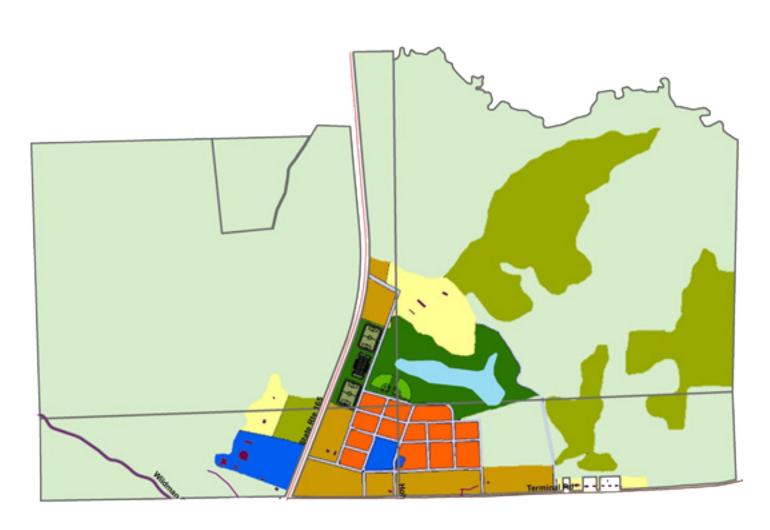
PLANNING AND DEVELOPMENT STRATEGIES FOR HOLY TRINITY, ALABAMA

GEORGIA INSTITUTE OF TECHNOLOGY SCHOOL OF CITY AND REGIONAL PLANNING



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Planning and Development Strategies for Holy Trinity, Alabama

This report was written at the behest of and with the support of the Missionary Servants of the Most Holy Trinity for the School of City and Regional Planning course, CP 6052 second-year masters studio. The course is comprised of 16 Masters in City and Regional Planning candidates (MCRP) at the Georgia Institute of Technology in Atlanta, Ga.

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EXECUTIVE SUMMARY

The Missionary Servants of the Most Holy Trinity (MSMHT) own and oversee parcels of rural land in Russell County, Alabama. The Missionary Servants are currently exploring and assessing how best to develop and utilize these major land holdings. By developing the land, members hope to provide services to their constituents, meet and help the needs of the larger community, and ensure a reliable source of income to fund Mission activities, all while promoting the principles of the Catholic Church as enunciated by MSMHT founder Father Thomas Judge, "Be good, do good, and be a power for good."

Towards this goal, the Missionary Servants have sought out the services and expertise of the School of City and Regional Planning Department of the Georgia Institute of Technology. MSMHT looked to Professor Michael Dobbins and professional planner Ray White for advice and guidance on how to best develop the land. The School subsequently formed a graduate level studio planning course around the project. Over the course of the Fall 2011 academic term, graduate students in the studio conducted site visits, interviewed stakeholders, solicited advice and guidance from subject-matter experts, examined the underlying data, engaged in quantitative analysis, created projections, generated maps and spatial analyses, and assessed various ideas and project proposals. Hundreds of hours were devoted to this project, with Professor Dobbins and Mr. White providing overall coordination, management, and expert guidance.

The final report is presented here. It takes the form of a land management evaluation and proposal. The report is broken down into four major sections. The first section, "Description of Holy Trinity and Environs," provides the background and context for the property located at the Holy Trinity site. Items in this section include a discussion of pertinent economic, housing, and demographic issues. This section addresses the composition of the land and environment, examines the social, cultural and business forces in the surrounding community and region, and provides an overview of the Church's activities in the area.

The second section focuses on "Land Management." This part of the report assesses current and potential revenue streams and amounts for the Mission. It also identifies and explores opportunities for Holy Trinity to partner with various businesses, investors, community and nonprofit organizations, and local and regional government offices and consortiums in furthering the goals of development, community service, and environmental preservation.

The third section is devoted to "Development." This portion analyzes and assesses various development possibilities for the property. It focuses on four potential scenarios for the land, consisting of agriculture industry, service provision, a town center concept, and/or environmental preservation. It also addresses land development from a functions perspective, examining how certain projects and programs could realize the interests and meet some of the goals of the Mission and the larger community. Issues of infrastructure, design, policy and legal mechanisms, and recommendations are also contained in this section.

A timeline for project planning and implementation accompanies these three sections. The report concludes with final land management recommendations, addresses long-term planning efforts, and furnishes contact and resource information.

This report is meant to serve as comprehensive reference tool and idea incubator. It is hoped that the report provides MSMHT with a comprehensive array of data, information, and resources to make informed decisions as to how best to proceed. Ultimately, we hope that the suggestions and recommendations contained herein help further the efforts and goals of the Church.

INTRODUCTION

In the Fall 2011 semester, students under the direction of Professor Michael Dobbins in the School of City and Regional Planning at the Georgia Institute of Technology, and with the help of doctoral student Raymond White, undertook an inventory and development report for properties owned by The Missionary Servants of The Most Holy Trinity (MSMHT).

The site belonging to the Missionary Servants of The Most Holy Trinity is located in Russell County, Alabama on the Chattahoochee River, the border of Alabama and Georgia. The site is close to the City of Columbus, Georgia and the Fort Benning military base. The properties of the missionary servants are divided between two owners: The Missionary Servants of The Most Holy Trinity and The Missionary Servants of The Most Blessed Trinity (MSMBT). What follows is a presentation of the preliminary research and data on the proposed development of property belonging to The Missionary Servants of The Most Holy Trinity (MSMHT). While the following document is specific to the property designated to the MSMHT, much of the information can be applied to the property assigned to MSMBT when assessing possible future development of that land. Collectively, the land designated to both the MSMHT and MSMBT are comprise the entirety of Holy Trinity, Alabama.

The Missionary Servants desire an inclusive inventory analysis of their holdings and possible prospects for future growth. It is hoped that the examination of their land holdings along with insights into regionals strategies for future growth will assist in determining how the properties owned by Holy Trinity can be incorporated into a sustainable development plan.

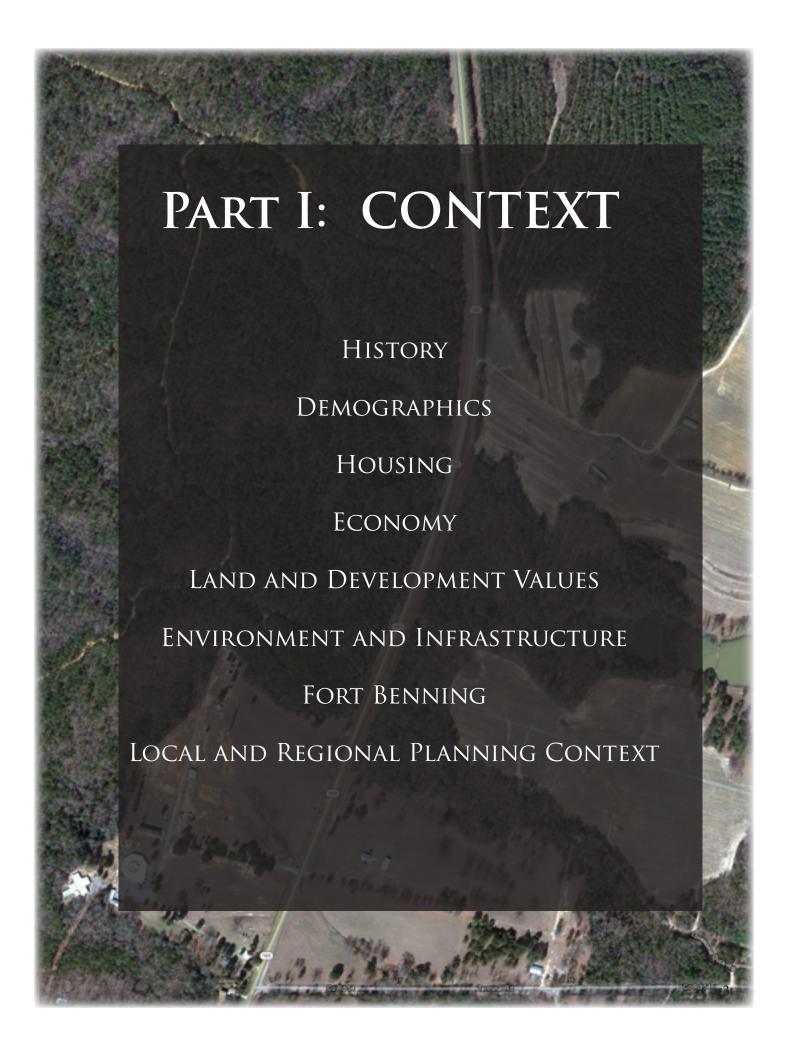
To obtain a better perspective of how the MSMHT might want to develop their land, it is necessary to understand what resources are obtainable and already being utilized. Once this is understood, active insights can be recorded and considered, allowing The MSMHT to continue to address their existing mission with future strategies for growth, and supplement what they have to offer to their members and the surrounding community.

Due to the decline in the economy, the increase of the elderly population and the influx of military personnel and their families to the area, this document will offer a variety of propositions to be presented to The Missionary Servants, all of which keep in mind the mission of The Missionary Servants to offer solace, guidance, and support to "Be good, do good, be a power for good".

Holy Trinity is located in a rural, low-density environment, with little development to constrain its potential. Limitations do exist, however, such as a lack of infrastructure, strong markets, as well as community services and resources amongst others. The supply of water and the elimination of wastewater must be addressed carefully, as new legislation and technologies come forth. Telecommunication (the Internet), something those of us consider a necessity, is considered only a commodity, and not a dependent line of communication yet; this must also be taken into consideration.

The existing development within the area centers on scattered single-family homes located on large parcels. New development is mostly simple family subdivisions built to accommodate military personnel and their families associated with Ft. Benning. Other housing types found within the area are mobile homes. Currently, no multi-family housing stock exists within the area. Because this area is low density, the value of homes is rather low and reasonable to afford.

The MSMHT land is currently primarily being used for timber harvest and secondarily for agriculture. Also situated on the property is a small lake and a small portion of environmentally sensitive areas. The land is primarily a monoculture, but in good shape with no apparent pollution. Due to the slope of the land, the eastern part of the property is more suitable for development."



Russell County was established on December 18, 1832 after the Creek Indians ceded their lands to the Alabama general assembly. The county was named in honor of Colonel Gilbert Christian Russell, a U.S. infantry soldier who served in the War of 1812 and fought in the Creek Wars (U.S. Department of Archives, DATE). The county includes Fort Mitchell, Glenville, Hurtsboro, Ladonia, Pittsview, Seale, and Phenix City, which is the county seat. The county is occasionally referred to as "The County of Forts" in light of the fact that a number of forts were established in the area, including Fort Mitchell, Sand Fort, Fort Bainbridge, and a portion of Fort Benning (Encyclopedia of Alabama, DATE).

The area is rich in history, with sites dating back to the late prehistoric and historic eras. Archeological sites show that the Apalochicola (e.g. Apalachicola Fort Site - 32°10'17"N 85°07'49"W) and Yuchi tribes (e.g. Yuchi Town Site - 32°18'00"N 84°59'00"W) were both present before European colonization. Europeans colonists arrived in the 1600s. One of the more interesting sites to be found is that of the Spanish Fort (U.S. Highway 165 at Holy Trinity, DATE), which briefly existed from 1689 to 1691. Built by the Spanish to slow the mercantile activities and colonization of arriving English traders, as well as

to counter any potential treaties, trade pacts, or military alliances they might have entered into with the Native American populations, the Fort was the most northern Spanish settlement in the eastern part of North America. It fell into ruin when the Spanish garrison relocated to St. Augustine in order to counter a threatened French attack. The site became a National Historic Landmark in 1966 (Spanish Fort.)

Early American settlement of Russell County followed on the heels of the establishment of Fort Mitchell (32°21'07"N 85°01'18"W), which was constructed by members of the Georgia militia in 1813 during the Figure 1.1.1 | The reconstructed stockade of Fort Mitchell



Creek Indian War of 1813 to 1814 (Encyclopedia of Alabama.) The fort served to provide military cover for settlers expanding into Native American territories. Most early American settlers came from Georgia, the Carolinas, or Virginia. The first permanent settlement in Russell County was at Glennville Beat, established in 1830.

The Yuchi came into conflict, with the Cherokee during the 18th century, with the latter ultimately wresting control from them and other tribes. Following the American Revolution, Yuchi population numbers declined and many members migrated elsewhere, forming close relationships with the Seminole and Creek Confederacy. In the early 1800's, the U.S. Government became increasingly active in Russell County, working to assert its control over the native populations and wilderness. A series of battles and political and military intrigues and alliances between and among the indigenous populations



Figure 2.1.2 | Trail of Tears depiction

and U.S. forces mark this period, with the end result being that the Native American populations were forcibly displaced under Indian Removal Acts and the U.S. Government had consolidated control over the region by the 1830's.

Fort Mitchell later became the starting point for the Trail of Tears (1838-1839) under President Andrew Jackson. Visitors can still survey the barracks, palisades, and defensive moat. Declared a national historic landmark, the site includes a museum, a restored 19th century log home, and a visitor center. With its national cemetery Fort Mitchell is also often referred to as the

"Arlington of the South" (Russell County). The Chattahoochee Indian Heritage Center is co-located and presents exhibits on the history and contributions of Native Americans in the Southeast (Image 3). A ceremonial flame pays tribute to the Creek nation and panels display scenes from the Creek War of 1836, and the removal of Creek peoples on the Trail of Tears (Chattahoochee Indian Heritage Center). Few Native Americans remained in Alabama by 1839.

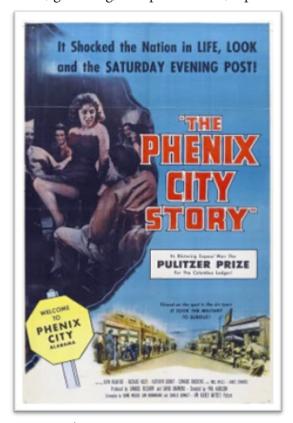
Notably, the last major land battle of the Civil War was fought in Russell County. The Battle of Columbus, also known as the Battle of Girard, occurred on April 16, 1865, one week after Robert E. Lee had already surrendered at Appomattox (Image 4). News of the surrender had not yet reached the Union forces commanded under General James H. Wilson, who captured two bridges connecting Girard to Columbus (The Battle of Columbus).

Girard was later renamed Phenix City and became the county government in 1935. Previous county



Figure 1.1.3 | Marker for the Battle of Columbus

government seats had included Girard (1833–1839), Crawford (originally Crockettsville) (1839–1868), and Seale (1868-1935). Phenix city was notorious during the 1940s and 1950s as a center for organized crime, gambling, and prostitution, a phenomenon resulting from and exacerbated by the city's proximity



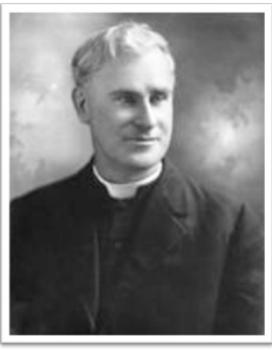
to Fort Benning. Phenix City became known as 'Sin City' and the subject of a famous 1955 film called 'The Phenix City Story' which explored its vices and corruption (Phenix City, SOURCE AND DATE). That film was loosely based on facts, including the actual 1954 murder of the state's attorney general-elect who had campaigned to rid the streets of crime, and the subsequent arrival of the national guard to restore order and roust the crime bosses (Image 5).

Fort Benning's history can be traced back to 1917 when the U.S. Army established a home for its infantry. The Fort is named after Brigadier General Harry L. Benning, a Confederate Army General. Dwight D. Eisenhower, George C. Marshall, and Omar N. Bradley would all see service there. The Fort originally served to provide basic training for units engaged in World War I. It later included the U.S. Army Armor School, the U.S. Army Infantry School, the 2nd Armored Division, the 555th Parachute Infantry Battalion, parts of the 75th Ranger Regiment, the 3rd Infantry Division, the 13th Combat Sustainment Support Battalion, and the School of the Americas. The latter, founded in 1984 in part to provide military education and training to cooperating governments Figure 1.1.4 | Movie poster for "The Phenix City Story" from Central and South America, was later renamed the Western Hemisphere Institute for Security Cooperation, (in

large part to avoid the taint imparted to its name by the human rights violations committed by some of its graduates.) 93% of Fort Benning resides on Georgian land, and the remaining 7% lies in Alabama (Fort Benning, SOURCE AND DATE). The Fort's establishment has led to major population growth and corresponding land development in the area over the years.

With missionary zeal, Father Thomas Augustine Judge, a priest from Boston, established a Catholic presence in Russell County in the early 20th century (Image 6.) In 1915, he was dispatched as a pastor on behalf of the Church to serve the Vincentian order in Opelika, Alabama (Missionary Servants.) With his volunteers, he sought to counter anti-Catholic sentiment and work to promote religious principles and establish a community in the area. Early volunteers and devotees congregated under the banner of the Missionary Servants of the Most Blessed Trinity, and the first priests and brothers arrived in 1924. Holy Trinity was founded in 1928 by the Roman Catholic order of the Missionary Servants of the Most Holy Trinity. The Missionary Servants continue to further the church's mission on this former plantation.

Today, blacks and whites each account for roughly half of the total population of 49,262 in Russell County. African-Americans were once held in slavery in Russell County. Many worked on cotton plantations, which was Alabama's major crop. The 1860 U.S. Census shows that 15,638 slaves Figure 1.1.5 | Thomas Augustine Judge, Founder of for the county. These records did not provide names, but only



the Missionary Servants of the Most Holy Trinity

ages and sexes. The 1860 census shows that the Russell County population included 10,936 whites (Census). By the time of the next census in 1870, the white population had decreased to 5,946, while the black population slightly increased to 15,690. A number of historic houses and plantations from the Antebellum period survive to this day in the County.

Following the Civil War and Emancipation, many freed slaves left for Dallas, Montgomery, and Mobile counties in Alabama, and it can be shown and inferred that many others departed for Texas, North Carolina, Florida, Ohio, Indiana, and Kansas. The 1960 Census lists a total of 22,906 blacks in Russell County, while the number of white residents had risen to 23,365 (Census). This represented a rough demographic parity, a trend that continues to this day.

Phenix City is home to a number of Christian churches. The major denominations are: Roman Catholicism, Protestantism, Baptist, Southern Baptist Convention, and Methodist. Baptists claim the most adherents. See Figure 1.1.6 for a percentage breakdown of the major denominations.

Religion	Russell, AL	United States
Percent Religious	45.12%	48.34%
Catholic	2.23%	21.76%
LDS	0.83%	1.66%
Baptist	31.61%	8.38%
Episcopalian	0.22%	0.53%
Pentecostal	3.04%	1.78%
Lutheran	0.00%	2.49%
Methodist	4.08%	2.98%
Presbyterian	0.07%	1.07%
Other Christian	3.02%	5.20%
Jewish	0.00%	1.81%
Eastern	0.03%	0.05%
Islam	0.00%	0.64%

Figure 1.1.6 | Religion in Russell County, Alabama

Images:

Figure 1 | The reconstructed stockade of Fort Mitchell

(http://www.exploresouthernhistory.com/fortmitchell1.html)

Figure 3 | Chattahoochee Indian Heritage Center

(http://www.exploresouthernhistory.com/ALChatt1.html)

Figure 4 | Marker for the Battle of Columbus

(http://www.exploresouthernhistory.com/battleofcolumbus.html)

Figure 5 | *Movie poster for "The Phenix City Story"*

(http://www.noiroftheweek.com/2008/05/phenix-city-story-1955.html)

Figure 6 | Thomas Augustine Judge, Founder of the Missionary Servants of the Most Holy Trinity

(http://www.msbt.org/pages/aboutus/ourstory.html)

Figure 7 | Religion in Russell County, Alabama

(http://www.bestplaces.net/religion/county/alabama/russell)

References:

Alabama Department of Archives and History, http://www.archives.state.al.us/counties/russell.html
Chattahoochee Indian Heritage Center - Fort Mitchell, Alabama, http://www.exploresouthernhistory.com/ALChatt1.html

Encyclopedia of Alabama, Russell County, http://www.encyclopediaofalabama.org/face/Article.jsp?id=h-1335 ExploreSouthernHistory.com - The Battle of Columbus, Georgia, http://www.exploresouthernhistory.com/battleofcolumbus.html

Fort Benning, The Land and the People, http://www.nps.gov/seac/benning-book/benning-index.htm
History Highlights, Phenix City, http://www.pc-rcchamber.com/history%20highlights%20phenix%20city.htm
Missionary Servants of the Most Blessed Trinity, http://www.msbt.org/pages/aboutus/ourstory.html
Official Russell County Website, http://www.rcala.com/about.html

Russell County, Alabama: largest Slaveholders From 1860 Slave Census Schedule, http://freepages.genealogy.rootsweb.ancestry.com/~ajac/alrussell.htm

Spanish Fort, 1689-1691, http://www.alabama.travel/yoh/alabama-history/historical-markers-detail. cfm?p=15&c=1&Label=SPANISH%20FORT%2C%201689-1691

This site is located in the Columbus six-county region that includes Russell and Lee counties in Alabama and Harris, Muscogee, Chattahoochee, Stewart counties in Georgia. The site is located within census tract 312 of Russell County, Alabama, which covers much of the south and central areas of the county. Additionally, it includes land immediately adjacent to census tract 309.02, which comprises the eastern section of the county centered on Fort Mitchell, Alabama. Despite being adjacent to one another, the two census tracts are experiencing very different demographic shifts.

Population

According to the 2010 U.S. Census, Russell County has a population of 52,947 with 32,822 persons, or 62% of the total population, living in the Phenix City area. The county's 6.4% growth rate is below the national trend (9.7%), the state of Alabama (7.5%), and the Columbus region (9.5%). The Fort Benning Regional Growth Management Plan for the county projects the population will grow by 18.9 percent, from 51,156 in 2008, to 60,805 in 2028, a number that may be modified downward in light of Fort Benning leveraging its projections.

The population to the east of the site (census tract 309.02) is growing rapidly. Between 2000 and 2010 the area population grew by almost 60%. The population of the area to the west of the site (census tract 312), however, is declining. During the same time period, 2000 and 2010, the area lost more than 15% of its population. Clearly, for the foreseeable future, population trends are driven by Fort Benning, which grew and expanded throughout the 2000s, but is now retrenching somewhat. Growth north and east of the site appears to need amenities, services, and infrastructure. From the site westward, however, little if any growth appears likely.

Population Trends			
	2000	2010	%Change
United States	281,421,906	308,745,538	9.7%
Alabama	4,447,100	4,779,736	7.5%
Columbus, Ga. Six-County Region	394,968	432,428	9.5%
Russell County, Alabama	49,759	52,947	6.4%
Census Tract 309.02, Russell County, Alabama	4,374	6,946	58.8%
Census Tract 312, Russell County, Alabama	4,714	3,990	-15.4%
Source: U.S. Census Bureau 2000, 2010			

Figure 1.2.1 | Russell County, Alabama Population Trends

Age

Figure 1.2.2 indicates a large portion of the population in census tract 312 is between ages 45 and 60. This suggests that the area may have a growing need for senior housing to allow the aging population to "age-in-place". Another bulge in the population is between the ages 10-20. Because of the top-heavy nature of the age distribution, the population of this area can be predicted to decline further.

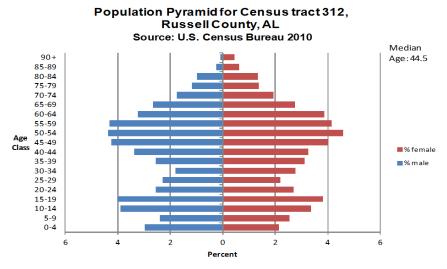
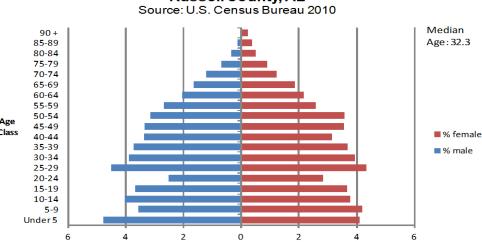


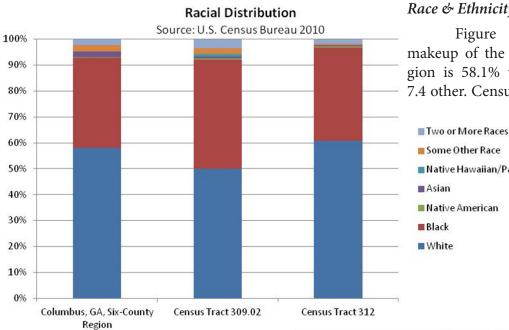
Figure 1.2.2 | Population Pyramid for census tract 312

Figure 1.2.3 shows the age distribution for census tract 309.02. The under 5 and between 25-29 age groups are the largest. This suggests a large proportion of young families in the area, a current demand for pre-k programs and a future demand for primary education. The pyramid shape of the distribution suggests a growing population in the future.

Population Pyramid for Census Tract 309.02 Russell County, AL



Percent Figure 1.2.3 | Population Pyramid for census tract 309.02

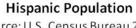


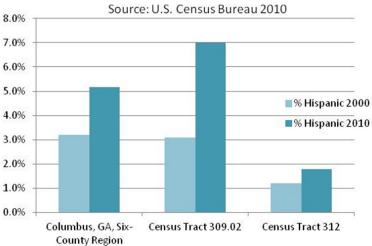
Race & Ethnicity

Figure 1.2.4 shows the racial makeup of the area. The Columbus region is 58.1% white, 34.5% black, and 7.4 other. Census tract 312 is less diverse

than the region with 60.8 % white, 35.9% black, and Native Hawaiian/Pacific Isl. 3.3% other. Census tract 309.02 is more diverse than the region with 49.4% white, 42.2% black, and 8.4% other.

Figure 1.2.5 shows the Hispanic population of the area. The percentage Hispanic population has grown over the past decade in the area from 3.2% in 2000 to 5.2%. The Hispanic population and growth is small in census tract 312 growing from only 1.2% to 1.8%. The Hispanic population has grown significantly in census tract 309.02 growing from 3.1% to 7.0%. The growing Hispanic population may indicate a demand for and/or supply of jobs, education programs, services, retail, and housing. The political climate of Alabama is likely to reduce its attraction for Hispanic people.





Household & Family Size

Household and Family sizes are slightly higher in census tract 309.02 than in census tract 312 and in the region as a whole. The larger household sizes implies a larger population increase per housing unit built in the area and a larger demand for retail and services in the area.

Household Charateristics		
	Avg. Household Size	Avg. Family Size
Columbus-Fort Benning 5-County Region	2.56	3.20
Census Tract 309.02, Russell County, Alabama	2.79	3.24
Census Tract 312, Russell County, Alabama	2.51	3.02
Source: U.S. Census Bureau 2000, 2010	•	

Figure 1.2.6 | Household Characteristics in Holy Trinity Area

Veterans

Nearly 10% of the Columbus region population are veterans of the military and no longer in the service. The percentage is smaller for the census tract 309.02. However, the area likely has a large percentage of active duty military that will be in this category in the future. The larger percentage of veterans in census tract 312 is expected with the higher age.

Civilian Veterans		
	Veterans	% of Total Pop
Columbus-Fort Benning 5-County Region	41,146	9.5%
Census Tract 309.02, Russell County, Alabama	553	8.0%
Census Tract 312, Russell County, Alabama	545	13.7%
Source: U.S. Census Bureau 2010		

Figure 1.2.7 | Civilian Veterans in Holy Trinity Area

Educational Attainment

The educational attainment of the adult population has risen significantly over the past decade. Census tract 309.02 has a higher percentage of high school graduates than the region but a lower percentage of people with bachelor degrees. Census tract 312 has a lower percentage of both high school graduates and people with bachelor degrees. The educational attainment of the area may imply a labor market conducive to certain industries or employers.

Educational Attainment				
	2000	2010	%Change	
Columbus, GA, Six-County Region				
High School Graduates ±	76.3	84.1	10.2%	
Bachelor Degrees±	18.9	23.5	24.3%	
Census Tract 309.02, Russell County, Alabama				
High School Graduates±	72.1	88.7	23.0%	
Bachelor Degrees	7.5	9.3	24.0%	
Census Tract 312, Russell County, Alabama				
High School Graduates±	57.7	82.1	42.2%	
Bachelor Degrees	8.5	12.9	51.8%	
Source: United States Census Bureau 2000; ACS 2009 5-Year Estimates				
±Educational Attainment counted for persons 25 years or older				

Citations

Figure 1.2.8 | Educational Attainment In Holy Trinity Area

- U.S. Census Bureau. 2010 Census SF4. GPO, 2011.
- U.S. Census Bureau. 2000 Census SF1. GPO, 2011.
- U.S. Census Bureau. 2009 5-Year Estimates. GPO, 2009.

Housing Types

The area around Holy Trinity is primarily rural and is characterized by a low-density residential development pattern. Single-family homes are the dominant housing type in the community. The other housing type that makes up just less than half of all units in the area is the mobile home. Newer homes in the Holy Trinity area are usually built as part of master planned communities that are typical of the most suburban subdivision development that occurs throughout the country. The subdivisions are transforming large parcels of land formerly used for agricultural purposes into cookie-cutter cul-de-sac communities. These new developments are popping up north of Holy Trinity towards the Fort Mitchell community that lies outside the back gate to Fort Benning.

Housing Units and Vacancy Rate

Data from the United States Census Bureau offers a detailed picture of housing characteristics in the vicinity of MSMHT properties. The charts above

Housing Types for Census Tract 312

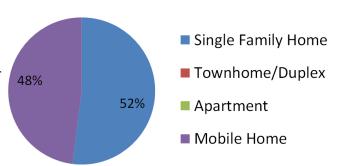


Figure 1.3.1 | Housing Types for census tract 312

Housing Types for Russell County

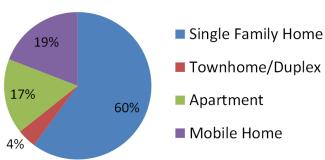


Figure 1.3.2 | Housing Types for Russell County

indicate housing types within census tract 312 as identified in the United States Census Bureau's American Community Survey, 5-year estimate from 2009. The Holy Trinity Community lies in the northeast corner of Census Tract 312. Census Tract 309.02 lies just to the north of Holy Trinity and includes Fort Mitchell. The chart below shows total housing units, number of occupied and vacant housing units, and vacancy rates for the two census tracts and Russell County in the years 2000 and 2010. The data indicates that housing in the Holy Trinity area is following the migration of people from rural to more urbanized areas.

Geographical Area	Total	Occupied	Vacant housir	Vacant housing units Vaca			Vacancy r	ancy rate	
			Total	Percent	Percent		Owner	Rental	
				For sale	For rent	Seas.,			
Russell County	22,831	19,741	3,090	9.4	47.6	7.6	2.3	16.6	
Census Tract 312	2,139	1,757	382	6.3	12.8	28	1.6	13.7	
Census Tract 309.02	1,820	1,566	254	7.5	44.1	5.9	1.5	23.8	
Russell County	24,595	21,229	3,366	11.9	33.2	8.7	3	11.6	
Census Tract 312	1,962	1,584	378	8.2	15.1	21.4	2.3	17	
Census Tract 309.02	2,885	2,486	399	16.3	27.3	5.3	3.2	16.5	

Figure 1.3.3 | Vacancy Rates In Holy Trinity Area

Between the years 2000 and 2010 the number of housing units grew by almost 36% in the area immediately to the north of Holy Trinity, while the number of units in the more rural census tract 312 shrunk by almost 26%. Figure 1.3.4 below looks at these numbers in detail.

Census Tract	2000	2010	% Change
Tract 312	2,139	1,584	-25.9%
Tract 309.02	1,820	2,486	36.6%

Figure 1.3.4 | Total Housing Units In Holy Trinity Area

Tenure

Figure 1.3.5 depicts 90.0% housing tenure rates for Russell County and the two census tracts from the 2009 ACS. 60.0% Housing tenure is defined as 50.0% the arrangement under which a person has the right to live in their homes. The two most frequent arrangements are owner occupied and renter occupied, in which the tenant pays rent to a landlord. In the United States as of 2009 approximately 66% of occupied housing units

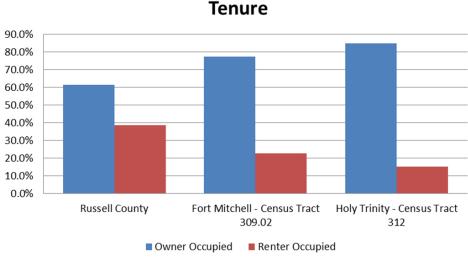


Figure 1.3.5 | Housing Unit Tenure In Holy Trinity Area

were owner occupied, while 34% were renter occupied. Owner occupancy in all of Russell County is under the national rate with 61% owner occupied, while the Holy Trinity Tract is mostly owner occupied, at 85%. This large disparity between Russell County and the area around Holy Trinity indicates that there may be potential for development on MSMHT property that can create more renter occupied housing, such as apartment homes.

Year Structure Built

35.0% 30.0% 25.0% 20.0% 15.0% 10.0% 5.0% 0.0% 2005 or 2000 to 1990s 1980s 1970s 1960s 1950s 1940s 1930s or later 2004 earlier

Figure 1.3.6 | Year Structure Built In Holy Trinity Area

■ Fort Mitchell - Census Tract 309.02

Size and Age of Housing

The size of housing within the Holy Trinity census tract follows very closely with the rest of Russell County. Most of the homes range between two and three bedrooms. The tract does differ from the rest of the county when it comes to the age of the current housing stock. The chart below comes from the ACS and shows the year a home was built as of 2009.

The data indicates that close to half of all homes were built during the 1980s and 1990s. The significant drop of new homes built in the area in

the 2000s are indicative of the current economic recession the nation is currently facing as well as the migration from rural to urban areas.

■ Holy Trinity - Census Tract 312

■ Russell County

Home Values

Housing in the Holy Trinity area is worth far less than homes in the rest of Russell County. According to 2009 ACS data median value for homes in Russell County is \$91,300, while the median home value in the Holy Trinity tract is \$64,600. The large incidence of mobile homes in census tract 312 accounts for this depressed figure, as the median value of mobile homes is \$33,100 and most of these are owner occupied. The Fort Mitchell tract has a median home value of \$99,400. The new housing developments north of Holy Trinity accounts for this higher figure. The chart below reflects data from the ACS for Russell County, census tract 312, and tract 309.02. A majority of homes in Russell County are valued between \$50,000 and \$150,000, while in the Holy Trinity area most of the homes are worth between less than \$20,000 and \$50,000.

Home Values

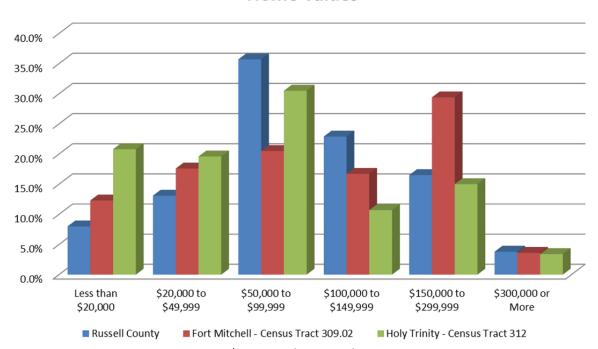


Figure 1.3.7 | Home Values In Holy Trinity Area

Housing Field Study

Approximately four miles north of the Holy Trinity property there are several new subdivision developments that have recently been constructed. These subdivisions are concentrated close to the back gate of Fort Benning. These housing developments include Riverside Estates, The Registry at Fort Benning, The Villages at Westgate, and The Landings at Westgate. All of these developments are higher-end developments that include community pools and clubhouses as well as other amenities.

Riverside Estates consists of 178 three story homes built up to 5,300 square feet and between three and seven bedrooms. These homes feature full brick fronts and granite countertops, and are selling from \$180,000. Homes currently available for sale in the development are selling between \$215,000 and \$287,000.

The Registry at Fort Benning is a subdivision with a total of 348 home sites. The full brick houses are large, with four or five bedrooms, and come furnished with stainless steel appliances, and granite countertops. The homes within the Registry start selling from \$200,000.

The Landings at Westgate is a subdivision of two story houses, with three to five bedrooms. Compared to other developments these homes are much cheaper with homes selling from \$140,000 and \$175,000.

The Villages at Westgate development consists of two story homes ranging in size between three and five bedrooms and between 1,965 and 3,820 square feet. There are currently 210 homes built and will have between 250 and 260 homes when full build out is complete. The houses range in price between \$165,000 and \$226,000. The real estate agent at the Villages revealed some insight into the market. According to the agent 90% to 95% of people living in the development are members of the military and their family. There is quick absorption of the homes as member of the military are buying homes to retire in, and renting them out to soldiers stationed at Fort Benning. Homes are typically leased within a week after they are put on the market. The residents of these subdivisions lack basic retail services and must go to Phenix City, about 25 minutes away to eat out, shop at a pharmacy or grocery store, go to the dry cleaners or even an ATM, although a new convenience store may meet some of that need.

ECONOMY

To help understand the potential of the subject property, it is important to understand its economic base. The scope of the data involves southeast Alabama, the Columbus, GA MSA, and Russell County, Alabama. The following is narrative describing the economic profile of the region.

Population

As reported under "Demographics", Russell County is part of Alabama Region 8 (Bullock, Chamber, Lee, Macon, and Russell County) and the Columbus, GA-AL (MSA), which includes: Chattahoochee County, GA; Harris County, GA; Marion County, GA; Muscogee County, GA; and Russell County, AL.[3] According to the 2010 Census, Russell County had a population of 52,947, with 32,822 (62%) residing in Phenix City area. For the county overall, this represents a 6.4 percent increase from 49,759 in 2000. Russell's 6.4 percent grow is also below Region 8 as whole (9.5%), which was mainly fueled by the fast growth of Lee County, directly to the north, at 21.9 percent. [3] Russell County was below Alabama and the nation as whole at 7.5 percent and 9.7, respectively. [3] The Fort Benning Regional Growth Management Plan for the County projects the population to grow by 18.9 percent, from 51,156 in 2008 to 60,805 in 2028. [4]

Labor Force

As of January 2011, Russell County had a labor force of 21,137 with 18,856 employed people and 2,281 unemployed, yielding a 10.8 percent unemployment rate. [3] The mean travel time to work for employees 16 years and over is 22.1 minutes, with 94.8 percent commuting by car (both alone and carpool). [6] Russell County's unemployment rate exceeded all comparison levels: Region 8 (9.4%); Alabama (9.9%); United States (9.8%). The labor force in Russell is estimated to increase by a modest 7.6 percent, from 22,414 in 2008 to 24,118 in 2028, mostly as a result of Fort Benning's expansion. [4]

Employment

The Columbus, Georgia Metropolitan Statistical Area employs 112,101 persons as of 2010, according to the Bureau of Labor Statistics. The MSA has high and growing employment shares in the professional, scientific and technical services, healthcare and social assistance and retail trade sectors. The retail trade is spread quite evenly throughout the sector but the professional and technical services sector is focused in the "custom computer programming services" and "telecommuting" industries. The healthcare sector has a concentration of employment in the nursing care facilities. The other large sectors of employment concentration are the full service and limited service restaurant industries. Though the employment shares aren't large in some industries, the concentration of employment in the Columbus MSA compared to the rest of the nation, known as the location quotient, has strength in certain industries

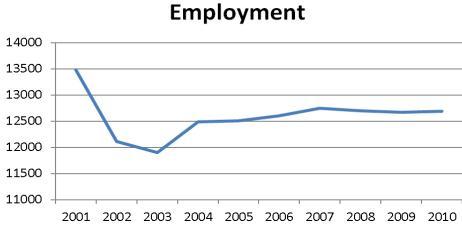


Figure 1.4.1 | Total Employment in Russell County

as well. The manufacturing industry, "sawmills" has a location quotient of 7.8 which grew over 100% between 2005 and 2010. There are also strong concentrations in consumer lending, exterminating and pest control services, kidney dialysis, and freestanding ambulatory surgical and emergency centers.

% of Total Employment



- Office and Administrative Support
- Transportation and Material Moving
- Installation, Maintenance, and Repair
- Cashiers

- Production
- Sales and Related
- Food Preparation and Serving Related
- Construction and Extraction
- Meat, Poultry, and Fish Cutters and Trimmers
 Heavy and Tractor-Trailer Truck Drivers

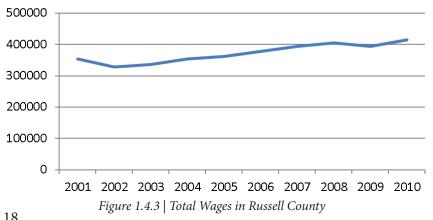
Figure 1.4.2 | Total Employment in Russell County by sector

A more focused look at the economic data brings a number of questions to mind. The first is how has the employment composition changed over time? Since 2000, Russell county employment has decreased by nearly 6 percent. A closer look at the trend reveals that employment has increased by approximately 6.5 percent since 2003, the time of the last recession, and has been relatively stable since 2007.

Another question is what industries are prevalent in the area. As of 2010, the top five industries in southeast Alabama includes office and administrative support occupations; production occupations; transportation and material moving occupations; sales and related occupations; and installation, maintenance, and repair occupations. Figure 1.4.1 displays the top 10 industries as a percentage of total employment, and the figure on the next page displays the top employers in the area proximate to the subject property.

In particular, Russell County, a part of the MSA has 12,689 workers in the county. manufacturing, retail trade, and food services. Sawmill and woodworking, under the professional and technical service sector has a strong and growing location quotient. Consumer lending, lessors of real estate, and depository credit intermediaries are also concentrated and growing industries within the county.

Total Wages



Wages

Wages in the county have been rising since 2002, with a slight dip in 2008, as can be seen in Figure 1.4.3.

Personal Income

Personal income is the sum of wage and salary disbursements, proprietors' income, rental income, personal dividend income, personal interest income, and current transfer payments not including contributions to government social insurance. [4] Accounting for the Fort Benning expansion and other significant economic activities in the region, personal income in Russell Countyis projected to increase by a staggering 123 percent from 2008 to 2028. [4] Incomes are expected to rise from \$1,477 billion to \$3,300 billion. [4] In light of the recent downtown and the scaling back of Ft. Benning, however, these projections seem over-optimistic.

Per Capita Income

Per capita personal income represents the total personal income of an area divided by the population in that area. Russell County per capita personal income rose by 48.3% from \$19,831 in 2000 to \$29,401 in 2009. [2] This compares favorably to a 34.3% increase in Lee County from \$20,577 to \$27,643, and a 38.8% rise in Alabama overall from \$24,069 in 2000 to \$33,411 in 2009.[2] Although less in actual dollar figures compared to Alabama, Russell has increased at a considerably faster rate than both Lee and the state as a whole. This represents a positive economic well being of county residents, and a solid consumer market, at least relative to the state as whole.

,	
Employer Empl	oyment
Fort Benning	42,000
Muskogee County School District	6,000
TSYS	4,400
AFLAC Inc.	4,000
Columbus regional healthcare	3,500
Columbus consolidated	
government	3,000
Kia (Main Plant)	2,500
Pezold Management Associates	
Inc.	2,200
Blue Cross Blue Shield of Georgia	1,650
St. Francis Hospital, Inc.	1,450
Callaway Gardens Resort Inc.	1,200
Mead Westvaco	950
Synovus	875
Harris County Schools	700
Phenix City Schools	700
Cagle's Inc.	600
Kysor/Warren	575
WC Bradley Co.	550
Russell County Schools	550
Lance	500
Swift denim, Inc.	500
Pratt Whitney	475
Precision Components Inter [®] I.	425
Kellogg"s	325
NCR	300
Figure 1 4 4 Major employers i	ท

Figure 1.4.4 | Major employers in Columbus area

Median Household Income

The median household income – adjusted for 2009 inflation – in Russell is \$32,064, well below the state and nation as whole at \$41,216 and \$51,425, respectively. [6] The census tract which Holy Trinity is in (312) is significantly less than Russell County at \$27,533. [6] The rate at which median household income in Russell increased between 2000 and 2009 is also much slower than the state and the county. The county rose by 16 percent, while the Alabama increased by 20 percent and the United States at 22 percent. [6]&[4]

Poverty

According to the 2005-2009 American Community Survey estimates, 21.8 percent of Russell County citizens live in poverty. This is significantly higher than Alabama and the Country as a whole at 16.8 percent and 13.5 percent, respectively. [6]

Gross Domestic Product

Gross Domestic Product (GDP) is the most comprehensive measure of economic activity as it represents the total value added – final goods and services produced – to an area. GDP is critical because it essentially represents economic growth while accounting for the economic impacts of new business, income, and consumption in dollar terms. [4] The Fort Benning Regional Growth Plan projects Gross Regional Product, the local equivalent to GDP, for Russell County to grow 57 percent within twenty years from 2008 to 2028. [4] Currently, GDP for Columbus, GA-AL (MSA) is \$11.6 billion and \$12.6 trillion for all U.S. MSAs. [2] Since 2001,

both the Columbus, GA-AL (MSA) and U.S. MSAs as a whole have grown at nearly the same pace, at 38 percent and 37.5 percent, respectively. [2]

Influential Economic Activities

In addition to the military base expansion, Russell County will be affected by some other major economic development generators. The construction of a new Kia automotive plant in Troup County, along with five supply plants throughout the region, is estimated to produce 19,985 jobs (direct, indirect and induced) 694 of which will be brought to Russell by 2013. [4] Alatrade Foods, a poultry processing plant located in Russell, expanded from 380 to around 800 jobs in 2009. [4] A Quality Inn on Route 280 and a Hampton Inn on Route 431 were under construction in 2009. [4] Russell County has planned a new/upgraded "rear gate" entrance to Fort Benning near Lawson Airfield along Route 165, which has significant economic development potential. [4] Russell is also considering merging the three area water/sewer systems of Russell County, Phenix City, and Fort Mitchell to improve economic development potential. [4] Negative economic activities have also occurred. According to the Georgia Department of Labor in 2009, approximately 13,350 jobs were lost since 2000 as a result of 58 business closings or major layoff events. Nearly 4,482 (33%) of the job losses occurred in Alabama, roughly 1,700 of which were located in Russell County. [4]

Fort Benning Expansion Reduced Projections

The expansion of Fort Benning will likely have a significant impact, as Russell County contains 7 percent of the land mass of the army base. Many of the surrounding areas, Russell County included, are making important arrangements to accommodate and take advantage of the expected growth. Originally estimated to produce a total of 28,088 jobs and personnel, – 11,403 jobs; 6,885 spouses; 9,800 children; and 6,839 school age children – these projections have been recently scaled down. In Mid-August of 2011, it was announced that the projection had been lower from 28,088 to just over 22,000 people. The decrease is in response to a projected 15 percent cut of the post's existing civilian payroll in the 2012 fiscal year that begins Oct. 1. [1] The significant reduction will likely lower the projected economic figures of the Fort Benning Regional Growth Management Plan.

SOURCES:

- [1] Adams, Tony. August 14, 2011. Fort Benning Revises BRAC Growth Numbers Downward. Columbus Ledger-Enquirer. Retrieved on September 4, 2011, from http://www.ledger-enquirer.com/2011/08/14/1693210/fort-benning-revises-brac-growth.html
- [2] Bureau of Economic Analysis (BEA). Updated April 21, 2011. Economic Profiles. U.S. Department of Commerce. Retrieved on September 8, 2011, from http://www.bea.gov/
- [3] Center for Business and Economic Research. (June, 2011). State of the Workforce Report V: Region 8. The University of Alabama.
- [4] EDAW/AECOM, Market St Services, RKG Associates, SAIC. (April, 2009). Fort Benning Regional Growth Management Plan. The Valley Partnership Columbus, GA Region.
- [5] Lee-Russell Council of Governments. (Sept, 2009). Comprehensive Economic Development Strategy (Draft). Lee-Russell Council of Governments.
- [6] U.S. Census Bureau. (2010). 2005-2009 American Community Survey 5-Year Estimates. U.S. Census Bureau. Retrieved on September 8, 2011, from http://factfinder.census.gov/

LAND AND DEVELOPMENT VALUES

The following is an attempt to estimate the current value of the land. Many sources and study methods were used to do this, including interviews, land suitability, and research on recent sales and current listings. These sources were synthesized to develop an estimate of land values for different portions of the site. It is important to understand that land values can be quite volatile, and respond to a number of factors. These can include population increases and infrastructure development, two significant potentials for this area. The land is valued at its current state, since these changes are difficult to predict. It is important to understand that values are likely to increase if certain things take place. Furthermore, if a portion of the site is developed into a positive and healthy use, the surrounding property values will increase. The following is an explanation of the sources and assumptions made.

Interviews

The most common finding from interviews with real estate professionals with knowledge of the area, was the detrimental effect the lack of infrastructure has on land values. Since this problem severely limits what can be developed on the land, demand is limited. This has a negative effect on land values. The other findings include:

- There is a discount associated with property that lacks access to the road, which can range from 10 to 20 percent. However, a property which lacks access has the legal right to an easement to connect to a road network. The cost to develop this access road, and the lack of frontage along a major roadway is incorporated within this 10 to 20 percent deduction.
- Competition from properties farther north and closer to Ft. Benning's West Gate drives down demand for this site.
- Demand for property this far south on Highway 165 may not surface for a number of years.

Land Suitability

Another factor which went into valuing the land was the suitability according to soil type and slope. This data is from the United States Department of Agriculture, which categorizes land in terms of development potential as Not Limited, Somewhat Limited, and Very Limited. Deductions were also made to land located 2,000 feet away from the road or greater. There may be premiums for land within 800 feet from the road or less, but there was no adjustment made according to this criteria. Premiums were also given to developable land within 400 feet of the lake. The following deductions and premiums were applied.

- Not Limited No Deduction
- Somewhat Limited 35 percent deduction to account for less than ideal slope and soils
- Very Limited 100 percent deduction to account for the FEMA floodplain, and prohibitive slopes and soils
- Outside of 2,000 feet of roadway 15 percent deduction
- Inside 400 feet of Lonesome Duck Lake 25 percent premium
- There is likely a greater premium for property within 800 feet of Highway 165, but that adjustment is not made.

Recent Sales and Listings

Recent land sales and listings along Highway 165 have sold for approximately \$10,000 per acre. However, these transactions and listings are far superior in terms of location and topography. Furthermore, real estate professionals do not believe these comparable listings and sales are indicative of the true land values in this area.

Growth Rate	2011	2012	2013	2014	2015
1%	\$ 3,643,670	\$ 3,680,107	\$ 3,716,908	\$ 3,754,077	\$ 3,791,618
2%	\$ 3,643,670	\$ 3,716,543	\$ 3,790,874	\$ 3,866,692	\$ 3,944,026
3%	\$ 3,643,670	\$ 3,752,980	\$ 3,865,570	\$ 3,981,537	\$ 4,100,983

Figure 1.5.1 | Growth Rate of Holy Trinity Site Land Value

Conclusion

After taking the above sources into consideration, we have concluded to a range of values. A map displaying these values is located below.

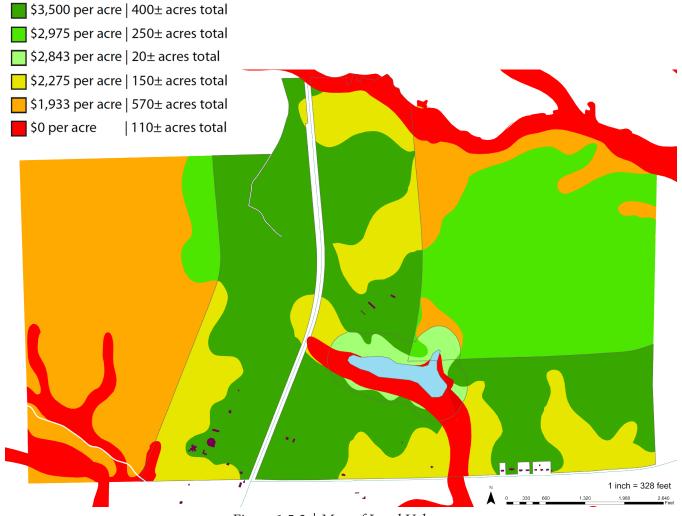


Figure 1.5.2 | Map of Land Values

It is important to understand that these estimated values are based on educated assumptions. These values are not necessarily what can be expected on the open market. However, the following are important things to consider.

- Land along Highway 165 will be most valuable, as well as land along Terminal Road
- Land at the intersection of these two roads will have the highest demand
- Land located in the back of the property has less value than those with road frontage, but has a legal right to access the road through an easement.
- Lonesome Duck Park is a desirable amenity
- Land values will rise as development occurs, population increases, and infrastructure is developed in the surrounding area
- Selling the property will take anywhere from 12 to 36 months. Property along Highway 165 will have the most demand.

Given the numerous uncertainties that surround future development on the site, any land owner must consider current revenue and expense figures as conjectural. Even so, the figures offer important information, enabling novice owners to understand how property type values compare. Over the long term, the site could include no less than five different property types: retail, offices, industrial, single-family residences, and multi-family residences. Viewed with the appropriate skepticism, the following data can help to establish general expectations for profit margins.

	Columbus MSA		
Property Type	One-Time Construction Costs	Annual Rent per Square Foot	
Retail	\$62	\$13	
Office	\$50	\$12	
Industrial	\$25	\$3	
Single-family residence	\$91	\$1	
Multi-family residence	\$130	\$8	

Figure 1.5.3 | Construction Costs and Annual Rent

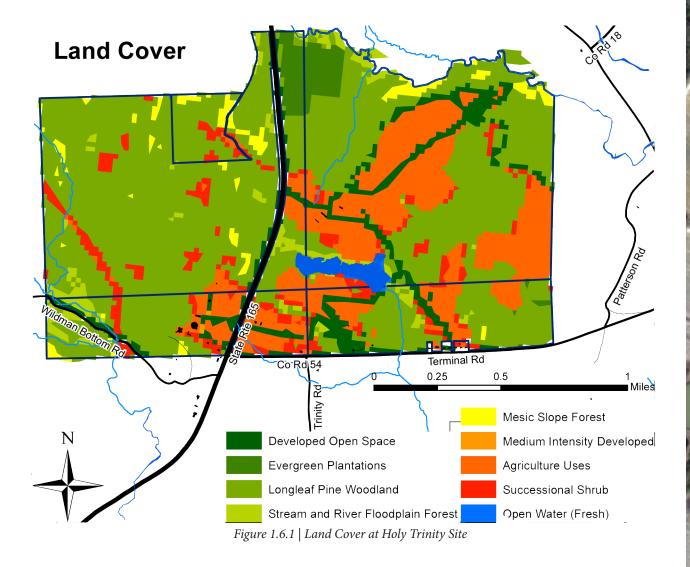
We estimate that, under our proposed design, a single block of 250' x 360'on the site will accommodate 12 single-family residences or 48 multi-family residential units. Ultimately, any landowner must base development on whatever particular amount of property type the market will support. Yet, the above figures can help owners to determine which property types they prefer.

ENVIRONMENT AND INFRASTRUCTURE

Land cover

About half of the land which lies to east of the State Route 165 (which runs North-South through the MSMHT land) is a variety of pine (longleaf, shortleaf, and loblolly) and evergreen. Almost one-quarter of this eastern land is developed open space and row crop (takes up about 1/3 of the land. The rest of this land east of 165 is scattered clearcut-grassland, scrub, low and medium intensity developed land, pasture/hay, floodplain forest, and riparian land.

The land west of 165 is primarily longleaf pine and floodplain forest, as well as some scrub, evergreen, developed open space and floodplain forest.



Trees

The MSMHT property contains a variety of tree types: Dry Oak, Shortleaf and Longleaf Pine, Loblolly Pine, Evergreen Plantations, and Stream and River Floodplain Forest are the most common, as can be seen in the map above. There are areas of clear cutting were shrubs have grown in the absence of trees (a process known as succeeding). These can be seen on the map above identified as "Successional Shrub".

Floodplains

Three floodplain areas exist on the MSMHT property: on the northern border of the property, in a south-central region surrounding Lonesome Duck Lake, and in the southwest corner.

While flooding is commonly considered a nuisance and a hazard, flooding in fact is quite important for floodplain ecosystems. Flooding deposits nutrient-rich sediments into soils in the floodplain, which is important for the plants that grow there and the organisms which in turn feed off those plants. Floodplains also serve to filter pollutants from water and recharge groundwater. The initial assessment of the Missionary Servants' property indicated that these issues are already present in this region. (Federal Interagency Floodplain Management Task Force 1996). Because floodplains provide such important functions, and because flooding can be damaging to built structures, it is wise to avoid developing these areas of Missionary Servant's property.

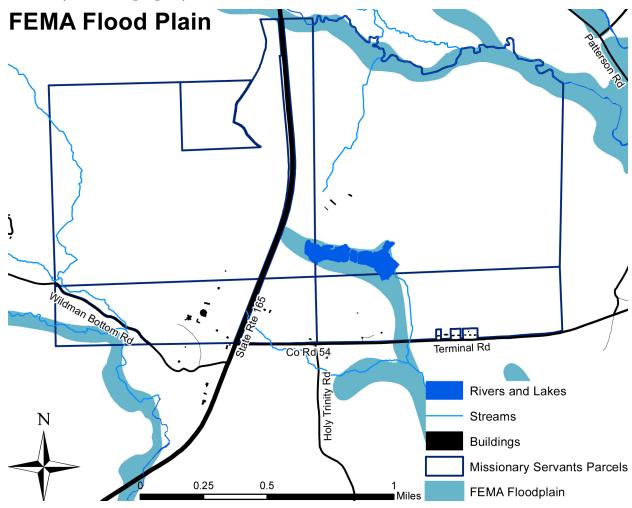


Figure 1.6.2 | FEMA Identified Floodplains at holy Trinity Site

Wetlands

The property also contains several wetlands areas. Freshwater forested/shrub wetlands exist on the western edge of Lonesome Duck Lake, as well as in southwest and north central parts of the property. These can be seen in the land cover map above, identified as "Stream and River Floodplain Forrest".

Like floodplain areas, wetlands are important for regulating the flow of water, and nutrients and chemicals in those waters, in the natural environment. Wetlands act as storage for water; because of this function, they can reduce flood damage by storing excess water. Like floodplains, they can filter pollut-

ants from water, improving water quality, and also provide habitat and food for fish and wildlife (US EPA America's Wetlands, DATES). Wetlands also help mitigate erosion control. Erosion is problematic because it can deteriorate water quality, threatening aquatic organisms' habitat (U.S. EPA, "Erosion, Sediment and Runoff Control for Roads and Highways", DATES).

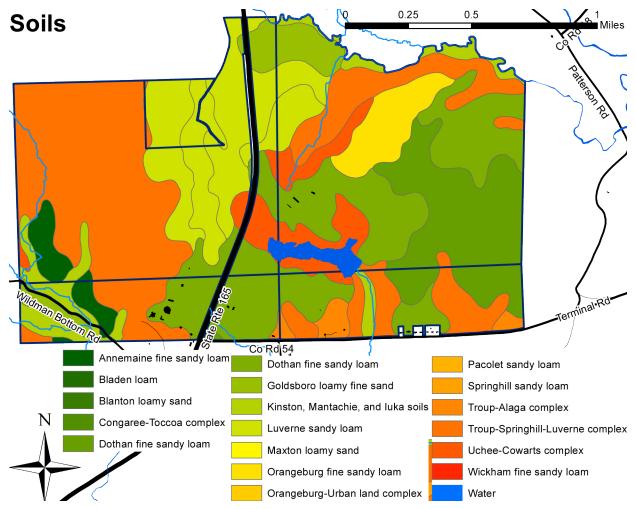


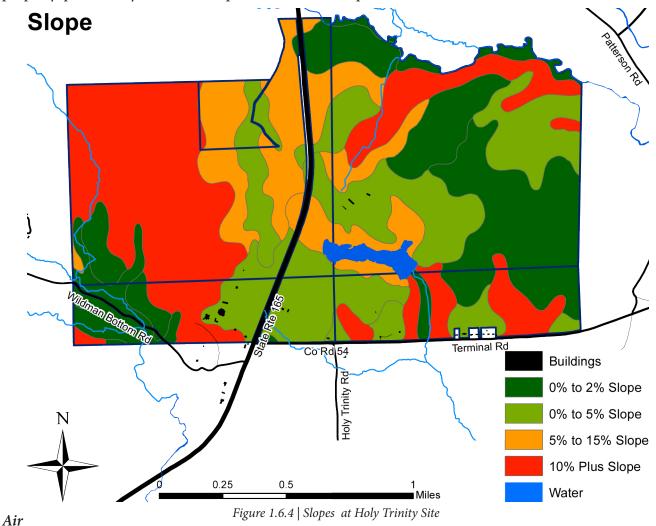
Figure 1.6.3 | Soil Composition at Holy Trinity Site

Soil

The MSMHT property is situated on soil from the following groups: Springhill-Troup-Luverne; Congaree-Wickham-Maxton; and Dothan-Fuquay-Orangeburg. These soils have the following characteristics:

- Springhill-Troup-Luverne erosion hazards and steep slopes make this soil poorly suited for cultivated crops and most urban uses; it is better suited to pasture, hay, and woodland, particulary loblolly pine.
- Congaree-Wickham-Maxton subject to occasional or rare flooding; poorly suited to most urban uses, due to flooding hazards; well suited to woodland, particularly loblolly pine and hardwoods.
- Dothan-Fuquay-Orangeburg well suited to most urban uses, cultivated crops, pasture, hay, and woodland, particularly loblolly pine. Erosion is a hazard. Also well suited to specialty crops (specialty crops grown in the county include sweet corn, peas, okra, melons, sod, and alfalfa), United States Department of Agriculture, N. R. C. S. (2003).

As previously stated in the report prepared by Raymond White (2010), erosion is a hazard on this property, particularly where the slope is more than two percent.



There are no problems with air quality in this part of Alabama (US EPA, "Status of SIP Requirements for Designated Areas, Alabama Areas by Pollutant "). An area of Muscogee County (near the GNB, Inc., lead smelting and battery production facility) was designated for high levels of lead in 1992 but in 1999 reached attainment (i.e., air quality is no longer a major concern)

Species

There are 11 federally listed species in Russell County, which are listed in Figure 1.6.5. Source: *USFW. 2011. Species By County Report.*

Group	Name
Birds	Wood stork (Mycteriaamericana)
Clams	Southern clubshell (Pleurobemadecisum)
Clams	Finelined pocketbook (Lampsilisaltilis)
Clams	Oval pigtoe (Pleurobemapyriforme)
Clams	Ovate clubshell (Pleurobemaperovatum)
Clams	Purple bankclimber (mussel) (Elliptoideussloatianus)
Clams	Shinyrayed pocketbook (Lampsilissubangulata)
Flowering Plants	Little amphianthus (Amphianthuspusillus)
Flowering Plants	Relict trillium (Trillium reliquum)
Flowering Plants	American chaffseed (Schwalbeaamericana)
Flowering Plants	Georgia rockcress (Arabisgeorgiana)

Figure 1.6.5 | Endangered Species in Russell County

Water & Sewer Infrastructure

Approximately 5,700 customers are serviced by Russell County Water Authority, many located in rural areas of the county, which equates to over 17,000 being supplied. To meet this demand 75,000 gallons of water is tapped by ground water wells, an additional 800,000 gallons per day is purchased from the City of Phenix City. Many of the residential and commercial customers have agreements to sell their water to Hurtsboro and Macon County. The County has offered new developers to the area an option to install on-site wastewater systems that will provide sewer service to homeowners.

Other options the Phenix City is offering for septic tank owners is to tie into its sewer system through an agreement with them directly; or to develop a decentralized package system which could discharge into Phenix City's waste water plan, both depending on pending proximity to the City. The resulting effluent could be used for underground drip irrigation, creek/river discharge and common area irrigation or for areas with high vegetation, golf course or ball fields.

Water Sources in Russell County

The County has three groundwater wells that produce water from the Eutaw and Tuscaloosa aquifer. They also purchase water from Phenix City Utility. Additional connections include selling water to Macon County Water Authority and Hurtsboro Water and Sewer Board, as needed.

Water Treatment in Russell County is centered on improving and controlling the chlorination, fluoridation and corrosion that is occurring in the sewers and septic tanks.

The County currently owns seven underground tanks with a capacity of 2,517,000 gallons.

Right of Ways for new and upgrading of water services

Alabama's laws relating to the use of right of way, House Bill 112 was amended to allow counties the right to develop regulations for the right of way within the jurisdiction of a governmental under certain circumstances. The Senate Bill 129 goes further in providing water authorities the ability to upgrade services to include fire hydrants and incentives to assure savings result in lower insurance rates. Act No. 97-417 of the Alabama state constitution states a water authority may develop, improve, maintain, equip and operate water, sewer, and fire protection facilities or combine services, and may charge a reasonable fees for the services. The Water Authority has the ability to fix, collect, and revise fees and other charges for water, sewer, and fire protection (alruralwater.com, 2011).

Sewage System in Russell County

There is concern about the development of sewer service, and exactly what the County's role would be regarding a mandatory hook-up policy and how they will enforce this action. If a home owner should have problems with his sewer or septic tank they are to contact the Inspector for the Health Department who determines if the system has truly failed. If it has the Health Department will inform the Building Inspector, who will let the resident know he will have to hook up to County's system. A failed system is one that has sewage backing up or pooling at the top of the ground area.

SOURCES:

Alabama Clean Waters Initiative, "Clean Waters Initiative", Alabama Clean Boating Act, Clean Boating and the Clean Vessel Act in Alabama, Marina Owners, Do Your Customers Have a Place to Dump Their Portable Waste.

http://www.outdooralabama.com/boating/clean-waters/

Alabama Department of Environmental Management., "

United States Department of Agriculture, Farm Services Agency. "Biomass Crop Assistance Program" http://www.fsa.usda.gov/FSA/webapp?area=home&subject=prod&topic=bcap

United States Department of Agriculture, Farm Services Agency. "Conservation Reserve Program" http://www.fsa.usda.gov/FSA/webapp?area=home&subject=prod&topic=crp

United States Department of Agriculture, Farm Services Agency. "Conservation Reserve Enhancement Program" http://www.fsa.usda.gov/FSA/webapp?area=home&subject=prod&topic=cep

United States Department of Agriculture, Farm Services Agency. "Grassland Reserve Program" http://www.fsa.usda.gov/FSA/webapp?area=home&subject=copr&topic=grp

United States Department of Agriculture, Farm Services Agency. "Source Water Protection Program" http://www.fsa.usda.gov/FSA/webapp?area=home&subject=copr&topic=swp

United States Department of Agriculture, Farm Services Agency. "Voluntary Public Access and Habitat Incentive Program" http://www.fsa.usda.gov/FSA/webapp?area=home&subject=copr&topic=pahp

Alabama Rural Water Association, "Laws of Interest", Legislative News, Alabama Law-Certificate of Incorporation of Water, Sewer and Fire Protection, Alabama Law-Relating to the Use of Rights of Way, Alabama Law-To Upgrade Services.

http://www.alruralwater.com/legislature/leg-laws.asp#RightsOfWay

Alabama State Parks, "Lakepoint Resort State Park", General Information, 2011.

http://www.alapark.com/LakepointResort/

.Alabama State Parks, "Lakepoint Resort State Park" Lake Eufaula Fishing Report".

http://www.alapark.com/LakepointResort/Lake%20Eufaula%20Fishing%20Report/

Aquatic Biodiversity Center, "Alabama Aquatic Biodiversity Center Fact Sheet", Alabama Aquatic Biodiversity Center. http://www.outdooralabama.com/research-mgmt/aquatic/

Nichols, Nick, "Restori-Aquatic: Outdoor Alabama", Alabama Division of Wildlife and Freshwater Fisheries. http://www.outdooralabama.com/outdoor-alabama/aquatic_ctr.pdf

Russell County Water Authority, "2011 Annual Water Quality Report", Source Water Assessment, Monitoring Schedule, Detected Contaminants, List of Primary Drinking Water Contaminants, and General Information.

Since 1918, Fort Benning has been the home of the United States Army Infantry. In 2005 the Base Realignment and Closure Commission decided to "consolidate a number of schools and institutions to create centers of excellence". As a direct result the Armor School was moved from Fort Knox, KY to Fort Benning, GA.

The base is consists of 182,000 acres, 12,000 of which are in Alabama. 120,000 military, family members, retirees, civil service employees and defense contractors utilize the base daily. More than half (52%) of all US Army Soldiers complete some sort of training at Fort Benning. The post goal for hiring new employees in support of BRAC is 933. As of January 2011 two-thirds of the positions were filled. [2]

Demographic Trends

According to base publications, the Fort Benning population consists of 39,411 Soldiers. These are typically 3 or 4 year transitional residents and can often be removed from the population at various points of time for combat or training rotations. Much of this demographic's basic needs are provided on the base. Groceries, fuel, basic shopping are all provided in on post facilities that often provide goods at a tax free and discounted price. However, amenities provided off post can benefit from a well-financed secure and relatively stable economic base.

Fort Benning reports a nearby population of 19,907 military retirees. Most of these retirees anchor themselves near a large post like Fort Benning because even in retirement, they retain their access to military facilities: shopping, information networks, and educational opportunities. What retirees do not have access to are healthcare networks. They are relegated to using outsourced private health services or Veteran Affair's hospitals. Military retirees bring both stable income and a myriad of health issues to the community.

Military family members make up the largest subgroup of the Fort Benning community with 52,472. The impact of family members on base is variable. Children have the opportunity to attend either Department of Defense schools on post or public and private schools located in nearby cities. For healthcare, military families get service from the private industry. The US Army began outsourcing family services in the late 90's so there is an established network of facilities around most posts that are tailored to meet their specific needs. Military members with families also add to the civilian housing needs.

The civilian population of Fort Benning is limited to 8,690 Department of the Army employees and contractors. These people tend to have longer stability periods in the housing market. They are anchored to employment that tends to pay well, carry generous benefits, and last for much longer than comparable military positions.

Major New Development- Impacts

Expansions to the base that will affect the quality of life, and meet the needs of families will include housing, neighborhood centers, swimming pools, and improvements to accessibility.

There are currently 4,000 family homes on the base. Approximately 4,000 homes will be added to meet growing needs. It was estimated that of the new incoming families, about half will choose housing on the base. Keith Lovejoy, Fort Benning's residential communities initiative asset manager, expects 20% of incoming families to purchase homes, while the remaining 8% will be renters. [3]

Currently six separate childcare facilities are available to families with children 18 months to 5 years old, many of which have before and after school programs [4]. A new resource available to families will be housed in the Warrior Transition Barracks. These barracks are to be built to assist wounded soldiers needing more than 6 months of rehabilitation, and will house a total of 120 soldiers. The facility, expected to open in October 2011, will also house a family assistance center for the families of soldiers under rehabilitative care. [2]

Spiritual needs can be partially met on base through, the Chaplain's office and limited resources geared towards Catholic and Protestant members, but as the growing base brings more diversity to the region a larger need for more denominations and non-English speaking places of worship will occur. [5]

Population and Employment Forecast

The growth in local population expected to result from the expansion is around 30,000 between May 2010 and October 2010. While 933 new positions will be created on the base itself, there will also be, as a direct result, about 4,000 to 6,000 jobs created. Recent cutbacks will reduce there numbers somewhat

SOURCES:

- [1] U.S. Army Maneuver Center of Excellence. (2011, Aug. 3). Retrieved Sep. 8, 2011, from https://www.benning.army.mil/mcoe/
- [2] .S. Army Maneuver Center of Excellence. (2010, Jan. 4). Fort Benning: Community Update. Retrieved Aug. 31, 2011, from http://www.benning.army.mil/mcoe/content/PDF/010411mcoeupdate.pdf [3] Adams, Tony.. (2011, Jan. 3). Benning's boost from BRAC expected to impact surrounding housing, retail sectors. Ledger-Enquirer. Retrieved Sep. 6, 2011, from http://www.fortbenningandthevalley.com/documents/Bennings%20boost%20from%20BRAC%20expected%20to%20impact%20housing,%20retail%20 sectors.pdf?PHPSESSID=ngckvint
- [4] U.S. Army MWR. Retrieved Sep. 6, 2011, from http://www.benningmwr.com/cyss-childcarefacilities. php
- [5] U.S. Army Maneuver Center of Excellence. Retrieved Sep. 6, 2011, from http://www.benning.army.mil/garrison/chaplains/index.htm

LOCAL AND REGIONAL PLANNING CONTEXT

Other factors and considerations that bear in the choices before MSMHT are below.

Authorities/Stakeholders

Though the landscape of our subject area is somewhat sparsely populated that does not mean that the region is without a vibrant political economic, landscape, social and cultural. It should be noted that several municipalities, authorities, and stakeholders have jurisdiction or "skin in the game" tied to the future development of this property. Several such authorities, offices, and stakeholders are listed below:

- The State of Alabama:
 - o Alabama Department of Transportation
 - o Alabama Department of Environmental Management
 - o Alabama Department of Conservation & Natural Resources
 - o Alabama Department of Public Health
- Russell County, Alabama:
 - o Russell County Administrator
 - o Russell County Water & Sewer Authority
 - o Russell County Commission
 - o Russell County Planning Commission
 - o Russell County Historical Commission
- Phenix City, Alabama:
 - o Phenix City Utilities Department
- Phenix City-Russell County Chamber of Commerce

Demographics/Immigration

The entities and individuals outlined above can be more thoroughly detailed with a look at the demographics of the region as discussed in earlier chapters of this report. The main example of such politics and the effect on the region is that of the recent immigration reform within the state of Alabama. This legislation has driven much of the immigrant population from the state with effects such as diminishing the local workforce within the agricultural area. Filling this vacuum the church may be able to round out its program for the development of this property by providing services and support for this disenfranchised segment of the population as well as other minority populations within the region.

Process

The political process should be viewed as an engine or catalyst for the project discussed within this report. As such several of the above referenced entities should be approached regarding alternate sources for development or infrastructure direction and funding to make the development options discussed more palatable to the private sector. For example the Alabama Department of Transportation may have roadway funding available over the next few years for roadway and infrastructure improvements. Additionally, MSMHT the Phenix City- Russell County Chamber of Commerce to develop and action an marketing plan on the property that would not compete with Phenix City and result only in a relocation of jobs, but in true job fostering and job creation. As such MSMHT should weigh the impact that each of these organizations can bring to bear on the issues and find the true advocates that can facilitate the necessary change and momentum to create in everyone's eyes the critical mass needed to see this initiative through to reality.

PART II: SCENARIOS

AGRICULTURE

INDUSTRY

HEALTH AND EDUCATIONAL SERVICES

TOWN CENTER AND RESIDENTIAL STRATEGIES

ENVIRONMENTAL PROTECTION

RECREATION

ary Holy

Commercion 54 Civic Terminal Rd

In order to give Holy Trinity a sense of place, it must have intrinsic value that comes from two parts; a supply to meet the demands that exist within any growing community, whether it is a dentist office, a grocery store, or a diversity of housing choices, and a uniqueness that attracts people both near and far. In America, communities and individuals have been separated from their food, both in supply chain and in access to supply at the end of the chain. There have been many efforts both to educate Americans about the unsustainable agricultural practices that put food on families' tables and to end the 'food desert' condition of the Holy Trinity community. A food desert is simply an area in an where affordable fresh food is difficult to obtain. There are many ways to define these areas but can be summarized in identifying several key indicators. Lee, Russell, and Barbour Counties have among the lowest per capita ratio of purchased fruits and vegetables to processed foods, highest amount of gallons of soft drinks consumed, and pounds per capita of packaged sweet foods (USDA Food Atlas). Alabama is currently the second most obese state in the nation and gaining on Mississippi, America's fattest state six years running (Trust for America's Health).

Americans, as a whole have been responding well to this information and operating farmer's markets have grown 17 percent in the last year and 150 percent since 2000 (Agricultural Marketing Service). The markets provide access to quality locally and/or regionally grown/raised product that not only minimizes the amount food must travel to reach your table is often higher quality and even organic. It's no secret that there is a growing food and agriculture movement moving throughout the country as well as in southeast Alabama. There are currently 11 small- to medium- scale farms, registered with the Rodale Institute's farm locator, within the region selling locally and nationally. Additionally, six farmer's markets that have between 15 and 40 local vendors at each market and a demand for Community Supported Agriculture (CSA) (interview, Laura Herring, Heritage Park Market director). Theodore Gilbert, the county extension officer, explained that there is a potential demand for demonstration farming as well as production farming that could serve families, markets, and restaurants in the area. Mr. Gilbert also commented on the potential for teaming up with a growing agricultural community in Russell County and the region to expand market reaches and serve a larger area. Furthermore, there are successful models within Alabama and Georgia that not only rely on agricultural production for an income, but also create educational opportunities for children and adults, retreat space and programs, and communal festivities that add to the creation of a sense of place within rural communities.

Agriculture Models and Uses

Having briefly identified potential markets and possible models for the agricultural concept, it's important to understand the feasibility of creating a product of this sort. With much of the developable land on the East of Highway 165 as well as the opportunity to use agriculture to help create a sense of place for Holy Trinity, the farm could be located on anywhere from 10 to 100 acres of land on the Northern portion of the land West of Highway 165. This could work as a welcoming feature with well-maintained plots along the highway and larger orchards back towards the woods that go up and beyond the hill, depending on what is produced. This land can complement the development on the East side of the Hwy, and vice versa through attracting people to the area with an onsite market that could be located in a city center or sell to a store in the center.

Agriculture Assistance

The opportunities for farm and rural development are currently being encouraged through federal grants and loans that can be used for a multitude of efforts. Resources for agriculture, business, and marketing efforts are provided by the USDA in comprehensive reports, as well as through assistance

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from the Russell County Extension Office. The Alabama State Agriculture Agency offers low-interest taxexempt loans to small farmers that can fund equipment purchasing, building construction, and site development. Federal loans and grants are even more comprehensive. The Rural Business and Enterprise Grants Program provides \$10,000 to \$500,000 for programs that encourage business development, adult education, or employment creation. With the right relationships, Holy Trinity land could be used with cooperation of other site developments such as senior housing, medical facilities, and schools, or similar off site companies that have a demand for particular agricultural products. If a certain demand is identified and stable or growing, the Holy Trinity Farm can create the supply to have that demand met locally and employ people regionally. The Rural Business Opportunity Grant (RBOG) program promotes sustainable economic development in rural communities with exceptional needs through provision of training and technical assistance for business development, entrepreneurs, and economic development officials and to assist with economic development planning. There are also a number of USDA grants that are offered year to year to help build hoop houses, green houses, offer agricultural insurance, or encourage rural development (http://www.rurdev.usda.gov/RD_Grants.html).

A timeline to see these efforts through could develop in three phases over three to five years. In the first year the farmer should be identified and a plan should be made to decide the type of farm, the quality of produce grown, the markets initially sought to sell at and any potential hurdles for a successful agricultural program. How extensive the current market is and the size of farm desired will depend on the size of the current market and whether the produce will only be sold locally or regionally. This will also determine when the farm should first be established, if the farm will be supported by the existing market, or if it would need onsite development first. Once the farmer is identified, during his or her first year of production, the farmer should begin to generate relationships and identify a community education plan that involves the local community and the MSMBT retreat community for access both as volunteers and educational classes to encourage a growing agricultural community. This plan should be completed during the first year and, depending on the success of the farm and the relationships made in the community, should be implemented during the second year of harvest or tweaked during that year and marketed during the off season of the second year and implemented during the Spring of year three.

Depending on the growth of agricultural markets in the region there could be opportunities for regional supply, which would be for the purpose of farm expansion, therefore growing employment for the local community. Health food stores in Montgomery, Columbus, Eufala, and Birmingham will be identified as regional market demand. If the market demand is large enough there could be opportunities to continue to expand the sense of place and regional identity of Holy Trinity through creating a co-op model working with other farmers in the region. A quality standard must be set as well as identifications of economies of scale within administration, distribution and marketing costs that a farmer might not need to bear alone.

Case Study 1- Koinonia Farms

In Americus, GA, 66 miles and 90 minutes away, is Koinonia Farms, a retreat space that supports 30 community members (the employees and their families), farms on 111 acres of which 100 are pecan trees, five are organic vegetables and fruit orchards, three are blueberries, and seven are grapes. The pecans are sold and distributed throughout the southeast to stores and through their catalog as pecans and value added products such as chocolate covered pecans, made on site in their bakery along with other goods. Their fruit orchards are used in products at their bakery, sold at the on-site market, Figure 2.1.1 | Sculptures at Koinonia Farms



and sold through their U-pick feature on site. Koinonia Farms is unique in that they combine agricultural production with their retreat center and invite guests to participate in all aspects of community life from meal preparation to bakery production to farming. It is an intentional community seeking to connect people to the land as well as encourage spiritual growth, reflection, and community; characteristics that can add to a sense of place that is already present at Holy Trinity through the Sister's property.

Case Study 2- Tuscarora Organic Growers

Tuscarora Organic Farmers is based in Hustontown, Pennsylvania and is a cooperative of approximate 40 farmers that serves the metropolitan Washington D.C. region. Hustontown is located in South Central Pennsylvania in the Juniata River Valley. The cooperative covers a seven county region including: Bedford, Franklin, Fulton, Perry, Huntingdon, Juniata and Mifflin Counties.

The growers of the Tuscarora Organic Growers (TOG) operate on farms of anywhere between 2 and 60 acres, with the average farm size at 20-30 acres. Most of the farms are family

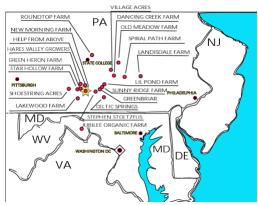


Figure 2.1.2 | Map of Tuscarora Organic Farmers

operated, hiring the occasional help during high demand harvesting seasons. In general, few farms hire large work crews. A common trait of all the farms, and what makes the TOG unique, is the strict certification of third party certified organic produce, and only the best produce from harvest can pass to be sold. This reputation for high quality, organic produce has helped build the market and demand for TOG produce. To ensure the quality of their goods, the TOG maintains an 18-page manual on harvesting, grading, packing, storage and food safety, as well as highly detailed record keeping of the farms, sales, produce demands, and more. Jeff Taylor, Sales and General Manager at the TOG, reported that gross sales are in the low- to mid- seven figures. Seventy-five percent of the sales are returned to the grower within three weeks of the sale of their produce and 25 percent is retained to operate the co-op, including delivery costs to the customers. The TOG aims to operate as a "service at cost", with the goal to break even or earn a "modest net income" (Hicks 2011).

SOURCES:

USDA Food Atlas. http://maps.ers.usda.gov/FoodAtlas/

Trust for America's Health, "F as in Fat Report." http://healthyamericans.org/report/88/

Agriculture Marketing Service, USDA. http://www.ams.usda.gov/AMSv1.0/ams.fetchTemplateData.do?template=TemplateS&leftNav=WholesaleandFarmersMarkets&page=WFMFarmersMarketGrowth&description=Farmers%20Market%20Growth&acct=frmrdirmkt

USDA Small Farm Grants http://www.nal.usda.gov/ric/ricpubs/small_farm_funding.htm\

In conjunction with the agricultural elements previously proposed for the property in question, Industry and Industrial Development were also examined as viable development options. Providing industrial development is an attractive opportunity to return or profit from the land expected by the property owners for any development action. As the previously mentioned agricultural components will require time and investment capital to get started and become an income generating asset for the client, the addition of the industrial development is proposed as either a land sale or lease that would generate revenue and provide the investment capital for the proposed coop farms.

The land sale option will allow for the property to be carved from the main parcels and sold to an industrial developer or an industrial company for a proposed plant or any number of other uses as detailed within this report. As the MSMHT would like to maintain an environmental focus and promote environmentally friendly uses a land use and environmental attorney will need to be consulted for this option so that adequate covenants and deed restrictions may be placed on the property for sale so that the environmental impact to the area is minimal. The added benefit to this option is that the MSMHT-would have no further liability or obligations on the property as it will be off their books and property taxes will no longer be required.

The land lease option will require additional work and understanding of the development process on the part of the MSMHT as they will most likely be involved with planning, permitting, construction, operation, and maintenance of any proposed development. As it is understood that the client does not want to become a developer this option may not be as attractive as the above mentioned land sale. Additional drawbacks are the added commitments that will be required if the MSMHT retains ownership of the land such as continued property tax payments and if the development fails the MSMHT would be left holding a derelict development on their books with thin prospects for moving the asset.

All that being said the path proposed within this report is the land sale of a portion of the property for industrial development.

Industrial Park

The industrial development of the property in question will turn a small portion of the site into an industrial park. The Holy Trinity Industrial Park would maintain several uses on-site including offices, warehouses, and production facilities for companies within the area. The term industrial park is defined as "an area usually located on the outskirts of a city and zoned for a group of industries and businesses", however, due to the environmental focus it is hoped that the site will be more in line with an "eco-industrial park" (Farlex).

An eco-industrial park is "based on a more limited objective of by-product utilization within networks of companies" such that it emphasizes development "in which there is material and energy recycling, and webs of firms that mimic the activities of producers, consumers, scavengers, and decomposers in a natural ecosystem". This concept allows for the waste of one firm to become the input into the production process of one of the other, adjacent companies within the industrial park which provides for cost savings and additional revenues for the firms involved. Therefore more narrowly defined "an ecoindustrial park (EIP) is a community of companies, located in a single region, that exchange and make use of each other's by-products or energy" (Indigo).

Office Facilities

The office component of the proposed industrial park is anticipated to center around the utility companies currently within the area as well as those that need to be pulled into the corridor. The

site could serve as a regional office for the natural gas and electricity companies whose service mains and transmission lines already crisscross the county and even the MSMHT property. Additionally, as the Russell County Water Authority and other municipal water and sewer systems extend service into this area the Holy Trinity Industrial Park is a natural location for a southern annex or office location to service new customers and serve as a way station for operations and maintenance employees. The water and sewer section of this report discusses the use of private "package plants" for wastewater treatment and if that is the path that development takes within this area the offices for the private management companies could also be housed within the industrial park.

As the range of uses is broad within the industrial park even service industry companies could look to this development as a location for them to service the growing population around Fort Benning. Architects, Engineers, Accountants, Attorneys, etc.... could find a natural location within the development. As Highway 165 and the railroad corridors are major thoroughfares through this area, logistical and transportation companies would be natural office tenants as well who may tie into the site becoming a warehousing service area for regional companies.

Warehousing Facilities

The warehousing option for the proposed industrial park is a use that could easily be applied to this development especially with the site's location and access to Highway 165 as well as the rail corridor that runs adjacent to the property. As the area develops, and especially with the existing housing development, retail and residential support uses will be required to service the population within the region. A logistics and warehousing facility at Holy Trinity Industrial Park would fit within the proposed development model and prove to be a profitable enterprise.

Additionally, with the rise in residential households the site could host a self-storage facility within the industrial park to service the community.

Production Facilities

The final and most controversial of the proposed industrial park uses is that of manufacturing or production facilities. As stated previously, it is the MSMHT's desire to maintain an environmentally friendly development and with any land sale the covenants and deed restrictions would be required to limit the scope of any production facility attempting to locate on the site. Facilities involving solvents, heavy metals, electroplating, etc... would be restricted or prohibited from the development, however, those uses with minimal impact would be allowed to locate within the proposed development.

Further expanding on this focus several example developments or case studies exist in this region and the nation as a whole that show how this type of development can crystallize and come into reality. The examples cited in this report are that of the Somerset Industrial Park in Somerset, PA and the AMB Morgan Business Center near Bloomingdale, GA.

Case Study 1 – Somerset Industrial Park

The Somerset Industrial Park was a result of the concerted efforts of several economic development organizations within the county and the larger region. Please refer to the list of several of the organizations below:

- Somerset County Economic Development Council (SCEDC).
- Somerset County Industrial Development Authority (SCIDA).
- Partnership for Rural Industrial Development Enterprises (PRIDE).
- Johnstown Regional Industrial Authority (JARI).
- Small Business Development Center (SBDC).

These organizations and ones similar will be of vital importance to the success of any future



Figure 2.2.1 | View of Somerset Industrial Park Site

industrial park at Holy Trinity as several of them served as facilitators and then maintenance organizations for the development within Somerset, PA.

Demographics

Somerset County, Pa. is an ideal case study for this report due to the similarities it maintains with Russell County, AL. Somerset is a rural county with a population of approximately 77,517 in which a large percentage is above the age of 65 years. The main demographic differences between the counties are due to the fact that Russell County is multi-racial while Somerset County is approximately 95% Caucasian.

Additionally, the labor force of approximately 36,945 and a total dwelling count of 37,638 in Somerset County is comparable if not more rural than the figures for Russell County Alabama.

Tenants

The targeted tenants for the Somerset County Industrial Park are very similar to those types that should be targeted for the Holy Trinity Development. A list of the current tenants is provided below:

- Augustine Die & Mold
- Beckwith Machinery
- Berkebile Oil Co.
- Columbia Gas
- County Assistance Office
- DeVilbiss
- Fleetwood Folding Trailers
- Gilmour Manufacturing Co.
- GPU Energy
- Gribble Trucking & Warehousing
- HMS Host
- NDS
- Pacific Pride

- Somerset City Workshop
- Somerset REC
- Stewart-Amos Equipment
- Verizon
- Wheeler Brothers

As previously discussed and noted within the list several county offices and utility companies have been located within this development which is an opportunity the Holy Trinity Industrial Park should capitalize on with the proposed development.

Case Study 2 – AMB Morgan Business Center

The second case study mentioned is that of the AMB Morgan Business Center which is close to a major port of harbor and airport, so the economic incentives for development are much higher, however, it shares similarities with the proposed Holy Trinity Industrial Park.



Figure 2.2.2 | AMB Morgan Business Center

The AMB Morgan Business Center in Bloomington, GA, is located near Savannah and Fort Stewart. It was built in 2008 as a speculative industrial building for distribution companies attracted to proximity to interstates and the Port of Savannah. The building has 343,000 square feet of rentable space and costs ran at about \$43 per square foot. Although the size and location of this site may not be applicable to the MSMHT site, the building design could be scaled down and accommodate a variety of uses. Most importantly, the case study shows that an industrial development can be sustainably built.

The AMB site is one of the few LEED Gold certified industrial developments in the country. LEED, or Leadership in Energy and Environmental Design, is a program created by the U.S. Green Building Council program to promote environmentally friendly building practices and energy efficient buildings. To obtain LEED certification developers must submit to a review process and show that they are using sustainable materials and integrating design elements that reduce energy and water usage and reducing the development's impact on the environment.

Industrial developments with LEED certification mitigate some of the detrimental effects that may be associated with industrial uses such as water runoff, heat island, water and energy waste, etc. To obtain LEED certification, AMB incorporated the following into the development:

- The roof and pavement fabricated with white reflective material instead of black, absorbent materials like asphalt to reduce air temperatures.
- 20% of construction materials were recycled from post-consumer waste
- 60% of construction materials were originated within 500 miles of the site (40% in 200 miles)
- The landscaping was designed using indigenous, drought-tolerant plants.
- Installed water-efficient plumbing fixtures and energy efficient lighting and HVAC systems

These practices are estimated to reduce energy usage by 32%, save 2 million gallons of water per year, and diverted 84.6% construction wastes from the landfill. The energy and water efficiencies made the building marketable to potential tenants who could take advantage of lower utility costs by located there.

Further, these building practices appealed to a growing number of corporations with mandates to create greener supply chains.

Sources

http://www.aces.edu/counties/Russell/

 $http://www.usda.gov/wps/portal/usda/usdahome?navid=BUSINESS_DEVELOPMENT$

http://indigodev.com/Defining_EIP.html

http://www.thefreedictionary.com/industrial+park

http://www.scedc.net/index.htm

http://www.somersetcountyprospector.com

http://www.usgbc.org/

http://energyace.com/

HEALTH AND EDUCATIONAL SERVICES

Plans to develop the property with an eye towards providing vital services in the area, contributing to the overall welfare and well-being of Russell County, and realizing the financial goals of the MSMHT should be considered. Towards that goal, we propose a combination of health, educational, and recreational facilities and amenities for the property. What follows is a vision which includes a variety of service possibilities, including continuum-of-care and medical facilities, a pre-kindergarten school.

Medical and Continuum-of-Care Facilities

Developing the property in order to meet the medical and health needs of the larger community should be considered. These facilities could be located to the north of the lake or as part of a town center further south (see town center scenarios). Services would be provided to meet a wide variety of health needs emanating from the wider community and from Fort Benning. From medical treatment to therapy to counseling to rehabilitation, the facilities could serve to promote the values of the MSMHT, while simultaneously meeting the community needs of Russell County and contributing to the overall financial health of the Church. We anticipate that many services would target the retirement community, including residents of the property itself. Many of the office facilities could be leased out to private caretakers and physicians. Medical and rehabilitation services would be provided in a safe and welcoming atmosphere amidst a relaxing and scenic natural setting. Counseling services would be especially beneficial for the larger military community. The attached map shows the locations of hospitals and medical services in Russell County (Map 1).

Ambulance Services

Ambulance services present an additional possibility, especially considering that almost all services in the area are located in Phenix City. An ambulance service does exist in Crawford, but this is relatively far away for emergency purposes. The attached map shows the locations of ambulance services in Russell County (Map 2).

Educational Services

Developing the property so as to meet the educational needs of little children in the community, in particular children between the ages of 3 and 5. To meet that need we propose the construction of a pre-kindergarten school as part of a town center on the eastern portion of the site or in conjunction with and as an expansion of the existing pre-K facility already operated by the MSMHT. The development of a pre-kindergarten school at Holy Trinity will greatly benefit those families adjacent to the site as well as families in nearby communities. At present the only schools that do have pre-kindergarten programs are located in Phenix City, Ala. Therefore providing a high quality pre-kindergarten school at the site would be advantageous for parents in the area, in terms convenience, and also for children, in that they will have a firm foundation they can build on in later years.

Costs

For any of the medical faculties or office spaces, we can estimate construction costs by looking at similar building projects. A survey of such projects indicates that construction costs would amount to perhaps \$130 and up per square foot of medical and office space. Depending on the size and scope of the projects, we envision that the establishment of building and complexes could run from \$500,000 to \$3

million. Implementation timelines vary depending on the size and complexity, but a period of 4 to 8 years could be reasonably expected.

For school construction, we can approximate costs by looking at comparable projects. After having conducted research on those ventures, costs associated with the construction ranged between \$94 per square foot and \$120 per square foot. The implementation of a school can take between 2 to 3 years from ground breaking to completion and school opening. Planning and arranging financing can take as much as 2 years prior to that, so construction of a new school tends to be a fairly lengthy process, with finance allocated and committed over a number of years. Of course the length of the implementation process is dependent upon the size and facilities offered. In addition to construction costs, the cost per child enrolled in pre-kindergarten is between \$4000 and \$4600, a significant operating cost burden that would require government or non-profit support to meet the needs of low income families.

Case Study 1- Uchee Pines

With regard to health and retirement services, our case example looked to nearby Uchee Pines. This 'lifestyle center' in Seale, Alabama provides a host of health and counseling programs for its patrons. The center is a nonprofit corporation of the Seventh Day Adventists. Among its programs are lifestyle education, lifestyle counseling programs, and practical training and education program, all under the auspices of a missionary organization. The center provides nutrition, exercise, herbal, massage, and hydrotherapy services.



Figure 2.3.1 | Uchee Pines Logo

A lifestyle counselor tailors an individual program for each guest. Staff members work mainly to address such chronic diseases as heart disease, diabetes, and obesity issues. Six semi-private rooms and 14 private rooms are offered. Health lectures, cooking classes, preventive medicine programs, and counseling to address such issues as smoking and drug use are also part of the offerings. Courses in medical missionary training are provided to medical missionaries. Moreover, an organic agriculture program, radio station, and auto repair shop are located at Uchee Pines. In nearby Columbus, the center runs a vegetarian restaurant and natural food store. The center was established in 1970.

Case Study 2 - St. Joseph Child Development Center

With regard to educational services, our case example looked at St. Joseph Child Development Center, which is located at Holy Trinity, Alabama. The non-denominational Center was founded in 2007 and is run by Catholics; however, for students to attend affiliation is not a requirement. The student population at the Center is diverse: one third are Hispanic, one-third are white or Asian Pacific and one third are African-American. Currently 46 students between the ages of 2 and 4 attend the Child Development Center. The Center runs from August until May, 5 days a week with two sessions: 8am – 3pm and 3pm – 5pm. The cost of attendance is based on a sliding scale in that students pay between \$5 per week, \$35 per week or \$60 per week. The majority of students at the Center are on scholarships; state funded scholarships are available for 4 year olds while church funded scholarships are available for 2 and 3 year olds. The Center acquires funding from private donations (\$110,000 per year), state (\$87,000 per year) and the church provides the facility as well as maintenance costs. For the months that the Center is open it costs approximately \$4000 per child, in terms of operational costs.

Phasing/Sequencing

We anticipate developing the land in phases in order to simultaneously contain expenses while maximizing profits over the course of a multi-year plan. Our conception calls for the continued consolidation and possible expansion of the educational services first, as this project augurs well in terms of balancing costs with benefits. We would then propose establishing the medical and health facilities, given sufficient interest and buy-in.

Issues

These development proposals are constrained by current limitations on the land. Of chief concern is sewage provision, as no sewer lines currently run through the property. We would also seek to lay electric lines and access roads to realize the goals of these projects. To make any of these projects viable, we also need effective internet cable lines. Additional concerns include the potential effects of flooding, a concern which we have sought to redress by locating any facilities above the floodplain. We should also seek to win the support and buy-in of the wider community for these projects.

Sources

Medical Services:

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Ambulance Services:

h t t p : // m a p s . g o o g l e . c o m / m a p s ? h l = e n & b a v = o n . 2 , o r . r _ g c . r _ p w . , c f . osb&biw=1795&bih=934&um=1&ie=UTF-8&q=ambulance+services+in+russell+county+alabama&fb=1&gl=us&hq=ambulance+services&hnear=0x888cdfb3e4c1b8f3:0xf23a963585b6cfa7,Russell,+Alabama&ei=okezTs_bIs69tgfmw7jEAw&sa=X&oi=local_group&ct=image&ved=0CBMQtgM

ENVIRONMENTAL PROTECTION

One possible use for the property owned by the Missionary Servants of the Most Holy Trinity is to employ strategies that conserve the natural resources found on the property. The conservation scenario, therefore, aims to identify uses for the property whose primary purposes are directly tied to conservation of the land's natural resources, avoiding development on areas of the property which have not previously been developed.

The conservation scenario consists of:

- Conservation subdivision
- Easements
- Avoiding development in sensitive areas
- Cultivating native forest
- Timber or wildlife corridor on western portion of site
- Leasing land
- Recreation

While conservation easements may not provide direct financial benefits, they will have an indirect economic benefit by increasing the property value of nearby properties.

Another benefit of this scenario is that it is still viable in the absence of an on-site sewage treatment facility of county sewer infrastructure.

SCENARIO COMPONENTS

Conservation subdivision

The land which is currently being used for agriculture can be used for the conservation subdivision. This is the most suitable location for a conservation subdivision because it is level and would not incur the costs of grading and also because it is relatively clear so clearing additional forest could be avoided.

Conservation subdivisions are typically defined by "the clustering of homes or developments to protect environmentally sensitive areas from encroachment" (Bergstedt 1999). Shared open space is typically preserved and buildings are intentionally sited in less environmentally-sensitive areas. Because buildings are more densely concentrated than in a traditional subdivision, less land is consumed and more open space is conserved, which can reduce disturbances to the natural environment.

One of the best ways to describe a conservation subdivision is to compare it to what it is not, which is a typical conventional subdivision development. In a conventional subdivision, the primary focus is cramming the maximum allowed number of residential lots onto a parcel of land. In order to do this the site is usually first stripped of all trees and vegetation. Afterward it is bulldozed and graded so that it is as flat as possible. If there is a stream or pond that exists on the property it may be drained, diverted into pipes, covered, or have construction occur right up to its edge. The increase in impervious surfaces and the loss of vegetation to absorb rain usually makes it necessary to construct gutters and a stormwater retention structure. In contrast, a conservation subdivision tries to balance new development with the environment and the original state of the land.

Developers who seek to construct conservation subdivisions usually try to create sustainable

growth. Conservation subdivisions usually try to protect many types of land, geographical features, and biological communities. Developers pay attention to preserve features such as floodplains, wetlands, steep slopes, wildlife species habitat (for threatened or endangered species, as well as those which are not), aquifer recharge zones, woodland and forests, farmland, areas of specific soil composition, as well as historic, archaeological, and cultural features. All of these areas are "designated as nonbuildable" and will typically make up between 50 and 90 percent of the subdivision as preserved land (Benedict 2006, 168, 165).

There are many benefits to building conservation subdivisions in favor of a traditional subdivisions development. Those benefits include, but are not limited to:

- Wildlife management; riparian buffers, managed wildlife meadows and corridors allow a wide variety of plants and animals to flourish;
- Improved water quality protection via buffers, whereby the areas of natural vegetation help store and treat pollution from run-off including fertilizers. Typically "wooded buffers 100 feet deep on slopes not exceeding 8 percent" provide adequate filtration of runoff, most conservation subdivisions can fulfill this requirement (Arendt 1999, 80);
- Increased aquifer recharge via improved stormwater management. Filtration and replenishment of the water table is a result of reducing disturbed land during the construction period; leaving a greater portion of the parcel in its natural state; reduction of impervious surfaces; inclusion of wider buffers and bio-swales;
- Opportunity to use environmentally sensitive sewage treatment and disposal, such as land treatment, spray irrigation, wastewater reclamation and reuse, and constructed wetlands, to treat water and sewage rather than dumping it (Arendt 1999, 83);

Recreational and Social Benefits

- Create pedestrian friendly neighborhoods- Narrow, curvy roads within conservation subdivisions reduce the speed of cars, increasing pedestrian safety. The creation of formal greenspace, common areas, sidewalks, and trails, helps draw people out onto the street and can help induce more interactions amongst neighbors, as well as allowing residents to get some exercise outdoors.
- Lifestyle- Conservation subdivisions "foster...a stronger sense of community pride than often exists in conventional developments" and encourages more community activities such as picnics, parties, sporting events as well as home and garden tours (Arendt 1999, 85).
- Greenways and trails- With strong local governmental support and planning as well as the developers who are motivated to follow conservation design, a network of greenways and trails can be created and even the connection of multiple conservation subdivisions. The possibility of a greenway network should be explored for the Holy Trinity site, the surrounding properties, and Russell County.

Economic Benefits

- Lower costs associated with development (for construction, engineering, and infrastructure)- Cost reductions include: less clearing and grading of the property; reduced amount pavement for streets; shortened utility and sewer lines. When less than half of the site has to be altered and built on it dramatically reduces costs.
- Marketing and sales- It is often easier to market and sell homes in conservation developments. Realtors can capitalize on the amenities created and preserved through conservation design and use an "environmentally oriented marketing strategy" to attract buyers (Arendt 1999, 89).
- Home value- Homes in conservation subdivisions often appreciate faster and sell faster and for higher prices than conventional development homes. A study from Amherst, Massachusetts revealed

that homes in a conservation subdivision sells for \$17,100 more than a home in a conventional development other studies have shown properties near greenways increase value by 10 to 30 percent (Benedict 2006, 74). Another study from the Midwest showed "that lots in conservation subdivisions carry a premium, are less expensive to build, and sell more quickly than" those in other subdivisions (Mohamed 2006, 376).

• Benefits to the region- There is also evidence that conservation subdivisions can "increase returns... to cities" or other political jurisdictions "in the form of tax revenue based on assessed home values" (Bowman 2009, 329).

The blue areas in Figure 1.6.2 (page 24) should be excluded from development because of steep slopes and wetlands/floodplains. As previously discussed, these areas should not be developed because Floodplains provide important functions: depositing nutrients into soils; filtering pollutants; and recharging groundwater. Also, flooding can be damaging to built structures. Moreover, these lands should be permanently conserved, because they can increase the property value of nearby properties. Some lands (indicate which) can be sold or leased to businesses like a camp, a co-op/extension, or environmental education center.

Native forest

In this scenario, it is recommended that timber harvesting be discontinued on the eastern portion of the site because it would disturb the residents in the conservation subdivision. This forest could instead be cultivated as a site for native plants, restoring this land to its natural state. Timbering on the western portion of the site could be continued as the slopes of this portion of the site are not suitable for development. This portion can continue to be a source of revenue to the landowner.

Alternatively, this land could be used for a green corridor for wildlife habitat by collaborating with neighboring property owners.

Recreation

The site could host recreation such as trails. Retaining forest on the portion of the property east of Route 165, and the area surrounding Lonesome Duck Pond, could be used for trails and a park.

Sewage

One factor that influences all scenarios proposed to MSMHT is the lack of sewer infrastructure. The advantage of the conservation scenario is that this scenario is still viable even if this site is not serviced by sewer.

If a sewer treatment facility were sited on MSMHT property, the southwest portion of the site is an ideal place for the on-site sewage treatment plant and constructed wetlands.

Case Study: Serenbe Community

The Serenbe community is located within the Chattahoochee Hill Country in rural Georgia. Serenbe is a 1000 acre community that was designed to "demonstrate how development can accommodate the need for housing with minimal impact on nature." The land plan of Serenbe attempts to preserve approxi-

mately 70% of green space, with 30 acres dedicated to farming. The principles of environmental sustainability have been integrated into every design aspect of Serenbe. For instance: each Serenbe building project is designed to flow with the terrain, disturbing the natural landscape minimally. The community has been designed with accessible pathways to promote walking. Native plants and organic landscaping techniques are used so as to remove the need for chemicals and expensive lawn maintenance. All structures at Serenbe are constructed to building standards mandated by EarthCraft House Program. Serenbe encourages land conservation, clean technology and green practices, such as recycling and composting, alternative fuel usage for maintenance vehicles, geo-thermal heating and farm-to-table.

Serenbe is not supported by a public utility's conventional sewer plant but is serviced by a local/privately operated wastewater collection system. An environmentally friendly and state-of-theart decentralized natural wastewater system and a constructed natural wetlands and sand filter system have been designed for the community.

The four components of the system include:

- 1. The Plant: comprised of man-made constructed wetlands, filtration basins and circulating pumps.
- 2. The Collection Tanks: amasses the household wastewater, preserves the solids (for decomposition), and passes the liquids (to the

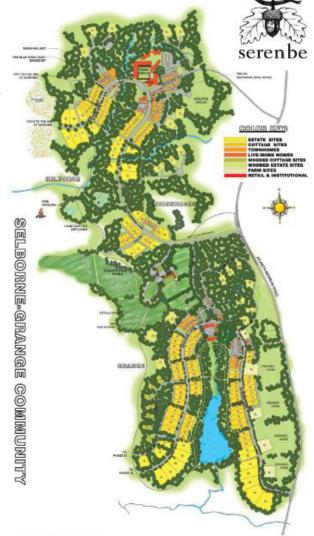


Figure 2.4.1 | Serenbe Site Plan

- composition), and passes the liquids (to the plant for "natural" treatment). Single family homes run off of their own 1,500 gallon tank. Other housing units and live/work units are linked in series and piped into larger shared "communal" tanks. The tanks discharge their effluent via "gravity" or "pumping", depending on the geography and location of the lot.
- 3. The Land Application Field: the plant's effluent, once treated, is pumped to the cow pasture and expelled into the ground via piped sub-surface drip lines.
- 4. The Re-use System: In addition to pumping the treated, clean water to the land application field, it is also pumped to each individual homeowner's yard to be used, also, for subsurface drip irrigation.

The Serenbe community built a biological wastewater treatment system because it did not have a traditional sewer system. MSMHT might consider building the same biological system, as this sewer system will preserve the integrity of the natural environment. The challenge the client will face in building this biological wastewater treatment system is paying for the initial capital cost of the system. However this preliminary cost could be recouped if the client charged the residents a monthly price for utilizing the biological system or add an amount to the cost of the home and also charge a monthly rate. The client could sell or "add- in" the biological sewer system to the local utility to avoid maintenance and operation costs. The residents of the Serenbe community are currently charged \$40 a month for the use of the sewer system.

The founders of the Serenbe community also faced financial issues in the earlier stages of the project. The founders of Serenbe were not able to acquire funding for the project from the bank in the beginning; instead, certain aspects of the project such as the model home was built by the generosity of the development team (Martin Dodson Homes). In addition, the architect Lew Oliver did not require to be paid upfront; rather, he received a commission as each home at Serenbe sold. Furthermore Southface Energy Institute provided a Building America grant to help the project. MSMHT can utilize many of the same resources as Serenbe especially since those involved at Serenbe will be familiar with conservation subdivisions.

If the client were to build an environmental education center, a transfer fee that would need to be paid by the homeowner during the sale of the home could very well fund it. In essence this transfer fee can be utilized to fund any project of the client that requires financial assistance. In the case of Serenbe, the open space land will be deeded to a Serenbe land trust and a 1% transfer fee will be assessed on all home sale; this will fund the land trust as well as the Serenbe Center for Arts and Culture.

SOURCES

Arendt, Randall. Growing Greener. Washington: Island Press, 1999.

Benedict, Mark A. and McMahon, Edward T. Green Infrastructure. Washington: Island Press, 2006.

Bergstedt, Amy. et al. "Conservation Subdivisions" UGA Rivercenter. Spring 1999. http://www.rivercenter. uga.edu/education/etowah/documents/conservation_subdivisions.htm

Bowman, Troy, et al. "Valuation of open space and conservation features in residential subdivisions" Journal of Environmental Management. 2009.

Miller, Tyler G. Living in the Environment. Pacific Grove: Thomson, 2004.

Mohamed, Rayman. "The Economics of Conservation Subdivisions: Price Premiums, Improvement Costs, and Absorption Rates" Urban Affairs Review. 2006 41: 376.

Serenbe Community. 2008. http://www.serenbecommunity.com/home.html

Phase 1

- Implementation of easements
- Discontinuation of timber harvesting and agriculture on eastern side of site
- Lease areas of property not intended for conservation subdivision or environmental protection
- Design layout of conservation subdivision and acquire funding for conservation subdivision

Phase 2

- Begin construction of first conservation subdivision on the northern portion of the eastern side of the site
- Begin construction of trails within areas surrounding first conservation subdivision
- Develop area surrounding Lonesome Duck Pond into a park

Phase 3

- Begin construction of second conservation subdivision on the southeastern portion of the eastern side of the site
- Begin construction of trails within areas surrounding second conservation subdivision
- Develop area surrounding Lonesome Duck Pond into a park

Phase 4

- Begin construction of third conservation subdivision on the southwestern portion of the eastern side of the site
- Begin construction of trails within areas surrounding third conservation subdivision
- Develop area surrounding Lonesome Duck Pond into a park

Figure 2.4.2 | Conservation Timeline

TOWN CENTER AND RESIDENTIAL STRATEGIES

Suitability Analysis

To find a potential developable site for the town center, we analyze suitability of the site. In this analysis, four factors are included: flood plain, roads, existing buildings, and topography. Firstly, a steep slope is not suitable to build town center. And to attract people coming in to the town center, proximity to highway 165 and the existing buildings are preferable. Last but not least, town center can take advantage of the lake view, but also it needs to incorporate environmental perspectives to protect the water.

The map below shows the four factors and the two potential developable sites. In this map, only green and light green areas are suitable to develop in terms of slope. Both of the two sites are close to highway 165. However, the southerly 60 acres land is preferable, because it is more accessible than the 35 acres site, and it is closer to the church.

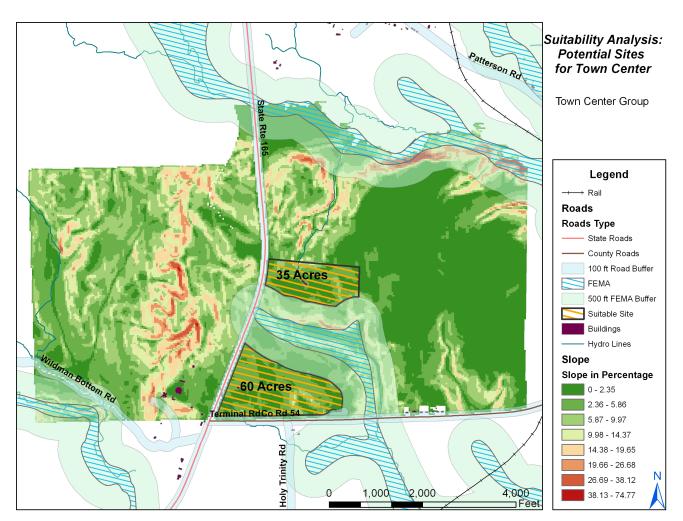


Figure 2.5.1 | Suitability analysis for a town center development

Since the bottom 60 acres land are more suitable for a town center development, we looked into its soil type to confirm its suitability. There are four types of soil in the 60 acres potential site. By doing some research of soil type, we identified that three of them are suitable for urban development, and only Troup-Springhill-Luverne complex, which lies at the lower right part may not be suitable for town center, construction. This can be seen in Figure 2.5.2.

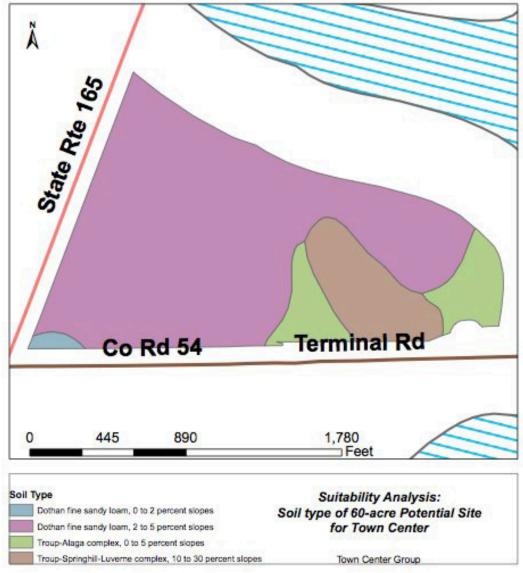


Figure 2.5.2 | Soil types for potential 60 acre town center site

We begin the discussion of the Town Center scenarios with two case studies.

Case Study: Serenbe - Chattahoochee Hills, GA

Serenbe is a good model both for an environmentally based as well as a village centered development scenario. It is the center of a 1,000 acre community located in part of the city of Chattahoochee Hill Country near Palmetto, Ga. Built in 2000, founder Steve Nygren and several other investors developed the concept as a preventative alternative to urban sprawl, while providing an eco-friendly environment for the more than 1,000 people it serves. The property boasts commercial space (several local restaurants), residential homes, art galleries, original shops, stables, and a 20-room inn. It was developed with a focus on land preservation, agriculture, energy efficiency, green building, walkability, higher density building, arts and culture, and community living for multiple generations.

Serenbe shares some similar characteristics Holy Trinity, making it a useful case study in the town center planning. The rural and natural environment found at Serbene is similar to that of Holy Trinity. 58

They are also relatively close in scale, as Serenbe is 1,000 acres and Holy Trinity controls 1,416.5 acres.

The development provides a good model for land conservation and environmentally-oriented development. Perhaps its most significant feature, the Serenbe master plan calls for preservation of at least 70% of the acreage. The site also devotes 30 acres to certified organic and biodynamic farming, which services a three thriving restaurants and a farmer's market. Its omega-shaped hamlet forms serves as an excellent conservation subdivision example, as it is carefully fitted into the natural landscape forming an interface between green, wetland and watershed areas of the site and the surrounding sloping hills. The four planned hamlets have similar housing typologies with a mix of single family attached and detached dwelling, which are all built to the strict green building standards of EarthCraft Home.

While such features provide a solid basis for the planning of a town center at Holy Trinity, it should be noted that Serenbe caters to a much more affluent demographic than MSMHT would likely target. Therefore, the inclusion of low- to moderate-income individuals must be considered. This can be achieved with the integration of affordable and senior housing, along with providing access to jobs through economic development activities.

Case Study: Big Sky Town Center - Big Sky, MT

Big Sky Town Center is probably the least comparable to Holy Trinity than all other case studies presented, as it is located in the ski and summer resort of Big Sky in the Rocky Mountains of southwest Montana. The site is also just 15 miles from Yellowstone National Park, making it a hub for world-class recreation and nature. Despite its dissimilarity location-wise, Big Sky offers framework for creating a unique and attractive town center that provides a nature and outdoors-oriented environment for both residents and tourists.

The Big Sky site is a 165-acre walking village surrounded by snow-capped peaks, catering heavily



Figure 2.5.3 | Big Sky Town Center Master Plan

to tourists. Big Sky offers a variety of outdoor activities that are potentially viable at Holy Trinity: public and private golf course, fly-fishing, biking, hiking, white water rafting, bird watching, and horseback riding. Such activities and amenities are conducive to the local environment of Holy Trinity, and are likely to attract a ranging demographic from all over the state.

Case Study: Babcock Ranch - Charlotte County, FL

Although Babcock Ranch is a proposed development at a much larger scale than Holy Trinity, the goals and principles are essentially the same. To create a well-designed blend of public and private space that enhances the quality of life for the surrounding area in an environmentally friendly way. Before this large development proposal, Babcock Ranch was a 91,000 acre property owned by the State of Florida and a private interest. Much of this land is an example of untouched native Florida, and over 80 percent of it will be protected as greenways, parks, and conserved habitation. A variety of residential, retail, office, and industry will be provided within this development allowing residents to experience a community where employment, housing, and shopping are available nearby (Partners).

Sample Town Center Scheme

Considering the physical features of the land as well as demographic and economic characteristics of the community, we divide the site into two phases. Phase I is the westerly portion of the site, which is closer to the highway and the church, and phase I is the actual town center. Phase II is the easterly portion of the site, which is closer to the lake. And it best fulfills like a town center potential for future use.

The town center scheme has four major types of uses: retail/commercial/office, recreation, housing and civic space. We want to connect the church with the town center. A road extended along the axis set up by the church functions as the major road into the town center, its axis marked with civic space. Commercial/office spaces are built in proximity to civic space, preferably at ground level with the probability of residential above. Along highway 165 and along Terminal Road are high value sites that should be reserved for further more intensive use – possibly retail and health or other service facilities. A recreation center is built at the north of the town center, anchoring the axis from the civic space and serving planting fields in the near term and the lake. The recreation center can provide for food service and minimum retail. Diversified types of housing can be located within the proposed block structure.

In the second phase, the block structure can be extended into the site, accommodating additional residential development. Civic space/parks or other environmental-friendly development are some potential uses.

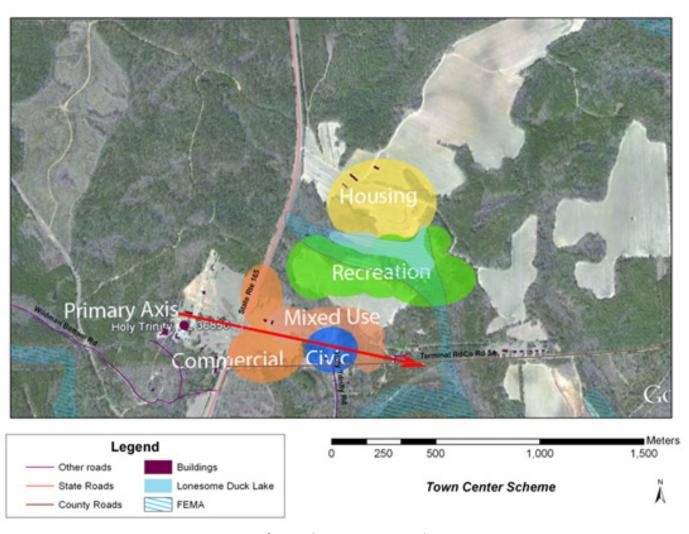


Figure 2.5.4 | Sample Town Center Scheme

Retail

An analysis of retail space shows that it is likely to remain at convenience scale for the foreseeable future. In the US, the average per capita shopping center space is 23.1 square feet, and the per capita retail space is 46.6 square feet. According to these standards, about 250,000 square

	Population 2010	Shopping center space (sq ft) needed	Retail space (<u>sq</u> ft) needed
Census tract 312	3,990	92,169	185,934
Census tract 309.02	6,946	160,453	323,684
Total	10,936	252,622	509,618

Figure 2.5.5 | Basic shopping center and retail space needed

feet of shopping center and 500,000 square feet of retail space are needed by current population living in the county. Most of the needs, like grocery stores, department stores, bank branch, restaurants, drug stores and movie theaters, are available in Phenix City and Columbus, considerable population growth, not anticipated would be required to anchor the site with retail space.

Residential

Residential is a vital component in the town center scenario. As one of the guiding principles for sustainable development, a mix of housing must be provided to meet the range of needs and create a sense of community. With 60 percent of Russell County being comprised of single-family homes, Holy Trinity should consider pursuing a more diverse approach to housing development. The town center will offer a range of housing types, sizes, densities, and income.

Housing Development

This proposal would establish a housing development on the eastern part of the property, south of the lake. The housing development would be tailored to meet the needs and interests of both the local community and members of the military community, but would mainly target retirees. Of course, other segments of the population are welcome to move in, but we anticipate that retirees would be most interested, especially given the on-site location of medical facilities and the possibility of an adjacent golf course. The development would include a number of different types of housing configurations, including 1, 2, and 3 bedroom units. The development would be built close to the lake to take advantage of the beautiful lake views. An interconnected series of pathways would exist to link the housing units with one another and the larger community. Amenities would include a boardwalk along the creek, a recreational center, a community garden, and a park and courtyard. In order to promote the sustainability aspects of the development, we propose covering part of the property with solar panels for solar power, as well as incorporating wind energy generators. Parking will also be located on site, and a road would wend its way through the property to order to enhance access to the individual housing units.

Townhomes, multifamily apartments, and single-family could be incorporated in the town center concept. These housing types will accommodate high, middle, and lower income, as well as elderly residents. To encourage an economically diverse and stable environment, the housing types and income ranges will be mixed and evenly distributed. The lands north of the lake may be suitable for a conservation subdivision approach, where homes are clustered so that much the land can be available for cultivation or conservation. The homes will incorporate innovative green building techniques and strive to optimize affordability, comfort, safety and aesthetics.

The mix of residential sites could be strategically positioned according to the block structure incorporating retail where possible linking to the civic space and the recreation center. This centralized location increases accessibility and walkability for future residents, particularly seniors.

- The most ideal location will be along the proposed north-south road which connects the planned town center to the recreation site. This area has the greatest short-term development potential (within 5-7 years). This site could be expanded to both the north and east as the proposed recreation site progresses (10-15 years).
- Housing site(s) may also be viable along the proposed access road, which crosses State Route 165 to connect Holy Trinity Church to the development site on the East of Route 165 (Yellow blocks in the above picture indicate residential sites).
- Larger and higher priced single family residential would also be suitable on the northern side of the lake. This area could potentially be developed as a conservation subdivision.

Housing Mix Recommendations

The planned development calls for a flexible block street-grid of around 240 ft. by 360 ft. Based on general lot and unit sizes for each property type, the rough approximate number or units each block can hold are as follows:

- 12 Single-family Homes
- 24 Townhomes
- 48 Multifamily Apartments

Ideally, a mix of housing types would be built in most street blocks. Thus, the number of units per block should be adjusted accordingly. The following are recommendations on how the residential sites' unit mix could be distributed:

Single-Family Housing

The sites could consist of two to four bedroom single-family homes for purchase. These homes can range from 1,500 to 3,000 square feet, which is slightly below ranges of nearby developments such as Villages at Westgate (2,000-4,000 sqft) and Registry at Fort Benning (2,500-5,000 sqft). While the majority of the homes will be market rate, at least 20 percent should be affordable to residents earning 80% or less of the Area Median Income (AMI).

Townhomes (for Purchase and/or Lease)

To diversify a single-family dominant area, the proposed site should incorporate for sale and or rental two to three bedroom townhomes, ranging in size from 1,200 to 2,000 square feet. While these units will also be both market rate and affordable, they will provide middle- to low-income households an alternative to the costly large single family homes as well as confined mobile homes. A recommended tenant mix would consist of 50 percent market rate units and 35 percent affordable units at 100% AMI or below, with the remaining 15 percent set aside for residents earning 60% or below of AMI.

Senior and Multi-family Apartments

Apartments also seem to be viable, as it can provide affordable housing options for very low-income seniors and individuals, as well as an alternative to large owner-occupied single family homes. A three to four-story 60-70 unit age-restricted senior apartment should be included, with studio and 1 bedroom units, all of which are affordable at 60% of below of AMI. A three to four-story 50-60 unit affordable

rental apartment should also be considered. It could potentially be comprised of 1 and 2 bedroom units, of which 25-30% could be market rate, and the remaining units could be evenly split between 80% AMI and 60% AMI affordability.

Manufactured Housing

Manufactured housing has been explored as an option by the client. The MSMHT hope to provide low-income housing as well as serve the aging population of Russell County. Manufactured housing is a short-term solution that would allow the client to serve both of these groups. Manufactured housing has become a popular choice for retirees (Image 2). Typically, families will own their own home, and the land the home sits upon is rented. Another option is for the land to be owned in part by all residents of the manufactured home community, and owners would pay HOA fees (1).

The low building cost, coupled with the ability to function on a septic system, makes manufactured housing an ideal first phase in development. Manufactured housing has the advantage of being 10 to 35 percent less expensive to build than similar site-built homes. In addition are fairly popular in the sunbelt. This form of housing is highly regulated, making this housing choice not only affordable, but safe as well (Image 1). Federal laws require, "smoke detectors, escape windows, and limited combustible materials around furnaces, water heaters and kitchen ranges" (2).

A good local resource is the Alabama Manufactured Housing Commission. The AMHC serves as the state regulatory agency, and enforces installation program standards and construction standards. The agency also conducts inspections and offers training to manufacturers and retailers (3).

Financing

To ensure a diverse environment, a mix of housing types and income levels must be incorporated. Financing for mixed-income developments can be complex, as it is commonly layered with government subsidy, private capital, and nonprofit and philanthropic funds. This blend of financial resources requires support and cooperation among the public, private, and nonprofit sectors. Below is a list of potential funding sources and partners.

RETIREMENT HOUSING

To consider the context and merits of retirement housing as a component in development strategies, we consider nearby models.

Nearby housing development:

Fairfield Manor in Columbus is a comparable retirement community. "Fairfield Manor is a three-story Independent Living Apartment Community specifically designed for older adults who are at least 62 years of age. There are 74 one-bedroom apartment homes, four of these homes are handicap accessible designed to benefit the mobility impaired and one unit is provided for those who are hearing and/or visually impaired".

Nearby nursing homes/retirement communities:

The closest nursing facility is in south Columbus 13 miles north of the property.

South Columbus Personal Care 2440 Mesa Street, Columbus, GA 31903

What Could Exist?

Because of the lack of retirement housing in Russell County there could be a significant population for this. Younger residents of Russell County are moving closer to the city of Columbus, and the population remaining is aging rapidly.

Ideally, units will be single story, or wheelchair accessible duplex-style or small single-family housing. Since this development will service a smaller segment of the population, this fewer units are needed in comparison to neighboring retirement communities. Limiting the size of the retirement community will also aid in restricting density. Limiting the distance residents must walk to a neighboring house or retail services will allow for a community feel as well as making it easier for those with limited driving capabilities to still get groceries, fill prescriptions, and socialize.

A model for this type of housing can be found in California at Air Force Village West. AFVW is a Continuing Care Community (CCRC). It is a full-service community designed for a stress-free lifestyle, comfortable housing and the added benefit and security of long-term healthcare. The long-term care concern of how and where to find quality care at affordable rates when needed, has become "the" most important issue seniors are faced with today. Long-term care will be a reality for an unpredictable percentage of us. The AFVW Health Center offers Assisted Living apartments for those residents who may need support in daily living, a Skilled Nursing facility for those who may require professional medical care, and Special Care dedicated to the needs of Alzheimer and Dementia. Residents will feel secure knowing that future long-term health care needs will be met in familiar surroundings, at affordable rates.

Instead of buying/owning real estate, residents of AFVW purchase a continuing care contract. The contract provides a comfortable home for life and various levels of health care, when needed. Therefore residents aren't burdened with property taxes, maintenance and landscaping. Residents may select and reserve a residence of their choice, for an agreed-upon time, with a \$5000.00 deposit, after which a monthly service fee is paid to cover a meal plan, a guarded, security services, transportation in AFVW buses, house-keeping, complete inside and outside home maintenance, pest control, emergency nursing care, and a social director to plan activities (http://www.afvw.com/air-force-village-faqs.php).

Because of the unique needs of an aging population, retirement housing is completely reliant on neighboring medical facilities. At the least a pharmacy, grocery store, and general physician within walking distance are necessary. Access to emergency medical care is also essential.

According to the National Private Duty Association the average annual cost per resident of a nursing is about \$70,000. The average cost per resident for assisted living is \$36,000(http://www.privatedutyhomecare.org/downloads/NPDA-FactSheet.pdf).

How Long?

A 20-year timeline was used to propose phased development of the retirement housing options.

- 1-5 years Secure developer, seek funding opportunities available for low-income retirement housing
- 5-10 years Build sewage facility, clear land parcels for build, lay down necessary infrastructure, finalize partnerships for medical care (i.e. hospital transportation, on-site clinics, and pharmacy)
- 10-15 years Build 10-20 units, build necessary medical facilities, set up and initiate transportation services (public and/or private), Begin selling units and/or continuing care contracts
- 15-20 years Complete all (40) units, add retail spaces

Civic Space

Civic space is an important aspect of a community, providing for a variety of activities vital for good quality human life. This type of well-designed space is lacking in the Columbus MSA, especially in the area surrounding Holy Trinity. The only other pedestrian friendly public space allowing for hanging out, walking, eating, reading or meeting other civic needs is in downtown Columbus, Georgia.

The proposed town center could incorporate a number of public functions framing a town square. This could provide various community services, be an important gathering place, and benefit the community in a variety of ways. It should invigorate the area providing a vibrant location for further housing or retail merchants. The civic block will be a space where people want to be, creating something special and unique for the community. Finally, this area will foster human connections between a diverse population by providing a space for the entire community (Spaces, DATE).

MAP WITH BLOCK STRUCTURE, WITH CAPTION

SOURCES

- (1) Modular Home Communities. 2011. http://www.seniorresource.com/hmhc.htm
- (2) The Advantages of Manufactured Housing. Manufactured Housing Institute. 2011. http://www.manufacturedhousing.org/media_center/quick_facts/advantages.htm
- (3) Alabama Manufactured Housing Commission. 2011. http://www.amhc.state.al.us/Assistance.htm Kitson and Partners. Babcock Ranch Southwest Florida's City of Tomorrow Fact Sheet. In Babcock Ranch (Ed.).

Project for Public Spaces. Approach to Town Squares, from http://www.pps.org/squares/approach/

An analysis similar to that for housing was put together for another of the suggested recreatinaly oriented development alternatives.

GOLF COURSE

What Already Exists?

Figure 2.6.1 shows a geographic representation of the known courses in the vicinity of the Columbus Phenix City MSA. There are currently 11 courses within a 20-mile radius. 2 are private country clubs with limited access available to the public.

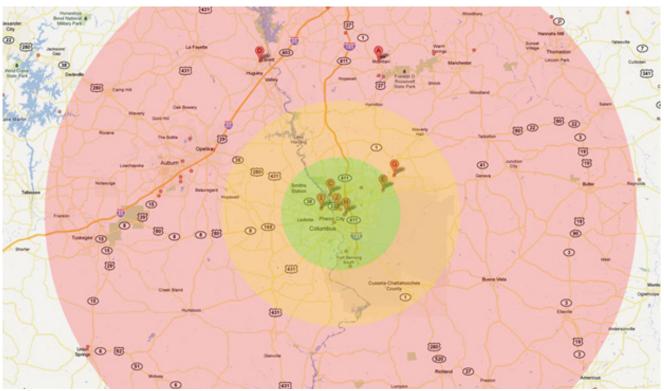


Figure 2.6.1 | Golf Courses at 5, 10, and 50 miles from Columbus Georgia

What Could Exist?

Most golfers expect a golf course to have 18 holes with a par of about 72, plus a practice range and practice greens. This typically requires from 140 to 180 acres of useable land.

Golf course construction costs vary greatly throughout the world. Most developers or communities that develop a golf course in the United States can expect to spend at least two million dollars for a modern regulation-length golf course, not including the cost of the land and many other factors, but that number can vary greatly due to location, land condition and more. The cost per hole can vary from \$50,000 to more than \$575,000 for some upscale courses. Those considering the development of a golf course should consider a realistic budget that includes clearing, grading, drainage, construction of tees, fairway and fairway features, greens, sand bunkers, irrigation system, seeding and grassing, shelter, bridges, cart paths, and more.

It must be emphasized that the cost of developing a golf course is separate from other factors such as the cost of the land, clubhouse, entry road and parking lots, other support facilities, the golf course architect and other necessary professional fees. In addition, maintenance costs usually run be-

tween \$250,000 and \$650,000 annually, plus club operations and golf cart fleets. Costs will vary depending upon the type of facility constructed, terrain and soil conditions, climate and development goals of the project. Future steps would include the consultation of a golf course architect and developers of the field to determine the site's applicability to a golf course.

How Long?

20-year timeline

- 1-2 years Secure a developer, seek funding opportunities, build a driving range in the interim to generate low-level cash flow and bring golf traffic to the site
- 2-3 years Full course design and financing completed, begin building
- 3-5 years Construction complete, begin researching secondary industries to operate adjacent to the golf course

It should be noted—and stressed—that the above nominal analysis assumes a market for golf. A few years ago, and maybe a few years hence, a golf course development may have seemed feasible. Currently, and for the foreseeable future, no such market exists.

GREEN SPACE

Green space is recommended in several areas of the MSMHT site. On the eastern half of the property, the following areas are suggested: encircling the housing subdivision; around Lonesome Duck Pond; and a trail connecting the housing subdivision to the town center, as well as trails connecting this area to a trail along the northern border, near Dry Creek. Green space activities are suggested on the western half of the property as a system of trails connecting special places, like the knoll to the north and the creek to the southwest.

Recreation and Green Space

Retaining green space around the housing conservation subdivision would have a positive impact on property values. Many studies have been done to demonstrate the benefits of siting property near permanently protected green space:

- Boulder, CO: value of property directly adjacent to green space is 32% higher than property located 3,200 feet from green space (Park Service, 1990)
- Concord, MA: the appreciation rate for cluster development with protected open space was 26 points higher than the rate for residential properties which had significantly larger private yards but no associated open space (Lacy, 1995)
- Amherst, MA: return on investment average homes in an open-space community is higher in conventional development, even though lot sizes were double the size. The average annual appreciation rate was several points higher and selling price was 12% higher. (Lacy, 1990)
- Salem, OR: the property value of land directly adjacent to open space was \$1,200/acre greater than land that was not adjacent to the open space (Park Service, 1995)
- "A land developer from Front Royal, Virginia, donated a 50 foot wide seven-mile easement for the Big Blue Trail in northern Virginia after volunteers from the Potomac Appalachian Club approached

him to provide a critical trail link along the perimeter of his second home subdivision. The developer recognized the amenity value of the trail and advertised that the trail would cross approximately 50 parcels. All tracts were sold within four months" (Park Service, 1995).

Lonesome Duck Pond

Because of the attractiveness of Lonesome Duck Pond, it is recommended that green space around this amenity be retained. This area could serve as a park for residents and visitors.

Trails

In addition to encircling the housing subdivision with green space, it is recommended that green space be retained for a trail network. One trail could lead from the housing subdivision to the town center to be located near the intersection of Route 165 and Terminal Road. Another trail could lead from the housing subdivision to north to the trails located along the northern border of the property. The area near Dry Creek should be retained as green space due to its location in the floodplain. The trail system could tie into the system in the MSMBT proposal, as well as, by agreement with the adjacent property owners, to the Chattahoochee River and the Old Spanish Fort.

SOURCES

Lacy, Jeff. August, 1990. "An Examination of Market Appreciation for Clustered Housing with Permanently Protected Open Space." Center for Rural Massachusetts Monograph Series. Amherst, MA: University of Massachusetts. http://www.capeelizabeth.com/council_packets/2011/03%2021%202011%20Ordinance%20Committee/article-1.pdf

National Park Service. "Economic Impacts of Protecting Rivers, Trails, and Greenway Corridors." 1995. http://www.nps.gov/pwro/rtca/econ_all.pdf.

PART III: PROPOSALS

DEVELOPMENT FACTORS

DEVELOPMENT CONSIDERATIONS

LAND MANAGEMENT

10-YEAR SCENARIO

20-YEAR SCENARIO

RESOURCES

RECOMMENDATIONS

Development Analysis

To understand the development potential of the subject property, an analysis of the area was completed. The study area chosen was generally north of the subject property, south U.S. Highway 41, east of County Road 39, and west of the Chattahoochee River. The following was analyzed.

- Inventory of Developed and Undeveloped Land
- Competitive Properties
- Absorption of Single-Family Lots

This study was completed by analyzing current property information from the Russell County Appraisal Department. Each parcel that is shaded red on the map indicates a developed property, and each parcel that is shaded green indicates an undeveloped property. As displayed much of the Highway

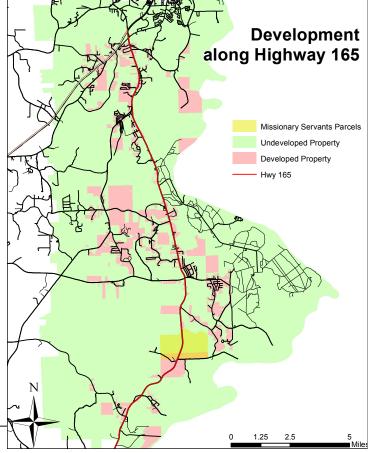


Figure 3.1.1 | Developed and Undeveloped Land

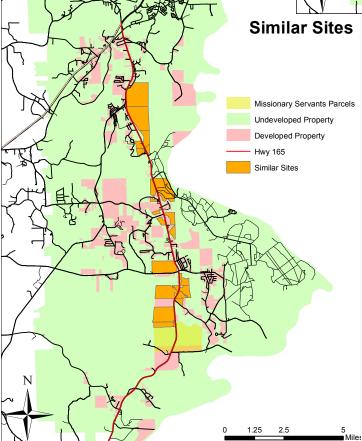


Figure 3.1.2 | Competitive Properties

165 corridor is green, which indicates the abundance of developable land in this area. Two things are worth noting. First, a parcel shaded red is considered "developed" when the county assesses a building at more than \$0. Thus, an insignificant structure valued at \$1,000 on a 200 acre property results in a "developed" parcel. This means that some of the parcels shaded red could actually be considered undeveloped, resulting in an even larger amount of developable land. The second important point to consider is where the majority of undeveloped land is relative to the major road network. A property inaccessible by a transportation network is undesirable. The following study narrows down the list of undeveloped properties for the purpose of indicating those along Highway 165.

This analysis narrows down the abundance of undeveloped land in the Highway 165 corridor into a group of properties that are truly competitive with the subject property. The 20 competitive sites identified, which are shaded orange, are adjacent to Highway 165, larger than 25 acres, and north of the subject property. This begins to display the amount of property that can support a large scale development along Highway 165. Furthermore, this does not take into consideration smaller parcels that are still suitable for significant development. All of the identified sites are likely to be more competitive than the subject property due to their proximity to the Fort Benning West Gate, and Phenix City, unless a more attractive community package can be promulgated.

To get a better understanding of the single-family developments in the Highway 165 corridor, each single-family lot has been identified on the map. Out of the 3,220± lots identified, only 1,768± lots have been developed with a home. This means that only 55 percent of the lots readied for single-family development have actually

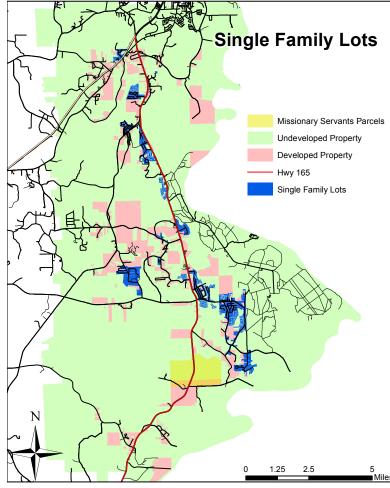


Figure 3.1.3 | Single Family Lots

been improved with a home. Furthermore, some of these single-family subdivisions platted these lots in the late 80's, but the lots still do not have homes on them.

There are a few important findings from the above analysis. It is evident that there is an abundance of competitive properties that have the same positive attributes of the subject property (frontage along Highway 165 and size), but are closer to Phenix City and the Fort Benning West Gate. The following is a hypothetical situation to understand the development timeline for the subject property. Assume that development in this area will begin again in 2013, and that half of the 20 identified properties will be developed before the subject property. If the 10 properties are developed every 2 years, the subject property will not be developed until 2033. Granted this situation is only a hypothetical exercise that does not take into account real estate cycles, population increase, infrastructure improvements, or property owners intentions, but it does attempt to estimate when the subject property could be developed. This exercise also assumes the necessary infrastructure improvements will be present by 2013. The above analysis also provides a small look into the possibility of single-family development on the site. Due to the current availability of single-family lots north of the subject property, and abundance of undeveloped land, this market does not seem promising. This also does not take into account the large amount of constructed homes yet to be sold by the developer in subdivisions north of the subject property.

Highest and Best Use

The above research was a broad look at development prospects for the entire area. The following is a highest and best use analysis for the subject property. This term has been defined by many sources, but a commonly accepted one is by the The Appraisal Institute, which defines the term as 'the reasonably probable and legal use of vacant land or an improved property that is physical possible, appropriately supported, and financially feasible and that result in the highest value.

For the purpose of this report, the subject property will be analyzed as is and as of the date of the report. Thus, this analysis does not assume any infrastructure improvements are present. Uses that are physically possible, legally permissible, economically feasible, and which would result in the highest return to the land will be analyzed

Physically the subject site totals $1,500\pm$ acres with some buildings constructed throughout the property. The subject site may accommodate a variety of uses. The proximate surrounding land uses is undeveloped land.

Legality of Use is generally the second factor considered, but is somewhat insignificant for the subject property due to the lack of regulations. This does result in a lower barrier to development, but also means surrounding land owners can use their land without any regulation as well. This can be a significant detriment.

Economic feasibility is the final factor in this analysis. Generally, a project is deemed economically feasible when the value of the completed project is more than the total cost to develop. To determine the feasibility of each use the following factors are considered: potential buyers of the property and how long it will take to develop. The above analysis indicates that significant development of this property is not likely for some time. The site will most likely be developed with some light use in the short term, and it is reasonable to conclude this as the highest and best use for the sites.

Conclusion

Based on the preceding discussion, we have concluded that the subject's highest and best use "as vacant" is to hold for significant development in the long term. In the short term, less intensive development is likely.

Context Maps

To get a sense of the physical size of the property, Figure 3.1.4 on the next page superimposes at the same scale the Washington Mall onto the Holy Trinity site, with the Lincoln Memorial to the left, the U.S. Capitol to the right, and the White House.

Figure 3.1.5, also on the next page, shows the Columbus airport and Columbus State University campus superimposed on the Holy Trinity site for further context and comparison.



Figure 3.1.4 | Holy Trinity Site overlaid with National Mall and Vatican City



Figure 3.1.5 | Holy Trinity Site overlaid with Columbus Airport

IDIEVIEILOPMIENTI CONSIIDERATIONS

INFRASTRUCTURE

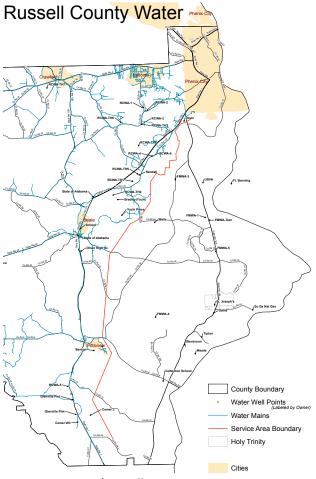


Figure 3.2.1 | Russell County Water Mains

Water

The properties in question are outside of water service areas within Russell County, Alabama and are currently serviced by a well located on the premises. In order to facilitate the development of the properties in accordance with the long term plans laid forth within this report it is anticipated that municipal water service will need to be provided to the property to meet demand.

At present the two most viable options for delivery of municipal water service are main extensions from either Seale or Pittsview. Please refer to the maps provided, while noting the fact that in order to save on installation costs the extensions will need to be completed with the existing county or state right-of-way. Additionally, please note the following:

• Seale Extension:

- o The direct path to the site is along County Road 18 to State Route 165.
- o This path is shown in light blue coloring on the attached exhibit.

• Pittsview Extension:

- o The direct path to the site is along County Road 4 to State Route 165.
- o This path is shown in dark blue coloring on the attached exhibit.

It is anticipated that the water main extension will need to take place as a part of Phase I to allow for the development to proceed as planned at this time.

Sewer

The referenced properties lack sanitary sewer services and are mainly serviced by septic tanks and septic fields, however, to minimize this impact and allow for development on less land intensive methods the following options are outlined:

• Phenix City Extension:

- o The direct path to the site is along State Route 1 to State Route 165.
- o This option will require utility surveys and further information to explore as a pump station will most likely be required as well as upgrades to the existing treatment plant within Phenix City.

• Decentralized Infrastructure:

- o This would allow for smaller batch treatment plants or "cluster systems" to be constructed on a "build as you go" timeframe to properly phase the proposed development.
- o Examples currently in operation near Mobile, Alabama can handle approximately 10,000 gpd to 60,000 gpd of wastewater and treat it on or near the subject property.
- o An average system would utilize filter media to process the wastewater and could exist on a footprint of 60 ft. x 80 ft.

Short of the installation of a new South Russell County Wastewater Treatment Plant the proposed development will be best served through the use of Decentralized Infrastructure to allow for the phasing of the development.

If the MSMHT hopes to see retail or denser-than-single-family development, a wastewater treatment plant must be developed on the site. Currently, Russell County has no plans of developing wastewater infrastructure as far south as Holy Trinity, but require wastewater treatment facilities for any development other than single family housing, which has been developed on a septic tank system throughout the county. Of the relevant case studies found and researched, it seems that, at minimum, a portion of wastewater infrastructure development, operations, and maintenance costs are funded by local and state governmental entities. If the MSMHT hope to develop sewer infrastructure on the site, partnerships with the county and Invictus should be pursued as both could be important resources on this project.

For comparison, the case study most similar to Holy Trinity is Piperton, TN, a suburb of Memphis. The suburb wanted to prepare to receive growth from Memphis without placing too much risk or cost on the current residents of this rural town. They calculated that a conventional central wasterwater treatment system would cost between two to five million dollars and, instead, chose a distributed system that could be developed throughout the municipality and overtime. As of March 2008, Piperton had installed four systems with two under construction that could service up to 750 homes, averaging cost at \$5,000 per home depending on the subdivision size. These costs are paid by the developer as it develops the sewer infrastructure for the particular development, connects it to Piperton's facilities, and turns over control to the city. The operating costs are then placed on tax[ayers at approximately \$75.00 a month.

DEVELOPMENT AGREEMENTS

The discussion below introduces the likelihood that MSMHT will need to partner at some point with a seasoned developer.

A development agreement is a mutual understanding between a landowner and a developer, requiring the developer to procure works, usually with a view to producing an income. The landowner and the developer may share future revenues.

In the case of developing the Holy Trinity site it will be necessary to bring in an experienced, professional real estate developer to carry out the work. A developer will bring the expertise that the church lacks when it comes to the development business and may have relationships with consultants and contractors, which can enable a more profitable project for all parties involved. Having a development agreement in place before any work is done can help protect the interests of the church.

The development agreement is often a very long and complicated legal document that can be difficult for many people to understand. For this reason, it is recommended that Holy Trinity ascertain the services of a highly qualified lawyer, with real estate experience, to draft and negotiate a development agreement. Having the best lawyer will help ensure that the church is not be taken advantage of in any way.

MSMHT will have several options when conveying any of the land to a private developer or public entity:

1. Sell parcels of the land out right. This can be initiated with an option to buy the land at a certain price with escalators to a higher price if development and occupancy thresholds are met. It is important to remember to include performance hurdles so that the developer is required to initiate work on the land based on a set timeline. If these hurdles are not met, the development agreement should state that the land will revert back to MSMHT. It is also important to ensure that if the land reverts back to

the church, the developer would carry costs incurred during that time, this includes but is not limited to soft costs such as due diligence, engineering, planning, architecture expenses, as well as hard costs associated with developing infrastructure and starting construction if the development had gotten to this stage.

- 2. Initiate a ground lease. Annual leases typically range between 7-9% of the land value. However Holy Trinity's location may cause the lease rate to be lower than 7%. A ground lease would not be used to develop single-family homes, instead it could be used for commercial, recreational, or public(schools, parks, ball fields) developments. It is important to avoid debt at all costs for a development on a ground lease. If debt is incurred and the project is foreclosed upon, MSMHT could lose that portion of the property.
- 3. Put in the land as equity. In a real estate development there are two types of capital that fund the project: debt and equity. The church lacks cash equity, but what it lacks in cash it makes for in land. Under a land as equity agreement, the value of the land once developed is established on a per acre basis. The land is contributed to the project free of cost, but MSMHT receives equity shares equal to the value of the land.

When determining who to bring on as a partner for development, it is important to evaluate a developer on three levels: their credit, their collateral, and their character. The financial background of a developer is important to evaluate their capabilities. Ask if they have a healthy credit history and do they have collateral available to put up against the project. Equally important to the investigation of a developer's financial history, is to perform an evaluation of their character and past projects. An interview with potential developers and looking at a portfolio of the developments they have worked on can help determine the right partner for the project.

Next Steps / Recommendations

- Do not give up your best developable sites first It is important to keep land that would be most valuable once the development reaches critical mass and is attracting a larger number of people and the sites
- It is important to spell out exactly what will be developed, when, where, and who is responsible for each aspect of the project.
- Don't give a long-term option or initiate a development agreement without performance hurdles and a reverter clause.
- Make sure to get a master plan up front from a developer before an option or development agreement is signed.

In this harsh economic climate seeking funding, capable developers, local government grants, and other resources will be difficult. Any development that could take place will require a substantial amount of time, money, and professional help. Therefore, the group has prepared a set of tools, useful for managing the land while preparing for development.

A list of useful partnerships has been compiled. It is important for the client to seek out partnerships in the early stages of development, in order to broaden an understanding of local gaps and resources. These partners are professionals in the fields of education, local land regulations, recreation, and preservation. Government and educational professionals are important contacts for the client immediately, as expanding educational opportunities and improving infrastructure are a priority to the area.

The client currently brings in a small amount of income from current endeavours. While the client prepares for development, and in the case where land is not viable for development, there are several preservation strategies that can generate income. In addition, the missionary servants have previous knowledge and experience in managing their land, and with little help could continue to do so with minor improvements. By expanding on timbering, broadening the scope of current agriculture, and researching new low cost uses of the land, it may be possible to increase revenues immediately.

MAXIMIZE CURRENT REVENUE

Maximize Timber

At present MSMHT engages in timber harvesting on the western and eastern portions of the site. The harvesting of timber is being carried out on the property, as a source of income for MSMHT. Currently MeadWestvaco supervises all forest management activities for MSMHT; the company harvests the following: Pine Pulpwood, Pine Sawtimber, Hardwood Pulpwood and Hardwood Sawtimber. Figure 3.3.1 reveals the amount of different timbers that are presently being harvested on the site. Furthermore Table 1 demonstrates that greater quantities of Pine Pulpwood and Hardwood Pulpwood are being harvested.

	Pulpwood	Sawtimber
Pine	18,330 tons	15,677 tons
Hardwood	13,300 tons	144 tons

Figure 3.3.1 | Quantity of timber harvesting on MSMHT property

It is recommended that MSMHT continue to harvest timber so as to maintain the revenue created from this particular activity. However in order to increase profits generated from timber harvesting it is suggested that MSMHT alter the quantity as well as the type of timber being harvested. Research has shown that Pine Sawtimber, Pine Chip-n-saw and Hardwood Sawtimber earn more returns than Pine Pulpwood and Hardwood Pulpwood (see Figure 1 & 2). Therefore MSMHT may need to switch from harvesting Pine Pulpwood and Hardwood Pulpwood to harvesting more Pine Sawtimber, Pine Chip-n-saw and Hardwood Sawtimber, assuming market support.

Although figures 1 and 2 depict an approximated dollar value for Pine and Hardwood it may be beneficial for MSMHT to contact forest management companies in the area to determine exact dollar values. The following is a list of potential companies that can be contacted for guidance in timber harvesting:

McKinley & Lanier

Phone: 205-344-5139

Website: www.mlforestresources.com

Greenwood Land Company

Phone: 706-575-4178

Website: www.greenwoodland.com

• Buchanan Forest Management

Phone: 334-872-0491

Website: www.buchananforest.com

ENVIRONMENTAL PRESERVATION

Conservation Easement

There are several land management strategies which can be pursued while other strategies are being assessed. They offer a way of generating income in the case that no other development strategies are viable.

MSMHT can generate income by enrolling timber land in the Farm and Ranch Land Protection Program (FRPP).

How this program works: Through this program, land owners receive funds to keep land in agriculture rather than developing it. The timber on MSMHT's property can count as agricultural land as long as only a certain percentage of the land enrolled is woodland (no more than 50%; property with 100% woodland would not qualify). USDA provides up to 50% of the fair market easement value of the conservation easement.

How to qualify: To qualify, at least 50% of the land must have some open land (e.g., crop or pastureland; open

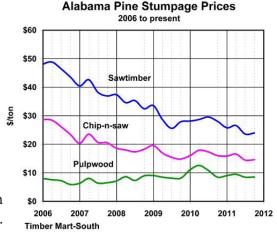


Figure 3.3.2 | Alabama Pine Prices

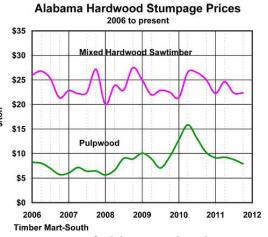


Figure 3.3.2 | Alabama Hardwood Prices

land is land which can be manipulated with standard agriculture equipment, such as bushhog or disk. If trees are too large to bushhog, then it is no longer open land). Furthermore, agricultural land must be considered "prime farmland" soils for it to be eligible under this program, and it must be ranked high enough in order to be enrolled in the program, due to competition with other landowners who are also enrolling their land.

How to enroll: Participation in this program does not preclude the owner from continuing farming practices; thus, MSMHT can continue to harvest timber while timber land is enrolled in FRPP. While it could take 1-2 years to enroll property in FRPP, there is no cost to enroll . To pursue enrollment in these programs, MSTMHT can contact the Russell County District Conservationist, Jason Gardner, at 334.887.4574, Jason.Gardner@al.usda.gov .

MSMHT can also generate income by enrolling wetlands in the Wetlands Reserve Program.

How to qualify: Under this program, non-wetland can be included as a "buffer". Also, some non-wetland will qualify if it meets certain criteria that makes it very close to wetland with very similar functions and values . A soil scientist is needed to determine qualifying acres. Generally, it is best to pursue this option if property contains at least30 acres of open land in the same general area, due to competition with other landowners who are also trying to enroll their land in the program .

How to enroll: Under this program, land can be enrolled in 3 ways:

- Permanent Easement is a conservation easement in perpetuity. USDA pays 100 percent of the easement value and up to 100 percent of the restoration costs. USDA pays all costs associated with recording the easement in the local land records office, including recording fees, charges for abstracts, survey and appraisal fees, and title insurance.
- 30-Year Easement USDA pays up to 75 percent of the easement value and up to 75 percent of the restoration costs. USDA pays all costs associated with recording the easement in the local land records office, including recording fees, charges for abstracts, survey and appraisal fees, and title insurance.
- Restoration Cost-Share Agreement an agreement to restore or enhance the wetland functions and values without placing an easement on the enrolled acres. USDA pays up to 75 percent of the restoration costs.

To pursue enrollment in these programs, MSMHT can contact the Russell County District Conservationist, Jason Gardner, at 334.887.4574, Jason.Gardner@al.usda.gov .

Lastly, another option could be to enroll land in Alabama's Forever Wild program. Under this program, the state purchases the land to convert it into parkland. This program can pay the appraised value of the land. Forever Wild land is nominated by the landowner and scored; the land is evaluated for either state park, nature preserve, Wildlife Management Area (WMA - mostly hunting), etc. That ranking is then sent to a board that decides if the property is to be purchased. The property needs some connection to state-owned lands or an aspect that would appeal to the board (for instance, unique plants/animals). It is too difficult to buy many small tracts and manage, so the property would need certain qualities to be considered. The appraisal would consider the dirt value, timber value, if minerals are owned by the land-owner and transferred as part of the transaction and other factors. To pursue this strategy, contact AL State Lands-ADCNR Assistant Director, Gregory M. Lein, Phone (334)242-3484.

Easements

There are a number of technical and financial assistance programs in place for landowners who wish to implement conservation measures.

From Alabama Natural Resources Conservation Service:

Environmental Quality Incentives Program (EQIP)

This program "provides payments for addressing significant natural resource concerns on agricultural lands." The following resource concerns in Russell County have been prioritized: Erosion/Soil Quality; Grazing Land; Forest Health and Wildlife; Water Conservation; Water Quality/Animal Waste

Wetlands Reserve Program (WRP)

"A program that provides technical assistance and financial incentives to restore, protect, and enhance wetlands in exchange for retiring marginal land from agriculture" WRP will pay \$2150 per acre for permanent easements and 75% of that for 30 year easements.

Wildlife Habitat Incentives Program (WHIP)

"A program that encourages creation of high quality wildlife habitats that support wildlife populations of National, State, Tribal, and local significance"

Conservation Security Program (CSP)

A "program that provides financial and technical assistance for the conservation, protection, and improvement of soil, water, air, energy, plant and animal life, and other conservation purposes on Tribal and private lands...The program is designed to reward the best conservation stewards of the most environmentally sensitive areas in targeted watersheds."

From Alabama Division of Wildlife and Freshwater Fisheries:

Landowner Incentive Program (LIP)

A program that provide "funding to private landowners for the direct benefit of conserving, managing, or enhancing the habitats of high priority wildlife species."

Partners for Fish and Wildlife

A program for "restoring, protecting or enhancing private property for Federal trust resources (e.g. migratory birds, endangered and threatened species, wetlands, floodplains, streams and riparian areas)."

Wildlife Habitat Enhancement Unit

"Four Division Wildlife Biologists who provide technical assistance to private landowners in conserving, maintaining and improving their natural resources to enhance the quality of fish and wildlife via conservation based recommendations with or without cost-share programs."

From the United States Department of Agriculture- Farm Services Agency:

Biomass Crop Assistance Program

BCAP "Provides financial assistance to owners and operators of agricultural and non-industrial private forest land who wish to establish, produce, and deliver biomass feedstocks."

Conservation Reserve Program

Offers "annual rental payments for planning permanent vegetation on ... idle, highly erodible farmland through the Conversation Reserve Program (CRP)."

Conservation Reserve Enhancement Program

Voluntary land retirement program that helps agricultural producers protect environmentally sensitive land, decrease erosion, restore wildlife habitat, and safeguard ground and surface water.

Grassland Reserve Program (GRP)

GRP is a voluntary conservation program that emphasizes support for working grazing operations, enhancement of plant and animal biodiversity and protection of grassland under threat of conversion to other uses. Participants voluntarily limit future development and cropping uses of the land while retaining the right to conduct common grazing practices and operations related to the production of forage and seeding, subject to certain restrictions during nesting seasons of bird species that are in significant decline or are protected under Federal or State law. A grazing management plan is required for participants.

Source Water Protection Program

Designed to help prevent source water pollution in 43 states through voluntary practices installed by producers as local levels.

Voluntary Public Access and Habitat Incentive Program

The Voluntary Public Access and Habitat Incentives Program (VPA-HIP) provides grants to States and tribal governments to encourage owners and operators of privately held farm, ranch, and forest land to voluntarily make land available for public access for wildlife-dependent recreation, including hunting or fishing under programs administered by States and tribal governments.

Additional Resources

The following is a list of environmentally oriented agencies and organizations that can assist in development when addressing possible preservation or conservation on the property.

- The Alabama Department of Environmental Management
- Environmental Protection Agency- Alabama
- The Nature Conservancy
- Fort Benning Environmental Impact Statement

Based on our findings, we have determined that development at Holy Trinity will be minimal in the short-term. For this reason, we have identified and illustrated a development scenario that can potentially be pursued within ten (10) years. A description of the proposed development site map (see Figure 3.4.1), and implementation chronology are as follows:

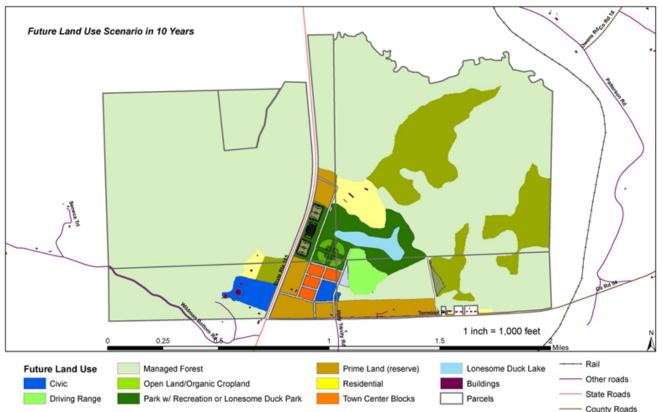


Figure 3.4.1 | 10 Year Development Scenario Map

Immediate Options (0-3 Years)

Forestry/Timber:

As indicated in Figure 3.4.1 (Pale Green), the vast majority of the Holy Trinity site is forestry. All forest on the site is managed, and should remain managed so. Low maintenance and a steady revenue stream make it a stable option, which should be maintained. To attract higher land lease rents, Holy Trinity may want to consider expanding this land use and diversifying of timber and property management options.

Open Land/Organic Cropland:

Like the forestry, the open land/organic cropland (Olive Green) is low maintenance and has stable revenue potential, if agriculture is pursued. Given its low cost and maintenance, cropland can be expanded with relatively little time and effort. Exploring the increasing interest in locally grown and organic food movements should be done to determine the most promising agricultural future for the land.

Near-Term Options (3-6 Years)

Recreation & Driving Range:

The Russell County Parks and Recreation Department is currently seeking viable locations to add to their portfolio. With a recognized need for outdoor parks, walking/jogging trails, golf, baseball/

softball and soccer fields, and playgrounds, the Holy Trinity site provides an ideal location for a large-scale recreation area. The proposed recreation site could serve as practice fields for local sports teams, and potentially host large sporting events (i.e. tournaments) or county festivals. To attract this prospective activity, Holy Trinity should consider leasing the specified recreation (Green) and driving range (Light Green) area to the County Parks and Recreation Department at a heavily discounted price. The land lease contract would ideally be for 20 to 25 years, enabling Holy Trinity to establish itself as a destination location within that time, and subsequently build out the proposed twenty (20) year scenario (See Below). This venture could be implemented fairly quickly, as very little costs and construction is required.

Intermediate-Term (7-10 Years)

Senior Housing:

There is an aging cohort in both Russell County and the immediate area of the Holy Trinity site, yet there is very little senior/retirement housing. Thus, assisted and independent living senior housing development will be a likely option within seven (7) years, maybe sooner – pending infrastructure resolution. As identified in Figure 3.4.1 (Yellow), the most suitable area for such a development is located to the west of State Road 165, adjacent to the church. Senior services and amenities will likely accompany the development, requiring more developable space, which makes this site ideal. The site provides close proximity and walkability to the church and future development, as well as a quiet and remote environment, making it conducive to a senior lifestyle. It should be noted that the complex operated by the MSMBT could provide for this kind of use, should more be any interest.

Town Center Blocks/Mixed-Income Housing:

Initial development of the town center area will be quite slow. However, mid to high density mixed-income housing is to most likely and feasible development to occur first. A high concentration of low density for-sale single-family housing, along with a considerable lower-income population, makes mixed-income housing a viable option. As shown in Figure 3.4.1 (Orange), this area will be located in the center of the entire development, between Terminal Road and the proposed recreation site. The town center should also include some form of civic space (Blue).

Low-Density Single-Family Housing:

With such an oversupply of product already on the market, this option should not be explored until the housing market sees a recalibration in supply and demand. Thus, a recommendation is proposed in the twenty (20) year scenario, though sooner should the market turn around. Again, the most favorable approach to such a development, both from an environmental and market point of view is as a conservation subdivision, a product not yet available in the area.

Highest Value Land:

In Figure Figure 3.4.1, (Gold) signifies the optimal developable land, which Holy Trinity should hold to until land values increase. Potential for this site is further discussed in the twenty (20) year scenario.

Recreation Demand Support:

All taken from the Alabama Statewide Comprehensive Outdoor Recreation Plan 2008-2012.

http://www.adeca.alabama.gov/C11/Recreational/Document % 20 Library/Alabama % 20 SCORP % 20 20 08 - 20 12 % 20 Final.pdf

The 20-year scenario for the Holy Trinity site seeks to build upon the positive steps taken during the first 10 years. Progress will continue incrementally, but we believe that, within this timeframe, the site will begin to resemble a sustainable, comprehensive development. A description of the proposed development site map (see Figure 3.4.2 below), and implementation chronology are as follows:

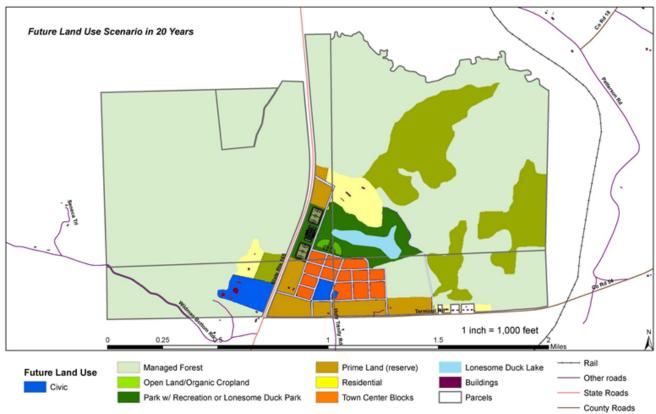


Figure 3.4.2 | 20 Year Development Scenario Map

Forestry / Timber:

As Figure 3.4.2 indicates (pale green), the land devoted to forestry during this timeframe largely will remain unchanged compared to the 10-year scenario. We anticipate that the reliance on this revenue stream will decrease gradually over time, but the revenue still will represent a valuable cushion, particularly when economic cycles reach down points.

Open Land / Organic Cropland:

Over 20 years, open land and organic cropland also will occupy the same areas on the site. Aside from any revenue generated from agriculture, the uses will gain additional appeal as more people inhabit and visit the area.

Recreation & Driving Range:

Once the land lease on the recreation proposed in the 10-year scenario expires, new or modified uses for the land should be considered. In the event that the town center has developed significantly during this period, the land may become valuable as a site for additional blocks of housing and retail. Under such a plan, the recreation space would be cut approximately in half. Alternatively, the land could become an even more elaborate recreation site, such as a one-stop site for outdoor enthusiasts in the area. This recreation use might leverage the presence of Lonesome Duck Lake to offer kayaking classes,

SCUBA diving training, and fishing activities. A small retail presence associated with the recreation might offer camping, hunting, and hiking gear.

Senior Housing:

In 20 years, the senior housing facilities built during the early development phases likely will remain in tact. The aging population in the county may warrant additional senior housing as the town center development emerges, but such a use likely will remain secondary in a healthy economy. At all times, however, the Holy Trinity site should seek to provide convenient access to amenities for seniors.

Town Center Blocks/Mixed-Income Housing:

The most noticeable difference between the 10 and 20-year scenario maps relates to the town center (orange). During this period, the option likely will become available to build out additional town center blocks. Any new development should seek to balance housing and retail, but housing will take priority on the periphery.

Low-Density Single-Family Housing:

Low-density single-family housing appears more viable over a 20-year timeframe compared to a 10-year timeframe. Yet, actual viability is contingent on how supply and demand changes over the entire period. In the most favorable scenario for this land use, supply in the surrounding area decreases and demand increases over time. In this case, the areas on the site set aside for residential uses (yellow), including the outer blocks of the town center, may support low-density single-family housing. If supply and demand fundamentals prove less favorable, though, this use should stay on the sideline.

Highest Value Land:

The site's prime land (gold), located primarily along State Route 165 and Terminal Road, may begin to see development during this timeframe. Any development proposals hinge, however, on current economic conditions and complementary development that already has arisen on adjacent sites. Once conditions support development, we envision the land on State Route 165 as a strong site for retail as a gateway into the town center. The land on Terminal Road, meanwhile, would effectively support light industrial uses.

As expressed in the report, significant development on the site occurring in the near future and generating the desired profit/revenue is unlikely. However, several important opportunities exist to increase the revenue from the land and prepare the landowners to maximize social and financial benefits at and around Holy Trinity over the next decades. Generally, it is necessary that the land caretakers/ overseers become pro-active, acting as entrepreneurs promoting and planning for land acquisition and development. These steps will help position the Missionary Servants of the Most Holy Trinity to react positively and sufficiently to take advantage of shifts in the economy or continual population growth in Russell County. Furthermore, relationships with the county will gather attention to the Holy Trinity site that might help in gaining state and county resources for development. MSMHT as part of its proactive engagement with its neighbors and the County must be vigilant in protecting its interests against any development actions that could threaten values for its property. Thus supporting a suitable policy and regulatory framework would be important.

In order to complement the research conducted, Georgia Tech's City and Regional Planning Studio, led by Professor Dobbins and PhD candidate, Ray White, has developed several immediate (1-12 months) and mid-term (2-5 years) steps that the caretakers of the property and John Colton should pursue.

- 1. In order to prepare for development opportunities that will come in the future, a working group or advisory board should be formed to better understand the needs of the community. The group should be created of, but not limited to:
 - representatives from both English and Spanish speaking communities
 - community leaders, rural stakeholders(county commissioners, school board members, business owners, county parks and recreation, long-time community residents, Invictus representatives, extension agents, local universities)
 - neighbors (should be evaluated on their desire to work together)
 - potential partners (recreational developers, organic farmers, military representatives, golfers)

Initially the MSMHT should draw on existing relationships, and work with the group to develop relationships with above mentioned community members and/or people the board/fathers identify as important or influential. While forming the group, it should be kept in mind that this is a long-term commitment, and though time and energy from different members will shift over the course of a year or several, the extended insight and group work will be important to maintaining momentum and awareness of how Russell county is changing year to year and how Holy Trinity can best respond to that change.

- 2. Maximizing profits from land resources through agricultural and forestry cultivation and temporary preservation easements in the area, periodically re-exploring state and federal grants that might offer financial assistance or tax-breaks for land preservation.
- 3. Leverage partnerships with the Russell County Parks and Recreation department to explore opportunities for undeveloped and unused rural land for a driving range/skeet shooting/athletic fields that requires large land pieces but little maintenance costs. These options might not generate large amounts of revenue but will play an important part in the land management timeline as it will begin the process of generating more local awareness of the site. This local awareness will help to develop the sense of place necessary for successful development in the long run.
- 4. Continue to monitor the state and federal resources identified in this report that have been helpful in understanding opportunities for rural development and Russell County growth, such as extension office, agriculture grants, rural development grants, master county plan.

5. According to local land prices, it appears that the fathers could make over \$3 million on selling the land dependent on finding a buyer interested in such a large piece of land. It might not be wise to sell the land in pieces in case sold tracts conflict with land use on kept tracks; however, this should be explored as an option of minimizing costs over the next decade or two.

The mid-term next steps to be taken are less tangible, but no less important,

- 1. With partnerships, monitor the growth of development on land between the Holy Trinity site and the military base.
- 2. Explore profit sharing partnerships or land leases for non-development necessary projects from farming and eco-tourism to recreational space for family reunions and similar gatherings near the lake.

Due to the long time frame that it will take to see development on this land, the next steps recommended are to position the land and land caretakers to be prepared for development when the market is more favorable for the Holy Trinity area. These small steps should be taken to prepare for larger steps in the planning process. The next large step should be a reassessment of the studio's project and the site in five to ten years depending on the area's growth between now and then. This plan should be able to more accurately project development potential for the area and help to continue the ongoing effort of maximizing the social and financial gains that will eventually be made from the land.

Lastly, in conclusion, the process of evaluating and understanding the opportunities and position of the site in context to the real estate market should be applied to land that the Missionary Servants of the Most Holy Trinity own throughout the South in order to increase awareness to assess opportunities present for the Fathers.

POTENTIAL FUNDING SOURCES

- Alabama Association of Regional Councils (AARC): www.alarc.org
- Lee-Russell Council of Governments (LRCOG): www.lrcog.com
- Phenix City Economic Development: www.phenixcityal.us/edo
- Phenix City-Russell County Chamber of Commerce: www.pc-rcchamber.com
- Alabama Department of Economic and Community Affairs: www.adeca.alabama.gov
- Alabama Department of Revenue, Tax Incentives Division: www.ador.alabama.gov
- Alabama Department of Transportation (ALDOT): www.dot.state.al.us/docs
- Alabama Historical Commission: www.preserveala.org
- Alabama Housing Finance Authority (AHFA): www.ahfa.com
- ALACOM Finance: www.alacom.com
- Economic Community and Development Institute (ECDI): www.auburn.edu/ecdi
- Economic Development Administration (EDA), Planning and Technical Assistance: www.eda. gov
- US Department of Housing and Urban Development (AL Field Office): www.hud.gov/local
- Small Business Development Centers (SBDCs): www.asbdc.org
- Southern Development Council, Inc.: (SDC): www.sdcinc.org
- USDA Rural Development Alabama State Office: www.rurdev.usda.gov/al

ECONOMIC DEVELOPMENT & COMMUNITY AFFAIRS

Phenix City-Russell County Chamber of Commerce

The Chamber helps directs economic development across the county. Works to expand regional job opportunities and the area tax base. Helps coordinate local, state and federal resources for economic development, as well as provide assistance for new industries and businesses. The Office can provide us with information and resources regarding land use and construction development, especially with regards to economic considerations, such as tax incentives. The office is particularly interested in developing the county with an eye toward increasing the quantity of available housing for residents, most notably with regard to single family housing.

Victor W. Cross, President

1107 Broad Street

Phenix City, AL 36867

Telephone: (334) 298-3639, (800) 892-2248

Fax: (334) 298-3846

Email: pcrccham@ldl.net

Phenix City- Economic Development Department

Services:

- Guidance for small businesses and enterprises
- Provides assistance in identifying small business start-up plans and profit making activities
- Interfaces with local businesses and the greater Russell County/Phenix City/Columbus, Ga. region in terms of acquiring knowledge and leveraging business contacts.

Shaun Culligan

Economic Development Specialist

sculligan@troy.edu

(334) 448-2858

Economic Development Department

931 Broad Street

Phenix City, AL 36867

Alabama Department of Economic and Community Affairs

401 Adams Avenue

Montgomery, AL 36130

(334) 242-5255

Higher Ed Institutions: Auburn University, Troy University, and Chattahoochee Valley Community College

There are a number of large and well regarded universities and colleges in Alabama and the Southeast region. As such, we may be able to work with academics, professors and students to help realize the goals of our various projects. In fact, universities are already engaged in projects in Russell County, as evidenced by archeological work by professors and students at the Spanish Fort site that is located close to Holy Trinity. Whether working to research and address agricultural processes and techniques, eco innovation initiatives or historical and archeological projects (e.g., the recent discovery of a late 19th century cemetery on site) the county offers a number of potentially attractive projects for scholarly pursuits.

Allen Furr

Allen.Furr@auburn.edu

Department of Sociology, Anthropology & Social Work

7030 Haley Center

Auburn University, AL 36849-5049

Phone: (334) 844-5049

Fax:(334) 844-2851

U.S. Army Corps of Engineers

The Corps of Engineers is currently conducting research at the Spanish Fort site. We may look to the corps for ideas on how to take advantage of Holy Trinity's proximity to this important archeological site as well as opportunities for collaboration on other environmental, engineering and archeological research and excavation projects in the vicinity.

U.S. Army Corps of Engineer Mobile District

P.O. Box 2288

Mobile, AL 36628-0001

Phone Number: 251-690-2505

U.S. Department of Agriculture- Rural Development Division

- USDA operates 4 rural development divisions in AL, one of which incorporates Russell County
- Look to USDA for assistance in developing property with an eye toward maximizing profit and returns particularly with regard to land use and agricultural development.

Russell County USDA Service Center

1001-B, 25th Avenue

Phenix City, Alabama 36869

Phone: 334-297-6692, extension 3

Fax: 334-291-1612

RECREATION, CULTURE, and HUMAN SERVICES

Boys and Girls Club

We recommend reaching out to the Boys and Girls Club as a potential partner in any activities we might take. Not only will such outreach bring the larger community into the purview of the wider community but would also serve to attract greater interest in development activities on site, and thereby realize both greater participation and, potentially, investment from outside sources. This template is borrowed from the example of other youth and recreational clubs such as the YMCA which often serve as both bedrocks and anchors in developing areas.

Boys & Girls Club 1110 Broad St. Phenix City, Al. 36867 334-297-6164

Boys & Girls Club- Phenix 1601 5th St. S Phenix City, AL (334) 297-6164

Fort Benning- Office of Family and Morale, Welfare and Education

The military community represents a stable and reliable partner in the community. We envision substantial buy in and support from that community including from its family members and the retirees associated with the fort. We recommend reaching out to potential partners, both official and civilian at the base. There may be opportunities for joint public-private partnerships with Fort Benning, including, but

not limited to, facility development, recreational use and/or conservation programs.

Fort Benning Directorate of Family and Morale, Welfare and Recreation Building 241, Baltzell Avenue 706-545-0892 or 706-626-2614

Russell County Public Schools

In order to fill the vacuum of effective and rigorous early childhood education for the Russell County community, we might wish to work to bring in and/or establish a school, particularly at the pre-K level. In order to do so, we would be wise to potentially partner with other school systems or entities along the lines of the Montessori system. It would be particularly helpful to work with officials from such academic circles and local county and general education officials to understand the necessary infrastructure, competition, programmatic needs, policies, funding issues and educational criteria for an effective educational facility. Toward this end, we recommend exploring all possibilities for receiving, matching or contributory public funding for educational purposes on site.

Mrs. Paula Thompson, Community Relations Coordinator

91 Poorhouse Road

Seale, AL 36875

Phone Number: (334) 855-0499

Fax: (334) 855-9651

Alabama Archaeological Society

President: Teresa Paglione teresa.paglione@al.usda.gov

13075 Moundville Archaeological Park

Moundville, Alabama 35474

Conservation Organizations, e.g. The Nature Conservancy

Since the property contains a plethora of ideal natural attractions, we envision potential partnerships with such non-profit and conservation organizations as the nature conservancy through participation, cooperation, guidance and potential financial assistance, such conservation organizations may serve to help increase the value of the land and the annual revenue generated from it.

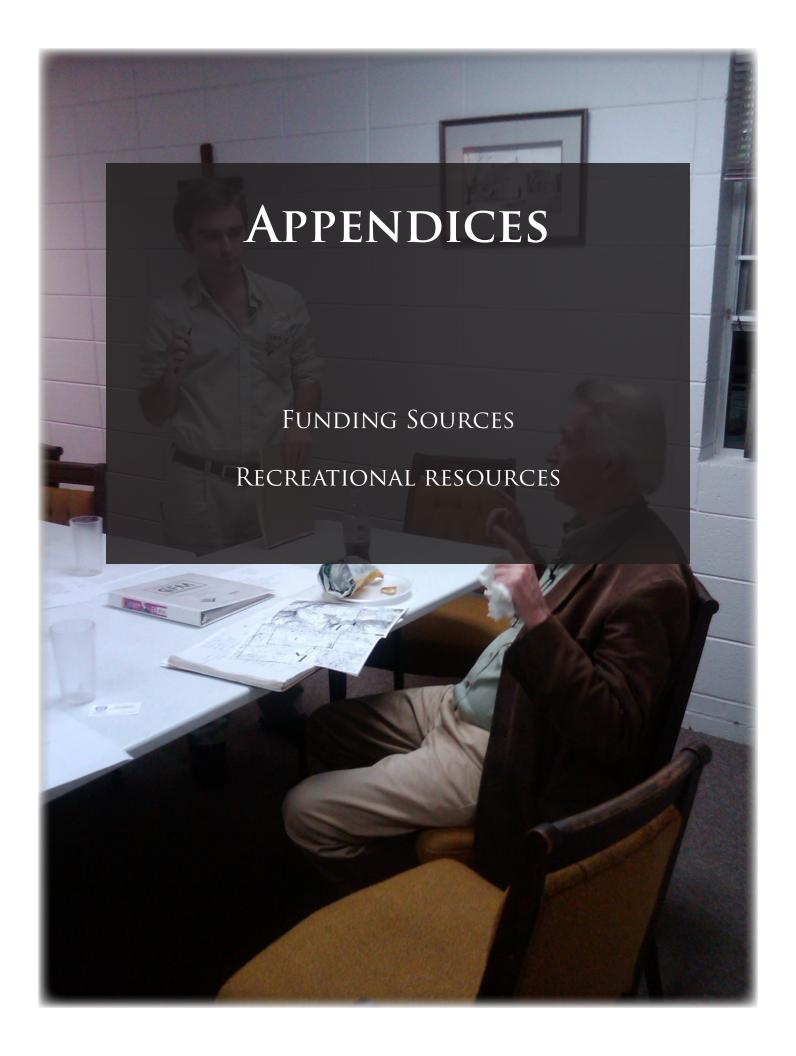
The Nature Conservancy in Alabama

2100 1st Avenue North, Suite 500

Birmingham, AL 35203 Phone:

Phone: (205) 251-1155

Fax: (205) 251-4444



FUNDING SOURCES

***The following Information is taken directly from the National Low Income Coalition's 2011 Housing Advocate's Guide to Housing and Community Development Policy

---More information can be found at http://www.nlihc.org/doc/2011-Advocates-Guide.pdf

Housing Bonds **Multifamily Apartments/Senior** (State – AL Housing Finance Authority)

Housing bonds are used to finance low-interest mortgages for low and moderate income homebuyers and the acquisition, construction, and rehabilitation of multifamily housing for low income renters. Investors purchase housing bonds at low interest rates because the income from them is tax-free. The interest saving are made possible by the tax exemption is passed on to homebuyers and renters in reduced housing costs.

Two Types:

Mortgage Revenue Bonds (MRBs) – Proceeds from MRBs finance discount mortgages to support the purchase of single-family homes. By lowering the interest rate, MRBs make homeownership affordable for families who would not be able to meet mortgage payments on a conventional loan. Congress limits MRB mortgages to first-time homebuyers who earn no more than the greater of area or statewide median income. Families of three or more can earn up to 115% of the greater of area or statewide median income. Congress also limits the price of homes purchased with MRB mortgages to 90% of the average area purchase price.

Multifamily bonds – Multifamily bonds provide funding for multifamily housing development that reaches income groups the market might not otherwise serve. Multifamily housing bonds finance the acquisition, construction, or rehabilitation of affordable rental housing. Multifamily housing bond financed developments must set aside at least 40% of their apartments for families with incomes of 60% of area median income (AMI) or less, or 20% for families with incomes of 50% of AMI or less. The incomerestricted apartments financed by those bonds must remain affordable for at least 15 years.

Low Income Housing Tax Credit (LIHTC) **Rental Townhomes/Multifamily/Senior** (State – AL Housing Finance Authority)

The program finances the construction, rehabilitation and preservation of affordable rental housing by encouraging private investment in affordable housing development. This encouragement comes in the form of a tax credit to investors, who purchase the tax credit award from the developer of a project and, in return, receive an equity stake in the project as well as a dollar-for-dollar reduction in their federal income taxes over a ten-year period starting from when the project becomes occupied. This infusion of equity reduces the amount of money a developer has to borrow, thereby lowering costs and allowing for lower rents.

The LIHTC can be used to support a variety of projects including both multifamily and single-family housing, new construction and rehabilitation, special needs housing for the elderly and people with disabilities and permanent supportive housing for homeless families and individuals. Tax credit projects are found in all parts of the country, including rural areas.

HOME Investments Partnership Program **All Proposed Housing Options** (State – AL Housing Finance Authority)

A federal block grant to participating jurisdictions (PJs), which are states and certain localities that use the funds to provide affordable housing to low and moderate income households. States and localities use the funds for a variety of homeownership and rental activities. In general, all HOME money must benefit people with low or moderate incomes, rents must be affordable, and units must remain affordable for a set period of time.

Eligible activities – HOME dollars can be used as a grant or a loan to meet a variety of development costs such as buying existing housing or vacant land for affordable housing, building new housing, rehabilitating existing housing, demolition to make way for affordable housing, relocation, site improvements, and various 'soft costs' such as engineering plans, attorneys' fees, title search, and fair housing services. HOME can also be used to help people purchase or rehabilitate a home by offering loans, loan guarantees, or down payment assistance. Tenants can be given grants for security deposits and rental assistance so that they need pay no more than 30% of their income for rent and utilities. Although tenant-based assistance agreements are limited to two-year terms, they can be renewed without limit.

Community Development Block Grant (CDBG) Program **All Proposed Housing Options** (State – AL Department of Economic and Community Affairs)

The primary objective of the CDBG program is to create viable communities by providing funds to improve housing, the living environment and economic opportunities principally for persons with low and moderate incomes.

Eligible activities – CDBG funds can be used for a wide array of activities, including housing rehabilitation (such as loans and grants to homeowners, landlords, nonprofits and developers); new housing construction by certain neighborhood based nonprofits; downpayment assistance and other help for first-time home buyers; lead-based paint detection and removal; purchasing land and buildings; constructing or rehabilitating public facilities such as shelters for people experiencing homelessness or victims of domestic violence; making buildings accessible to those who are elderly or disabled; public services such as job training, transportation, healthcare and child care (public services are capped at 15% of a jurisdiction's CDBG funds); capacity building for nonprofits; rehabilitating commercial or industrial buildings; and loans or grants to businesses.

Beneficiaries – At least 70% of the CDBG funds received by a jurisdiction must be spent to benefit people with low and moderate incomes. The remaining 30% can also benefit people with lower incomes, or it can be used to aid in the prevention or elimination of slums and blight (often used by local governments to justify downtown beautification) or to meet an urgent need such as hurricane, earthquake or flood relief.

The Section 202 Supportive Housing for the Elderly **Senior Apartments** (Federal – HUD)

The 202 program provides capital and operating funds to nonprofit organizations (known as sponsors) that develop and operate senior housing. Many Section 202 project sponsors are faith-based groups. The Section 202 grant program has two main components: a capital advance that covers expenses related to housing construction, and operating assistance that supports the buildings' ongoing operating costs. Both the capital and operating funding streams are allocated to nonprofits on a competitive basis, through a HUD Notice of Funding Availability (NOFA).

Capital funding –The first component of the Section 202 program provides capital advance funds to non-profits for the construction, rehabilitation, or acquisition of supportive housing for seniors. These funds can now be augmented by tax credit debt and equity to either build additional units or supplement the capital advance as gap financing in so-called mixed finance transactions. The Section 202 program is HUD's largest directly funded construction program; however, the capital advances rarely support 100% of the construction costs.

Operating funding – The second program component provides rental assistance in the form of Project Rental Assistance Contracts (PRACs) to subsidize the operating expenses of these developments. Residents pay rent equal to 30% of their adjusted income, and the PRAC makes up the difference between rental income and operating expenses.

Section 515 Rural Rental Housing**Multifamily Rental/Senior** (Federal – USDA)

Under the Section 515 program, U.S. Department of Agriculture's (USDA) Rural Development arm makes direct loans to finance affordable multifamily rental housing for very low income, low income, and moderate income families; elderly people; and persons with disabilities.

Section 515 provides direct loans to developers at an interest rate of 1%, amortized over 50 years, to finance modest rental or cooperatively-owned housing.

Section 515 funds can be used both for new construction as well as the rehabilitation of existing properties. However, very few new rental properties are built each year because the program's appropriations levels are low.

Congregate housing for the elderly and persons with disabilities and group homes for the developmentally disabled are authorized through special regulations and requirements, but nursing or 'special care' homes are not eligible. Funds may also be used to buy and improve land and to provide necessary facilities such as water and waste disposal systems.

Rural Innovation Fund**All Proposed Housing Options**

(Federal – HUD)

The Rural Fund offers three types of funding:

- Single Purpose Grants address one kind of need in a target area, such as affordable housing development or support for entrepreneurs.
- Comprehensive Grants assist larger projects with other partners and other funding sources, addressing social, housing, and economic needs in an area.
- Economic Development and Entrepreneurship Grants for Federally Recognized Indian Tribes support job creation by for-profit entities.

For Single Purpose Grants and Comprehensive Grants, eligible applicants include local rural nonprofit organizations, community development corporations, federally recognized Indian Tribes, state housing

finance agencies, and state economic development and community development agencies (including consortia of such entities).

Potential Partners

Habitat for Humanity – An ecumenical Christian ministry that builds simple, decent, and affordable homes using volunteered labor.

Russell County Affiliate Contact Info:

P.O. Box 3590, Phenix City, AL 36868-3590

Phone: (334)448-8275 Fax: (334) 297-2174

http://www.alabamahabitat.org/affiliates01.html

http://www.habitatrussellcounty.org/

Alabama Housing Finance Authority – Creates housing opportunities for low- and moderate income Alabamians through the affordable financing of single- and multifamily housing.

7460 Halcyon Point Dr., Ste 200,

Montgomery, AL 36117 Phone: (334)-244-9200 https://www.ahfa.com

Alabama Department of Economic and Community Affairs – Administers the Community Development Block Grant Program, which providing funds to improve housing, the living environment and economic opportunities

Community Development Block Grant Program

P.O. Box 5690

Montgomery, AL 36103-5690

(334) 242-0492 (phone)

(334) 353-3527 (fax)

E-mail: CED@adeca.alabama.gov

http://adeca.alabama.gov

NeighborWorks America – It is the country's preeminent leader in affordable housing and community development. They work to create opportunities for lower-income people to live in affordable homes in safe, sustainable neighborhoods that are healthy places for families to grow. They provide project funding and operation support.

Southeastern District

Donald R. Phoenix, District Director

NeighborWorks America

260 Peachtree Street, Suite #1000

Atlanta, GA 30303 Phone: 404-526-1270 Fax: 404- 526-1271

Contact: skent@nw.org

www.nw.org

The Housing Assistance Council (HAC) – HAC helps local organizations build affordable homes in rural America. They assists in the development of both single- and multi-family homes and promotes homeownership for working low-income rural families through a self-help, "sweat equity" construction method.

Southeast Office

Housing Assistance Council 600 West Peachtree Street, NW Suite 1500 Atlanta, GA 30308

Tel.: 404-892-4824 Fax: 404-892-1204

E-mail: southeast@ruralhome.org http://www.ruralhome.org/

Kitson and Partners. Babcock Ranch - Southwest Florida's City of Tomorrow - Fact Sheet. In Babcock Ranch (Ed.).

Project for Public Spaces. Approach to Town Squares, from http://www.pps.org/squares/approach/

RECREATIONAL RESOURCES

Holy Trinity is boarded by many water recreation parks, adding to the flavor of the beautiful landscape. Many of these parks are popular with fishermen, hunters and of course anyone who loves to be outdoors living in and along with nature.

Bluff Creek Park is the nearest recreational area to Holy Trinity as it is located approximately 3 miles north or about 18 miles from Eufaula. It can be found at GPS: 32.17972 (latitude) -85.01333 (longitude). The area has 88 sites all with water and electrical hookups, a sanitary dump and fishing cleanup station can be found on the property (USACE. 2008).

White Oak Creek Park, AL (Eufaula, AL) is another recreation park that sits close to Holy Trinity, actually closer to Eufaula, than our site, but still influences the area. This recreational area hosts 130 sites, with water and electrical hookups. White Oak provides 2 dump and fish cleaning stations, and the park is open the entire year. The U.S. Army Corp of Engineering had an open comment period regarding the Environmental Assessment of this area, this last summer; findings regarding this report have not been included in this paper, as of yet (USACE, 2008).

Lake Point State Park is the third recreational area in close proximity to Holy Trinity, and it consists of 1,220 acres, it is located on the banks of the 45,000 acres Lake Eufaula. The park has a large lodge, convention center, modern campground, vacation cabins and lakeside cottages, all adjacent to family picnic areas, an 18-hole golf course and a marina complete with launch facilities and boat slips. The surface water temperature is found between 82 and 85 degrees, with the average lake level of 186.37 feet, the condition of the water is found to be very clear. Renovation was completed on the site in 2009, which included the addition of ten new modern lakeside cottages and 29 modernized cabins (Alapark. com, 2011).

Eufaula National Wildlife Refuge – also sits near the Holy Trinity site and should be considered when incorporating any future ventures for the area. It was established in. 1964 along with the Walter F. George Reservoir (Lake Eufaula). Originally it was built by the Corp of Engineers, and was the result of an impoundment of the Chattahoochee River between GA and AL. It consists of 11,184 acres, however not all of those acres are in located in one state or county. Barbour and Russell counties in Alabama have 7,953 acres of the park, while 3,231 acres lie in Steward & Quitman counties in Georgia.

Uuchee Creek Park

It's approximately 40 miles south of Columbus, Ga. and 80 miles east of Montgomery, Ala., much of the refuge lies in the city limits of Eufaula, Ala. The area hosts a wetland and upland areas that has a large divers fauna. The main purpose of the refuge is to assure the habitat of the area, such as the wintering waterfowl and other migratory birds and resident species will be provide a haven of protection for them. In addition, the area does contain a 7-mile auto route with 2 viewing towers and a walking trail.

Some hunting is allowed during different periods of the year; animals that can be hunted are dove, deer, waterfowl, squirrel & rabbit all of which is governed by state law. Of course fishing is allowed year around, however bank fishing is only allowed during the day. Trapping of frogs, turtles or commercial fishing is not allowed.

The types of shores located in this area are shallow as they originate from nearby creeks and wetlands, which open to shaded woodlands. Waterfowl is highly present during the months of November through February (US-parks.com, Eufaula, 2011).

U.S. Parks.com, Eufaula National Wildlife Refuge, Description.

http://www.us-parks.com/fws/eufaula-national-wildlife-refuge/eufaula-national-wildlife-refuge.html.

U.S. Army Corp of Engineering, "Bluff Creek Park", Mobile District, 2008.

http://www.sam.usace.army.mil/op/rec/wfg/bluff_creek.htm

U.S. Army Corp of Engineering, "White Oak Creek Park", Mobile District, 2008.

http://www.sam.usace.army.mil/op/rec/wfg/white_oak.htm