of up to 1.0 MSF called Lion's Gate at World Commerce Center, is also planned.

As with the Saint Johns/World Golf Village DRI, the project is unlikely to provide any significant benefit for the World Commerce Center as it already has access to I-95. A possible exception is that alternatives with an I-95 interchange just north of International Golf Parkway (i.e., Green 1 and 2, Pink 1 and 2, and southern leg of Black) could make the World Commerce Center appear to be part of a regional crossroads area and make it more convenient to the Clay County population and workforce. This may help promote attraction of employment and shopping activities to the International Golf Parkway interchange area.

5.2.10. Esplanade at St. Johns

This proposed 946-acre project is located in the northeast quadrant of the I-95/International Golf Parkway interchange. Devlin Group, the Jacksonville-based master developer, proposes 1,400 housing units, 2.6 MSF of retail and office space, and 110 hotel rooms on the property. The centerpiece is a 1.2 MSF open-air "lifestyle" shopping center similar to the St. Johns Town Center in Jacksonville. Atlanta-based Ben Carter Associates is developer of both town centers. This project, which is awaiting development approval, would occupy 338 acres originally part of the Saint Johns/World Golf Village DRI and an adjacent 608 acres on the north side of International Golf Parkway between I-95 and the Twelve Mile Swamp Conservation Area.

As with the Saint Johns/World Golf Village DRI, the project is unlikely to provide any significant benefit for the World Commerce Center as it already has access to I-95. A possible exception is that alternatives with an I-95 interchange just north of International Golf Parkway (i.e., Green 1 and 2, Pink 1 and 2, and southern leg of Black) could make the World Commerce Center appear to be part of a regional crossroads area and make it more convenient to the Clay County population and

workforce. This may help promote attraction of employment and shopping activities to the International Golf Parkway interchange area.

5.2.11. Nocatee DRI

This 15,000-acre DRI, the largest in Northeast Florida (Department of Community Affairs, 2007), is located between US 1 and the Intracoastal Waterway and straddles the Duval County/St. Johns County line. The vast majority of land and proposed development is in St. Johns County. Nocatee was approved in 2001 for up to 14,920 housing units, 968,000 SF of retail space, 4.1 MSF of office space, 250,000 SF of industrial space, and 650 hotel rooms. Jacksonville-based PARC Group is the master developer. Initial phases of five residential communities are underway and major commercial developments have been announced, including a 650,000 SF office park and an 81,000 SF first phase shopping center in the 1,500-acre Nocatee Town Center.

A major road building program is associated with this DRI. Improvements include realignment and widening of CR 210 from two lanes to four lanes from the Intracoastal Waterway to US 1 and construction of the new Nocatee Parkway from CR 210 to US 1. Nocatee is not impacted directly by the project, but could benefit from the alternatives (i.e., Black, Purple, Brown 1 and 2, and Orange 1 and 2) that would connect with I-95 at the 9B interchange.

5.2.12. Twin Creeks DRI

This 3,050-acre proposed development is located between US 1 and I-95 on both sides of CR 210. It was approved in 2005 for up to 5,000 housing units, 900,000 SF of retail and office space, 2.0 MSF of industrial space, and 175 hotel rooms. South Florida-based Falcon South Properties is the master developer. Twin Creeks is not impacted directly by the project, but could benefit indirectly from all alternatives, as they would potentially divert peak hour traffic from the nearby I-95 interchange at CR 210.

5.2.13. Bartram Park DRI

Most of the 3,600-acre Bartram Park DRI is located in southeast Jacksonville just across the St. Johns County line, but 767 acres are located in St. Johns County on the north side of Race Track Road. The DRI extends from Old St. Augustine Road in Jacksonville on the north to Race Track Road in St. Johns County on the south and is on both sides of I-95. It was approved in 2000 and, with subsequent amendments, provides for up to 5,288 residential units, including 1,000 in St. Johns County, 1.8 MSF of retail space, 3.1 MSF of office space, and 800 hotel rooms. Jacksonville sections of the DRI are extensively developed, including several new multifamily projects on the west side of I-95 and the 1,500-unit Bartram Springs community on the east side of I-95. Approximately two-thirds of the project's total residential capacity is built out. Non-residential development to date is found mainly on Old St. Augustine Road near the I-

95 interchange, but a 528,000 SF retail project, Bartram Commons, is planned on Race Track Road near I-95.

Bartram Park could benefit indirectly from the project, as the northern terminus alternatives (i.e., Black, Purple, Brown 1 and 2, and Orange 1 and 2) could remove external commuter traffic from Bartram Park Boulevard by giving commuters on CR 2209 and Race Track Road from communities to the southwest and south a way to access I-95 rather than using Bartram Park Boulevard to access I-95 at Old St. Augustine Road.

6. Assessment of Alternatives

The alternatives pass near or through a number of large-scale real estate projects and areas master planned for major new development in Clay and St. Johns Counties (Clay County, 1998; St. Johns County, 2000). Most of these areas are expected to be developed even in the event that this project is not constructed. However, the presence of the alternatives, in particular the location of interchanges, could impact the pace at which these developments occur. As noted in Section 3, the application of tolls is not expected to be a substantial deterrent to corridor usage, except in comparatively few segments, and so should not have a significant impact on development patterns.

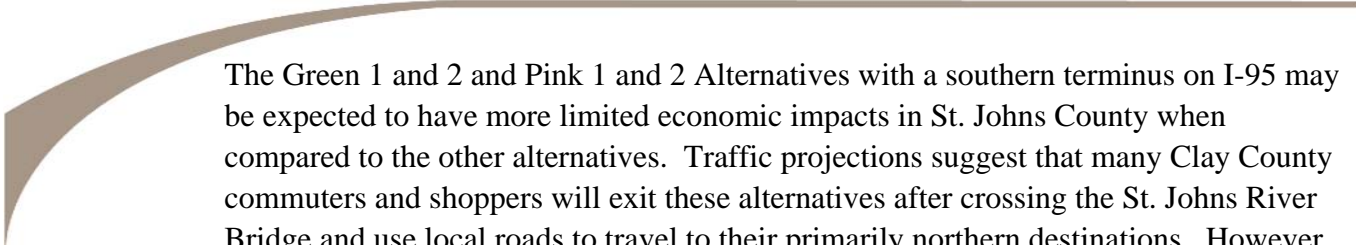
6.1. Economic Impacts

6.1.1. Potential Impacts in Clay County

Clay County is one of only two Florida counties with a population greater than 150,000 not served by an Interstate Highway or Interstate-type, multilane, limited access highway. The proposed alternatives would make Clay County less isolated in the perception of the marketplace as a result of its being more accessible to inbound traffic as well as commuting by residents to employment and shopping centers primarily in southeast and west Jacksonville. This would also help promote employment-based office and industrial development by making the County more accessible to workers, customers, and suppliers from outside the County. However, the alternatives are unlikely to draw significant non-local traffic (i.e., both external origins and destinations) as a toll road because of toll costs and, in some cases, longer point-to-point travel distances versus existing highways.

6.1.2. Potential Impacts in St. Johns County

For St. Johns County, the alternatives would have less impact, as the county has six I-95 interchanges that are expected to serve as economic generators well into the future. Key benefits of the project to St. Johns County include diversion of Clay County commuter and shopper traffic away from local roads, in addition to providing alternative routes to I-95 for St. Johns County commuters and shoppers living in the Northwest section of the County.



The Green 1 and 2 and Pink 1 and 2 Alternatives with a southern terminus on I-95 may be expected to have more limited economic impacts in St. Johns County when compared to the other alternatives. Traffic projections suggest that many Clay County commuters and shoppers will exit these alternatives after crossing the St. Johns River Bridge and use local roads to travel to their primarily northern destinations. However, the Green 1 and 2 and Pink 1 and 2 Alternatives and interchange with CR 2209 would still help foster developments in the immediate area and nearby, including the Silverleaf Plantation, World Commerce Center, and the Saint Johns and World Golf Village developments of regional impact (DRIs).

With six I-95 interchanges in the county and its proximity to major employment centers in Jacksonville, there would seem to be little additional value of the project alternatives to the county as an economic driver.

6.1.3. Conclusions

Relationships of development projects and special planning areas profiled in Section 5 to local access interchanges associated with each of the ten alternatives are shown in *Table 12*. Relationships to local access interchanges are classified as being adjacent, within two miles, and within five miles. However, developments that are adjacent to or within two miles of a local access interchanges are likely to benefit to the greatest extent in terms of economic impacts (NCHRP, 2002). Developments within five miles of a local access interchange may also benefit, but to a lesser extent, particularly in terms of non-residential activity.

The Brown 1 and 2 and Orange 1 and 2 Alternatives serve the largest number of developments, twelve, with local access interchanges either adjacent or within two miles, including five developments in Clay County and seven east of the St. Johns River. The Black Alternative serves ten developments, but only two in Clay County. The Green 1 and 2 and Pink 1 and 2 Alternatives serve eight developments, including five in Clay County. The Purple Alternative also serves eight, including only two in Clay County.

In regards to the developments focused on in this analysis, the Brown 1 and 2 and Orange 1 and 2 Alternatives would rate highest in terms of potential economic benefit by serving twelve developments within two miles of their interchanges. The Black Alternative has the next highest number of developments served, ten, with local access interchanges adjacent or within two miles, and the Green 1 and 2, Pink 1 and 2, and Purple Alternatives serve eight each.

Overall, the Black and Purple Alternatives serve the most developments (7-8) in terms of local access interchanges within five miles. The Brown 1 and 2 and Orange 1 and 2 Alternatives serve the fewest with only three. The Green 1 and 2 and Pink 1 and 2 Alternatives each serve six developments.

Table 12: Proposed Local Access Interchange Relationships to Major Existing and Planned Developments

County and Development	Northern River Crossing						Southern River Crossing (Shands Bridge)											
	Purple Route			Black Route			Pink 1 and 2 Route			Brown 1 and 2 Route			Green 1 and 2 Route			Orange 1 and 2 Route		
	Adj	<2M i	<5M i	Adj	<2M i	<5 Mi	Adj	<2 Mi	<5 Mi	Adj	<2M i	<5M i	Adj	<2M i	<5M i	Adj	<2M i	<5M i
Clay County																		
Fleming Island Plantation DRI			X			X												
Governors Park DRI								X			X			X			X	
Lake Asbury Master Plan Area	X			X			X			X			X			X		
Peters Creek Business Park			X			X		X		X			X			X		X
Saratoga Springs DRI		X			X			X		X			X			X		X
Reynolds Industrial Park			X			X	X			X			X			X		X
St. Johns County																		
Aberdeen DRI		X			X				X			X			X			X
Ashford Mills DRI			X	X				X		X				X		X		
Durbin DRI	X			X						X						X		
Durbin Crossing DRI	X			X					X	X					X	X		
Julington Creek Plantation DRI			X			X						X						X
Nocatee DRI			X			X						X						X
RiverTown DRI		X			X			X			X			X			X	
Silverleaf Plantation DRI			X	X			X				X		X				X	
Twin Creeks DRI		X			X				X		X				X		X	

(continued)

County and Development	Northern River Crossing						Southern River Crossing (Shands Bridge)											
	Purple Route			Black Route			Pink 1 and 2 Route			Brown 1 and 2 Route			Green 1 and 2 Route			Orange 1 and 2 Route		
	Adj	<2M i	<5M i	Adj	<2M i	<5 Mi	Adj	<2 Mi	<5 Mi	Adj	<2M i	<5M i	Adj	<2M i	<5M i	Adj	<2M i	<5M i
St. Johns County (continued)																		
World Commerce Center DRI						X			X						X			
World Golf Village/St Johns DRI						X			X						X			
Esplanade at St. Johns						X			X						X			
Southeastern Duval County																		
Bartram Park DRI	X			X						X						X		
Number of Developments Served																		
West side or River	1	1	3	1	1	3	2	3	0	2	3	0	1	4	0	1	4	0
East side of River	3	3	4	5	3	5	1	2	6	4	3	3	1	2	6	4	3	3
Total	4	4	7	6	4	8	3	5	6	6	6	3	2	6	6	5	7	3
Number of Developments Impacted																		
West side or River	1			1			2			2			2			2		
East side of River	4			6			2			4			2			4		
Total	5			7			4			6			4			6		

Notes: Adj - adjacent; <2Mi - less than two miles; <5Mi - less than five miles
 Source: URBANOMICS, Inc.

Future commercial, industrial and office uses within two miles of each interchange were also analyzed to determine potential economic and employment opportunities. Commercial, industrial and office uses designated in each County’s Future Land Use Plan and in approved or planned DRIs were considered. In addition to evaluating employment-type uses, the potential jobs and revenues generated by the approved and planned DRIs within two miles of each interchange were also taken into consideration. The results of the analysis are shown in the table below, **Table 13**.

Table 13: Employment Areas and DRI Tax Revenues within 2 Miles of Interchanges

Alternative	Commercial, Industrial, Office in Comp Plans (acres)		Commercial, Industrial, Office in DRIs and Other Planned Areas* (acres)		Total Commercial, Industrial, Office (acres)		DRI Job Creation within Radius**		DRI Revenues within Radius*** (\$millions)	
	Clay	St. Johns	Clay	St. Johns	Clay	St. Johns	Clay	St. Johns	Clay	St. Johns
Black	730	2,003.15	1,742.58	948.43	2,472.58	2,951.58	940	18,744	\$6.89	\$78.38
Purple	730	2,003.15	1,742.58	539.57	2,472.58	2,542.72	940	16,375	\$6.89	\$42.71
Brown 1 and 2	3,300	1,569.17	3,167.93	580.81	6,467.93	2,149.98	1,254	16,932	\$13.98	\$51.07
Orange 1 and 2	2,200	1,569.17	3,049.44	580.81	5,249.44	2,149.98	671	16,932	\$10.16	\$51.07
Green 1 and 2	2,200	17.73	3,049.44	459.83	5,249.44	477.56	671	2,271	\$10.16	\$34.38
Pink 1 and 2	3,300	17.73	3,167.93	459.83	6,467.93	477.56	1,254	2,789	\$13.98	\$34.38

* Includes DRIs as well as Branan Field, Lake Asbury, and Peter's Creek.

**Based on the percent of a DRI's commercial, industrial, and office areas that are within the 2 mile radius multiplied by the total number of jobs to be created.

***Calculated by taking the percent of the DRI within the 2 mile radius and applying it to that DRI's total revenue.

As noted in **Table 15** in the land use section, there will be a large number of properties converted from their current use to road right-of-way. This will also result in a decrease in tax revenue to both counties ranging from \$136 thousand annually for the Pink 1 Alternative to \$989 thousand for the Black Alternative. However, tax revenues lost from conversion of lands to road right-of-way are expected to be offset by planned and approved, future and ongoing development within the project area. As described earlier, seven DRIs have been approved or are pending in Clay County since 1990, and 13 DRIs have been approved or are pending in St. Johns County since 2000. These developments are planned for the area, with or without the project. Based on available DRI documents, FDOT looked at the total projected annual *ad valorem* tax revenues (primarily property and sales tax) that would be generated at buildout of these DRIs. They looked at only those DRIs where development has not yet commenced or is at less than 5 percent complete (so that only new, future tax revenues were considered). The combined annual estimated tax revenues from these planned developments at full buildout will exceed \$672 million, as shown on **Table 14**.

Table 14: Additional Tax Revenues from DRIs at Buildout

DRI ¹	Total Permanent Employment Generation	Total Revenue	Ad Valorem Revenue at Buildout
Ashford Mills	518	\$7,729,835	\$4,298,274
Governor's Park	6314	\$42,583,478	\$27,326,156
Durbin Crossing	467	\$4,041,309	\$2,950,000
The Crossings	13614	\$34,174,003	\$11,315,563
Silverleaf	3320	\$40,566,745	\$26,298,777
Bartram Park	17752	\$30,595,035	\$25,189,689
Rivertown	1100	\$10,667,803	\$6,406,260
Julington Creek	1817	\$6,339,063	\$6,182,063
World Commerce Center	12873	\$18,545,263	\$15,348,858
Twin Creek	6359	\$23,860,758	\$21,826,667
Saratoga	2471	\$18,902,514	\$9,559,411
Durbin	7202	\$19,178,495	\$10,100,000
Aberdeen	239	\$3,103,791	\$2,216,770
Nocatee	17296	\$585,132,408	\$502,911,206
Total			\$671,929,694

¹ DRIs within 2-mile radius of project interchanges; approved or pending approval in Counties; development not yet started or less than 5 percent of buildout. Assume all buildout is complete by 2025. Information was not available for all DRIs in project area.

For this tax revenue analysis, FDOT conservatively assumed that full buildout of all these developments will occur in 2025, and that development will occur incrementally over the next 14 years at approximately the same rate each year (that is, 1/14th of each development would occur each year through 2025). Under these assumptions, these new developments would generate approximately \$48 million of new tax revenues in 2010, and will double each year between 2010 and 2025. Therefore, these future revenues from planned development are expected to offset tax revenues lost due to right-of-way conversion over the next few years.

In addition, the proposed project may accelerate the buildout of the planned DRIs discussed. Therefore, the added tax revenues from residential and commercial/industrial development in the project area are likely to be realized sooner with the implementation of the proposed project. For these reasons, the impact from tax revenue loss due to right-of-way conversion will be minimal.

6.2. Land Use Impacts

The proposed project will affect land uses by converting acreage to road right-of-way. In addition, the project will increase access to some area DRIs, and potentially affect the rate of development in some areas.

The amount of land converted to right-of-way varies by alternative. Total parcels affected range from a low of 162 for the Pink 1 Alternative to a high of 273 for the Black Alternative. Total acres impacted vary from 1,301 for the Purple Alternative to 1,907 for the Black Alternative. Table 15 shows the number of parcels and acres converted broken down by land use category.

Where acquisition causes the relocation of business or residences, the extent of this impact is considered in the relocation services and payments made under the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (42 U.S.C. 4601 *et seq.*).

Regardless of which project alternative is selected, the development of those DRIs and planning areas discussed in this analysis is likely to occur. The only impacts that may occur to land use in these areas is the rate at which these DRIs maybe be built out. As such, this project is considered to be in compliance with both the Clay and St. Johns County plans (Clay County, 1998; St. Johns County, 2000).

No prime or unique farmlands are found in the project area (NRCS, 2008). However, since nearly 1000 acres of agricultural property would be converted to right-of-way by the project, the Natural Resources Conservation Service was consulted on July 30, 2008. They confirmed that the project would not have a significant impact to farmlands in the project area (*Appendix A*).

Construction of the project could result in some temporary land use for staging areas and access roads. FDOT and its contractors would not use any properties that had not been purchased for this project without first consulting with those properties owners that might be impacted. These impacts would be considered minor and short term. Restoration of the property to its pre-existing condition would mitigate any such impacts.

Table 15: Land Use Impacts

	Northern Crossing		Southern Crossing							
	Black	Purple	Brown 1	Brown 2	Orange 1	Orange 2	Green 1	Green 2	Pink 1	Pink 2
Parcels Impacted										
Residential	59	57	42	57	43	58	39	54	38	53
Office/Commercial	9	9	3	3	6	6	6	6	3	3
Vacant/Undeveloped	81	52	51	61	50	53	32	35	33	43
Agriculture/Timber	83	52	66	66	71	71	52	52	47	47
Utilities	3	3	4	4	4	4	1	1	1	1
Other	38	46	40	30	53	53	53	53	40	30
Total Parcels	273	219	206	221	227	245	183	201	162	177
Acres Impacted										
Residential	65	64	43	49	44	44	37	37	37	42
Office/Commercial	17	17	5	5	5	5	5	5	5	5
Vacant/Undeveloped	680	394	454	448	371	376	375	380	458	453
Agriculture/Timber	1000	596	893	893	972	972	920	920	841	841
Utilities	18	18	24	24	24	24	15	15	15	15
Other	128	211	304	291	239	219	238	219	304	291
Total Acres	1907	1301	1724	1710	1654	1639	1590	1576	1661	1647
Tax Revenue Lost (thousands of dollars)⁽¹⁾										
St. Johns County	\$905	\$844	\$760	\$760	\$760	\$760	\$81	\$81	\$81	\$81
Clay County	\$84	\$84	\$55	\$74	\$100	\$123	\$100	\$123	\$55	\$74
Total Tax Revenue	\$989	\$928	\$815	\$834	\$860	\$883	\$181	\$204	\$137	\$155

(1) In 2008 dollars, based on a millage rate of 15.7525 mils in St. Johns County and either 16.9946 mils or 19.5946 mils in Clay County

Source: 2008 parcel data, St Johns and Clay Counties

Table 16 below summarizes the land use and economic impacts discussed in Sections 6.1 and 6.2.

Table 16: Environmental Effects Summary Matrix

	Northern Crossing		Southern Crossing							
	Black	Purple	Brown 1	Brown 2	Orange1	Orange 2	Green1	Green 2	Pink 1	Pink 2
Alignment Characteristics										
Travel Distance (miles)	N - 26 S - 26	26	34	34	33	33	31	31	31	31
Difference from Existing Route (miles)*	N - (0) S - (-6)	1	9	9	8	8	(-1)	(-1)	(-1)	(-1)
Number of Interchanges	8	6	9	9	9	9	7	7	7	7
Economic Impacts										
DRIs Served <2 miles	10	8	12	12	12	12	8	8	8	8
Total DRIs Served	18	15	15	15	15	15	14	14	14	14
DRI's Impacted	7	5	6	6	6	6	4	4	4	4
Land Use Impacts										
Parcels Impacted	273	219	206	221	227	245	183	201	162	177
Acres Impacted	1907	1301	1724	1710	1654	1639	1590	1576	1661	1647
Tax Revenue Lost (thousands of dollars)	\$989	\$928	\$815	\$834	\$860	\$883	\$181	\$204	\$137	\$155

* Existing route refers to the current that route that travelers would take from SR 21 to I-95

7. The First Coast Outer Beltway

The combination of the St Johns River Crossing project and the Branan Field / Chaffee Road project has been identified as the First Coast Outer Beltway. Although these two projects are in very different stages of development, the ultimate result of combining these projects will be a 46.5 mile, limited access expressway connecting I-10 in Duval County to I-95 in St. Johns County. This entire project would be funded using tolls.

The benefit of developing the First Coast Outer Beltway as a toll facility will be that the entire project can be completed in a significantly shorter time than with conventional funding. Joining these projects greatly enhances the ability of FDOT to completely deliver both projects.

In addition to the St. Johns River Crossing Project, the 14.8-mile long section of the beltway, known as the Branan Field / Chaffee Road project, from I-10 in west Jacksonville to SR 21

includes an existing four-lane divided highway from 103rd Street in Jacksonville to Argyle Forest Boulevard just north of the county line and a two lane roadway from this point south into Clay County to SR 21. A new I-10 interchange and limited access roadway from I-10 to 103rd Street is currently under construction, with completion scheduled for 2008-2009.

It should be acknowledged that the implementation of one of the alternatives having a northern connection to I-95 at SR 9B (Black, Purple, Brown 1 and 2, and Orange 1 and 2) could result in additional indirect impacts on St. Johns County by fostering the completion of other major highway proposals in the northern end of the county, including an extension of proposed SR 9B from I-95 south, the realignment and upgrading of Race Track Road/Durbin Parkway, and a new interchange at Race Track Road/Durbin Parkway linking SR 9B and CR 2209. This could further accelerate the pace of development in the county. However, implementation of the southern alternatives (i.e. Pink 1 and 2 and Green 1 and 2) would not nearly equal the magnitude that northern alignments would have in fostering these projects.

8. Other Florida Toll Highways: Characteristics and Impacts

As background information regarding tolling of the St. Johns River Crossing Project, three existing toll highways in Florida were studied and are profiled in the following subsections:

- SR 417 (Central Florida Greenway/Seminole Expressway) in the Orlando area.
- SR 570 (Polk Parkway) in the Lakeland Area.
- SR 589 (Veterans Expressway/Suncoast Parkway) in the Tampa Bay area.

All three are multi-lane limited access expressways and are comparatively new, having been built in the last 20 years. Two are bypass routes around areas of dense urban development and heavy traffic (SR 417 and SR 570) and the other (SR 589) is a radial route extending well out into the suburbs from the urban core.

8.1. SR 417 (Central Florida Greenway/Seminole Expressway/Southeastern Connector)

8.1.1. Profile

This toll highway extends from I-4 in the Sanford area of Seminole County, north of Orlando, through Orange County around the east side of Orlando and passing just south of Orlando International Airport, to I-4 in Osceola County in the area of Walt Disney World, southwest of Orlando, a distance of 55 miles. The 17-mile segment in Seminole County, known as the Seminole Expressway, is operated by Florida's Turnpike Enterprise, as is the 5-mile segment at the southern end, known as the Southern Connector. The 33-mile central segment in Orange County, known as the Central Florida Greenway, is operated by the Orlando-Orange County Expressway Authority (OOCEA).

SR 417 bypasses the intensely developed and congested I-4 corridor through downtown Orlando, through inner suburban communities to the north and south, and through the tourist-oriented areas and theme parks south of Orlando. The highway opened in sections over a 14-year span from 1988 to 2002. SR 417 crosses and interconnects with two other limited access toll highways operated by the OOCEA. These are the East-West Expressway (SR 408), which passes through downtown Orlando and links Florida's Turnpike to the west, and the Beachline Expressway (SR 528), which links I-4 south of Orlando and the Kennedy Space Center and Port Canaveral on the coast. An interchange with Florida's Turnpike is planned in the future.

SR 417 has 21 local access interchanges, including seven in Seminole County, 12 in Orange County and two in Osceola County. Major local access interchanges include US92, SR 434, and SR 426 in Seminole County, SR 50, US441, John Young Parkway, and International Drive in Orange County, and the Osceola Parkway in northern Osceola County near Walt Disney World. Well-developed commercial activity centers are found near I-4 interchanges at both ends of the SR 417 corridor, including the Seminole Towne Center Regional Mall and Reinhart Road complex at the northern end and Walt Disney World at the southern end. Other major activity centers along and near SR 417 include the University of Central Florida and Central Florida Research Park, Orlando International Airport, and the International Drive entertainment area.

8.1.2. Toll Costs

Cash tolls for two-axle vehicles (e.g., passenger cars) from end-to-end total \$5.50, averaging approximately \$0.10 per mile. Truck tolls are much higher and increase by number of axles as shown in Table 14. There are six mainline toll plazas, including four in Orange County and one each in Seminole and Osceola Counties. Mainline tolls vary from \$0.50 to \$1.00 at most locations, but are \$2.00 at the Lake Jesup toll plaza in Seminole County, reflecting the high cost recapture required for the Lake Jesup bridge. Directional ramp tolls for passenger cars are \$0.25 or \$0.50. Cash tolls by vehicle type for selected segments are summarized in *Table 17*.

Table 17: **Cash Tolls for Selected Segments of SR 417 in the Orlando Area**

Segment	Distance (miles)	Cash Tolls (\$), Total (Per Mile)			
		2-axle	3-axle	4-axle	5-axle
I-4 to I-4	55	5.50 (0.10)	10.50 (0.19)	14.50 (0.26)	19.00 (0.35)
I-4 to SR 528 (NB)	25	2.50 (0.10)	4.00 (0.16)	5.50 (0.40)	7.00 (0.28)
I-4 to SR 528 (SB)	31	3.00 (0.10)	6.50 (0.21)	9.00 (0.29)	12.00 (0.39)
I-4 to Univ Blvd (NB)	39	3.50 (0.09)	6.50 (0.17)	8.50 (0.22)	11.00 (0.28)
I-4 to Univ Blvd (SB)	17	2.25 (0.13)	4.25 (0.25)	6.25 (0.37)	8.25 (0.49)

Abbreviations: NB - northbound; SB - southbound
 Source: OOCEA

8.1.3. Traffic Patterns

Traffic data indicate that the majority of traffic on SR 417 is local (i.e., local origins and destinations). AWT in 2007 varies widely, ranging from around 20,000 VPD on the Southern Connector to 80,000+ VPD on the Greenway at University Boulevard. The busiest interchanges are SR 408 and SR 408 Spur (86,000 VPD), SR 528 (50,000 VPD), and University Boulevard (33,000 VPD).

Prevailing travel directions at the East-West Expressway interchanges are to/from the south at SR 408 and to/from the north at the SR 408 Spur. Prevailing travel directions at the Beachline Expressway are to/from the north, and prevailing directions at University Boulevard, interestingly, are to/from the south. Ramp traffic growth from 2001 to 2007 is highest for interchanges generally south of the Beachline Expressway near Orlando International Airport and Disney World.

No data are available for long-distance through traffic and commercial traffic, but neither appears to be a major source of traffic. For through traffic, the travel distance between I-4 interchanges at both ends is 15 miles longer on SR 417 than on I-4. Cost of tolls, particularly for trucks, is an added deterrent. In addition, mainline traffic volumes north and south of the Lake Jesup toll plaza (\$2.00 for passenger cars) are quite different, suggesting that this mainline toll rate is a major deterrent to both local and through traffic. As all areas are different, no particular conclusions can be drawn from this example about the impacts of a \$1.50 St. Johns River Bridge toll, but a potential two-way cost of \$3.00 per day could be an issue for Clay County commuters to southeastern Jacksonville and cause them to use other river crossings.

8.1.4. Land Use and Growth Impacts

The Greenway corridor south of the Beachline Expressway, including areas near the International Airport, is lined with large-scale DRIs and other developments planned for thousands of housing units, millions of SF of retail, office, and industrial uses, and thousands of hotel rooms. Among these are the Lake Nona DRI (9,000 housing units, 6.9 MSF commercial/industrial space, and 2,250 hotel rooms), Ginn Property DRI (2,060 units, 2.1 MSF commercial/industrial space, and 600 hotel rooms), Meadow Woods DRI (7,960 units, 0.7 MSF commercial, and 300 hotel rooms), and Innovation Place (4,100 units, 0.7 MSF commercial, and 200 hotel rooms). The location and development of these and other DRIs indicates that, in the presence of other market factors, Central Florida toll roads have not been a deterrent to adjacent development, in fact, have attracted development in the absence of comparable non-tolled highways, particularly where toll costs between access points are considered reasonable in relation to convenience and time savings.

8.2. SR 570 (Polk Parkway)

8.2.1. Profile

SR 570 is a 24-mile long toll highway that runs from I-4 on the west side of the City of Lakeland, around the City to the south, and back to I-4 between Lakeland and Auburndale. Lakeland, the largest city in Polk County, is 30 miles east of Tampa. The Parkway opened in sections from west to east in 1998-1999 and is operated by Florida's Turnpike Enterprise. It is four-lane, divided, limited access highway except for the eastern end, which is currently two lanes and is scheduled to be four lanes beginning in 2009. The Parkway has three mainline toll plazas and ten local access interchanges. Major interchanges are at SR 37 on the south side of Lakeland, at US98 connecting to Bartow, the Polk County seat, at SR 540 connecting to Winter Haven, and at US92 connecting to Auburndale and beyond to US27 in eastern Polk County.

Polk Parkway is not designed as an I-4 bypass, as I-4 remains the principal travel route for "through" traffic between the Orlando and Tampa areas. Rather, the Parkway provides a means by which commuters from and visitors to Polk County communities to the south and east of Lakeland can avoid having to travel through central Lakeland or in a circuitous routing around Lakeland in order to get to/from I-4.

8.2.2. Toll Costs

Cash tolls for passenger cars average \$0.13 per mile from end-to-end, but are only \$0.07 per mile between I-4 on the west side of Lakeland and SR 37 and \$0.10 per mile between I-4 and US98. Most usage occurs on western segments of the Parkway. For eastbound travel, tolls average \$0.14 per mile from US98 to I-4 and \$0.10 per mile from SR 540 to I-4. Mainline tolls are \$1.00 each for passenger cars. Directional ramp tolls are \$0.25 or \$0.50. Representative cash toll costs for passenger cars and other vehicles are shown in *Table 18* by number of axles.

Table 18: Cash Tolls for Selected Segments of SR 570 in the Lakeland Area

Segment	Distance (miles)	Cash Tolls (\$), Total (Per Mile)			
		2-axle	3-axle	4-axle	5-axle
I-4 to I-4	24	3.00 (0.13)	6.00 (0.25)	9.00 (0.38)	12.00 (0.50)
SR 37 to I-4 West	7	0.50 (0.07)	1.00 (0.14)	1.50 (0.21)	2.00 (0.29)
US98 to I-4 West	10	1.00 (0.10)	2.00 (0.20)	3.00 (0.30)	4.00 (0.40)
US98 to I-4 East	14	2.00 (0.14)	4.00 (0.29)	6.00 (0.43)	8.00 (0.57)
SR 540 to I-4 East	10	1.00 (0.10)	2.00 (0.20)	3.00 (0.30)	4.00 (0.40)

Source: Florida's Turnpike Enterprise

8.2.3. Traffic Patterns

Average annual daily traffic (AADT) data for 2007 shows that the Parkway is used by a combination of commuters, intracounty travelers, and inbound visitors, with the heaviest orientation to/from the west. Traffic varies from 6,000 VPD at the eastern mainline toll plaza located north of US92, increases slightly to 8,900 VPD at the central mainline plaza near SR 540, and increases to 28,300 VPD at the western mainline plaza just east of SR 37. The most heavily traveled segments are west of US98 and range from 24,800 to 27,700 VPD. Traffic on segments east of US98 range from 19,800 VPD between US98 and SR 540, 10,400 VPD between SR 540 and US92, and 7,400 VPD between US92 and Saddle Creek Road (CR 546).

8.2.4. Growth and Land Use Impacts

The Parkway has generated in rapid growth south of Lakeland in recent years. Whereas, most population and retail growth in the Lakeland area in the 1980s and 1990s, including development of the Lakeland Square regional shopping mall, occurred north of I-4, the Polk Parkway has drawn a major share of growth since year 2000 to the south Lakeland area. Residential development is moving south along/near the SR 37 corridor from south Lakeland to Mulberry. Commercial development, including big box retailers, is also moving south along SR 37 and is locating near key Parkway interchanges, including Lakeland Highlands Road and Harden Boulevard on the south side of Lakeland.

There are a number of new and planned business/industrial parks and properties near the Parkway that have a potential buildout of 13 MSF of warehouse/industrial and office space. The largest development is the proposed 2,000-acre Polk Commerce Center DRI at the eastern end of the Parkway at I-4. A major branch of the University of South Florida (USF) is also planned in this area. The Parkway has also provided a

boost to population growth and economic activity in the Bartow and Winter Haven-Auburndale areas, because of improved connections to the Tampa Bay area.

8.3. SR 589 (Suncoast Parkway/Veterans Expressway)

8.3.1. Profile

The Suncoast Parkway and Veterans Expressway form a radial highway in the Tampa Bay area extending north from the City Tampa, through suburban Pasco and Hernando Counties, to US98 at the Citrus County line. SR 589 traverses and serves areas between the two other major north-south highways in the region: US19, which runs north from Pinellas County through west side of Pasco and Hernando Counties near the Gulf, and I-75, which runs north from east side of Tampa through eastern Pasco and Hernando. SR 589 is a substantial upgrade, particularly for commuters, over US41, the traditional north-south route through northwest Hillsborough and central Pasco and Hernando.

The Suncoast Parkway and Veterans Expressway share the SR 589 toll highway designation. The tolled section of the Veterans Expressway runs north from the Courtney Campbell Causeway (SR 60) at Tampa International Airport in the Westshore area of Tampa to Dale Mabry Highway in north Hillsborough County, a distance of 15 miles. The Suncoast Parkway intersects the Veterans Expressway in north Hillsborough County and continues north another 42 miles. The total length of the Suncoast Parkway and Veterans Expressway from the SR 60/Tampa International Airport area to US98 at the Citrus/Hernando line is 55 miles, not including the Veterans Expressway extension to Dale Mabry. When the Suncoast Parkway was completed, the Veterans Expressway extension to Dale Mabry was redesignated SR 568.

The Veterans Expressway, originally known as the Northwest Hillsborough Expressway, opened in 1994, followed by the Suncoast Parkway opened in 2001. Both are operated by Florida's Turnpike Enterprise. SR 589 has five mainline toll plazas and 17 local access interchanges. Two mainline toll plazas are in north Hillsborough County, two are in Pasco County between SR 54 and SR 52 and north of SR 52, and one is in Hernando County north of SR 50 near US98. Hillsborough County has 11 local access interchanges and a total of six are in Pasco and Hernando Counties. Major roads with local access interchanges include Hillsborough Avenue (US92) and Gunn Highway in Hillsborough County, SR 54 and SR 52 in Pasco County, SR 50 near Brooksville in Hernando County, and US98 at the Citrus/Hernando line.

8.3.2. Toll Costs

Cash tolls for passenger cars from end-to-end are \$4.75 (\$0.09 per mile) and are generally \$0.10 per mile to/from Pasco and Hernando County locations. Mainline tolls are \$1.00 at four plazas and \$0.75 at one in Hillsborough County. Directional ramps tolls range from \$0.25 to \$0.50. Representative cash toll costs for passenger cars and other vehicles are shown in *Table 19* by number of axles.

Table 19: Cash Tolls for Selected Segments of SR 589 in the Tampa Bay Area

Segment	Distance (miles)	Cash Tolls (\$), Total (Per Mile)			
		2-axle	3-axle	4-axle	5-axle
SR 60 to US98	55	4.75 (0.09)	9.50 (0.17)	14.25 (0.26)	19.00 (0.35)
SR 60 to SR 54	19	2.00 (0.11)	4.00 (0.21)	6.00 (0.32)	8.00 (0.42)
SR 60 to SR 54	29	3.00 (0.10)	6.00 (0.21)	9.00 (0.31)	12.00 (0.42)
SR 60 to SR 50	44	4.00 (0.09)	8.00 (0.18)	12.00 (0.27)	16.00 (0.36)

Source: Florida's Turnpike Enterprise

8.3.3. Traffic Patterns

Traffic on SR 589 builds from north to south. According to 2007 estimates from Florida's Turnpike Enterprise, AADT increased from a modest 5,700 VPD at the Oak Hammock Plaza just south of US98, to 18,900 VPD at the Spring Hill Plaza in north Pasco County, to 24,800 VPD at the Anclote Plaza in south Pasco, to 48,500 VPD at the Sugarwood Plaza in northwest Hillsborough just south of Veterans Expressway spur to Dale Mabry, and to 62,400 VPD at the Anderson Plaza north of Tampa International Airport. Mainline AADT between SR 54 and the Veterans Expressway spur was 33,900 VPD. Based on these mainline estimates, traffic volumes increased generally by 13,200 VPD in Hernando County and another 15,000 VPD in Pasco County.

Comparisons of traffic data with 2000 Census data on county-to-county commuting patterns suggests that SR 589 has resulted in increased commuter traffic and other travel from Hernando County to the south. In 2000, Hillsborough County commuters from Pasco County totaled 31,900 compared to 3,700 from Hernando County. Another 21,000 Pasco County workers commuted to Pinellas County compared to only 1,500 from Hernando County. Pasco County was the leading external destination for working residents of Hernando County in 2000 with 6,600 commuters traveling to work in Pasco. Conversely, Pasco sent 3,500 commuters to jobs in Hernando County.

8.3.4. Land Use and Growth Impacts

The Suncoast Parkway has supported a real estate development boom in central Pasco County, particularly in south central Pasco near SR 54. Whereas, growth in Pasco County heretofore was limited primarily to the I-75 and US19 corridors to the east and west, the Suncoast Parkway has opened up the rural central area of the County. This area, now only 20-25 miles and 30 minutes or less from the Tampa Westshore area, International Airport, and downtown Tampa has numerous existing and proposed residential and commercial developments.

There are eight recently approved and proposed large-scale developments in south central Pasco with a total of 33,400 housing units, 9.0 MSF of retail space, 7.5 MSF of office space, and 1.2 MSF of industrial space. Local economic development officials view tolls on SR 589 as perhaps limiting to industrial prospects in the corridor, but not retail and office development, citing several proposed large commercial projects on/near SR 54. Some reverse commuting from northwest Hillsborough County to Pasco County may ensue as large-scale commercial development occurs in south central Pasco County in the future.

The Suncoast Parkway passes by the Spring Hill area in southwest Hernando County and crosses SR 50 about five miles west of Brooksville, the County seat. Unlike Pasco County, where the Suncoast passes through what was a primarily rural area, this area of Hernando County is well developed. Spring Hill is a planned community constructed by the Deltona Corporation, and is oriented generally to the retirement-age population. Because of the generally well-developed nature of this area and greater distance from Tampa, impacts of the Suncoast Parkway on local land use and economic growth have been less than those in central Pasco County. Nevertheless, there are many approved but undeveloped residential projects, large and small, in the Suncoast corridor and on nearby sections of US41 and US98 with thousands of housing units proposed. In addition, the Suncoast Parkway is seen as providing a major boost to commercial and industrial development opportunities around the County Line Road interchange and the Hernando County Airport located between the Suncoast Parkway and US41 east of Spring Hill.

9. References

Clay County Building Division, 2007. *Annual Report*.

Clay County. 1998. *Clay County, Florida 2015 Comprehensive Plan*. Amended 10/15/07.

Department of Community Affairs, 2007. *Annual Development of Regional Impact Report*

Jacksonville Regional Chamber of Commerce, 2006. *Annual Report*.

National Cooperative Highway Research Program, 2002. *Report 466: Desk Reference for Estimating the Indirect Effects of Proposed Transportation Projects*.

Natural Resource Conservation Service, 2008. www.nrcs.usda.gov, accessed February 2008.

Realty Reporting Services, Inc., 2007. Annual sales data maintained on file by URBANOMICS, Inc.

St. Johns County Permitting Department, 2007. *Annual Report*.

St Johns County. 2000. *St. Johns County, Florida 2015 EAR Based Comprehensive Plan Amendment*. http://www.co.st-johns.fl.us/bcc/growth_mgmt_services/media/Planning/GOPsfy06.pdf. Amended 9/18/07.

United States Census Bureau, 2004. April 2004 Press Release.

United States Census Bureau, 2000. *2000 Census*, detailed files

Urbanomics, Inc, 2007. Discussion with Ted McGowan, Executive Director, Reynolds Industrial Park.

Wilbur Smith Associates, 2007. *First Coast Outer Beltway Design Hour Volume Turning Movements for Six Alternatives*. Prepared for the Florida Department of Transportation. March 2007