# New Church Starts 1985-2005 

## Virginia Annual Conference

## Findings from a Detailed Analysis of the New Church Starts in the Virginia Annual Conference

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Lewis Center for Church Leadership

The Virginia Annual Conference engaged the Lewis Center for Church Leadership of Wesley Theological Seminary in an examination of new church starts, as well as mergers and relocations. The Lewis Center developed and implemented the project with RRC, Inc., of Bryan, Texas. The two principal researchers were Dr. Donald R. House, president of RRC, Inc., and Dr. Lovett H. Weems, Jr., executive director of the Lewis Center for Church Leadership.

This examination is largely based upon the completed geo-coding of all United Methodist churches in the Virginia annual conferences and with additional demographic information within the relevant geographic areas. Additional founding pastor surveys were completed. The Virginia Annual Conference provided additional details of mergers and church relocations.

It is generally understood that the purpose of a new church start is to make disciples of Jesus Christ through the United Methodist witness. It is reasonable to expect that such expanded witness will result in increased membership and attendance in these churches. It is under this understanding that this examination is designed and conducted. We assume that, while not the only expectation, there is an expectation that every new church start seeks to expand membership and attendance.

## Two Ways to Measure "Success" Rates

There are two equally important ways to look at the success rates for new church starts within conferences. We report both. One is to examine all the new church starts launched by a conference and to see how many of them are still reporting worship attendance in the most recent year. These figures are shown in Appendix A. This calculation includes churches that never got off the ground sufficiently to receive a GCFA ID number and to report annual statistics. Virginia has an 88\% success rate using this definition, far higher than any other conference studied. In terms of average worship attendance in 2006, Virginia is significantly higher in the percentage of churches found in the 126-349 AWA tier, resulting in smaller percentages for smaller and larger churches.

The second way is the one reflected in the numbers used in the remainder of the report. Here the new church starts are limited to those churches that did get far enough to receive a GCFA ID number and report annual statistics for at least one year. Some of these churches may have closed later. The total number of new church starts in these calculations will normally be lower for a conference since those efforts that never got off the ground are not included due to the absence of useable statistics.

New Church Starts: Virginia Annual Conference
Table 1 presents the number of new church starts with statistical information within the Virginia Annual Conference.

## Table 1

# Number of New Churches <br> Virginia Annual Conference <br> (for new churches progressing far enough to receive an ID number and report statistics) 

| Conference | Started | Continuing | Percent |
| :--- | :---: | :---: | :---: |
| Virginia | 23 | 23 | $100 \%$ |

In contrast to studies of new churches among other denominations and in our own research with the annual conferences in Texas with survival rates under $80 \%$, the survival rate of $100 \%$ is remarkable.

The Four Virginias
No differences in success rate were found in the "four Virginias." The new church starts in each region were: Capital - 5, Northern -9, Shenandoah - 3, and Tidewater - 6.

The mere survival of a new church is not the only measure of success. For most new churches there is an expectation of worship attendance growth sufficient to reach a point at which the church is viable and without need for conference or district financial support within a reasonable time period. Table 2 presents the average worship attendance among new churches at the three-year and five-year points in their histories. Not all new churches are included since some had not yet reached the five-year point by 2005.

Table 2
Average Worship Attendance At the End of the Third and Fifth Year

| Number of <br> Churches | 3-Year | 5-Year | Change |
| :---: | :---: | :---: | :---: |
| 17 | 120.5 | 166.3 | $27.5 \%$ |

In the Virginia annual conference, the average new church reached worship attendance around 121 attendees, and attendance continued to grow to about 166 by the $5^{\text {th }}$ year. Worship attendance increased by $27.5 \%$ between the $3^{\text {rd }}$ and $5^{\text {th }}$ years. These findings are somewhat similar to the findings in two annual conferences in Texas (Texas and North Texas). In these conferences, worship attendance at the 3 -year mark averaged around 220 with a growth between the $3^{\text {rd }}$ year and $5^{\text {th }}$ year of $38 \%$. The Virginia new church starts appear to have a greater survival rate but a smaller scale compared to those in two annual conferences in Texas.

The equation in Table 3 explains the differences in worship attendance growth among the new churches. It is the basis for identifying factors that contribute to the success or failure of new churches. The following table presents the foundation equation, which is based upon data that includes the number of other United Methodist churches in the surrounding area and local demographics.

Table 3
Foundation Equation
Virginia Annual Conference

where
yrs_open represents the number of years a new church has been open
yrs_open represents the arithmetic square of yrs_open
nhs_white represents the size of the non-Hispanic white population within a 4-mile radius asian represents the size of the Asian population within a 4-mile radius competing_5 represents the number of UM churches within a 5-mile radius pct_over_65 represents the percentage of the population over the age of 65 within a 4 -mile radius
pct_over_100 represents the percentage of the population with family incomes greater than $\$ 100 \mathrm{~K}$ within a 4 -mile radius _cons represents the statistical constant (intercept) term

This foundation equation is based upon the history of the 23 new church starts in the Virginia Conference. Additionally, the population surrounding the new church has been separated into multiple population groupings based upon race and ethnicity. In this equation, it is possible to measure the impact of growth in population within a racial and ethnic group.

Racial and ethnicity groupings deserve comment. The 2000 US Census introduced new racial and ethnic groupings compared to those used in the 1990 US Census. Claritas, the vendor supplying
the demographic data for this study, estimates the 2000 groupings for the 1990 census year. ${ }^{1}$ Additionally, Claritas provides an estimate of the size of these grouping for the year 2007. For our analysis, population counts for intra-census years and for years between 2000 and 2007 have been interpolated.

One should understand the definition of the groupings. Large ethnic and racial groupings in Virginia include white, non-Hispanic; white, Hispanic; black; and Asian. However, almost all of the new churches are either white or Asian. There remain several other ethnic and racial groupings, such as multi-racial, Native Americans, Pacific Islanders, and others. Because of the importance of the former ethnic and racial groupings, the latter groupings have not been included.

## Years Open

The new church is expected, on average, to report increases in worship attendance as it matures. Figure 1 below presents a graphical description of the results from the foundation equation.

Figure 1
Average Worship Attendance Results from the Foundation Equation


Holding all else constant, worship attendance among new churches is expected to reach peak after about fifteen years of operation. The growth rate in worship attendance is greatest during its earlier years. This growth path, however, changes if any of the remaining factors change.

[^0]
## White, Non-Hispanic Population

Worship attendance increases with increases in the white, non-Hispanic population within a four-mile radius of a new church. As expected, the gain in worship attendance is significantly less than the increase in population. The results suggest that for every ten percent increase in the white, non-Hispanic population surrounding the new church, worship attendance is expected to increase 7.6\%.

## White, Hispanic Population

Due to the small number of new Hispanic churches in the area, the results were not statistically significant and cannot be analyzed here.

## Black Population

Due to the small number of new Black churches in the area, the results were not statistically significant and cannot be analyzed here.

## Asian Population

Worship attendance decreases with increases in the size of the Asian population. These results suggest that a 10\% increase in the size of the Asian population surrounding a new church results in a $3.5 \%$ decrease in worship attendance in the new church. This is a smaller response than reflected in the results for the white, non-Hispanic population. This result does not shed light on the successes or failures of new church starts targeting a growing Asian population. Instead, it suggests that new United Methodist churches do reasonably well in areas with growing white, non-Hispanic populations. Even with new churches targeting Asian populations, our denomination does not do as well. These results do not suggest that United Methodist churches targeting growing Asian populations are never successful.

## Other UM Churches

The presence of another United Methodist Church within a four-mile radius of a new church start limits growth in worship attendance. The results indicate that the presence of an existing United Methodist Church within a four-mile radius of a new United Methodist Church results in a 151 reduction in expected worship attendance in the new church. ${ }^{2}$ Other examinations confirm the conclusion that the negative impact of the presence of another UM church is minimal in the larger communities.

## Population over the Age of 65

This result is consistent with the findings from the Texas Annual Conference alone. An increase in the percentage of the population over the age of 65 is positively related to worship

[^1]attendance. The results are not statistically significant, but of the right direction as found in other studies. New United Methodist churches tend to prosper in areas with a larger proportion of older adults.

Population with Family Incomes over \$100,000
A higher percentage of the population within a four-mile radius of the new church with family incomes greater than $\$ 100,000$ leads to greater numbers in worship among new UM churches. The impact is relatively large. When comparing two new churches, adjusted for all other factors, the new church surrounded by a population with $10 \%$ in the higher income categories is expected to have a larger worship attendance than a new church surrounded by a population with only $7.4 \%$ of the population in the higher income categories.

## Differences in Population Growth

It is possible to compare the characteristics of the neighborhood surrounding new churches and the neighborhood surrounding existing churches. Table 4 presents the population growth surrounding new church starts and surrounding existing churches.

Table 4
Population Growth (Actual and Expected) Within a 4-Mile Radius: New and Existing Churches

|  | Total Population Growth |  |  |  | Annual Population Growth |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | $\mathbf{1 9 9 0 - 2 0 0 0}$ | $\mathbf{2 0 0 0 - 2 0 0 7}$ | $\mathbf{2 0 0 7 - 2 0 1 2}$ |  | $\mathbf{1 9 9 0 - 2 0 0 0}$ | $\mathbf{2 0 0 0 - 2 0 0 7}$ | $\mathbf{2 0 0 7 - 2 0 1 2}$ |
| New | 14,047 | 8,924 | 6,212 |  | 1,405 | 1,275 | $\mathbf{1 , 2 4 2}$ |
| Existing | 2,762 | 1,674 | 1,161 |  | 276 | 239 |  |

The typical new church was placed in a neighborhood with a population growth that was considerably greater than the growth in population surrounding existing United Methodist churches. On an annual basis, the population increased 1,405 per year surrounding new churches in the Virginia Annual Conference. During 2000 and 2007, the annual growth rate decreased. Annual growth in the existing churches from 2007-2012 is estimated to be only 232 people per year, where new churches expect to see 1,242 people in their 4-mile radii.

The race and ethnicity of population growth has been found to be important. Table 5 presents the average annual rate of growth in differing racial and ethnic populations within a four-mile radius of the new church starts.

Table 5
Racial and Ethnic Annual Population Growth ${ }^{3}$
4-Mile Radius of New Church Starts

|  | Total Population Growth |  |  | Annual Population Growth |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | $\mathbf{1 9 9 0} \mathbf{- 2 0 0 0}$ | $\mathbf{2 0 0 0} \mathbf{- 2 0 0 7}$ | $\mathbf{2 0 0 7} \mathbf{- 2 0 1 2}$ |  | $\mathbf{1 9 9 0}$ |  |  |
| White | 2,416 | 2,439 | 214 |  | 242 | 348 | 43 |
| Black | 3,496 | 1,595 | 1,229 |  | 350 | 228 | 246 |
| Asian | 2,985 | 2,079 | 2,074 |  | 298 | 297 | 415 |
| Hispanic | 1,761 | 1,054 | 997 |  | 176 | 151 | 199 |
| Other | 3,389 | 1,757 | 1,698 |  | 339 | 251 | 340 |
| Total | 14,047 | 8,924 | 6,212 |  | 1,405 | 1,275 | 1,242 |
|  |  |  |  |  |  |  |  |
| Black + White | 5,912 | 4,034 | 1,443 |  | 591 | 576 | 289 |
| Asian | 2,985 | 2,079 | 2,074 |  | 298 | 297 | 415 |
| Total | 8,896 | 6,114 | 3,517 |  | 890 | 873 | 703 |

The differences presented in this table are remarkable. The annual rate of growth in the white population surrounding new churches between 2000 and 2007 (348) is the largest of all annual increases between 2000 and 2007. In future years, Asians are expected to represent the fastest growing segment of the population. Because United Methodist Churches have served the white, nonHispanic, black, and Asian populations reasonably well, the table combines these three populations. ${ }^{4}$ Between 2000 and 2007, the Virginia Annual Conference experienced annual growth in these three populations (873). The white, non-Hispanic population alone is currently growing rapidly, but in the projected years from 2007-2012, the white, non-Hispanic population is expected to increase at a much slower rate, only 43 people annually.

## Important Markers

The evidence can be used to explore the possibility of identifying important markers that can be used to predict future worship attendance based upon early worship attendance records. That is, can one predict future worship attendance growth based upon only the first three years of attendance history? Can this be used to consider the possibility of closing a new church start sooner rather than later?

Most annual conferences seek to start new churches that will become financially sufficient, meaning that the new congregation will provide the necessary financial resources to pay the pastor in full, cover operating expenses, and to pay any assigned apportionments in full. A new congregation that cannot meet either of these obligations is one in which the annual conference or district must financially subsidize thus using funds that could otherwise be used for other mission and ministry.

[^2]Let's look at the issue of the ability to pay the pastor's salary. For new churches that have been open only three years, a total of 19 new churches for which we have pastor pay available, $76 \%$ paid their pastor less than $\$ 20,000$ for the year (2008 dollars) - four paying nothing. At the fiveyear mark, 11 of 18 new churches (or 61\%) paid their pastor more than \$20,000 per year (2008 dollars) - one paying nothing. The important issue here is the question of sufficient payment for the pastor, for if the congregation cannot meet the minimum salary requirement, the annual conference must use equitable compensation to subsidize the pastor or the new church must become a part of a circuit with only a part-time pastor.

With the available evidence, it is possible to establish useful markers that identify levels of worship attendance at key points in time that yield an acceptable likelihood of sufficient worship attendance growth. For example, at three years, what is the expected growth in worship attendance for new churches with average worship attendance of 75 ? Is this sufficient to warrant continuing the new congregation past the three-year point?

Table 6 presents the results of the estimation of annual growth rates in membership, based upon differing attendance figures at three years of operation.

Table 6
Annual Worship Attendance Growth By Differing Worship Attendance Figures at Markers

|  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Attendance (Year 3) | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ | $\mathbf{7}$ | $\mathbf{8}$ | $\mathbf{9}$ |  |
| Less than 50 | $14 \%$ | $12 \%$ | $10 \%$ | $9 \%$ | $8 \%$ | $7 \%$ |  |
| Less than 100 | $25 \%$ | $21 \%$ | $19 \%$ | $17 \%$ | $15 \%$ | $14 \%$ |  |
| Less than 150 | $25 \%$ | $18 \%$ | $14 \%$ | $12 \%$ | $10 \%$ | $8 \%$ |  |
| Less than 200 | $23 \%$ | $17 \%$ | $13 \%$ | $11 \%$ | $9 \%$ | $7 \%$ |  |

According to Table 6, a new church start that has less than 50 in worship attendance at the four-year mark can expect an annual growth of only $14 \%$ in the 4th. The rate of growth tapers downward with time, and by the $8^{\text {th }}$ year, the growth will only be $8 \%$. That means that predicted attendance for a church that has 32 attendance in the $3^{\text {rd }}$ year will only have 36 attendance in an additional year. In contrast, a new church that has 125 in attendance at the $3^{\text {rd }}$ year can expect to gain $25 \%$ in worship attendance in the 4 th year. At the $8^{\text {th }}$ year, this congregation would expect in worship a total of 258 attendees.

Table 6 provides reasonably strong support for using the three-year markers for determining whether the annual conference should continue a new congregation if there are to be no future financial subsidies. A gain of less than one attendee per year is essentially a worship attendance plateau. Growth is so small that it can reasonably be ignored. These results suggest that a new church that has average worship attendance exceeding 100 after three years should reasonably expect measurable annual growth in worship attendance thereafter. With less than 50 in worship
attendance, measurable annual growth in worship attendance in the future is doubtful. Of course, special circumstances could alter these expectations, such as a rapid growth in the segment of the population that the new church is able to reach and serve.

## Race and Ethnicity: Differences among New Churches?

There are a total of 22 new churches from the Virginia Annual Conference with sufficient information for inclusion in the data analysis with one church of unknown racial composition. The racial and ethnic composition of the membership of these churches differ as several new churches were established for the purpose of ministering to particular racial and ethnic communitiesparticularly Hispanics and Asians. Using the composition of the membership of each of these new churches, it is possible to classify each church on the basis of the racial and ethnic composition of membership. For our purposes, a church is classified on the basis of the majority (over $50 \%$ ) of the membership. For example, a new church is classified as Hispanic if over $50 \%$ of its members are classified as Hispanic, as recorded in the church's year-end statistical report.

From our 23 churches, the racial and ethnic composition of membership yields the following classifications:

Table 7
Racial and Ethnic Composition of Membership Among New Churches

|  | Number of <br> Churches | Percent |
| :--- | :---: | :---: |
| White | 16 | $70 \%$ |
| Black | 1 | $4 \%$ |
| Asian | 3 | $13 \%$ |
| Hispanic | 2 | $9 \%$ |
| Unknown | 1 | $4 \%$ |
| Total | 23 | $100 \%$ |

Our church history has demonstrated our relative successes in attracting members from white and black communities and our difficulties in attracting members from Hispanic communities. The composition of these new churches appears to reflect this history.

There is a common observation that the membership of new churches tend to reflect the racial and ethnic composition of the populations surrounding the selected location. A successful Asian United Methodist Church is best located in a neighborhood with a relatively large concentration of Asians. If this is correct, one would expect the new churches to reflect the race and ethnicity of the surrounding populations. Table 8 illustrates the racial and ethnic composition of the neighborhoods surrounding each new church start.

Table 8
Racial and Ethnic Composition of Population
Within a 4-Mile Radius of the New Church

|  | Racial Compostion of 4-Mile Radius |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Predominant |  |  |  |  |  |
| Membership | White | Black | Asian | Hispanic | Other |
| White | $\mathbf{7 3 . 1 \%}$ | $12.2 \%$ | $3.2 \%$ | $6.1 \%$ | $5.5 \%$ |
| Black | $48.5 \%$ | $\mathbf{4 3 . 5 \%}$ | $1.1 \%$ | $0.2 \%$ | $6.6 \%$ |
| Asian | $63.9 \%$ | $10.0 \%$ | $\mathbf{6 . 9 \%}$ | $8.2 \%$ | $11.1 \%$ |
| Hispanic | $61.2 \%$ | $18.5 \%$ | $4.2 \%$ | $\mathbf{8 . 1 \%}$ | $8.0 \%$ |

The table presents the composition of the population surrounding each classification of new churches. For example, among the new, predominately black churches, $43.5 \%$ of the surrounding population was black, $48.5 \%$ of the surrounding population was white, non-Hispanic, $0.2 \%$ of the surrounding population was white, Hispanic, $1.1 \%$ of the surrounding population was Asian, and $6.6 \%$ of the surrounding population was other racial and mixed racial groups.

The growth rates in worship attendance among racial and ethnic minority churches differ. Table 9 presents the 3-year and 5-year average worship attendance figures among the racial and ethnic groups.

Table 9
Average Worship Attendance at the End of Three And Five Years of Operation

| Predominant |  |  |  |
| :--- | :---: | :---: | :---: |
| Membership | $\mathbf{3}$ Years | $\mathbf{5}$ Years | Change |
| White | 134.5 | 186.0 | $\mathbf{2 7 . 7 \%}$ |
| Black | N/A | N/A | N/A |
| Asian | 55.3 | 87.0 | $36.4 \%$ |
| Hispanic | N/A | 30.0 | N/A |

These figures are based upon only those new churches that reached the five-year mark so that useful comparisons can be made between the three-year and five-year marks. Because there are so few Hispanic and Black churches, the attendance data were not available for analysis. Among predominately white churches, worship attendance figures increased $27.7 \%$ on average. Asian churches also experienced growth. From the third to the fifth year, Asian churches increased 36.4\% on average.

## New Church Compared to Existing Church

There is no doubt that our churches fail to keep pace with population growth. United Methodists represent a declining percentage of the population in the US. Not only is our denomination failing to keep pace with population growth, membership is declining in the presence of population growth. In spite of these facts, it is important to measure the responsiveness of existing versus new churches to population growth. These findings will help form the conversation around transforming existing churches versus establishing new churches.

Overall, existing churches and new churches both positively respond to population growth. Table 10 presents the general findings, without separation into racial and ethnic groups.

Table 10
Foundation Equation Comparing
Existing and New Churches
Total Population With a 4-Mile Radius
Random-effects GLS regression
Random-effects GLS regression
Number of obs $=22407$
Group variable (i): rectype
Group variable (i): rectype
Number of groups $=1189$
R-sq: within = 0.0767
R-sq: within = 0.0767
between = 0.1252
between = 0.1252
overall = 0.1509
overall = 0.1509
$\begin{array}{rlr}\text { Obs per group: } & \text { min }= & 1 \\ \text { avg }= & 18.8\end{array}$
$\max =19$
Random effects u_i ~ Gaussian
Random effects u_i ~ Gaussian
Wald chi2(4) = 1422.71
$\begin{array}{llll}\text { corr (u_i, X) } & =0 \text { (assumed) } & \text { Prob > chi2 } & = \\ \end{array}$

| attend | Coef. | Std. Err. |  | $\mathrm{P}>\|\mathrm{z}\|$ | [95\% Conf. Interval] |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| pop | . 0011622 | . 0000377 | 30.85 | 0.000 | . 0010883 | . 001236 |
| inter_0 | . 0015511 | . 0001461 | 10.62 | 0.000 | . 0012648 | . 0018374 |
| Pct_Prime_Āge | 90.89249 | 13.29896 | 6.83 | 0.000 | 64.82701 | 116.958 |
| competing_5 | -8.218397 | 4.357183 | -1.89 | 0.059 | -16.75832 | . 3215243 |
| cons | 42.45424 | 7.381176 | 5.75 | 0.000 | 27.9874 | 56.92108 |
| sigma_u | 103.02243 |  |  |  |  |  |
| sigma-e | 35.279398 |  |  |  |  |  |
| rho | . 89504056 | (fraction of variance due to u i) |  |  |  |  |

where
inter_0 represents an interaction term designed to measure the difference in responses to population growth between existing and new churches.
Pct_prime_age is the percentage of the population between the ages of 35 and 54. Competing 5 is the number of churches within a five mile radius.

This evidence supports the notion that existing churches expand worship attendance in response to population growth. The existing church increases worship attendance by 0.8 persons in response to an increase of 1,000 in population within a four-mile radius of the church. The new church, in contrast, increases worship attendance by 2.3 persons for every 1,000 increase in the surrounding
population. In general, the new United Methodist church more than doubles the growth in worship attendance compared to the existing United Methodist church. ${ }^{5}$

The same examination is possible among churches that are predominately white by examining the white, non-Hispanic population growth within a four-mile radius. Table 11 presents these results.

Table 11
Foundation Equation Comparing
Existing and New Churches
Predominately White, Non-Hispanic Congregations

| Random-effects GLS regression | Number of obs | = | 20081 |
| :---: | :---: | :---: | :---: |
| Group variable (i): rectype | Number of groups | = | 1167 |
| R-sq: within $=0.1045$ | Obs per group: min | $=$ | 1 |
| between $=0.2182$ | avg | $=$ | 17.2 |
| overall $=0.2184$ | max | $=$ | 18 |
| Random effects u_i ~ Gaussian | Wald chi2(5) | $=$ | 2262.27 |
| corr (u_i, X) = 0 (assumed) | Prob > chi2 | = | 0.0000 |


| attend | Coef. | Std. Err. | z | $\mathrm{P}>\|\mathrm{z}\|$ | [95\% Con | Interval] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| nhs white | . 0021106 | . 0000658 | 32.09 | 0.000 | . 0019817 | . 0022395 |
| iñter_1 | . 004975 | . 0003377 | 14.73 | 0.000 | . 004313 | . 005637 |
| asiān | -. 0005924 | . 0002154 | -2.75 | 0.006 | -. 0010146 | -. 0001702 |
| pct_over_65 | -34.67524 | 27.34073 | -1.27 | 0.205 | -88.26208 | 18.9116 |
| pct_over_100 | 405.5067 | 20.74104 | 19.55 | 0.000 | 364.855 | 446.1584 |
| _cons | 49.75441 | 5.952463 | 8.36 | 0.000 | 38.0878 | 61.42103 |
| sigma_u | 99.441286 |  |  |  |  |  |
| sigma_e | 33.087153 |  |  |  |  |  |
| rho | . 90032533 | (fraction of variance due to u_i) |  |  |  |  |

where
inter_1 represents an interaction term designed to measure the difference in worship attendance in response to a change in the white, non-Hispanic population between new and existing churches.

The result confirms the expectation. A new, predominately white church increases worship attendance by more than an existing church, given the same increase in the white, non-Hispanic surrounding population. With a 1,000 increase in the white, non-Hispanic population, a new church is expected to report, on average, a 3.3 person increase in worship attendance. Without a new church, the existing church is expected to report, on average, a 0.7 person increase in attendance.

The calculated elasticities are as follows:

$$
\text { Existing } \quad 0.446
$$

[^3]These statistics indicate that a $10 \%$ increase in the white, non-Hispanic population yields a $4.46 \%$ increase in worship attendance among predominately white, existing congregations. A $10 \%$ increase in the white, non-Hispanic population yields a $7.63 \%$ increase in worship attendance among predominately white, new congregations.

Table 12 below provides the results from an examination of all congregations.

## Table 12 <br> Foundation Equation Comparing <br> Existing and New Churches <br> Predominately Black Congregations

| Random-effects GLS regression Group variable (i): rectype |  |  |  | Number of obs |  | 824 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Number of groups |  | 57 |
| R-sq: within $=0.0248$ |  |  |  | Obs per group: min |  | 1 |
| between $=0.2217$ |  |  |  | avg |  | 14.5 |
| overall $=0.2076$ |  |  |  | max |  | 17 |
| $\begin{aligned} & \text { Random effects u_i } \sim \text { Gaussian } \\ & \text { corr(u_i, X) } \end{aligned}$ |  |  |  | Wald chi2 (6) |  | 29.16 |
|  |  |  |  | Prob > chi2 |  | 0.0001 |
| attend | Coef. | Std. Err | z | $\mathrm{P}>\|\mathrm{z}\| \quad$ [95\% Con |  | nterval] |
| nhs_white | . 0000982 | . 0001657 | 0.59 | $0.553-.0002265$ |  | . 000423 |
|  | . 0008805 | . 0002377 | 3.71 | 0.000 .0004148 |  | . 0013463 |
| $\begin{array}{r} \text { inter } 2 \\ \text { asiān } \end{array}$ | -. 0091944 | . 0128488 | -0.72 | $0.474-.0343776$ |  | . 0159888 |
|  | -. 0000413 | . 0007197 | -0.06 | $0.954-.0014518$ |  | . 0013693 |
| pct_over_65 | -36.17276 | 81.37068 | -0.44 | $0.657-195.6564$ |  | 123.3108 |
| pct_over_100 | -120.5215 | 49.62869 | -2.43 | $0.015-217.7919$ |  | -23.251 |
|  | 59.39119 | 17.08927 | 3.48 | $0.001 \quad 25.89685$ |  | 92.88554 |
| sigma_u <br> sigma_e r̄̄o | 40.613839 |  |  |  |  |  |
|  | 21.290713 (fraction of variance due to ui) |  |  |  |  |  |
|  |  |  |  |  |  |  |

where
inter_2 represents the interaction term.
The results are suggestive but do not confirm the expectation that predominately black church experiences a larger growth in worship attendance than the predominately white church. The calculated elasticities are as follows:

| Existing | 0.040 |
| :--- | :--- |
| New | Not Available |

This is perhaps a surprising result in that it indicates that existing, predominately black churches respond significantly to growth in the black population surrounding the church, but the response is relatively small. A $10 \%$ increase in the black population within a four-mile radius results
in a $0.4 \%$ increase in worship attendance. Among the annual conferences in Texas, the attendance response to an increase in the surrounding black population was considerably larger-an elasticity of 1.41. There is insufficient data to measure the responsiveness of new, predominately black churches to black population growth.

An analysis of predominately Asian United Methodist congregations in Virginia failed to provide useful results, largely due to the relatively small numbers of Asian congregations in the available data. Among the annual conferences included in the Texas study, new Asian congregations responded positively to increasing Asian population surrounding the new church.

Table 13 presents the annual population growth among racial and ethnic populations within four miles of existing churches.

Table 13
Racial and Ethnic Annual Population Growth 4-Mile Radius of Existing Churches

|  | Total Population Growth |  |  | Annual Population Growth |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1990-2000 | 2000-2007 | 2007-2012 | 1990-2000 | 2000-2007 | 2007-2012 |
| White | -452 | 224 | -77 | -45 | 32 | -15 |
| Black | 1030 | 357 | 272 | 103 | 51 | 54 |
| Asian | 755 | 398 | 353 | 75 | 57 | 71 |
| Hispanic | 455 | 245 | 218 | 46 | 35 | 44 |
| Other | 971 | 448 | 395 | 97 | 64 | 79 |
| Total | 2,759 | 1,672 | 1,160 | 276 | 239 | 232 |

Notice the difference in the annual growth in the total population during the 2000-2007 period for existing churches is 239 people per year and is projected to be 232. In Table 5, the corresponding figure is 1,275 and 1,242 respectively. This strongly suggests that our existing churches are not well located to fully benefit from the growth in population.

In summary, the results confirm the expectation that new churches enable our denomination to respond more effectively to population growth than existing churches. This is true generally and true among at least two racial and ethnic groupings: white, non-Hispanic; and black. The evidence further underscores the fact that our new churches are best located to benefit from population growth. Existing churches are, on average, poorly located to effectively respond to population growth.

## Additional Findings from the Founding Pastors

The study entailed surveys of founding pastors of new church starts. A total of 23 founding pastors were surveyed, but not all information was completed for each pastor. These surveys were difficult to complete in that many of the questions focus upon the start of the church, and some of these churches began before 1990. In the future, it is important to survey founding pastors soon after the first worship service and repeatedly during the first several years of operation.

Although the information collected was broad, this report focuses only upon a few key questions.

## Founding Pastor Age

There has been a general belief that new church starts are more likely to achieve greater worship attendance levels if the founding pastor is relatively young. Without more data, it is not possible to identify the most productive age for the founding pastor. However, simple averages tend to suggest some support for the general understanding that the older pastors are not best suited to establish a new church. Table 14 below presents the mean worship attendance at the two marks in time with differing ranges of age of the founding pastor.

Table 14
Worship Attendance and the Age of the Founding Pastor

|  | Attendance |  |  |
| :--- | :---: | :---: | :---: |
| Age Range | 3-Year | 5-Year | Change |
| Under 35 | 148.0 | 209.6 | $41.6 \%$ |
| $35-49$ | 109.6 | 124.7 | $13.8 \%$ |
| 50 and Over | 66.0 | 76.0 | $15.2 \%$ |

The founding pastor under the age of 35 appears to establish new churches with the higher levels of worship attendance than pastors 35 years of age and older. The evidence does not present significant differences for the pastors over the age of 50 and pastors between the ages of 35 and 49 .

## Time between Pastor Assignment and Beginning Worship

The number of months between the time the founding pastor was assigned and the beginning worship service varied-between zero months through 16 months. The average number of months was 4.6 months. The founding equation suggests that the longer time between assignment and the first worship service does not contribute to average worship attendance. Table 15 illustrates this result:

Table 15
Time Delay between Assignment and The First Worship Service

where
gap represents the number of months between the assignment of the pastor and the first worship service.

This result is not a strong result but suggestive. Long delays between the assignment of the founding pastor and the first worship service may be a good indicator of trouble ahead.

## The First Facility

Among the founding pastor surveys, most new church starts began either in a school (11) or retail space (3). Only one started in a community center, one started in a church facility of an existing church, one started in a home, and one started in a temporary structure. There were eighteen founding pastors completing this specific question. These responses were sufficient to conclude that new churches beginning in a school average more in worship attendance than new churches beginning in a retail space. No other conclusions could be drawn from these data.

Among the responding founding pastors, only one of these new churches at the time of the interview had remained in its first facility. The average time in the first facility equals 37 months, with a range of 3 to 99 months (and continuing). With the number of surveys completed for this question, it was not possible to determine if the time spent in the first facility affected average worship attendance.

As expected, a larger seating capacity in the first facility is associated with greater growth in worship attendance. This may reflect a pastor's expectations of potential rather than a cause-andeffect. There remains the possibility that too little seating capacity in the first facility may in fact restrict worship attendance growth, but this evidence neither confirms nor rejects this notion.

## Beginning Staff

There were several non-clergy employment positions filled in the new churches. The following table presents the types of positions for the $1^{\text {st }}$ and $2^{\text {nd }}$ non-clergy employees in the new churches.

Table 16
Non-Clergy Employment Positions Filled

|  | 1st Position | 2nd Position |
| :--- | :---: | :---: |
| Music Director | 4 | 5 |
| Secretary | 8 | 3 |
| Worship Leader | 1 | 0 |
| Youth Leader | 0 | 1 |
| Program | 3 | 3 |

Among the founding pastors that completed the surveys, there were some common patterns in the order in which non-clergy staff were employed. For those that listed their first two hires, Table 17 presents the most common patterns.

Table 17
Order of Non-Clergy Staff Employed

| Order of Staff Hires (1st $\rightarrow$ 2nd) | Number of Churches |
| :--- | :---: |
| Music Director $\rightarrow$ Secrectary | 3 |
| Secretary $\rightarrow$ Music Director | 4 |
| Secretary $\rightarrow$ Program | 3 |
| Program $\rightarrow$ Youth Leader | 2 |

The most common order of employment was the secretary position being filled first, and the music director position being filled second. For ten of the twelve that responded, the secretary was one of the first two hires.

An analysis of the order of employment presents interesting findings. Table 18 displays the results when the order of employment is entered into the foundation equation.

Table 18
Foundation Equation With

## Order of Employment of Non-Clergy Staff

| Random-effects GLS regression Group variable (i): rectype |  |  |  | Number of obs |  | 146 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Number | of groups |  | 10 |
| R-sq: within $=0.4708$ |  |  |  | Obs per group: min |  |  | 6 |
| between = 0.9388 |  |  |  |  | avg |  | 14.6 |
| overall $=0.7605$ |  |  |  |  | max |  | 19 |
| Random effects u_i ~ Gaussian |  |  |  | Wald chi2 (9) |  |  | 431.93 |
| corr (u_i, X) $\quad$ - 0 (assumed) |  |  |  | Prob > chi2 |  |  | 0.0000 |
| attend | Coef. | Std. Err. | z | $\mathrm{P}>\|\mathrm{z}\|$ | [95\% Con |  | Interval] |
| yrs_open | 42.24156 | 8.774682 | 4.81 | 0.000 | 25.04349 |  | 59.43962 |
| yrs_open2 | -1.040938 | . 3728061 | -2.79 | 0.005 | -1.771624 |  | -. 3102512 |
| nhs_white | -. 0073166 | . 0005556 | -13.17 | 0.000 | -. 0084056 |  | -. 0062277 |
| competing_5 | 146.6358 | 55.82262 | 2.63 | 0.009 | 37.22545 |  | 256.0461 |
| pct_over_65 | -615.0815 | 304.7885 | -2.02 | 0.044 | -1212.456 |  | -17.707 |
| pct_over_100 | 1804.437 | 372.5852 | 4.84 | 0.000 | 1074.183 |  | 2534.69 |
| Iorder_2 | -156.549 | 30.15098 | -5.19 | 0.000 | -215.6438 |  | -97.45415 |
| -Iorder_3 | -320.4146 | 37.87827 | -8.46 | 0.000 | -394.6547 |  | -246.1746 |
| _Iorder_4 | -483.4729 | 56.82552 | -8.51 | 0.000 | -594.8489 |  | -372.097 |
| _cons | 270.0303 | 73.634 | 3.67 | 0.000 | 125.7103 |  | 414.3503 |
| sigma_u | 0 |  |  |  |  |  |  |
| sigma-e | 107.62836 |  |  |  |  |  |  |
| rho | 0 | (fraction | f vari | e due | u_i) |  |  |

where
Iorder represents the groupings of churches with differing orders of employment.
The new churches that retained a youth director as its first staff member recorded higher numbers in worship than churches that retained a secretary first, followed by a music director or churches that retained a secretary first, followed by a program director. This evidence underscores the importance of the youth director as the first non-clergy staff.

## Marketing

The interviews with founding pastors sought histories concerning the new church's marketing efforts-efforts seeking people to attend worship. Several alternatives were available:

Telemarketing
Direct mail
Door-to-door visits
TV and radio advertisements
Print media
Contact with non-profits, para-churches, and other agencies, etc.
Personal contacts in restaurants and shopping malls
Community service
Small groups and Bible study
Informational meetings

Preview events
Prayer groups
The number of surveys was relatively small, so the results from any analysis of these marketing efforts must be viewed with caution. Nevertheless, worship attendance was significantly greater among new churches that relied upon contacts with non-profits, para-churches, and other agencies. Worship attendance was reduced with frequent use of TV, radio, and printed media advertising.

## Style of Worship

The surveys included several questions regarding the style of worship during worship services. Most of these questions focused upon a differentiation between and among traditional, praise, and blended services. However, the surveys are limited in number so the results from these data must also be viewed with caution.

It was not possible to clearly determine a relation between some of the survey responses and growth in worship attendance. For some questions, there was little variation in responses, which eliminates the possibility of measuring their impact upon attendance. Responses to the following questions were found to be unrelated to worship attendance for a variety of possible reasons:

1. Do people call out "amen" or other expressions of approval?
2. Do people applaud during the service?
3. Do people laugh during the service?
4. Is there a written order of worship for people to follow?
5. Is a hymnal used during worship?
6. Do people read or recite something in unison?
7. Do people raise hands during the service?
8. Is a piano used?
9. Is an organ used?
10. Are electric guitars used?
11. Was the Lord's Supper celebrated?
12. Was dance performed by teens or adults?
13. Were skits used?
14. Were hired singers or musicians used?
15. Was time given for leaders to testify or speak about their own experiences?
16. Were sermons longer than 20 minutes?
17. Were services longer than one hour?

A few questions regarding style of worship did lead to some useful conclusions. Worship attendance was greater in new churches that used visual equipment during worship. Attendance was greater in new churches that used drums. With more surveys completed in the future, it is hoped that the impact of the style of worship upon attendance can be more effectively explored.

## Church Relocations

The Virginia Annual Conference provided records of eight church relocations over the 19852006 period. The churches that relocated during the period are as follows:

## Table 19

Church Relocations
1985-2005

| Name of Church | GCFA <br> ID \# | Year of <br> Move |
| :---: | :---: | :---: |
| Herndon | 471042 | 1987 |
| St. Mark's | 481655 | 1987 |
| Centreville | 470925 | 1991 |
| Ebenezer | 471430 | 1992 |
| Grace, Manassas | 471144 | 1995 |
| Belmont (3Oaks Fell) | 482648 | 2003 |
| Mt. Sinai/New Hope Comm | 483905 | 2004 |
| Norfolk | 967196 | 2005 |

It is widely assumed that a church is relocated in order to improve its opportunities to grow. For our purposes, it is useful to measure the "success" of a church relocation by a change in its worship attendance growth path. A successful relocation would be observed by a change from declining worship attendance to increasing worship attendance. An unsuccessful relocation would be observed by the continuation of a declining worship attendance.

Overall, it is possible to examine the average response to a relocation. Seven of the eight churches listed in Table 19 provide sufficient post-relocation evidence to be included in the analysis. Table 20 presents the results of the regression analysis, designed to measure the change in the path of worship attendance.

## Table 20 <br> Regression Results Worship Attendance and Church Relocation


where
post represents a binary variable registering each year after relocation
year represents the year of record
_cons represents the constant term in the regression equation
The results confirm the expectation that a relocation changes worship attendance. On average, worship attendance increases by 211.9 individuals after the relocation. The coefficient of post is positive and statistically significant. Average attendance in the sample of churches before a relocation equals 160.8 , so the improvement in attendance of 211.9 is substantial-more than doubling worship attendance after the relocation. This represents an increase in worship attendance of over $100 \%$.

## Church Mergers with Relocation to a New Site

Mergers of churches are often used to establish a single, larger congregation from existing smaller congregations in hopes that the new church will acquire the scale necessary to improve the potential for growth. In some instances, a merger represents a form of relocation for only one church involved in the merger. In the instances reported in Virginia, all merges involved a new location for the newly established church. Table 21 presents the listing of churches that merged in Virginia during the 1985-2005 period.

## Table 21 <br> Merged Churches

| Year | Merged Churches |  | New Church |
| :---: | :---: | :---: | :---: |
| 1985 | Paran | Mountain Chapel | Grace |
| 1985 | Memorial | Brookville | Heritage |
| 1988 | Calvary | Sledd Memorial | Piney Forest |
| 1992 | Asbury | Memorial | St. Lukes |
| 1996 | Bailey's Chapel | Madison Heights | Asbury Memorial |

Each of these merges was examined. The pre-merger experience consists of the combination of the churches to be merged. For our purposes, the worship attendance figures among the churches to be merged were merely totaled. Post merger, the attendance of the new church was recorded. The growth path of attendance pre-merger was compared to the path of attendance post-merger.

Table 22 presents the regression results from the analysis of the five mergers in Virginia.

Table 22
Regression Results Mergers: Worship Attendance

where
attend represents the average annual worship attendance
post represents a binary variable reflecting the years before and after the merger
year represents the year of record
cons represents the constant term in the regression equation

The results from the regression equation are weak. The coefficient of the merger variable, post, is small but positive and statistically significant at only the $90 \%$ level of confidence. At best, one can conclude that a merger yields an increase in worship attendance of only 32 individuals. The mean attendance before merger equals 240.5 , so the percentage impact upon worship attendance is, at best, $13.3 \%$. The relatively low level of confidence indicates that there is a significant chance that we failed to detect any impact upon worship attendance from mergers.

There is, however, a more encouraging result from the analysis of mergers. A separate regression analysis was conducted in which the number of members received by profession of faith was compared before and after the mergers. The regression results from this analysis are presented in Table 23 below:

## Table 23 <br> Regression Results Mergers: Professions of Faith


where
rcvconf is the number of members received by profession of faith during the year post represents a binary variable reflecting the years before and after the merger year represents the year of record
_cons represents the constant term in the regression equation
These results are relatively strong. The coefficient of the merger variable, post, is positive and statistically significant. The mean value of the number of persons received by profession of faith equals 11.1 members, so the additional 8.1 members related to the merger is substantial-an increase of $73 \%$. These results suggest that the merger may have a positive impact upon worship attendance, but there is a significant, positive impact upon the number of new members received through profession of faith.

## Church Mergers Using an Existing Site

The most common mergers in the Virginia Annual Conference during recent years is the merger between two churches but one of the existing churches becomes the merged church. That is, one of the merged churches does not relocate to another site. Between 1985 and 2006, there were 23 mergers of this type. Table 24 presents these mergers.

Table 24
Church Mergers without Relocations

| Year | Merged Churches | New Church |  |
| :---: | :---: | :---: | :---: |
| 1985 | Le Kies | Wesleyan Acres | Heritage |
| 1990 | Manassas | St. Thomas | Manassas-St. Thomas |
| 1985 | Grace | Design | Grace-Design |
| 1986 | Elm Ave | Wrigth Memorial | King Memorial |
| 1987 | Haven's | Smith | Haven's Chapel |
| 1988 | Hume | Orleans | Orleans |
| 1988 | Waterlick | Bethel (Front Royal) | Bethel |
| 1989 | Bethany | Pleasant Grove | Bethany |
| 1989 | Buckroe Beach | First Church |  |
| 1990 | Tyler Memorial | Bethany |  |
| 1992 | Epworth | Sleepy Hollow |  |
| 1995 | Centreville | Mt Solon | Bridgewater |
| 1995 | Reid Chapel | Calvary | Bethany |
| 1995 | First | Chestnut Hill |  |
| 1996 | Barker Mem | Ward's Chapel | Calvary |
| 1996 | Brosville | Providence |  |
| 1997 | Christ | Crossman | Ward's Chapel |
| 1997 | Diamond Hill | Emmaus | Brosville |
| 1997 | Good Shepard | Wistar Hgts | Christ-Crossman |
| 1999 | St Mark's | Korean Wesley (BWC Conf) | Emmaus |
| 2000 | New London | Lebanon | Good Shepard |

These mergers occurred between 1985 and 2000. One of the mergers involved a church (Korean Wesley) from the Baltimore-Washington Annual Conference. The Bridgewater merger involved three existing churches.

Table 25 presents the regression results from the analysis of these mergers.

Table 25
Regression Results
Worship Attendance
Mergers: No Relocation

| Random-effects GLS regression Group variable (i): rectype |  |  |  | Number of obs |  | 759 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Number of groups |  | 23 |
| $\begin{aligned} \text { R-sq: } & \text { within }=0.0060 \\ & \text { between }=0.0062 \\ & \text { overall }=0.0000 \end{aligned}$ |  |  |  | Obs per group: min |  | 33 |
|  |  |  |  |  |  | 33.0 |
|  |  |  |  | max |  | 33 |
| $\begin{array}{ll} \text { Random effects u_i } & \sim \text { Gaussian } \\ \text { corr }\left(u \_i, ~ X\right) & =0 \quad(\text { assumed }) \end{array}$ |  |  |  | Wald chi2(2) |  | 4.33 |
|  |  |  |  | Prob > chi2 |  | 0.1149 |
| attend \| Coef. Std. Err. ${ }^{\text {c }}$ ( P>\|z| [95\% Conf. Interval] |  |  |  |  |  |  |
|  |  |  |  |  |  | -. 038367 |
| post | 17.46021 | 9.130793 | 1.91 | $0.056-.4358109$ |  | 35.35624 |
| _cons \| | 2018. 201 | 910.6217 | 2.22 | $0.027 \quad 233.4154$ |  | 3802.987 |
| $\begin{aligned} & \text { sigma_u } \\ & \text { sigma_e } \end{aligned}$ | 124.89824 |  |  |  |  |  |
|  | 67.376271 |  |  |  |  |  |
|  | . 77459 | (fraction | varia | ce due to u_i) |  |  |

where
attend represents average worship attendance
year represents the year in which worship attendance is reported
post represents the years after the merger
_cons represents the constant term in the regression equation
These results indicate that the merger yielded a gain in worship attendance of about 17.5 individuals. Average worship attendance before merger among the 23 churches equals 160, so the gain in worship attendance represents slightly more than a $10 \%$ gain. However, on average, there was a one-time adjustment upward at the time of the merger followed by a gentle, continuing decline in which average worship attendance decreased at a rate of one individual per year. This trend appears to continue regardless of the timing of a merger. Overall, this result suggests that these mergers, in terms of worship attendance, were productive in that average worship attendance was greater after the merger than before. Yet the downward trend continues, even after the merger. This, of course, represents the average path - there are exceptions.

Table 26 presents the analysis of the impact of mergers upon professions of faith.

Table 26
Regression Results
Worship Attendance
Mergers: No Relocation

where
rcvconf represents total new members who joined by profession of faith year represents the year in which worship attendance is reported
post represents the years after the merger
_cons represents the constant term in the regression equation
These results indicate that the number of professions of faith increased by 2.3 individuals per year after the merger. The average number of professions of faith before mergers equals 9.6 individuals, which implies that professions of faith increased by about $24 \%$. In terms of professions of faith, the mergers were productive. However, on average, there was a one-time adjustment upward at the time of the merger followed by a gentle, continuing decline in which professions of faith decreased by about 1 individual every four years. This trend, too, appears to exist, regardless of the timing of a merger. The merger increases the number of professions of faith but the gradual decline appears to continue. This, of course, represents the average path - there are exceptions.

Comparing the two types of mergers is informative. Mergers in which the new church is a new location yield an average increase in worship attendance of 32 compared to only 17 with no relocation. That is, the gains are greater if a new location is involved. However, as a percentage, they are comparable-about a 13\% average gain among mergers with new locations and a $10 \%$ average gain among mergers with no new locations. The larger gains when a new location is involved has more to do with the original sizes of the churches rather that the involvement of a new location.

The impact of mergers upon professions of faith is more significant. Mergers with new locations yield an increase in professions of faith of 8.1 individuals compared to only 2.3 individuals with no relocation. The percentage increase is $73 \%$ for mergers with new locations and $24 \%$ for mergers without new locations. Mergers with new locations appear to yield a percentage increase in professions of faith that is three times that of mergers with no new location. Given the fact that most existing churches are not located in the best locations, the merger with relocation likely forces two (or more) churches to find an improved location.

## Summary

The presence of an existing United Methodist church in the neighborhood of a new church significantly affects its growth.

Worship attendance is a critical part of maintaining and growing the health of the church. In terms of average worship attendance, the degrees of success differ among churches and across the annual conferences we have studied.

Average worship attendance among new churches responds positively to surrounding population growth. Yet, the degree of response depends upon the composition of the population growth. New churches, on average, report increases in worship attendance with increases in the white, non-Hispanic, and Asian populations. Average worship attendance is greater if the surrounding population consists of a relatively high proportion of individuals over the age of 65 and with family incomes over $\$ 100,000$ per year.

Average worship attendance after three and five years of operation provides a reasonable basis for projecting future growth. On average, new churches that report average worship attendance of less than 50 after the first three years are unlikely to experience measurable growth thereafter. New churches reporting average worship attendance of over 100 or more after three years are likely to report significant gains in average worship attendance thereafter.

Seventy percent of the new churches for which year-end statistical reports were available had congregations that were predominately white. Although Asian churches showed the largest percentage growth from three to five years, predominately white congregations reported the largest average worship attendance after 3 years and the largest growth between three and five years.

A new church responds more effectively to population growth than an existing church. On average, the gain in average worship attendance in a new church is about twice that of an existing church.

New churches tend to be located where there is significant population growth. New churches with predominately white membership tend to be planted where there is significant growth in white, non-Hispanic populations. On the other hand, existing churches, on average, are poorly located for the purpose of capturing new members from significant population growth.

These data suggest that average worship attendance is greater when the first non-clergy employee of a new church is a youth director.

These findings are based upon a total of 23 new churches in the Virginia Annual Conference. Much has been learned. With additional information from other annual conferences, the scope of our understanding can be significantly broadened.

The analysis of mergers and relocations yielded largely positive results. There were eight church relocations observed, and there was a large, positive gain in worship attendance related to the relocation. On average, a church relocation resulted in an increase in worship attendance of over $100 \%$.

There were 28 mergers observed-five involving new locations and twenty-three without a new location. The effect of a merger/relocation upon average worship attendance was, at most, relatively small—about a $10 \%$ increase in average worship attendance. There was little difference between mergers involving a new location and those that did not. The impacts of mergers upon professions of faith were more remarkable. There was a $73 \%$ increase in professions of faith among mergers with new church locations and a $24 \%$ increase in professions of faith among mergers without a new church location.

The overall results suggest that relocations of churches are productive in that one observes increases in worship attendance and increases in professions of faith. These results hold true for mere relocations of existing churches or new locations post mergers.


#### Abstract

About the Authors

Dr. Donald R. House is the president of RRC, Inc., an economic research consulting firm located in Bryan, Texas. It has a staff of twelve professional and associate members, including five PhDs in economics. RRC was established in 1977 and serves clients throughout the US. Dr. House has been actively involved in economic research of the United Methodist Church since 1996. He currently serves as a member of the General Council on Finance and Administration (GCFA) and President of the Council on Finance and Administration of the Texas Annual Conference. Email: dhouse@rrcinc.com

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| Appendix A |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| New Church Starts Research Project |  |  |  |  |  |  |  |  |  |  |  |  |
| Churches Still Active by Annual Conference |  |  |  |  |  |  |  |  |  |  |  |  |
| Conference | *New Church Starts from 1985-2005 | Reporting AWA in 2006 | Not Active or 0 AWA in 2006 | $\begin{gathered} \text { Active } \\ \text { in } 2006 \end{gathered}$ | AWA 125 or fewer | $\begin{gathered} \text { AWA } \\ 126- \\ 349 \end{gathered}$ | AWA $350-$ 499 | $\begin{gathered} \text { AWA } \\ 500- \\ 749 \end{gathered}$ | $\begin{array}{\|l} \text { AWA } \\ 750- \\ 999 \end{array}$ | $\begin{gathered} \text { AWA } \\ \text { 1,000+ } \end{gathered}$ | Avg AWA in 2006 | Median AWA in 2006 |
| Northwest TX | 12 | 5 | 7 | 5 | 3 | 1 | 0 | 1 | 0 | 0 | 199 | 70 |
|  |  | 42\% | 58\% |  | 60\% | 20\% | 0\% | 20\% | 0\% | 0\% |  |  |
| Southwest TX | 19 | 14 | 5 | 14 | 10 | 3 | 1 | 0 | 0 | 0 | 114 | 96 |
|  |  | 74\% | 26\% |  | 71\% | 21\% | 7\% | 0\% | 0\% | 0\% |  |  |
| North Texas | 40 | 29 | 11 | 29 | 12 | 8 | 3 | 3 | 0 | 3 | 317 | 152 |
|  |  | 73\% | 28\% |  | 41\% | 28\% | 10\% | 10\% | 0\% | 10\% |  |  |
| Texas | 44 | 29 | 15 | 29 | 12 | 6 | 3 | 3 | 0 | 5 | 432 | 230 |
|  |  | 66\% | 34\% |  | 41\% | 21\% | 10\% | 10\% | 0\% | 17\% |  |  |
| Central TX | 28 | 16 | 12 | 16 | 11 | 4 | 1 | 0 | 0 | 0 | 140 | 78 |
|  |  | 57\% | 43\% |  | 69\% | 25\% | 6\% | 0\% | 0\% | 0\% |  |  |
| Virginia | 26 | 23 | 3 | 23 | 9 | 10 | 0 | 3 | 1 | 0 | 233 | 146 |
|  |  | 88\% | 12\% |  | 39\% | 43\% | 0\% | 13\% | 4\% | 0\% |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Totals | 169 | 116 | 53 | 116 | 57 | 32 | 8 | 10 | 1 | 8 | 275 | 119 |
| Percentages |  | 69\% | 31\% |  | 49\% | 28\% | 7\% | 9\% | 1\% | 7\% |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| *The total new church starts number in this column will nearly always be higher than the number of new starts used for the more detailed report analysis since only churches surviving long enough to report statistics can be studied in detail. This |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

## APPENDIX B - Virginia Conference New Church Starts 1985 - 2005

| New Church Starts - Virginia Conference - 1985 to 2005 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \hline \text { GCFA ID } \\ \# \\ \hline \end{gathered}$ | Name of Church | District | Four VAs | Year | Founding Pastor (FP) |
| 470572 | Community of Faith (originally Franklin Farm) | Arlington | NOVA | 1986 | Roy White |
| 477163 | Messiah | Norfolk | Tidewater | 1986 | Wayne Snead |
| 477152 | Courthouse Community (originally Redeemer) | Norfolk | Tidewater | 1986 | Bruce Tuttle |
| 481154 | Woodlake | Richmond | Capital | 1986 | Dennis Perry |
| 470754 | Old Bridge | Alexandria | NOVA | 1987 | Milton Marks |
| 480412 | Susanna Wesley | Rapp | Tidewater | 1988 | Alan Rock |
| 471532 | Christ | Alexandria | NOVA | 1988 | Charles Hubbard |
| 470798 | Crossroads | Arlington | NOVA | 1989 | Dave Norman |
| 475368 | Mountain View | Lynchburg | Shenandoah | 1992 | Will White |
| 477538 | Open Door Kor UMC | Peninsula | Tidewater | 1994 | Paul Song |
| 481473 | Korean Emmaus | Richmond (orig Ashland) | Capital | 1994 | Yunho Eo |
| 481028 | New Life | Richmond | Capital | 1997 | David Bonney |
| 480822 | New Song | Ashland | Capital | 1997 | Jim Chandler |
| 477835 | New Town | Peninsula | Tidewater | 1999 | David Ford |
| 485312 | Evergreen | Winchester | Shenandoah | 1999 | Chip Giessler |
| 484693 | Fieldstone | Roanoke | Shenandoah | 2000 | Lynne Alley-Grant |
| 470311 | Rising Hope | Alexandria | NOVA | 1995 | Kerry Kincannon |
| 480228 | Wilderness | Ashland | Capital | 1998 | Keith Boyette |
| 473952 | New Mission | Eastern Shore | Tidewater | 1998 | Vernell Carter |
|  | Mision La Esperanza | Alexandria | NOVA | 1999 | Luz Carballo-Lugo |
| NO \# | New Hope Community | Richmond | Capital | 2000 | Marilyn Heckstall |
| 410966 | Amor y Paz IMU | Winchester | Shenandoah | 2000 | Martha de la Rosa |
| 476567 | New Light Korean | Alexandria | NOVA | 2001 | Yong Hwan Joseph Kim |
|  | New Season | Ashland | Capital | 2004 | Robb Almy |
| 470377 | Iglesia Methodista Unide Gracia | Arlington | NOVA | 2001 | Ileana Rosas |
| 410842 | Vietnamese | Arlington | NOVA | 2002 | Charles Tran |

## APPENDIX C - Virginia Conference Relocations 1985 - 2005

| Relocations - Virginia Conference - 1985 to 2005 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Name of Church | District | $\begin{array}{\|c\|} \hline \text { GCFA ID } \\ \# \\ \hline \end{array}$ | Original Location | Yr of Move | Relocating Pastor |
| Herndon | Arlington | 471042 | 655 Spring St, Herndon 20170 | 1987 | Albert Sikkellee |
| St. Mark's | Richmond | 481655 | 9529 Midlothian Pike, Richmond 23235 | 1987 | Glen C. Evans |
| Centreville | Arlington | 470925 | 14040 Braddock Road, Centreville 22020 | 1991 | Robert L. Parsons |
| Ebenezer | Ashland | 471430 | 168 Onville Rd., Stafford 22556 | 1992 | Kathryn F. Talley |
| Grace, Manassas | Alexandria | 471144 | 9400 Main Street, Manassas 20110 | 1995 | Jack Martin |
| Belmont (3Oaks Fell) | Roanoke | 482648 | 806 Jamieson Ave SE, Roanoke 24013 | 2003 | Debra Lucas |
| Mt. Sinai/New Hope Comm | Harrisonburg | 483905 | 1723 Port Republic Rd, Harrisonburg 22801 | 2004 | David Lagerveld |
| Norfolk | Norfolk | 967196 | 2729 Bowden Ferry Rd., Norfolk 23508 | 2005 | Sherry Daniels |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Name of Church | District | $\begin{gathered} \hline \text { GCFA ID } \\ \# \\ \hline \end{gathered}$ | New Location | Yr of Move | Relocating Pastor |
| Herndon | Arlington | 471042 | 701 Bennett St, Herndon 20170 | 1987 | Albert Sikkellee |
| St. Mark's | Richmond | 481655 | 11551 Lucks Ln, Midlothian 23114 | 1987 | Glen C. Evans |
| Centreville | Arlington | 470925 | 6400 Old Centreville Rd, Centreville 20121 | 1991 | Robert L. Parsons |
| Ebenezer | Ashland | 471430 | 161 Embrey Mill Rd, Stafford 22554 | 1992 | Kathryn F. Talley |
| Grace, Manassas | Alexandria | 471144 | 9750 Wellington Rd, Manassas 20110 | 1995 | Jack Martin |
| Belmont (3Oaks Fell) | Roanoke | 482648 | 12392 Hardy Rd, Hardy 24101 | 2003 | Debra Lucas |
| Mt. Sinai/New Hope Comm | Harrisonburg | 483905 | 55 Round Hill School Rd, New Hope 24469 | 2004 | David Lagerveld |
| Norfolk | Norfolk | 967196 | 500 W 34th St, Norfolk 23508 | 2005 | Sherry Daniels |

## APPENDIX D - Virginia Conference Mergers with Relocation to a New Site 1985 - 2005

| Mergers and Relocation - Virginia Conference - 1985-2005 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dist | Year | Church 1 | Location Church 1 | ID for Church 1 | Church 2 | Location Church 2 | ID for Church 2 | $\left\lvert\, \begin{gathered} \text { Church } \\ 3 \end{gathered}\right.$ | Location Church 3 | $\begin{array}{\|c\|} \hline \text { ID for } \\ \text { Church } \\ 3 \\ \hline \end{array}$ | Name of Merged Church |
| C | 1985 | Paran | unable to find | 47221 | Mountain Chapel | unable to find | 47187 |  |  |  | Grace |
| L | 1985 | Memorial | Ninth and Floyd, Lynchburg | 47578 | Brookville | 7619 <br> Timberlake <br> Rd, <br> Lynchburg | 47541 |  |  |  | Heritage |
| D | 1988 | Calvary | 924 N. Main St., Danville | 471725 | Sledd <br> Memorial | 356 Lindhurst <br> Dr., Danville | 472968 | Piney Forest | 494 Piney <br> Forest Rd., <br> Danville, <br> VA | 472924 | Saint Luke's |
| RD | 1992 | Asbury (South Richmond) | 609 Jefferson Davis Hwy, Richmond | 481165 | Memorial | 30 East Broad Rock Rd., Richmond | 481542 |  |  |  | Asbury <br> Memorial |
| L | 1996 | Bailey's Chapel | Galts Mill <br> Road, <br> Madison <br> Heights | 47181 | Madison Heights | Main Street, Madison Heights | 47586 |  |  |  | Amelon |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Dist | Year | Name of <br> Merged <br> Church | Location <br> Merged <br> Church | ID for Merged Church | Notes |  |  |  |  |  |  |
| C | 1985 | Grace | 5143 <br> Dickerson <br> Rd, <br> Charlottesvill <br> e 22911 | 472217 | Closed June 2007 |  |  |  |  |  |  |
| L | 1985 | Heritage | 582 Leesville <br> Rd., <br> Lynchburg <br> 24502 | 475780 | Memorial burned in 12/03 speeding up conversati ons already underway |  |  |  |  |  |  |
| D | 1988 | Saint Luke's | 3090 N Main St, Danville 24540 | 471725 |  |  |  |  |  |  |  |
| RD | 1992 | Asbury Memorial | 7151 Belmont Rd, Chesterfield 23832 | 481165 |  |  |  |  |  |  |  |
| L | 1996 | Amelon | 220 Amelon Rd, Madison Heights 24572 | 475860 |  |  |  |  |  |  |  |

## APPENDIX E - Virginia Conference Mergers Using an Existing Site 1985 - 2005

|  | Mergers and Stayed at One of the Locations - Virginia Conference - 1985-2005 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dist | Year | Name of Church 1 | GCFA ID Church 1 | Name of Church 2 | GCFA ID Church 2 | Church 3 and ID | Name of Merged Church | $\begin{array}{\|l\|} \hline \text { GCFA ID } \\ \text { Merged } \\ \text { Church } \\ \hline \end{array}$ | Address of Merged Church |
| N | 1985 | Le Kies | 47674 | Wesleyan Acres | 47707 |  | Heritage | 477072 | 815 Baker Rd, Virginia Beach 23462 |
| A | 1990 | Manassas | 412201 | St. Thomas | 471097 |  | Manassas-St. <br> Thomas | 471097 | 8899 Sudley Rd, Manassas 20110 |
| D | 1985 | Grace | 47284 | Design | 47121 |  | Grace-Design | 471213 | 1064 Franklin Tpke, Danville 24540 |
| PT | 1986 | Elm Ave | 479468 | Wrigth Memorial | 479628 |  | Martin Luther King, Jr., Memorial | 479468 | 1701 Elm Ave, Portsmouth 23704 |
| RN | 1987 | Haven's | 482615 | Smith | 48267 |  | Haven's Chapel* | 482615 | 3375 Daniels Run Rd NE, Check 24072 |
| W | 1988 | Hume | 485037 | Orleans | 485072 |  | Orleans | 485072 | 7029 Leeds Manor Rd, Marshall 20115 |
| W | 1988 | Waterlick | 485447 | Bethel (Front Royal) | 482078 |  | Bethel | 421594 | 49 Kendrick Ford Rd, Front Royal 22630 |
| H | 1989 | Bethany | 48552 | Pleasant Grove | 42097 |  | Bethany | 485527 | 3700 Lee Hwy, Weyers Cave 24486 |
| PN | 1989 | Buckroe Beach | 477345 | First Church | 477380 |  | First Church Fox Hill | 477380 | 1 Salt Pond Rd, Hampton 23664 |
| H | 1990 | Bethany | 9589 | Mt. Carmel | 9593 |  | Mt. Carmel | 95935 | 13375 Third Hill Road, Fulks Run 22830 |
| PN | 1990 | Tyler Memorial | 477505 | Bethany | 47742 |  | Bethany | 477425 | $\begin{aligned} & 1509 \text { Todds Ln, Hampton } \\ & 23666 \\ & \hline \end{aligned}$ |
| RN | 1990 | St John's | 48221 | Price's Fork | 482193 |  | Price's Fork | 482193 | 4236 Prices Fork Rd, Blacksburg 24060 |
| A | 1992 | Epworth | 47089 | Sleepy Hollow | 411948 |  | Sleeply Hollow | 411948 | 3435 Sleepy Hollow Rd, Falls Church 22040 |
| H | 1995 | Centreville | 47092 | Mt Solon | 484831 | Bridgewater (484567) | Bridgewater | 484567 | 219 N Main St, <br> Bridgewater 22812 |
| S | 1995 | Reid Chapel | 968794 | Calvary | 48338 |  | Calvary | 483381 | 2179 Stuarts Draft Hwy, Stuarts Draft 24477 |
| L | 1995 | First | 47574 | Chestnut Hill | 475665 |  | Chestnut Hill | 475665 | $\begin{aligned} & \text { 4660 Fort Ave, Lynchburg } \\ & 24502 \end{aligned}$ |
| F | 1996 | Barker Mem | 474912 | Ward's Chapel | 47493 |  | Ward's Chapel | 474934 | Burkeville 23922 |
| D | 1996 | Brosville | 472401 | Providence | 473622 |  | Brosville** | 472401 | 120 Long Circle, Danville <br> 24541 |
| AR | 1997 | Christ | 474912 | Crossman | 470845 |  | Christ-Crossman | 470845 | 384 N Washington St, Falls Church 22046 |
| L | 1997 | Diamond Hill | 476578 | Emmaus | 475916 |  | Emmaus | 475916 | 2282 Meadors Spur Rd, Moneta 24121 |
| RD | 1997 | Good Shepherd | 481597 | Wistar Hgts | 481600 |  | Good Shepherd | 481597 | 9155 Hungary Rd, Richmond 23294 |
| AR | 1999 | St Mark's | 471166 | Korean Wesley (BWC Conf) | 169375 |  | St Mark's | 411870 | 2425 N Glebe Rd, Arlington 22207 |
| L | 2000 | New London | 970354 | Lebanon | 47620 |  | Lebanon | 476204 | 4565 New London Rd, Forest 24551 |
|  |  |  |  |  |  |  |  |  |  |
|  | *Floyd was another church listed as part of this merger but no statistical records or ID number could be located. |  |  |  |  |  |  |  |  |
|  | ${ }^{* *}$ In 1996 Providence and Brosville comprised the Asbury Memorial Charge, Danville District. The two churches merged into Brosville. |  |  |  |  |  |  |  |  |

## Virginia Conference <br> Members Received from 23 New Churches <br> Established 1985-2005



## APPENDIX G - Apportionments Paid by New Church Starts

## Virginia Conference Apportionments Paid by 23 New Churches

Established 1985-2005


## APPENDIX H - Average Worship Attendance Changes in Relocated Churches

Relocated Congregations Average Worship Attn 10 yrs Before and After Move


## APPENDIX I - Average Worship Attendance Changes in Mergers that Relocated to a New Site



## APPENDIX J - Average Worship Attendance Changes in Mergers Using an Existing Site




[^0]:    ${ }^{1}$ See the Claritas website at http://www.claritas.com/claritas/Default.jsp.

[^1]:    ${ }^{2}$ Although the result is not statistically significant at the $5 \%$ level of significance, it is indicative of the problem with crowding. The low level of significance may be due to the small number of new churches in the analysis. In other studies with larger sample sizes, the result is significant and larger.

[^2]:    ${ }^{3}$ In the table, "hispanic" refers to the white-, Hispanic population, "white" refers to the white, non-Hispanic population. The other labels are self-explanatory.
    ${ }^{4}$ This conclusion is confirmed in the foundation equation.

[^3]:    ${ }^{5}$ There is a cannibalization process that is excluded in this simple comparison. Worship attendance decreases among existing churches in the neighborhood of the new church, but the net effect is still positive.

