

The Archdiocese of Baltimore, MD

The Archdiocese of Baltimore (AOB) has been a client of Spatial Systems Associates, Inc. (SSA) for over ten years. The AOB currently consists of two vicariates, approximately 150 parishes, and about 75 parochial schools. Geographically, the AOB covers most of the state of Maryland in the mid-Atlantic. The AOB is often referred to as the *Premier See* in the U.S., having been the first diocese established in this country in 1789 and for a time being the only diocese in the then new Republic.

The Information Technology (IT) group within the AOB is nationally recognized as being one of the most progressive IT shops within the U.S. Catholic Church. The AOB was first introduced to GIS technology in 1998 and rapidly adopted its ability to assist diocesan staff in understanding the realities of how the diocese and individual parishes and schools were operating. SSA has been providing analysis and mapping services to the AOB in planning and managing both its churches and schools every year since. Pastors, principals, and diocesan staff have come to rely on GIS technology as a mechanism to understand the dynamics of church and student populations, and to incorporate available census data for planning purposes.

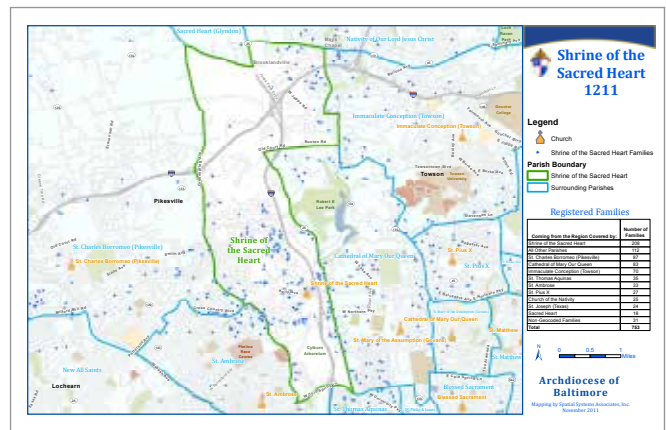
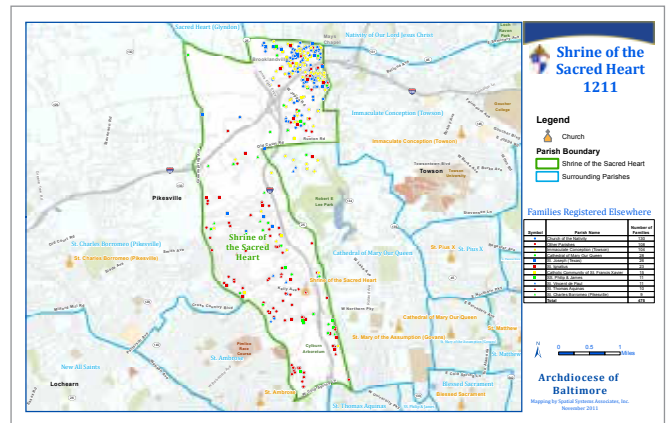
Due in part to the downturn in the economy, changing populations, and other church issues, Catholic parishes and schools have faced a decrease in church attendance/donations and enrollment in parochial schools. As many of the parish and school structures continue to age, maintenance and operational costs continue to rise. The services SSA has provided have assisted the Archdiocese of Baltimore in making informed decisions that result in the least amount of impact while providing the most benefit to parishioners, students, and the surrounding community. Map-based visualization of proposed changes can be one of the most effective ways of demonstrating the need and justification behind decisions to consolidate or create a new parish, or close/build a new church or school facility.

Parish Mapping

Spatial Systems has been providing the Archdiocese of Baltimore with new parish map sets about every four years. These maps have proven to be a valuable resource to the AOB and to parish pastors in planning and management. The AOB is continuously evaluating trends within parish communities related to changes in demographics. The AOB has standardized the use of ParishSoft® to maintain local census data about the population of each parish. With the release of the 2010 national census data, the AOB decided to remap parish local census data and incorporate some of the national census information. Incorporating decades of information from the national census files, along with historical local parish census data, allows the AOB to better understand what is happening at the local level.

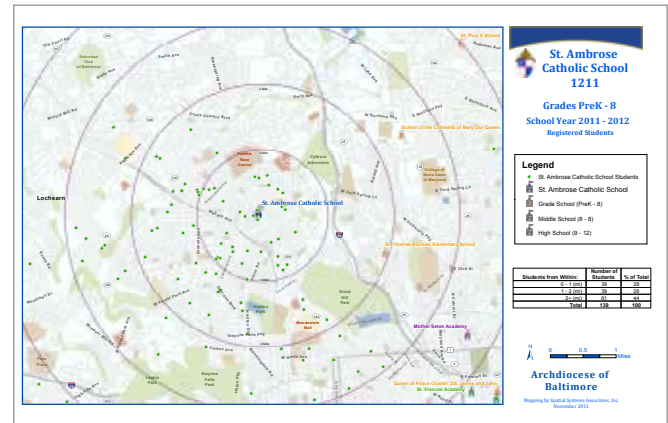
Currently, the parish maps sets consist of six maps for each parish:

- *Parish Boundary Location Map* » a map depicting the location of the boundaries of the parish, the location of the parish church and the proximity to facilities of other parishes
- *Registered Families Map* » a map depicting where each registered family lives
- *Families Registered Elsewhere* » a map depicting families located within the boundary of a parish that choose to be registered elsewhere
- *Median Household Income* » a map depicting the changes in income for the region from which a parish draws its parishioners
- *Orthophotography* » a map photographically depicting the current use of land within the area from which it draws its parishioners
- *Population Change 2000-2010* » a map depicting whether overall population is increasing or decreasing in the area from which it draws its parishioners



School Mapping

In 2004 the AOB decided to map information regarding the parochial school system at a diocesan-wide level. After geocoding student addresses from the standard PowerSchool® student database and applying national census data, various types of analyses were completed to demonstrate demographic trends. On a diocesan basis, analysis showing the current enrollment of each school, capacity of the school, tuition rates, average family income of students attending that school, and average percentage of family income spent on parochial school tuition was provided. Diocesan and school administrators could then use this information to make decisions regarding tuition rates, requirements for new schools, and school consolidation initiatives. Every year since 2004, SSA has produced a set of maps to display student trends for each school in the diocese.



Currently, the school map sets consist of three maps per school:

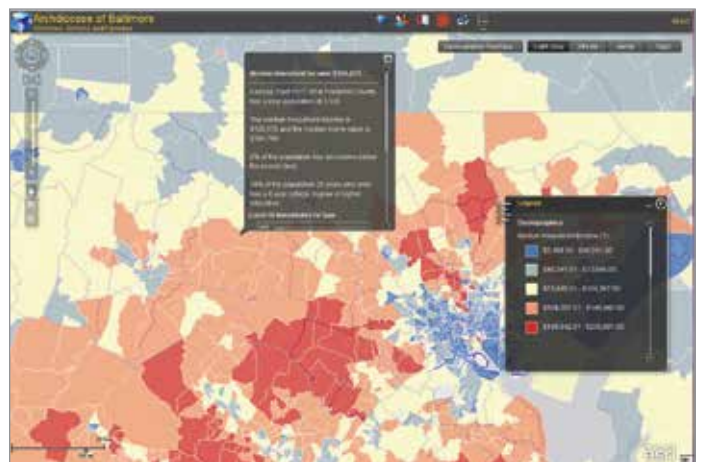
- *School Location* » depicting the location of the school along with the location of other regional public and private schools
- *Registered Students within a defined proximity* » a map depicting the geographic extent from which a particular school draws its student population
- *Students Registered Elsewhere within a defined proximity* » for the same geographic extent as described above, a map depicting the home locations of other parochial school students

These maps assist both school administrators and diocesan planning staff in understanding the dynamics of the region from which students are drawn.



Web Services

The Archdiocese of Baltimore had an ongoing interest in being able to view parish and school data over the web. They recognized that a transition from all hard copy maps to web-based analysis and map production would allow for greater flexibility of displaying data. Keeping in mind the end goal for the Archdiocese of Baltimore, one of the more recently implemented projects is a flex-based viewing application for the web. Utilizing the free FlexViewer technology from Esri, Spatial Systems created a custom, web-based service for analysis of parish and school data. Recognizing that varying skill sets exist, the FlexViewer was developed and designed with the end user skill level in mind, by providing an easy-to-interpret user interface. With little training, users can begin using the custom built tools for analysis and be provided with immediate results.



Custom tools utilizing parishioner data allow the user to view:

- the total number of families in a designated area and to which parish they belong
- the number of families within a specific parish and to which parish they are registered
- where parishioners are coming from within a specific parish

For more information on how SSA can assist your diocese or parish, please contact us:

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