# Analysis of the Impact of a New Church Structure

# St. Clare Parish Region, Essex and Middle River



# Prepared for the Archdiocese of Baltimore September 2003

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#### **Executive Summary**

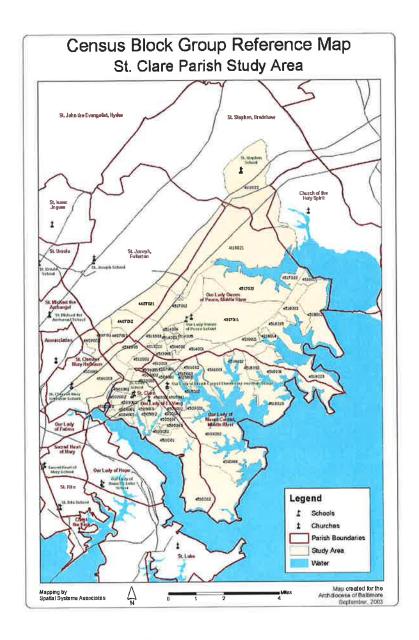
#### **Problem Statement**

St. Clare parish has been using the parish school basement as its worship site for over 40 years. The congregation would like to build a church on their property, which would also allow the school basement to be used by the school. The Archdiocese would like to know if the parish can afford to raise the money needed to begin the project and if they can afford amortization after construction. The Archdiocese also wants to look at the long term viability of the parish, the changing demographics of the neighborhood, and the county plans for the area.

The Archdiocese would also like to know how the construction of a new church at St. Clare will impact Our Lady of Mt. Carmel and Our Lady Queen of Peace parishes. Will the improvements at St. Clare draw parishioners away from the Middle River parishes and schools? Since St. Clare is a PLD parish, will new parishioners place additional demands on the clergy at Mt. Carmel? What is the long term viability of Queen of Peace after the incumbent pastor leaves the parish, especially if St. Clare is drawing parishioners away? Will there be enough new construction in the area to bring in enough practicing Catholics to support the needed repairs to the parish facilities? Would it be more advantageous for Queen of Peace to become a mass station of Mt. Carmel?

### Study Area

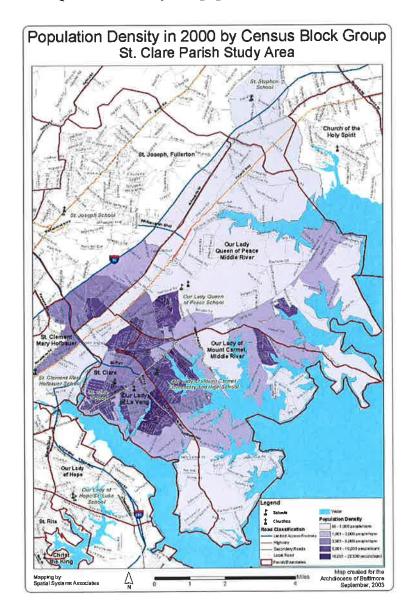
St. Clare church and school are located in a residential neighborhood north of Eastern Avenue in Essex. Our Lady of Mt. Carmel is located on Old Eastern Avenue in Middle River, northeast of the intersection with Southeast Boulevard. Our Lady Queen of Peace is located much farther to the north in Middle River, on Bird River Road. The study area is comprised of the three parishes, bounded by the Back River to the south, the Bird River to the north, the Chesapeake Bay to the east, and Philadelphia Road (Route 7) to the west, as shown on the following map:



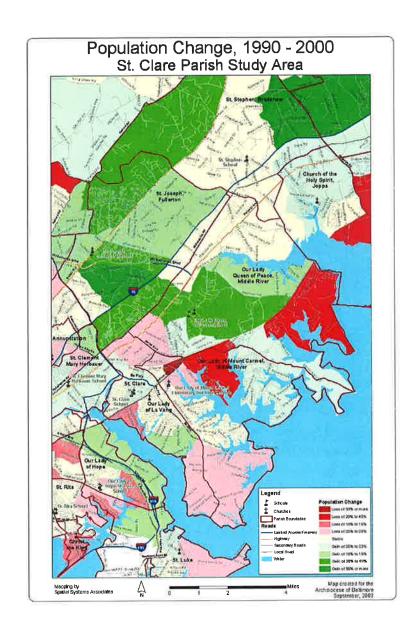
The study began with a demographic analysis of the area, including population density, population change, racial makeup, income characteristics, and percentage of registered Catholics. From there, each parish was explored individually; where registered families live and where students attending each school are coming from. Then, we used the current zoning information to determine where development may take place in the future and how many of the new families are likely to be registered Catholics, based on the demographic information.

In order to determine demographic trends in the study area, the analysis included an evaluation of population and income information from the 2000 Census, acquired from the U.S. Census Bureau. The following map shows the population density (the number of people per square mile) for the study area. Note the high density of population in the

central part of St. Clare and Our Lady of Mt. Carmel. On the other hand, most of Our Lady Queen of Peace parish has a very low population density.

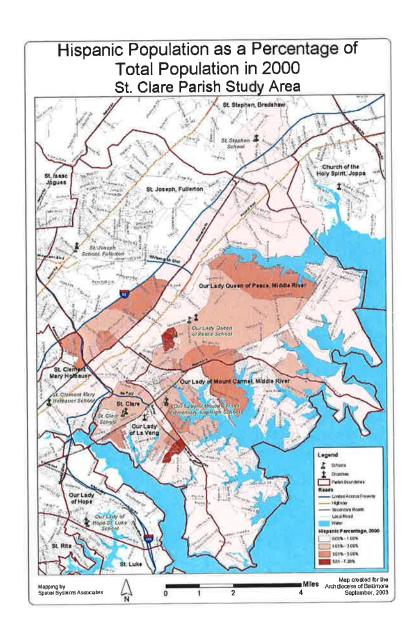


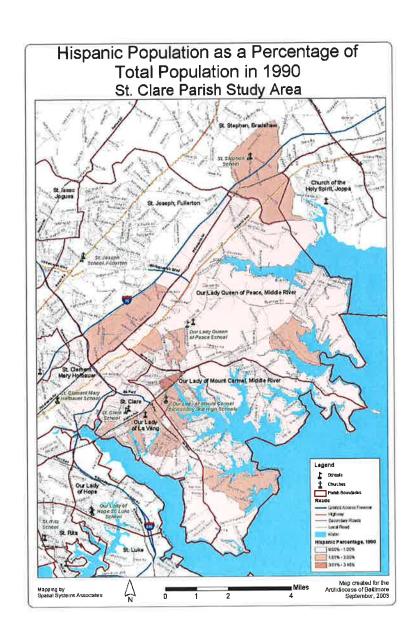
The following map depicts how population changed between the 1990 and 2000 Census. The population of St. Clare parish remained stable; areas with a slight loss were offset by areas with a slight gain. Our Lady Queen of Peace parish also stayed relatively stable. The area with a rather large population decrease in the eastern portion of the parish is offset by the area with significant increase in the center of the parish. Our Lady of Mt. Carmel lost a small percentage of population between 1990 and 2000, though that trend is likely to reverse itself in the coming years due to ongoing residential construction. The small triangle of land just to the north of Eastern Avenue that shows a loss of 50% or more is currently the location of a few new housing developments, as is the area directly across Old Eastern Avenue from the church structure.

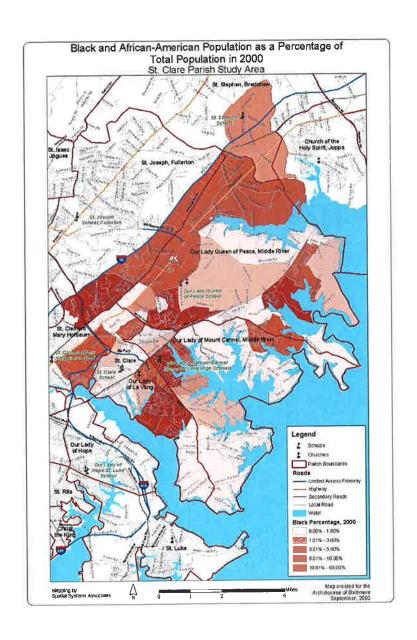


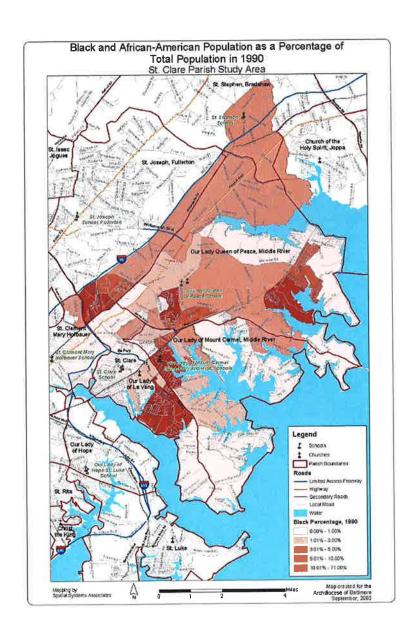
#### **Minority Populations**

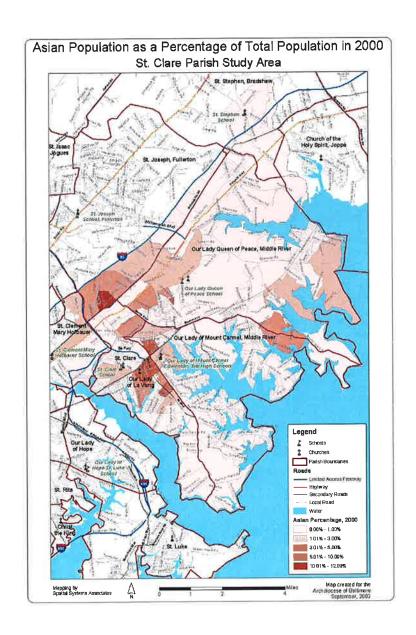
In an attempt to better understand the changing demographics of the region, an analysis was performed to identify large percentage populations of various minority groups that may have an impact on church communities in the area, and how these populations may have changed over time. The following six maps show Hispanic, Black and African-American, and Asian populations as a percentage of total population in both 1990 and 2000. The same percentage classifications are used for all six maps, so comparisons can be made between them.

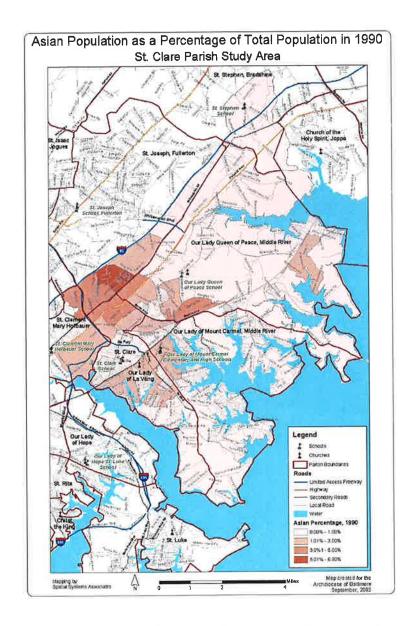








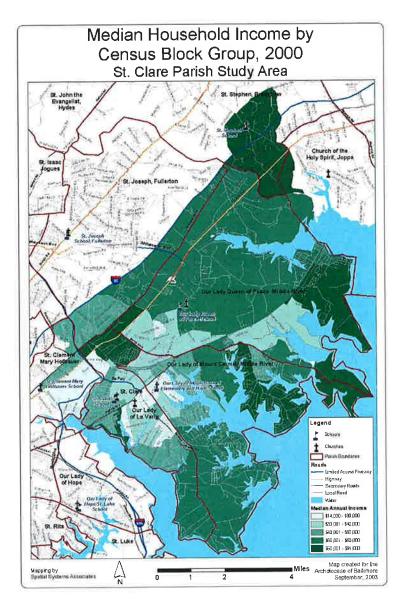




All three minority populations grew in the study area, both in raw numbers and in percentage of total population, between 1990 and 2000. The Hispanic population increased the most, 46.52% overall, from 1.04% of the total population in 1990 to 1.94% of the total population in 2000. Our Lady Queen of Peace parish had the greatest increase in Hispanic population, although parts of St. Clare parish increased significantly as well. The Black and African-American population of the area increased 46.18% in the past decade; black made up 8.99% of the total population in 1990 and 16.67% of the total population in 2000. Increases in black population occurred throughout the study area fairly evenly. The Asian population in the area only increased 20.53%, from 1.18% of the total population in 1990 to 1.49% of the total population in 2000. The older sections of Essex and Middle River, along Eastern Avenue in St. Clare and Our Lady of Mt. Carmel parishes, saw the greatest increase in Asian population.

This analysis is not intended to suggest that all Hispanics would prefer Spanish language masses, or that African-American or Asian Catholics would prefer a separated parish, or even attend a separate parish if one were available. These demographic trends, however, are something that the Archdiocese needs to take into account and plan for, since cultural differences in spirituality need to be considered in liturgical planning.

From a household income perspective, it is assumed that the general character of households in the region will stay approximately the same, and the new development and new families will follow approximately the same pattern that exists today. The following map depicts median household income from data taken from the 2000 Census.



The older sections of Essex and Middle River tend to have a lower median income, while the areas along the eastern edge of the study area bordering the Chesapeake Bay tend to

be more affluent. Most of Our Lady Queen of Peace has a higher median annual income that the other parishes, and this area is where a lot of new development is occurring.

The "Total Parish Household Income" of each parish in the study area was then determined by:

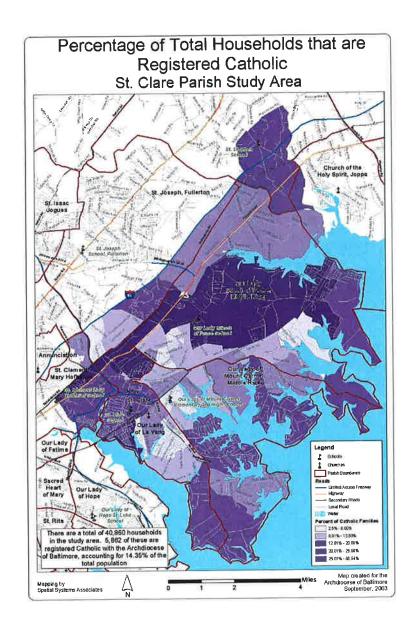
- geocoding the location of each registered family
- determining the census block group in which that family resides
- assigning the median household income for that census block group to the respective family
- aggregating the median household income for all families registered to each parish
- calculating the average household income for all families registered to each parish

The analysis resulted in the following statistics:

Parish	Number of Registered Families within Study Area	Aggregate Household Income	Average Household Income
St. Clare	1,169	\$50,461,797	\$43,167
Our Lady of Mt. Carmel	1,535	\$69,901,270	\$45,538
Our Lady Queen of Peace	1,051	\$53,422,836	\$50.830

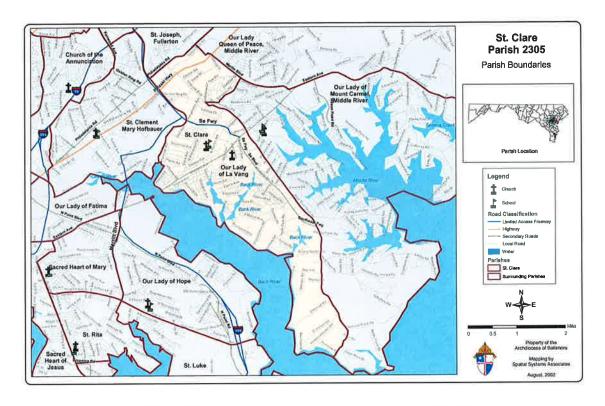
Note that the number of families in this analysis is not the same as the number of families registered to each parish. For this evaluation, only those families living within the study area were considered.

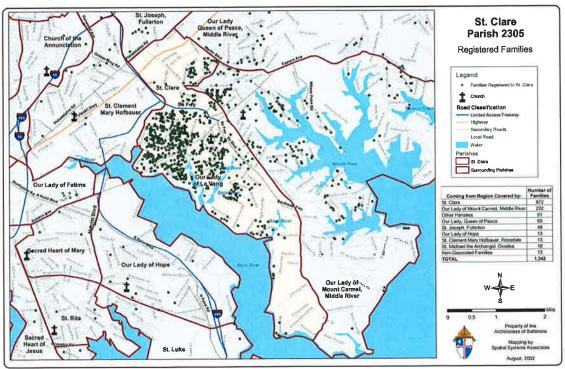
The next step was to determine what percent of the population in the study area was Catholic and was registered at a parish. The following map shows the results of this analysis. There are approximately 48,800 families in the study area, of which about 5,800, or 14.35%, are registered to a diocesan parish. The Archdiocese states that an average of 25% of the general population is Catholic, and this region seems to be significantly below that. This may be indicative of the region in general, or it may be caused by the fact that a large number of Catholic families in this area choose not to register with a church, or that the data used is not complete. It is interesting to note, however, that a large area in Our Lady Queen of Peace parish has a very high Catholic population, well above the accepted average.



#### St. Clare

The following maps depict the boundaries of St. Clare parish and the locations from which currently registered families come to attend mass. Most families registered at St. Clare are clustered within the parish boundary. There are 1,342 families registered to St. Clare, 872 (65%) live within the parish boundaries. 222 families live in Our Lady of Mt. Carmel parish, and 60 live in Our Lady Queen of Peace parish.

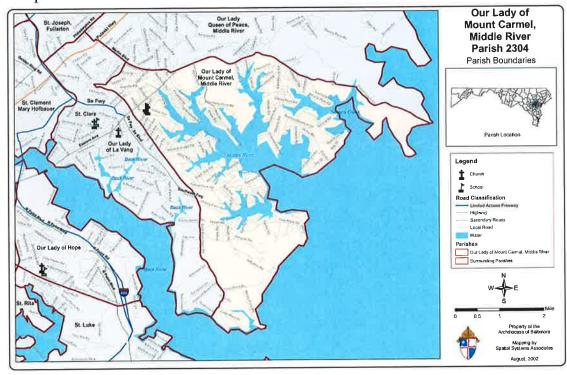


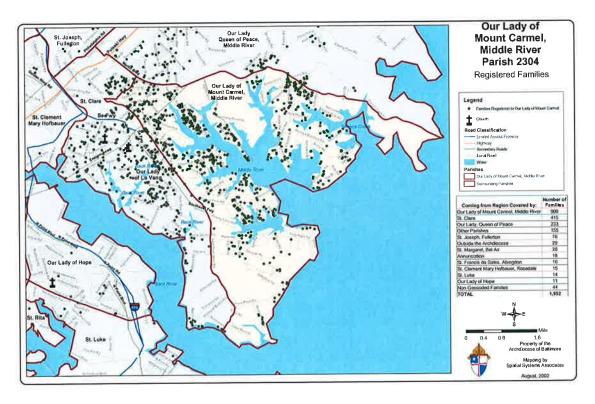


## Our Lady of Mt. Carmel

The next two maps show the boundaries of Our Lady of Mt. Carmel parish and the location of families registered there. The registered parishioners are spread out

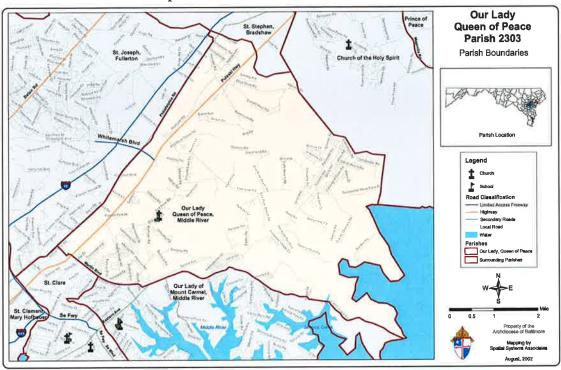
throughout the three study area parishes. Mt. Carmel has 1,952 registered families; 900 of the live within parish boundaries, 415 live in St. Clare parish, and 233 live in Queen of Peace parish.

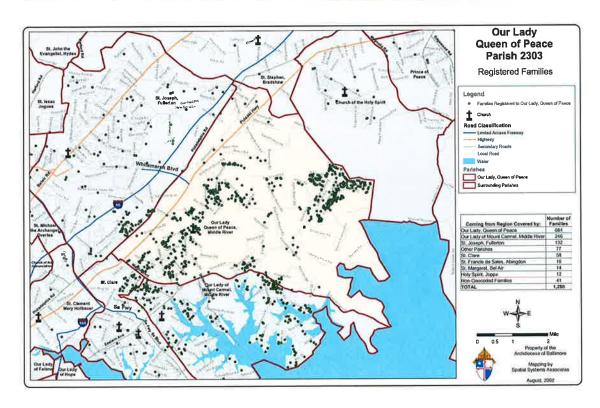




Our Lady Queen of Peace

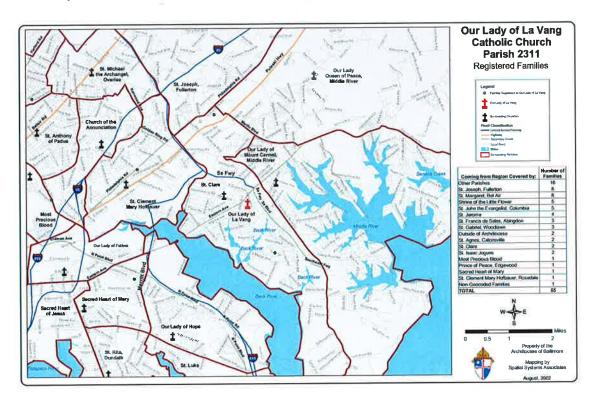
Our Lady Queen of Peace parish has 1,280 registered families, the majority of whom (684 families) live within parish boundaries. 246 families live in Mt. Carmel parish and 58 families live in St. Clare parish.



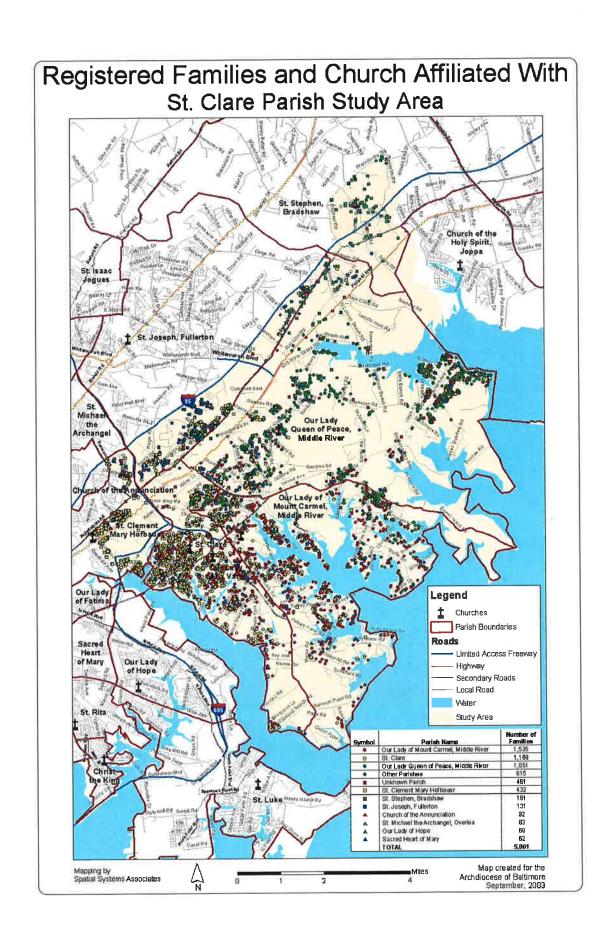


#### Our Lady of LaVang

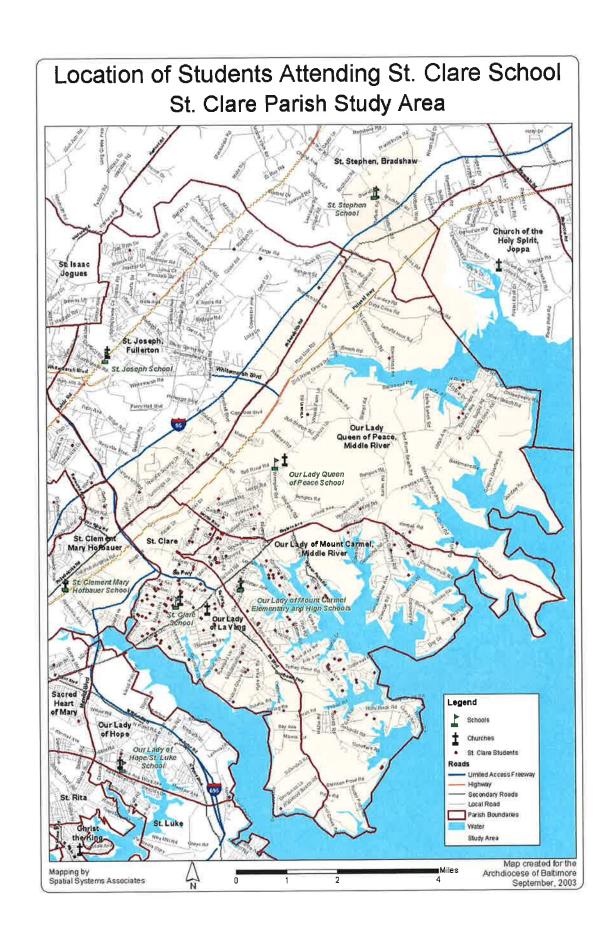
Our Lady of LaVang is a Vietnamese Catholic Church located in between St. Clare and Our Lady of Mt. Carmel churches. It does not have parish boundaries and draws families from throughout the Archdiocese who wish for a Vietnamese service. There are 65 families registered to Our Lady of LaVang, and only two of them live in the study area. The following map shows the location of the church as well as some of the registered families. Our Lady of LaVang is not included as part of the analysis since it is not drawing a significant number of parishioners from the three parishes in the study area, and is only included here because the church appears on the maps in this report.

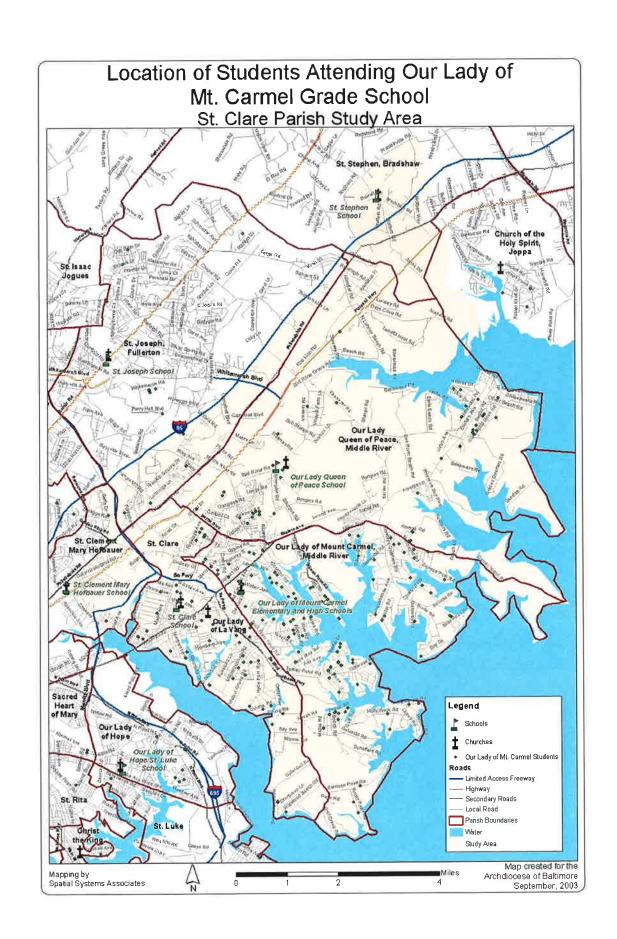


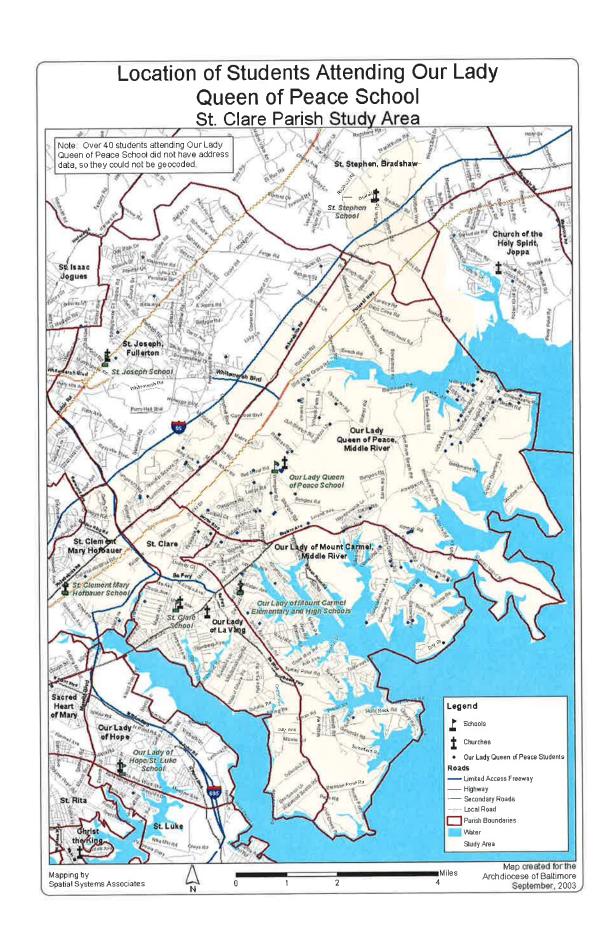
In order to visualize attendance on a regional basis, a map was developed depicting thematically (as a function of both color and symbology) the location of families registered to each parish in the study area. The registration counts in the table on the map do not correspond to the numbers referenced earlier in the section; the numbers in this map count only the families living within the designated study area. Parishioners registered to St. Clare tend to be clustered around the church, with a smaller clustering just south of Martin Boulevard. Our Lady of Mt. Carmel parishioners tend to be spread out along the eastern edge of both St. Clare and Mt. Carmel parishes. Most of the parishioners registered to Our Lady Queen of Peace are located within the parish boundaries, and not many people living in the parish attend church elsewhere. The major exceptions are the area between Eastern Avenue and Martin Boulevard and a small group off of Carroll Island Road.

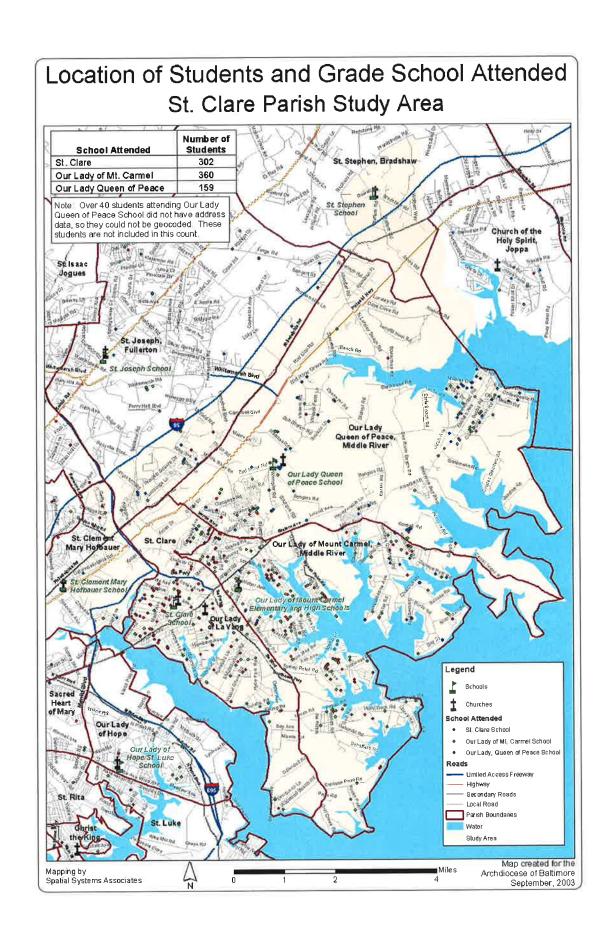


Since all three parishes in the study area have schools associated with them, and a number of the questions discussed in the problem statement concern the schools, an analysis was performed to determine where students are coming from to attend each of the three grade schools. The Archdiocese provided an export of active students enrolled in St. Clare, Our Lady of Mt. Carmel, and Our Lady Queen of Peace grade schools for the 2002-2003 school year from PowerSchool (student IDs and addresses only, no names were provided). The students were then geocoded and overlaid with the parish boundaries and church and school locations. The following four maps show the students' locations, color-coded based on which school they attend. The first three show the students for each school individually, and the fourth map shows all the students for all three schools combined.







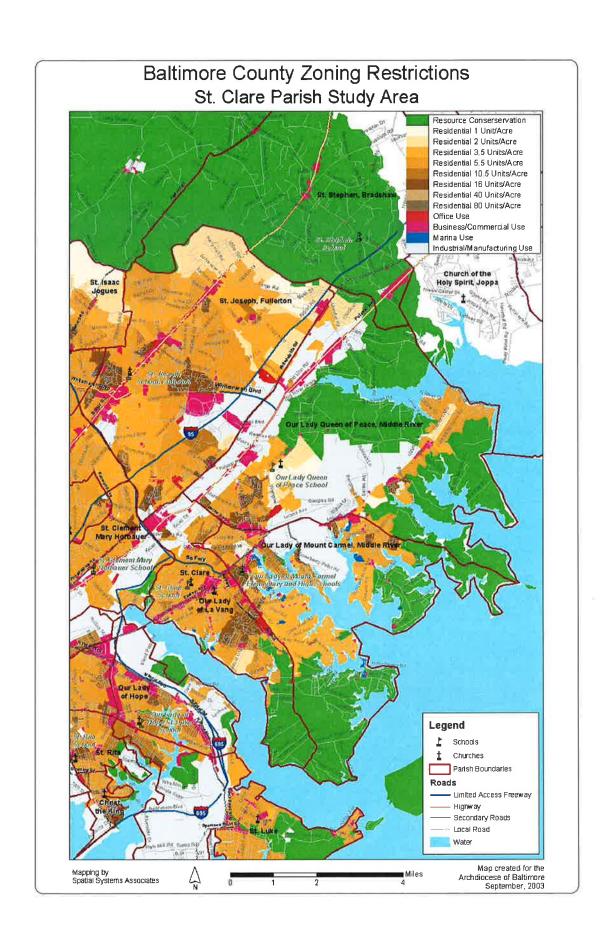


Approximately 69% of the 302 students attending St. Clare School live in either St. Clare or Mt. Carmel parish. Only about 7% live in Queen of Peace parish, and the rest are outside the study area. Almost 79% of the students attending Our Lady Queen of Peace School live either in Queen of Peace parish or outside the study area; only 18% live in Mt. Carmel parish and 3% live in St. Clare parish. The students attending Our Lady of Mt. Carmel School are more evenly distributed throughout the study area, which may be because Mt. Carmel also has a High School associated with it. Of the 360 students attending Our Lady of Mt. Carmel Grade School, 39% live in Mt. Carmel parish, 19% live in St. Clare parish, 16% live in Queen of Peace parish, and the rest live outside the study area.

As a side note, the data provided by the Archdiocese shows 159 students registered at Our Lady Queen of Peace school. However, more that 40 students attending the school did not have addresses associated with them in the database, and were not part of the export. These students are not included in this analysis.

#### **Current Zoning and Area Demographics**

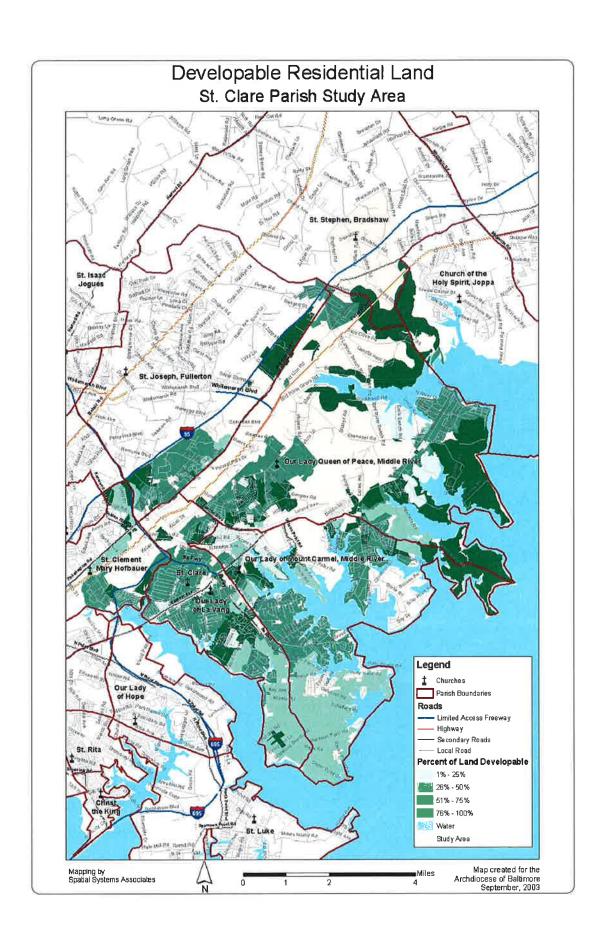
In an attempt to understand where current residential properties in the study area are located, and where additional development within the study area is likely to take place in the next ten to twenty years, an analysis of current zoning and buildout was conducted. A digital zoning layer was acquired from Baltimore County and overlaid with parish boundaries and church locations. The following map depicts the study area and thematically represents residentially zoned lands, color coded by allowable density, commercial and industrial lands, and resource conservation areas.



The area immediately surrounding Pulaski Highway is designated commercial and industrial, and a large tract of land in the middle of Our Lady Queen of Peace and Our Lady of Mt. Carmel is zoned industrial as well. Most of the land at the ends of the peninsulas, and a large area surrounding Bird River are zoned as Resource Conservation. Residential uses are allowed in resource conservation areas, but at a much lower density than in regular residential areas. Most resource conservation areas have a minimum lot size of one acre, with a limit as to how many residential units may be built on a given number of acres. For example, in Agricultural Protection areas, a lot between two and 100 acres may be subdivided into two lots, with a minimum lot size of one acre. In Watershed Protection areas, a tract between six and ten acres may be subdivided into two lots, with a minimum lot size of one acre. Clustering of residential developments is also encouraged in most resource conservation areas. Baltimore County publishes a guide called A Citizen's Guide to Zoning in Baltimore County, available online at http://www.co.ba.md.us/Agencies/planning/zoning/zone\_descriptions.html that explains all zoning restrictions and allowances in more detail.

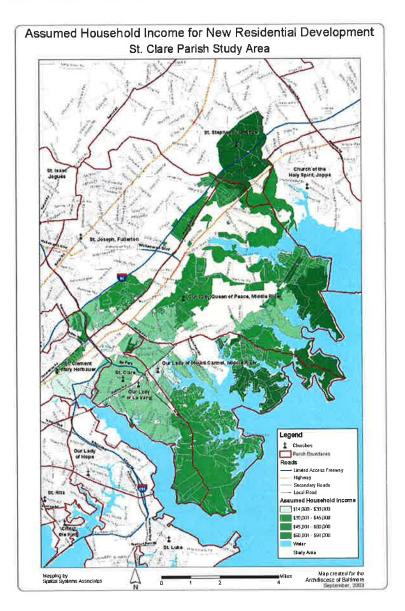
Residential areas are depicted on the map in shades of brown. The lightest brown color represents areas zoned for one unit per acre. Other residential zones include 2 units/acre, 3.5 units/acre, 5.5 units/acre, 10.5 units/acre, and 16 units/acre, as well as two zones for apartment complexes and other multi-family areas, 40 units/acre and 80 units/acre. Most of the residential land in the study area is a mix of the higher density, non-multi family zones.

The next step in the study was to determine, based on current zoning and development, where additional residential development may take place in the future. The following map shows the results of that analysis. Developable land is depicted in varying shades of green; the darker areas are less developed as a percentage of allowable density based on current zoning. Keep in mind that this analysis only looks at current buildout in comparison to allowable density. It does not take into account established neighborhoods that may have been developed at a lower density than allowed by zoning. For example, the area surrounding St. Clare church is designated "developable" but is most likely not going to see any major additional development in the foreseeable future.



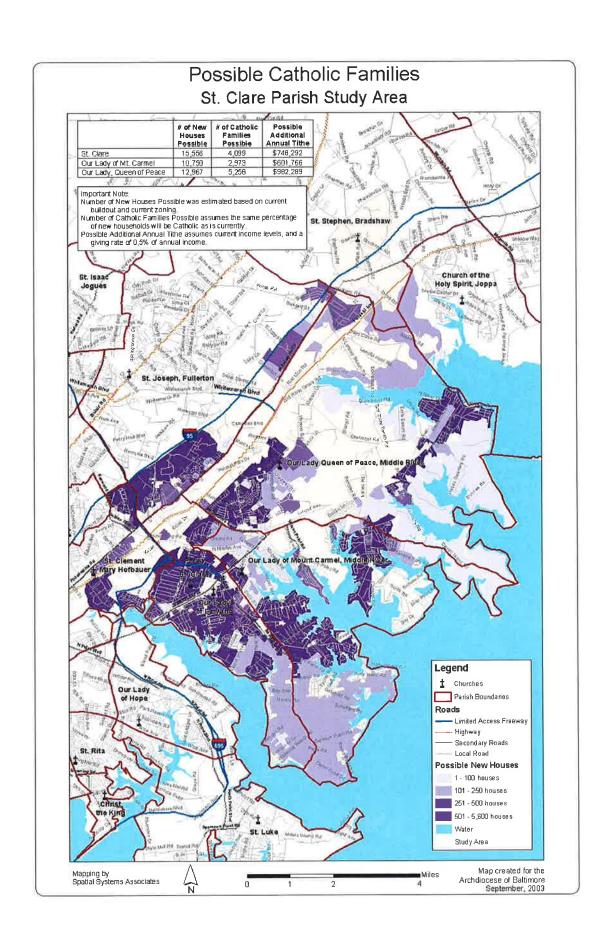
#### **Expected Future Development and the Impact on Parishes**

An analysis was performed to determine where additional development could take place in the study area, where development is likely to occur, the number of families that could be expected to move into the area, and the demographic characteristics of the new neighborhoods. Any new development in the area will have a financial impact on the parishes, so a study was done to project the income levels of families that may move into the region. The following map shows the expected income levels families moving into the study area based on 2000 Census data:

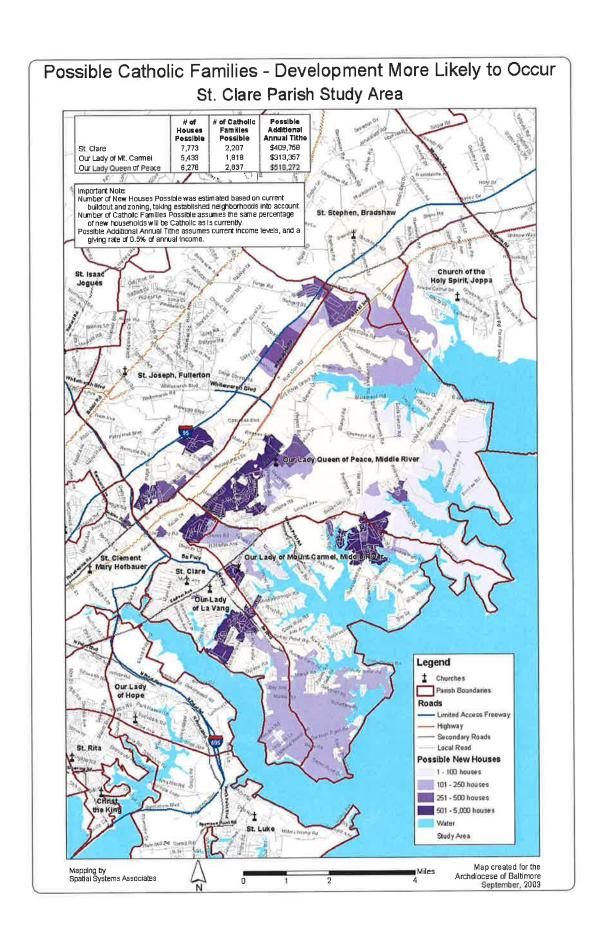


An analysis was then preformed to try to assess what a full buildout of the area might look like and how it would affect each parish. By looking at:

- the current level of development,
- the allowable development based on current zoning, and
- projections of household income based on current income levels in the area, it is possible to predict the eventual total family count and parish income of the parishes in the study area. The following map depicts development potential based on this analysis:



This level of development is highly unlikely, as it would require demolishing existing established neighbor hoods that were built at a lower density than zoning allowed. Given information obtained from field studies in the region and a list of approved subdivisions provided by Baltimore County, the same analysis was run again, using a more likely development scenario. The following map shows the results of this analysis:



The map indicates the potential for fairly moderate growth throughout the study area. The greatest growth, with the greatest economic gain for the parish, is likely to take place in Our Lady Queen of Peace parish. The assumption that 30% of new households will be Catholic and register at the parish in which they live seems rather optimistic; even if full buildout of these areas takes place, the actual number of new parishioners would actually be somewhat lower. The assumption that the average family would tithe 0.5% of their annual income is fairly accurate, based on current giving levels.

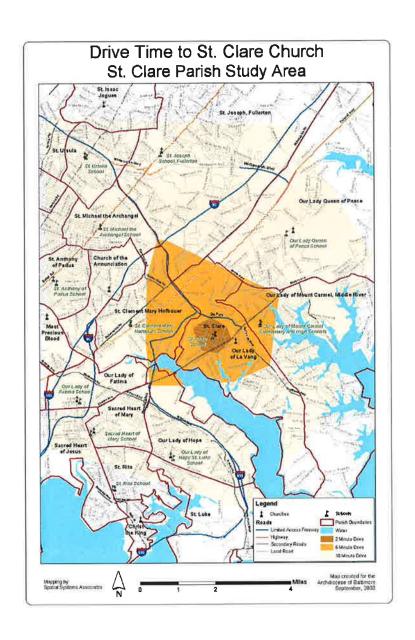
The analysis results in the following table of possible statistics for a full buildout (20 year) scenario:

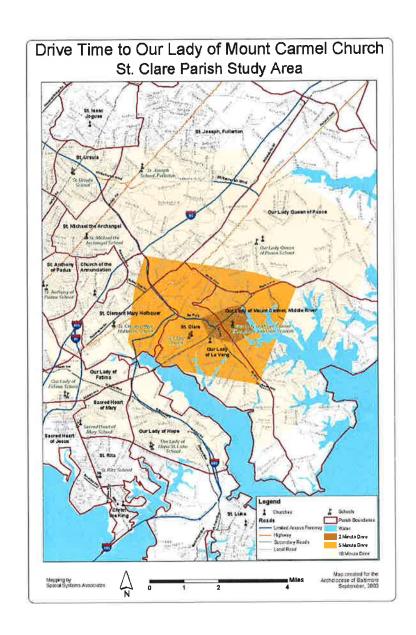
Parish	Currently Registered Families	Current Average Household Income	Potential Additional Families	Potential Total Registered Families	Potential Total Annual Tithe
St. Clare	1,342	\$43,167	2,207	3,549	\$765,998
Mt. Carmel	1,952	\$45,538	1,818	3,770	\$858,391
Queen of Peace	1,280	\$50,830	2,837	4,117	\$1,046,336
Totals	4,574		6,862	11,436	

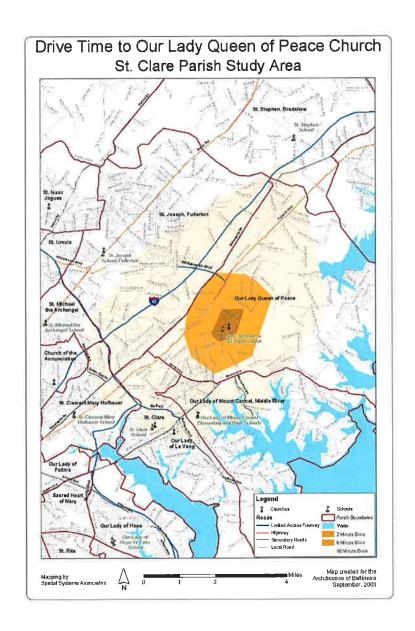
Note that the total number of registered families has the potential to increase more than 114% throughout the study area over the next 15-20 years, especially in St. Clare and Our Lady Queen of Peace parishes.

#### **Drive Time**

The amount of time it takes to drive from a family's home to a place of worship is usually a factor in determining where a family attends church. Most families would not be willing to drive much more than ten minutes to attend church, especially if there are other, closer churches of the same denomination that they could attend, unless there is a special draw to one church. The following three maps show drive times to each of the churches in the study area:







As shown on the maps, St. Clare and Our Lady of Mt. Carmel are very close to each other; if a family is within five or ten minutes of one, they are most likely within five or ten minutes of the other. When churches are located this closely together, the Archdiocese needs to look at other reasons why a family will choose to attend one church over another, especially when there are a large number of families who cross parish boundaries to attend church. Some of these reasons may be: pastoral staff, church architecture, type of service available (traditional vs. contemporary), availability and quality of a preschool or other day care services, availability and quality of a grade school or high school, existing youth programs, and other available ministries. Our Lady Queen of Peace church is farther away, only small portions of St. Clare and Mt. Carmel parishes are within a ten minute drive of the church. Reflecting this, there is not a large amount of crossover between Queen of Peace parish and the other parishes in the study area.

#### St. Clare



St. Clare Church entrance

St. Clare parish has a bout 1,300 registered families. According to the parish office, the church offers four masses each weekend – two on Saturday evening and two on Sunday morning. The Five Year Profile for St. Clare reports average attendance for masses in 2002 as being 273 people, and the capacity of the school basement worship center is 700 people.

The problem statement asks if the parish would be able to raise the funds necessary to build a new church and to continue to pay for it after the church is built. St. Clare has a strong parishioner base, especially in the neighborhoods on either side of Eastern Avenue in Essex. The Five Year Profile reports the average household tithe to be about \$345 annually. The average household income within the parish boundaries is \$43,167; the accepted tithing rate of 0.05% would only be about \$215 per household annually. Parishioners at St. Clare tend to give generously to their church, so raising additional funds for a new church should not be a problem, especially if the idea of a new church structure is strongly supported by the parishioner base.

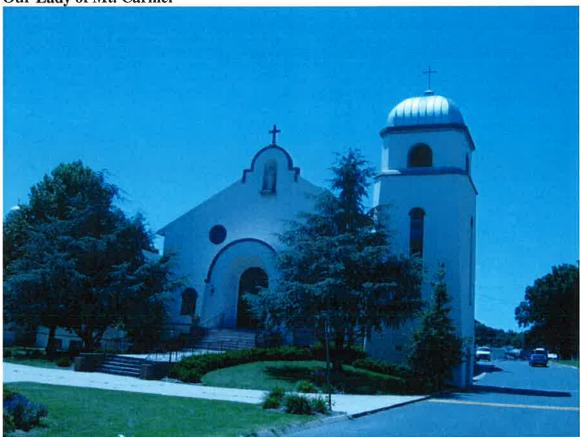
The general population of the parish has remained relatively stable in the last decade. The population has the potential to double in the next 15 - 20 years, but it is unlikely that it will increase that much. New developments are being built in the area at a fairly steady rate, and the long-term viability of the area looks good.

The Hispanic population of the parish did increase in the past decade, especially in the neighborhood immediately surrounding the church, and in a few other neighborhoods further south on Southeast Boulevard. The Hispanic population seems to be increasing much more rapidly in Our Lady Queen of Peace parish, however. Neither the Black and African American or Asian populations are increasing significantly enough to have an impact on the parish.



St. Clare School

Our Lady of Mt. Carmel



Our Lady of Mt. Carmel Church

Our Lady of Mt. Carmel parish currently has about 2,000 registered families. According to the parish office, the church offers five masses each weekend – one on Saturday evening and four on Sunday morning. The Five Year Profile for Mt. Carmel reports the average weekly attendance in 2001 to be 1,400 people, or about 280 people per mass, and the church capacity is 600 people.

Currently, Mt. Carmel draws parishioners from across the study area, especially the southeastern portion of St. Clare parish. In fact, almost a quarter of the families registered to Mt. Carmel live in St. Clare. It is quite possible that a new church structure at St. Clare could draw some of these families away from Mt. Carmel, especially if expansion and improvements to the school accompany the new construction. Currently, Our Lady of Mt. Carmel Elementary School has more students enrolled than St. Clare School, and the students are coming from a wider geographic area, but the number of students at Mt. Carmel has been decreasing over the past five years, and the number of students at St. Clare has been increasing. Between 1998 and 2002, the number of students enrolled at Mt. Carmel grade school decreased by 11% and the number of students at St. Clare School increased by 15%. Any expansions and improvements at St. Clare School would likely only exacerbate this trend.



Our Lady of Mt. Carmel Elementary School



Our Lady of Mt. Carmel High School

#### **Our Lady Queen of Peace**



Our Lady Queen of Peace Church

Our Lady Queen of Peace church currently has about 1,300 registered families. According to the parish office, the church offers four masses each weekend – one on Saturday evening and three on Sunday morning. The Five Year Profile for Queen of Peace reports the average attendance for masses as being 175 people in 2002, and the capacity of the church is 800 people.

It is unlikely that any improvements to St. Clare parish will draw parishioners away from Queen of Peace, as there is very little crossover registration between the two parishes now. Only 58 families registered to Queen of Peace live in St. Clare parish, and only 60 families registered to St. Clare live in Queen of Peace parish. Likewise, only a very small percentage of the students attending either school live in the other parish.

Queen of Peace parish has the greatest potential for growth over the next 15-20 years of the three parishes in the study area, and it also has the highest income potential in the area. However, church attendance is relatively low, currently only 21% of registered parishioners are estimated to attend church on Sundays. Mt. Carmel is experiencing a similar situation; only 24% of registered parishioners are estimated to attend masses, compared to 32% at St. Clare. The annual tithing rates at both Queen of Peace and Mt. Carmel are right around the accepted 0.05% of annual income. If these trends continue in

Queen of Peace, it is unlikely that the parish will be able to raise enough money to fund the improvements to the facilities that are necessary. The problem statement asks if it would be advantageous for Queen of Peace to become a mass station of Mt. Carmel – give the current situation of both parishes and likely future scenarios, it would probably be beneficial to both parishes to combine resources in some manner.