EMMC GROWTH FACTORS
A LOOK AT FACTORS THAT IMPACT GROWTH IN CHURCHES OF THE EVANGELICAL MENNONITE MISSION CONFERENCE

By

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A Thesis Submitted to the School of Graduate Studies In Partial Fulfilment of the Requirements For the Degree Master of Science

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MASTER OF SCIENCE (2006)  McMaster University

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TITLE:  A Look at Factors that Impact Growth in Churches of the Evangelical Mennonite Mission Conference

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NUMBER OF PAGES:  xii, 219
Abstract

Background

Canadian domination of Christianity is challenged by eastern religions. Affiliation with the Mennonite faith fell 8% from 1991 to 2001. The Evangelical Mennonite Mission Conference (EMMC) recently adopted a regional structure across Canada, the United States, Mexico, and Belize. It wishes to measure its recent growth rate and investigate growth factors across regions.

Methods

Using EMMC Records of church membership and attendance, surveys of senior pastors and church leaders, we grouped the 37 churches by region, size, and growth status, modelled church growth using univariate and multivariable models.

Leaders perception of occupation and activity faith would compromises their faith and the level of assistance their church required and received, and expectation of five-year change in their church attendance were modelled using generalized estimating equations.

Results

Attendance growth varied across regions and church size - small (0-99; 9%), medium (100-299; 14.2%), and large (300+; -3%). For 33 of 37 responding senior pastors 61% of new members were transferees, few churches took listed growth promotion steps, 54% of attendees attend Sunday school, 26% attend Bible study, 30% attended the last annual meeting 42% received a donation receipt, 91% own their building, 70% have the worship space filled less than 80% capacity, 77% had a single board, and 59% had board term limits and the senior pastor overseeing other pastors. None of the tested factors predicted change in attendance.

Almost half (49%) of 517 EMMC registered leaders completed the questionnaire. Of these 87% claimed Mennonite ancestry. The scores measuring the opinionated degree that particular jobs and activities would compromise their faith were higher for leaders with university education, first speaking Plautdietsch, in Mexico or Belize but lower in Saskatchewan. Leaders
at new and small churches believe their churches require and received more assistance than those from large churches. The church required assistance score was substantially higher than the received assistance (mean 16.0 vs. 9.4).

**Conclusion**

In spite of apparent robust growth in the EMMC, this growth is limited to the frontier regions. The demographics of the leaders indicate that outreach to other ethnic groups has not produced leaders yet. We did not identify any factors associated with growth.
Acknowledgements

The successful completion of this project depended on contributions by many people. I would like to acknowledge the people who assisted in this endeavour.

First of all I would like to thank my project supervisor, Dr. Lehana Thabane, a professor in the Department of Clinical Epidemiology and Biostatistics, at McMaster University. He guided the progression through all phases of this project — overall study design, design of questionnaires, ethics application, analysis, write-up and presentation. His suggestions and probing questions were essential to the success of this research project.

I also gratefully acknowledge the Professors Macdonald and Viveros for their investment in my education, by teaching courses and as members of the examining committee.

Likewise this work has relied on subject matter experts to prompt pertinent research questions and guide the creation of the survey questionnaires. In particular, I am indebted to the research advisors, Jake Thiessen and Gin Thiessen, assigned by the EMMC General Council. They have represented the EMMC in this project from its inception by prompting research questions, contributing to the creation of both questionnaires and acting as the liaison to the EMMC head office to obtain and clean EMMC Records.

I gratefully acknowledge the cheerful efforts of Lil Goertzen at the EMMC office for providing EMMC Records data and compiling the list of churches and leaders. I am also grateful to the EMMC General Council, particularly chair Frank Friesen, for its vision to pursue this project and the resources to fund the administration of the study.

Various people contributed to the design and wording of the questionnaires. Jack Heppner, freelance writer and former professor at Steinbach Bible College; Dr. Terry Hiebert, professor and academic dean at Steinbach Bible College; and Abe Harms, Director of the Aylmer Resource Centre, contributed to development of the theological questions.

I also acknowledge the efforts of volunteers in the administration of the study. Yolanda Rempel, Susie Reimer, and Helen Bergen entered data from returned survey questionnaires. My wife, Pauline Rempel, prepared survey mailings, and administered many facets of the study. Most of all I am thankful for her constant encouragement.
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1. INTRODUCTION

1.1. Background

1.1.1. Mennonite Origins

The Anabaptist faith began in Europe during the 16th century reformation with the conviction that the church must be voluntary and thereby free from the rule of the state. From its beginnings in Switzerland and Germany, the faith spread rapidly to northern Europe as people of all languages, countries, and ethnicities were encouraged to join. They inherited the name Mennonite, a condescending reference to Menno Simons, one of their early Dutch leaders.

However, harsh persecution including executions and torture by the state and state church authorities prompted migration to more secure places. Faith adherents from Switzerland and Germany migrated west, first to France, then across the Atlantic to the New World. They founded American communities like Germantown (Philadelphia). Many migrated north as British Empire Loyalists during the American Revolution and settled in Southern Ontario.

Though Poland was a Roman Catholic state and papal decrees made being Mennonite a capital offence, Mennonites from the Netherlands migrated to northern Poland where their land redemption skills made them a valuable asset. In response to 17th century Polish and Prussian state directives they conceded not to proselytise in exchange for freedom from harassment. This limit on outreach prompted the ethnic and cultural consolidation of the group. Though the majority of the Mennonite population originated from the Netherlands, the local Low German dialect Plautdietsch eventually replaced Dutch as the language of business and home life. Consistent with the custom across the northern mainland Europe, the Mennonite community also adopted High or Standard German as the language of school and church. After years of protectionism, they came to be seen as an ethnic group by their neighbours, government officials and finally by themselves. This cultural ethnic group was characterized by the Plautdietsch language, Caucasian look, conservative dress, and Polish foods.

The 1642 agreement with Poland became a blueprint for mass migration negotiations to Russia in the 1790s, Canada in the 1870s, Mexico in the 1920s, and Belize in the 1950s. Core components of these agreements, including block (reserve) settlement, military exemptions, and private schools in their own

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language, further consolidated their status as an ethnic and cultural group. The EMMC originated in the 1930s on the Mennonite reserve in Southern Manitoba provided by the provincial government in 1876.

1.1.2. Overview of the EMMC

The Evangelical Mennonite Mission Conference (EMMC) is a loosely linked confederation of 37 churches situated across the Canadian prairies (Alberta-1, Saskatchewan-5, Manitoba-16), Southern Ontario (5) in parts of the United States (Iowa-1, Kansas-1, Texas-2), Mexico (3), and Belize (3). (See Figure 1.) Most of EMMC adherents are descendents of Mennonite immigrants from Russia to Canada in the 1870s.

Mennonite churches have traditionally been characterized by their congregational structure. Membership is reserved for adults who have received adult baptism. However, people baptised previously in other Christian churches are accepted as members without re-baptism. Decisions were made by the entire membership of a local congregation. Pastors were elected by the local church membership and served in that role as volunteers.

Today EMMC churches have established boards as required by law for registered charity organizations. These boards are elected by the membership and usually chaired by an elected volunteer congregational chair. Usually a senior pastor, either a salaried employee of the church or a volunteer, is charged with the task of leading the church under the direction from the membership and the board. Many churches employ additional pastors and administrative staff as their requirements increase.

In recent years, church leaders have been contemplating the future of the conference. The central debates concern the identity of the conference and whether a regional structure would be more effective than the current centralized structure. This, conference leaders believe, would also inspire churches to take initiative in reaching out in their communities and planting new churches.

1.1.3. Review of Relevant Literature

The religious landscape of Canada is changing. The percentage of Canadians aged 15 and older who identified themselves as non-Christian increased from 2% in 1901 to 17% in 1991 and 28% in 2001. The percentage of Canadians who identify themselves as Christian has decreased by almost 1 percentage point per year since 1981. This trend is very similar to that of the United States where it has increased to 23.5% by 2000 from 13.8% in 1990.

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Though the population of Canada increased 9.8% to almost 30 million from 1991 to 2001, several notable denominations have experienced acute loses in the same period. Of particular interest is the decrease in affiliation with Mennonite denominations of 8%. (See Table 1a.)

Meanwhile Canadian affiliation with middle-eastern and eastern religions increased dramatically in the same period – Muslim (129%), Buddhist (84%), Hindu (89%), and Sikh (89%) – and the majority (52%) of immigrants coming to Canada in that decade are affiliated with these religions. (See Table 1b)

The data suggest that the trend away from mainline Christian faiths will continue as the ages of their adherents continue to rise. In Canada the median age of mainline denomination affiliates - Anglican, Lutheran, Methodists, Presbyterian, Ukrainian Catholic, Ukrainian Orthodox, and United Church - are much older than the Canadian population (43 to 46 vs. 37 years). The median age of Canadian affiliates with Roman Catholic (38) and Greek Orthodox (41) are older than the overall population. Conversely, the median ages of Islamic and Sikh affiliates and no religion are 28, 30 and 31 respectively. The trend toward aging affiliates of mainline churches is similar in the United States where only 10 to 12% of those identifying with the Congregational, Episcopalian, Methodist, Presbyterian, and United Church denominations are between the ages of 18 and 29 while 56% of Muslims are in this youthful age group.

The One must be careful not to assume that Canadian Christians are switching their affiliation to other religions. Statistics Canada points out that the increase in affiliation with non-Christian religious is due to immigration from areas

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5 ReligiousTolerance.org, Religious Makeup of Canada, March 2006
6 The Canadian Census uses the word "affiliate" to inquire the adherent of a religious group. The American Census uses "identify".
9 The Census includes self declared "affiliation" with a religious group. Statistics Canada groups Christian sub-groups into Catholic, Protestant, Christian Orthodox, and Christian not otherwise identified, irrespective as to how the Church leadership identifies their group. Mennonites were not considered Protestant in their beginnings and still do not consider themselves to be Protestant.
12 ReligiousTolerance.org, Religious Makeup of Canada, March 2006
where other religions dominate\textsuperscript{14}. One prominent researcher goes further, stating that assimilation of religions is toward the dominant faith - some 20% of Buddhist, Hindu, Muslim, or Sikh no longer identify with their religion by their late teens\textsuperscript{15}.

The affiliation or identification with a religious group does not translate directly into membership or attendance at a corresponding place of worship since the census data reflect only self-attributed religious affiliation (Canadian) or identification (American) of the respondent. The Angus Reid Group showed that about 21% of Canadian adults report that they attend a religious service weekly. Researchers believe the true attendance to be 10%, about half the reported number in both Canada and the United States.\textsuperscript{16}

Examination of religious affiliation in national censuses does not extend to the religious organizations or churches themselves. This opens the debate among church growth authorities as to the church characteristics that correspond with growth. In particular, experts debate whether the number of adherents to a church impacts its growth rate. Christian Schwartz has conducted research into thousands of Christian churches of many denominational affiliations spanning 32 countries on all continents. He believes that a church's growth slows after reaching an attendance of about 200 people.\textsuperscript{17} He advocates putting efforts into planting additional churches instead of attempting to grow churches larger with diminishing returns. However, founding pastors of large mega-churches dispute this notion noting that their churches are large because their small churches grew.\textsuperscript{18} And they also promote church planting in addition to growing the local church attendance and membership.

Advocates of both schools have developed assessment tools to determine factors associated with growth. Schwartz developed the Natural Church Development assessment instrument to determine church health in each of the following quality factors: Empowering Leadership, Gift-oriented Ministry, Passionate Spirituality, Functional Structures, Inspiring Worship Services, Holistic Small Groups, Need-oriented Evangelism, and Loving Relationships\textsuperscript{19}.

\textsuperscript{16} Religious Tolerance.org, Religious Makeup of Canada., March 2006
Mega-churches such as Saddleback Community Church\textsuperscript{20} and Willowcreek Community Church\textsuperscript{21} have developed their own evaluation methods.

The published research provides insight into the religious trends over time. However, it is limited for church trends since census data focus on the religious group adherents and not the churches themselves. Moreover, both census and church studies of religion group denominations into larger faith groupings limiting studies of a small denomination like the EMMC. Typically EMMC churches are lumped into a general Mennonite category and often Mennonites are lumped into Protestant Christian. Furthermore, demographic studies are usually national whereas EMMC churches span four countries.

To date no research of EMMC attendance and membership trends or comparisons to other faith groups has been conducted. Neither has any study examined the EMMC characteristics and growth patterns across their geographic regions.

This study examines an overview of EMMC membership, attendance, and number of churches since the EMMC began collecting the data in 1961. We set out to understand the growth patterns of EMMC churches in different regions and differing church sizes. We also examined some opinions of EMMC church leaders.

1.2. Objectives – EMMC records

1.2.1. Overview of EMMC Growth Trends

First, we sought to learn whether the rate of change is constant over time. In the interest of adding context to these growth rates, we will compare the relative change of EMMC average church attendance and end-of-year membership data with that of Christian and Mennonite religious affiliation for the most recent Canadian census comparison period.

Then we sought to determine the most recent five-year relative change in attendance and membership at EMMC churches. Since the definitions of annual attendance and membership data of EMMC records are somewhat ambiguous, we also verified their accuracy by comparing them with average attendance and end-of-year membership based on a clear question to senior pastors. Similar results would confirm the validity of calculating five-year percentage increases using EMMC records.

1.2.2. Grouping Churches by Region, Size, and Growth Status

Since 1952 when the EMMC organized into a conference, it has been a centralized structured with a head office in Manitoba. Each church is autonomous with few relationships to other churches that provide accountability and assistance. The extension of EMMC churches to the United States, Mexico, and Belize has prompted EMMC leaders to consider regional restructuring. In recognition of existing regional differences, the 2006 EMMC Convention formalized a structure with regions in Southern Manitoba (the site of the 1876 reserve settlement where the EMMC was founded), Western Manitoba, Central Manitoba, Saskatchewan (and Alberta), Ontario, United States, Mexico, and Belize. The process of regionalization, together with the debate regarding effective church size, prompts one to consider how the churches differ across regions, by church size and growth status.

Since the EMMC has not defined an ideal church size, we grouped the churches into size groupings (large, medium, small, and new since 2000). We also defined growth status groupings (new, increasing, maintaining, and decreasing) by the relative change in average attendance from 2000 to 2005. These region, size, and growth status groupings provide a framework for examination of church characteristics.

1.3. Objectives – National Census Data

1.3.1. Demographics of Church Neighbourhoods

In this study we sought to examine characteristics of the neighbourhoods in which each of the EMMC churches is located, including population density (urban, rural), median income, median age, gender, educational levels, ethnicity, religious affiliation, and marital status.

1.4. Objectives – Survey of Senior Pastors

1.4.1. Demographics of EMMC Senior Pastors

The demographic characteristics of EMMC senior pastors examined include age, gender, education levels, marital status, ethnicity, language first spoken, and country of birth.

1.4.2. Examination of Membership Gains and Losses

It would be advantageous for church leaders to understand the nature of church attendance fluidity. In particular, pastors desire to know whether people drop out of church life completely or connect with another church when they cease attendance at their church. Rigorous study of those questions would
require an extensive survey of the attendees. The scope of this project limited us to examine only people who have become members in EMMC churches because the records are already collected.

Church memberships are added and removed in various ways. People can be added to a membership either by baptism or transfers from other churches and can be removed by death, dismissal by the membership, voluntary withdrawal of a member, or a transfer to another church.

We sought to determine the number of members that were added to EMMC churches by baptism and transfer from other churches and how many members were removed from EMMC churches by death, dismissal, withdrawal, or transfer in 2005.

Furthermore, we endeavoured to examine the transfers from or to other churches in more detail. Church members may choose to join the membership of another church after they move to a new area. Others may decide to join a nearby church. We desired to determine how many EMMC members were transferred both from and to local and distant churches.

Another phenomenon observed in Mennonite churches is the shift of attendees and members from traditional churches to less traditional churches. We desired to determine if the EMMC gains members from more traditional Mennonite churches such as the Old Colony, Reinlander, Sommerfelder, Kleine Gemeinde, and Berghalter while losing members to less traditional churches such as the Mennonite Brethren, Brethren in Christ, and General Conference.

1.4.3. Church Initiatives to Promote Growth

Church growth experts believe that particular practices or attitudes of church leaders result in growth. We examined whether the following church initiatives are correlated with growth: selecting one particular spiritual gifts assessment tool, conducting a Natural Church Development (NCD) evaluation, having multiple worship services, and having separate worship services for multiple language groups. We also checked whether the following use of church funds correlate with increased growth, whether the church budgets for staff and non-staff training, and whether the church donates to physical relief in the community and local missionary outreach.

At the 2002 EMMC Convention the NCD assessment method developed by Christian Schwartz was promoted to EMMC churches. The NCD assessment analyzes a standardized questionnaire completed by church leaders to determine

an overall church health score and the following eight quality factors: empowering leadership, gift-oriented ministry, passionate spirituality, functional structures, inspiring worship services, holistic small groups, need-oriented evangelism, and loving relationships. We hoped to determine whether the overall score and the eight quality factors of the assessment correlate with growth in EMMC churches.

1.4.4. Participation in Church Life

Research has shown a decrease in participation in church activities. We sought the proportion of attendance participation of church attendees in several activities including Sunday school, Bible study, annual meeting and receipted donations in 2005.

1.4.5. Church Facility and Financial Resources

The role of material resources in church growth is uncertain. Some of the most resource deficient churches have experienced incredible growth while some wealthy churches have stagnated. We desired to learn the number and proportion of churches that are resourced at a particular level, by examining whether the church owns the building, the average attendance would fill less than 80% of the corporate worship space, and has debt or non-capital debt.

1.4.6. Church Organizational Structure

This study also attempted to examine dichotomous organizational structure factors, including whether one board or council sets the direction of the church, the board members have term limits, boards hire senior pastors, membership approves the budget, and senior pastors oversees other pastors. We tested the hypothesis that these factors correlate with increased five-year church attendance.

1.5. Objectives – Survey of Church Leaders

1.5.1. Demographics of EMMC Church Leaders

This study attempted to generate a demographic profile of church leaders including characteristics such as age, gender, education levels, marital status, ethnicity, language first spoken, and country of birth. We also inspected the role of the leader in their local church. Our objective was to summarize these leader attributes by region, church size, and growth status of the church to which they belong. Since the EMMC, like most Mennonite denominations, insists it is a faith

group and actively welcomes people of any ethnic group, and the scope of this study limits us from measuring the ethnic makeup of all EMMC members, we attempted to determine the proportion of EMMC leaders that have Russian Mennonite ethnicity.

1.5.2. Compromises to Anabaptist Faith

Since Mennonite churches do not have a central hierarchical organizational structure, defining the Anabaptist faith position is difficult though various authors have attempted to do so25. Though the EMMC has adopted a statement of faith, it has not developed a test of Anabaptist faith. However, a 12-point summary of Anabaptist characteristics articulated by the Conference of Mennonite Brethren26, offered practical assistance. We wondered how much particular occupations and activities would compromise leaders' faith. We wish to model a score representing this value by the leader demographics and church region, size, and growth status.

1.5.3. Assistance from Conference churches

One of the objectives of regionalization of churches into closely linked groups was for churches to share resources and offer mutual support. We desired to measure church leaders' opinions as to the amount of assistance their church requires and receives. Since the EMMC has no historical data or measures of the assistance requested or given to individual churches, we endeavoured to make baseline measures of the assistance that is required and received from associated churches. Then we determined to model them by the leader demographics and church region, size, and growth status.

1.5.4. Expectation of future increases in Church Attendance

We attempted to measure church leaders' expectation of future church increases in attendance and model it by the demographics of their leaders and church region, size, and growth status.

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2. METHODS

2.1. Study Design

This study is a mixture of retrospective data review of EMMC records, national census statistics and cross-sectional surveys of senior pastors and church leaders.

2.2. Data Sources

The primary data sources are the EMMC Church Records of Attendance and Membership, a Survey of Senior Pastors, and a Survey of Church Leaders. These are supplemented by national census demographics of church neighbourhoods.

2.2.1. EMMC Records of Membership and Attendance

Church membership and attendance records are collected annually by the EMMC conference office via a survey of the churches. The onus is on the individual church to estimate or calculate these data. Since the attendance and membership questions on the annual EMMC questionnaires are ambiguous, it is uncertain what definitions the individual churches used in their responses. We considered the definitions to be the average attendance in the primary corporate worship services over the course of the year and the membership total at the end of the respective year. The number of churches is simply a count of churches with an attendance in a given year.

2.2.2. National Census Demographics of Church Neighbourhoods

Obtaining demographics of a neighbourhood around the church requires access to four national census databases. Each of the countries with EMMC churches allows open access to community census data via web-based queries. For each church we sought the smallest geographic neighbourhood in which the church building or regular meeting place is located for which census demographic data were available without a data request. The variables of interest include gender, median age, median household income, educational levels, ethnic makeup, first language, religious affiliation, and marital status. Care was taken to verify that the definitions for the demographic statistics for the four countries are close to equivalent, the definitions of neighbourhoods are similar, and the data are from a similar time period.
The neighbourhood of each Canadian church was defined as the 2001 census subdivision in which the church is located. We utilized the Statistics Canada web-based 2001 Community Profiles for the demographic data\(^{27}\).

American church neighbourhood demographics was obtained from the Fact Sheet on the American 2000 Census website for the township or city\(^{28}\).

The University of Costa Rica has created a web-based census search tool for recent censuses of many Latin American countries including Mexico and Belize\(^{29}\). This service facilitates summaries of raw data, as opposed to the aggregate summaries provided in the Canadian community profiles or the American fact sheet. The data include many additional variables but some data may be missing or out of range.

Demographic information of the 2001 Belizean census of the municipality in which the churches are located can be easily obtained from this website. Municipality demographics of 2000 Mexican EMMC church neighbourhoods was obtained from the same service.

2.2.3. Surveys

The majority of the data utilized in this study were collected via two surveys of EMMC pastors and church leaders. The EMMC publishes a “Directory of Congregations” annually which lists mailing and contact information of every EMMC church. It also lists the names, roles and contact information of each church leader. This publicly available directory provided the sampling frame for both the Survey of Senior Pastors and the Survey of Church Leaders. Given the small number of churches (37) and leaders (517), we decided to survey all senior pastors and leaders rather than merely a sample.

The language of correspondence in pertinent regions of Canada, United States, and Belize is English. Though Mexico is officially Spanish, the senior pastors of the Mexican churches all speak some English. Many of the Mexican church leaders also read English so we hoped to obtain a good response without the expense and effort of translating the documents into Spanish.

2.3. Questionnaire Design

The survey questionnaires were designed to gather adequate data to answer all the research questions while minimizing response burden. The

\(^{27}\) http://www12.statcan.ca/english/profil01/CP01/Index.cfm?Lang=E, May 2006

\(^{28}\) http://factfinder.census.gov, May 2006

questionnaires were designed by the Tailored Design method advocated by Dillman\textsuperscript{30} to maximize the survey response rate, reduce response burden, maximize response to individual questions, and gather unambiguous responses. Since we do not have luxury of reliability tested questionnaires other measures were taken to ensure objective responses. We used simple language and required only check box selection from a list for most responses though a few required short answers. Each question was asked in the order that the respondent would consider the information. Demographic questions were asked using the same wording as the 2001 Canadian census forms to facilitate comparisons. These logically ordered questions were printed in a visually relaxing layout on one side of paper only. The questionnaires were reviewed by the EMMC appointed advisors to reduce the potential for geographic bias and to focus the questions.

2.3.1. Survey of Senior Pastors
The Survey of Senior Pastors was directed to the volunteer or salaried senior pastor of each of the 37 EMMC churches. In cases where the church senior pastor position was vacant, we requested the interim pastor or chair of the board to complete the survey. The survey collected church level administrative data regarding church membership, attendance and practices of corporate worship services, participation in church life by members and attendees, church structure and decision-making, staffing, and technological and financial resources. Therefore, the pastor likely had to consult with the treasurer and administrative assistant to complete the one-hour 12-page questionnaire (see Figure 5a.).

2.3.2. Survey of Church Leaders
The Survey of Church Leaders questionnaire collected data including personal demographics, church involvement, opinions about faith, church and conference strengths and challenges from each EMMC church leader including the senior pastor. We expected the 13-page questionnaire required from 30 minutes to an hour to complete. The survey targeted each of the 517 church leaders that were identified by the churches and published in the “2005 EMMC Directory of Churches”. There is no suitable proxy for any of these leaders that happen to be unavailable and they will simply be classified as non-responding leaders. (see Figure 5b.)

2.3.3. Questionnaire Delivery Method
We considered several methods of questionnaire delivery including a web-based form, telephone interview, and mail-out survey. Some of the churches are located in remote areas which may not have reliable internet service; additionally, some leaders likely do not have the access to a computer or the skills to use a

\textsuperscript{30} Dillman, Don A., Mail and Internet Surveys: The Tailored Design Method., Wiley, 2000, pp. 150-3.
web-based form. Personal telephone interviews may improve response rates and potentially speed up the data collection process; however, we did not have the resources to hire interviewers or the time to train volunteers.

The leaders in Mexico and Belize were generally believed to be located in more remote areas and less familiar with the written English language. Most of The United States leaders were believed to be recent immigrants from Mexico and also less likely to be comfortable with the written English language. Therefore, we considered mixing two modes, with Canadians receiving a mail-out questionnaire and non-Canadian leaders receiving telephone interviews. That mixed mode, however, leaves significant potential for bias because people might respond differently to an interview question than to the same question on paper. Ultimately we choose a mail-out questionnaire for all leaders to be delivered via the senior pastor.

2.3.4. Survey Distribution, Follow-up and Data Entry

Each leader and pastor received a paper-clipped packet of survey documents beginning with the questionnaire covered with a self-addressed 9” x 12” return envelope. The envelope was pre-stamped for Canadian respondents while American, Mexican, and Belizean packets included an American dollar designated for postage. This was topped by a personalized explanation letter explaining the project, how the data would be used, and contact information for the Ethics Board, my supervisor, and myself. The letter also reminded them that participation was voluntary and that could simply return the blank questionnaire in the supplied envelope to exercise their choice to not participate. Research shows that including incentive such as cash helps increase response rates\(^{31}\). we included an American dollar in the US, Belize, Mexico return envelop to cover the cost of the return postage, while the Canadians received a pre-stamped envelope. This was judged to be unimportant in contrast to the bias of the language and cultural differences.

Judging that many of the leaders would be difficult to reach, especially in more remote areas, we decided to package both the pastor and leaders packets for each church together and courier them to the church rather than risk the questionnaires getting lost. A cover letter requested that the pastor distribute the packets to the other leaders in their church. Courier tracking and follow-up telephone calls to the churches confirmed their arrival – from within a week of the March 30\(^{th}\) sending date in most cases but up to six weeks in Belize – and that the packets were distributed to the leaders.

We assigned a unique church identifier and leader identifier which were printed on each Survey of Senior Pastors and Survey of Church Leaders

respectively to allow response tracking and linkage of church and leader level data. Since the study includes only 37 churches, a high response rate for the Survey of Senior Pastors is essential. To that end we employed several telephone follow-ups to remind pastors that we had not yet received their Survey of Senior Pastors. We had no cases where the pastor refused to participate either by returning a blank questionnaire or by refusal during the follow-up call. When called, all of the pastors indicated that they intended to return the completed questionnaire very shortly. Due to resource constraints we made no attempts to follow-up with any of the leaders when questionnaires were not returned expeditiously.

A team of volunteers immediately entered a returned survey data into a spreadsheet. Since the questionnaires were identified only by the unique identifier, the responses were anonymous while permitting the author to follow up with the pastors directly.

2.3.5. Ethical Considerations
Response data received via the questionnaires was considered confidential and anonymous. No names were entered into the survey database to protect the identity of the individuals. Confidentiality and privacy of individuals were further protected by publishing data in aggregate form only.

This study received approval from the McMaster University Research Ethics Board and a letter accompanying each questionnaire stated their support.

The research project was supported by the EMMC General Council. They appointed Jake Thiessen and Gin Thiessen as research advisors and committed $1000 for office supplies, telephone calls, and similar expenses.

2.4. Linking of Data Sources
Each church and leader was assigned a unique identification number which facilitated linkage of the data sources and tracking of responses. These were attached to EMMC Records of church attendance and membership, national census demographics of church neighbourhoods and printed on both the Survey of Senior Pastors and the Survey of Church Leaders.

The list of church leaders from the EMMC office included the name, role and church. The role was utilized to identify the senior pastor of each church. We assigned a leader identification number to each leader on the list and linked it to the church.
2.5. **EMMC Records**

2.5.1. **Overview of EMMC Growth Trends**

The annual EMMC Records provides the attendance and membership of each church in the EMMC. The number of churches that had an attendance record for a given year was counted and the attendance and membership were summed for all churches in the EMMC. (See Figure 2.) Then we calculated the relative increase from the previous reporting year. In cases where the attendance is missing for one or more years, we calculated the annual compounding change rate assuming a constant rate of change.

There is no apparent cyclical component to the attendance and membership data to indicate a need for forecasting methods. Therefore, we employed a simple linear model to estimate the annual change in attendance. The high $R^2$ of 92% and the fact that no particular patterns in the residual plots were observed to indicate that the model is invalid. (See Figure 3.)

We also calculated the EMMC 1991 to 2001 relative change in attendance and membership and compared them to the relative change in affiliation with overall Christian, Catholic, Protestant, and Mennonite faith groups as compiled by the Canadian census\(^{32}\).

The outcome of interest is the most recent five-year relative change in average attendance and end-of-year membership in the EMMC churches. The calculation was trivial using the EMMC Records but the data definitions are uncertain. Since we have 2004 and 2005 attendance and membership from both the EMMC Records and the Survey of Senior Pastors, with precise definitions for the survey questions, we compared these to determine the validity of using the EMMC Records. In particular, for the churches that responded to both the EMMC Records request and our Survey of Senior Pastors for the outcome of interest, we compared the mean, median, and counted the number of churches where the survey was lower than EMMC Records, the number where the survey was equal to the EMMC Records, and the number where the survey higher than the EMMC records. Similar means and medians and a balance between those churches where the survey resulted in higher or lower than the EMMC Records would indicate the results were probably measuring the same outcome and we can assign the definitions from the survey to the EMMC Records.

We used the EMMC Records for calculation of 2000 and 2005 attendance and membership totals. In cases where the EMMC Records had missing data

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that were included in the Survey of Senior Pastors, we used the survey data. (See Figure 4.)

2.5.2. Grouping Churches by Region, Size, and Growth Status

For the purposes of this project, we grouped the 37 churches in three different ways. First, we followed the newly adopted regional grouping of EMMC churches into Southern Manitoba (8), Western Manitoba (3), Central Manitoba (5), Saskatchewan (6), Ontario (5), United States (4), Mexico (3), and Belize (3). This regionalization plan further grouped the three non-Canadian regions as one group. For our analysis we will consider them as separate groups.

We also desired to group the churches by size, that is, the number of adherents of a local group and no association with the church building. Arguably the attendance more precisely defines the adherents of the church than membership since it includes children and non-member adult adherents. The churches were also grouped by the attendance in 2000 as per EMMC records. Six churches are classified as new since they came into existence after 2000. The remaining 31 churches were divided into three groups alone arbitrarily cut lines. The fourteen churches with an attendance under 100 in 2000 were classified as small, the church with an attendance of 300 or over as large, and churches in between as medium. (See Table 4b.)

Church leaders debate whether it is more effective to plant churches or keep growing churches larger beyond a certain size\textsuperscript{33}. The EMMC has not taken a position in this debate. However, since we endeavoured not to penalize churches that send people to participate in church plants, we have attributed the attendance of new churches to their founding churches for the purposes of calculating church growth rates. Suppose, for instance, that a church was planted by two founding churches after 2000 and has an average attendance of 100 people in 2005. Each of these churches would be attributed with 50 additional people for calculating their five-year growth rates.

This grouping, again, has the same new grouping as above that comprises of the churches begun after 2000. The churches in existence before 2000 were grouped into three growth status groups. The churches which declined in average attendance were labelled declining.

Since the Canadian population increased by approximately one percentage point per year from 1991 to 2001 (9.8\%)\textsuperscript{34} it is conceivable that it was

34 Statistics Canada, 2001 Census: analysis series Religions in Canada, Catalogue no. 97F0022XCB2001002, p. 18, Statistics Canada, 2003\end{footnote}
similar from 2000 to 2005. We labelled churches that approximately maintained pace with the Canadian population growth, arbitrarily set at five percentage points on either side of the 5% Canadian population growth (0 to 10% increase), as maintaining. Churches whose attendance increased 10% or more from 2000 to 2005 were defined as growing.

2.6. National Censuses

2.6.1. Demographics of Church Neighbourhoods

The national census provided demographics including gender, ethnicity, language first learned, educational levels, age, and marital status. We obtained the median age and the percentage of the population who identified themselves as male, married, first speaking the official language, Caucasian race, born outside the country, and having obtained a university degree for the geographic neighbourhoods in which the churches are located. Then we modeled the relative change in 2000-2005 attendance by these neighbourhood demographics individually by univariate models.

2.7. Survey of Senior Pastors

2.7.1. Demographics of Senior Pastors

No demographic questions were included on the Survey of Senior Pastors questionnaire. Instead, we utilized the data from the demographic questions on the Survey of Church Leaders questionnaire corresponding to the appropriate pastor or alternate to develop the demographic profile of the senior pastor.

The profiles included age, gender, educational levels, marital status, ethnicity, language first learned, and country of birth. We obtained the median age and the percentage of responding church leaders who identified themselves as male, obtained a university degree, married, Mennonite race, speaking Plautdietsch, and born outside the country in which the church is located.

2.7.2. Examination of Membership Gains and Losses

The Survey of Senior Pastors asked a series of questions aimed at understanding the nature of membership gains and losses. We wish to understand the distribution of membership gains attributable to new church members compared to transfers from other Christian churches. Likewise church membership losses are attributable to transfer to other churches, death, and withdrawals or dismissal. The survey asked membership gains and losses by age group. For this analysis we simply summed the groups to obtain an overall number for each method of church membership entrance or exit. As a check, we
compared the net gain to that of the difference between 2005 and 2004 end of year membership in the EMMC Records.

One phenomenon in Christian churches is the lure of people from one church to another neighbouring church. We differentiated between transfers to another local church from transfers to a church in a new neighbourhood, for example following a more. In the questionnaire we defined a local church as one that can be driven by car in 20 minutes or less while a distant church is more than 20 minutes away. The survey asked for these by age group to obtain the local and distant transfers.

Another phenomenon observed in Mennonite churches is the shift of attendees and members from traditional churches to less traditional churches. The questionnaire asked for the number of people who transferred their membership from or to their church to or from a list of other common Mennonite churches. We summed the transfers from or to the following traditional Mennonite churches: Old Colony, Reinlander, Sommerfelder, Kleine Gemeinde, and Bergthaler. Similarly, we summed the members that were transferred to or from these less traditional Mennonite churches: Mennonite Brethren, Brethren in Christ, and General Conference.

2.7.3. Church Initiatives to Promote Growth
We also examined four sets of church attributes for association with relative change in church attendance; the first included measures of church initiatives to encourage growth. The EMMC Records include which churches were involved in church plants since 2000. We simply identified which churches had contributed to church plants, selected one particular spiritual gifts assessment tool, conducted a Natural Church Development (NCD) evaluation in the last five years, have multiple worship services, allocated funds for staff and non-staff training, and spent money on physical relief in the community and local missionary outreach.

Our endeavour was to model the relative change in church attendance by these initiatives. Furthermore, we wanted to model the 5-year relative change in attendance by the eight quality factor and overall score of the Natural Church Development assessment tool.

2.7.4. Participation in Church Life
The Survey of Senior Pastors requested the total number of church attendees and the number that participated in several core church activities, namely, Sunday School, Bible Study, attendance of the annual membership meeting and made receipted gifts to the church. We divided the total number of participants by the total attendance of responding churches to obtain overall participation rates.
2.7.5. Church Facility and Financial Resources
The Survey of Senior Pastors asked whether the church owned their building, the amount of overall debt and the amount of capital expenditure debt. It also included the capacity of the worship spaces and the average attendance over the year. A common rule of thumb says that a church filled to over 80% capacity detours new people from participating. We simply calculated the percentage of average capacity and allocated them into groups reflecting over and under 80% capacity. Churches with multiple services would likely be over 100% capacity. The median donation per attendee (based on average weekly attendance) for EMMC churches was calculated at approximately $1000 in 2005. Therefore, we arbitrarily assigned churches into those that donated more than $1000 and those that donated less.

2.7.6. Church Organizational Structure
The Survey of Senior Pastors asked whether the church has one board or council that sets the direction of the church and whether board members have term limits. It also asked which of the membership, board or council, pastor, ministry team, or treasurer hires the senior pastor, approves the budget, and oversees non-senior pastor. From these variables we could conclude whether the board makes the decision to hire the senior pastor, the membership approves the budget, and the senior pastor oversees the non-senior pastors. We grouped each of these into corresponding dichotomous variables.

These factors are too numerous relative to the number of churches to be tested simultaneously, therefore, we tested univariate linear models for the five-year change in attendance by each of these factors. Factors with p-value less than 10% were tested in a multivariable generalized linear model, adjusted for church region and size grouping. Plots of residuals by normal quantiles were not evidence against the assumption that the residuals are normally distributed. (See Figure 6.)

2.8. Survey of Church Leaders

2.8.1. Demographics of Church Leaders
The Survey of Church Leaders asks a series of demographic questions including age, gender, educational levels, marital status, ethnicity, language first learned at home and still understood, and country of birth. From these we obtained the median age and the proportion of responding church leaders who identified themselves as male, having obtained a university degree, married, of Mennonite ethnic ancestry, first speaking Plautdietsch at home, born outside the country where they now live and the role in their church. We summarized the leader's primary role in the church as one of senior pastor, other pastor, board or
council member, and other role. Then we produced a corresponding descriptive demographic profile of these church leaders by region, church, and growth status.

2.8.2. Compromises to Anabaptist Faith

In the absence of reliability tested questionnaire to assess the degree to which particular jobs and activities were opined to compromise their Anabaptist faith, we simply added the (0-4) scores indicating how much each would compromise their faith for eight occupations. The first occupation was ignored because the wording was misspelled and the responses were ambiguous. The remaining eight values were summed to obtain an approximately continuous normal distribution of scores measuring their rejection of employment avoided by early Anabaptists. The values with no missing values were modelled and tested for residual normality assumptions. (See Figure 7.)

We also asked, on the same scale, whether a Christian could participate in a series of activities and these were similarly summed to obtain scores measuring rejection of activities likely avoided by early Anabaptists. These were modelled in a manner similar to the above. (See Figure 8.)

2.8.3. Assistance from Conference churches

One of the objectives of regionalization of churches into closely linked groups was to share resources and offer mutual support. We endeavoured to make baseline measures of the assistance that is required by the churches and received from associated churches. Here the sum of the ten values represented the amount of assistance believed to be required by the respondents' church in ten areas. Correspondingly, we asked how much help the church had received in these areas and summed the scores. We modelled and tested both. (See 9 and 10.)

2.8.4. Expectation of future increases in Church Attendance

The Survey of Church Leaders questionnaire asked for the expected increase or decrease in average attendance in their church over the next five years. We modelled that outcome by leader demographics and church characteristics, church size grouping, and growth status. Like in the previous analysis, we used generalized estimating equations for this model with the normal distribution and the identity link function. An examination of the plot of residuals by normal quantiles shows that the assumption of normality is not justified. (See Figure 11.) Apparently, a couple of outlier responses of over 100% expected increase skewed the distribution. We repeated the model with these two points excluded and obtained reasonable results. (See Figure 12.) However, since both of these outliers belong to new churches - one each from Saskatchewan and Belize regions - we speculated that this may bias the data by underestimating the optimism of the new churches. Therefore, as a sensitivity
analysis we truncated these two outliers at expected five-year increase in attendance of 100% and included them in the model. (See Figure 13.)

2.8.5. Generalized Estimating Equations Models
Since the leaders are clustered within churches, the generalized linear model does not adequately account for the correlation within the data structure. Generalized estimating equations were introduced (Liang and Zeger 1986)\textsuperscript{35} to model data that could be modeled by the generalized linear model except for the correlation of data. These models, which permit the same distributions and link functions available for the generalized linear model, give ample options to model the following leader level outcomes. They depend on asymptotic distributions that require the number of clusters to be large.

Each of the five leader opinions described above, were modeled using Generalized Estimating Equations by the leader demographic variables detailed above adjusted for church region, size grouping, and growth status. These data were assumed to be related by an exchangeable correlation matrix. That is, the leader responses were assumed to be independent from those of leaders of other churches but correlated to those of other leaders in their own church. However, the models for the four score outcomes produced negative intra-church correlation estimates so we assumed independent correlation between all leaders.

The Language first spoken as a child and ethnicity were highly correlated so ethnicity was removed from all the models. For this analysis, age groups were grouped into thirds as follows: 1-36 years, 37-50 years, and 51 or greater.

2.8.6. Population Size Issues
Since there are only 37 churches in the four countries of interest, the study will survey the senior pastor of every church. Even so, we cannot conduct a Pearson's Chi-square test for differences in a contingency table. And we will need to test univariate models since we do not have the degrees of freedom to test many simultaneously.

We decided, a priori, that cases where all or the majority of the data were missing from a survey would disqualify its use. In cases where individual data were missing the case will simply be excluded from that particular table or model. Though there are various imputation techniques such as the EM Algorithm to utilize cases with missing data, the scope of this project is limited to using completed data.

3. RESULTS – Church Level Analysis

3.1. EMMC Records of Attendance and Membership

3.1.1. Overview of EMMC Growth Trends

Membership and attendance data have been collected almost annually by the EMMC office since 1961 and 1968 respectively. (See Table 2.) Though an inspection of the data shows a trend of increasing attendance, membership, and number of churches, it also reveals periods of decline. (See Figure 2.) It is difficult to speculate on the nature of these fluctuations without additional data. Unexplained fluctuations in the attendance (and membership) of particular churches further underscore the need to use caution when using these data.

No annual church data except region and outcome variables attendance and membership were available so we simply modelled attendance by year to estimate the annual change in attendance. The, well-fitted \((R^2 > 92\%\) linear model, estimated an increased attendance of 93 people across the EMMC annually. Though we had expected church attendance to be correlated exponentially to year, a model with year squared did not improve the fit. The survey data are intended to identify factors that are associated with this increase.

Over the period of the Canadian census 1991-2001, attendance and membership of EMMC churches increased 24.7 and 27.0\% respectively, modestly higher than that of the EMC (16.7\% and 19\%). (See Table 3.)

Though the number of Canadians affiliated with Christian churches has increased modestly and the affiliation with Mennonite churches in Canada has actually decreased in recent years, both membership and attendance at EMMC churches has increased several times the rate of the population growth (24.7\% and 27.0\% vs. 9.8\%) from 1991 to 2001. (see Tables 1a and 3a.) Each of attendance, membership, and number of churches in the EMMC increased in the recent five-year period of primary interest as illustrated in the table. (See Table 3a.)

3.1.2. Grouping Churches by Region, Size, and Growth Status

Attendance aggregates exhibit vast disparities between regions from explosive growth in Mexico (82.9\%) and the United State (78.9\%) to modest increases in Ontario (18.0\%) (despite losing a church in 2005), Central (17.0\%) and Western Manitoba (32.7\%), to decreases relative to the population growth in Saskatchewan (4.2\%), Southern Manitoba (-6.4\%) and Belize (-9.9\%). The net decreased attendance observed in Belizean EMMC churches may be due to an anomaly in one church which had a dramatic spike in attendance in 2000, rising
by over 200 from 1999 and immediately dropping in 2001. (See Figures 4 and 5 and Tables 5abc.)

Substantial differences in relative change in attendance from 2000 to 2005 were observed between church size groupings. Despite two small churches becoming defunct since the year 2000, this grouping actually experienced a modest five-year increase (9.0%) in attendance. The greatest growth (14.2%) was experienced by churches in the medium size category while large churches actually declined (-3.0%) in attendance. (See Table 5b.)

The EMMC landscape had changed considerably since 2000, with two churches closing their doors and another withdrawing their association with the conference while six new churches were planted. When we examined the 31 EMMC churches existing in 2000 and still in existence in 2005 by growth status, the declining group lost a quarter (25.6%) of their attendance while the growing group increased by a third (32.5%).

3.2. National Censuses

3.2.1. Demographics of Church Neighbourhoods

Publicly available web-based searches of community profiles in all four of the countries of interest looked very promising. Each site facilitates the selection of demographic data for similar census regions (census subdivision, township, and municipality). Though the regions are defined similarly in each country, the population size included in such a region varies greatly even within a country. For example, in our search of census subdivisions in Canada, we could not search a sector of Winnipeg and ended with a church neighbourhood that included over 600,000 people while the town of Hague, Saskatchewan has a church neighbourhood with only 711 people.

The availability and quality of data varied greatly from country to country. (See Table 6.) The demographic variables available in the American fact finder are so selective that of the variables of interest only age, gender, and ethnicity are available. Canada only reports education levels by selected age groups so we cannot even calculate overall. The Latin American census databases are much more flexible; they include the entire slate of variables included in their census form and in raw frequency form instead of summaries. However, some variables in the Mexican database include out-of-range data or high amounts of missing values making them unreliable. Country of birth is not available in Belize or Mexico. Therefore, while the public census data are useful for investigating a particular region and even make some comparisons across regions, it does provide explanatory variables for models.
Regionalization is a pragmatic solution to the difficulties experienced by church leaders in connecting to peers across huge distances. The populations of the neighbourhoods in which a particular church is located are likely similar within a geographic region. We wish to understand the amount of similarity of the neighbourhoods between regions. Median age, percentage of population male, married, first spoken official language, white (including Mennonite), born in another country, adhere to Christianity and obtained university education. The table expresses the demographic variable of the median church in the region. (see Table 7.)

It demonstrates considerable variation in demographic attributes of church neighbourhoods between regions. For example, the Mennonite population in Belize is concentrated in a few communities and dominates the communities in which EMMC churches are located. In the municipality in which one of the Belizean churches is located, over 99% of the population identified themselves as Mennonite race. (Note that Belize was the only country in our study that identified Mennonite as a race.) Therefore, the demographics describing the church neighbourhood describes the Mennonite community in Belize. In particular, few (1%) residents of these municipalities first learned to speak the official language of Belize and despite the population being very young (median age 18 years) many (65%) were already married.

Since only two demographic variables were available from each national census, and education levels were difficult to compare, we built univariate models for each of the remaining demographic attributes. The percentage who were married (p=0.0278) and born outside country (p=0.0090) were significantly factors in predicting change in church attendance. However, the best use of this is descriptive; the models are suspect at best.

3.3. Survey of Senior Pastors

3.3.1. Response rates

We couriered the Survey of Senior Pastors to each of the 37 churches in the EMMC and received confirmation that it had been received. Thirty-three of the 37 (89%) churches returned a completed questionnaire and each region had a response rate of at least 75%. (See Table 9.)

3.3.2. Demographics of Senior Pastors

No demographic questions are included on the Survey of Senior Pastors questionnaire. The pastors also received a Survey of Church Leaders which had

a demographic section but of the 33 responders to the Surveys of Senior Pastors, 22 (20 pastors) also completed the Survey of Church leaders.

The median age is 44 years (q1-q3: 33-50), all are male, all but one is married, half are serving in a church outside of their birth country. (See Table 10.)

3.3.3. Comparison of the Survey of Senior Pastors with EMMC Records

In the EMMC records it is unclear what definitions church administration used to report their annual attendance and membership data. We tested whether the attendance and membership records are comparable to average attendance and end of year membership reported on the survey.

The survey had parallel results to EMMC records for 2005 membership (mean=166.9 (sd=186.4) vs. 165.3 (188.4) for the 24 churches that were reported in both sources. (See Table 11.) In fact, ten reported the same number while six reported a higher number in the EMMC record than the survey while eight did the converse. The comparison of 2005 attendance figures was not quite as close with the EMMC records adding a mean of seven (200.8 (179.4) vs. 194.1 (173.3)) more persons than the survey.

3.3.4. Examination of Membership Gains and Losses

Of the 398 people added to the membership of EMMC churches in 2005, 39% (155 people) were added through baptism. While the EMMC experienced considerable net gain (80 people) through transfers from traditional Mennonite churches, they also had a net gain of members from non-traditional Mennonite churches contrary to our hypothesis. (See Table 12a,b.)

Though EMMC records indicate that overall EMMC attendance dropped slightly from 2004 to 2005 (6,903 vs. 6,887), membership increased by 53 persons, (5,327 vs. 5,380) and by 104 persons (4,816 vs. 4,920) for the 33 churches responding to the survey. (See Table 2.) However, they reported a net gain of 238 persons. This may indicate that pastors have selective memory recall, preferring to remember people joining over those leaving their membership. EMMC gained a net of 88 people from other local churches similar to gains from churches.

3.3.5. Church Initiatives to Promote Growth

We sought to determine how many churches took particular initiatives to promote growth in their church. EMMC records tell us that only four churches actively participated in a church plant in the last five years, (2000-2005); The Survey of Senior Pastors revealed that only three conducted a Natural Church Development evaluation and only six have selected a particular spiritual gifts assessment tool. (See Table 13a.)
We intended to investigate whether Natural Church Development assessment quality factors and overall scores were correlated with increased attendance. Surprisingly, only three churches have conducted the assessment in the last five years despite being promoted at the 2002 EMMC Convention. Because of this, we had insufficient data to do further analysis on this specific topic.

After observing that nine of the ten churches that had multiple worship services also had them for multiple language groups, each of them in English and Plautdietsch, we removed the latter from further analysis.

3.3.6. Participation in Church Life
As a proportion of average attendance in 2005, 54% attended Sunday school, 26% attended Bible study, 30% attended the last annual meeting and 42% received a donation receipt. (See Table 13b.)

3.3.7. Facility and Financial Resources
Most of the churches (91%) own the building in which the meet for worship and most (70%) have an average attendance of less than 80% of worship space. (See Table 13c.)

3.3.8. Organizational Structure
Of the churches responding to these organizational structure questions, 77% had one governing board, 59% had term limits for board members and had the senior pastor oversee other pastors employed by the church. (See Table 13d.)

3.3.9. Models
We modeled the relative change in attendance by the preceding factors from the Survey of Senior Pastors. The large number of explanatory variables compared to relatively few observations limited the analytical methods employed. All the effects significant at the 10% level in the univariate model together with region and church size groupings were modelled in a multivariate model. (See Table 14.) Only the United States region was significantly (estimate=1.05, 95% CI (0.53, -1.58), p=.029). Debt was significant univariate model was no longer significant in this model (estimate=0.0180, 95% CI (-0.33, 0.36), p=.9248).
4. Results – Leader Level Analysis

4.1. Survey of Church Leaders

4.1.1. Response rates

All 517 leaders on the EMMC office list of church leaders should have received a Survey of Church Leaders questionnaire from their pastor or church office. Seventeen indicated their desire to decline the survey by returning the blank questionnaire. Almost half (251, 48.5%) of the leaders responded with a completed questionnaire. The response was distributed almost uniformly (40% to 59%) across regions except Western Manitoba where only 14% responded. (See Table 9.) We do not have descriptive data of leaders that chose not to respond the survey and cannot determine whether the respondents were representative of the sampled. Perhaps the respondents were younger, more educated, or less optimistic about their church.

4.1.2. Demographics of Church Leaders

The leaders had a median age (43 years), a third (33.5%) were women and a quarter (24.3%) had a university degree. Seven of eight (87.1%) identified themselves as descendents of Russian Mennonites and almost three quarters (70.9%) first learned to speak Plautdietsch. (See Table 10.)

The regional breakdown of leader demographics revealed some noteworthy contrasts. The median age of the responding leaders from Mexico was the youngest (25 years); from Saskatchewan the oldest (58) (See Table 15a.).

4.1.3. Jobs and Activities Compromising Anabaptist Faith

The jobs compromising faith scores measure the degree that the leader believes particular jobs would compromise their faith. In general (n/N=211/251) responding EMMC church leaders do not consider the occupations to compromise their faith extensively as evidenced by a mean score of 10.7 on the 32 point scale. However, scores vary widely (sd=7.2), with over 10% of the leaders (26/211) scoring 0 and one scoring the maximum (32).

When the effects of the leader demographics and church region, size group, and growth status were considered in a clustered model, those first speaking Plautdietsch (estimate=2.8, 95% CI (0.1, 5.3)) and university educated (3.3, (0.9, 5.7)) score significantly higher while senior pastors (-2.2, (-4.5, -0.1)) and leaders from Saskatchewan (-3.6, (-6.8, -0.4)) compared to Southern Manitoba scored lower than their comparator group. (See Table 17a.)
Overall, (n/N=208/251) responding EMMC church leaders do not consider the listed activities to compromise their faith extensively (mean=12.5, sd=7.0) though they expressed caution, the maximum score being 32 of 40 possible points.

When the effects of the leader demographics and church region, size group, and growth status were considered in a clustered model, those in age group 1-36 years (estimate=-4.4, 95% CI (-6.8, -1.9)) compared to those over age 50, and leaders from Saskatchewan (-4.2, (-7.4, -1.1)) compared to Southern Manitoba scored significantly lower while leaders that were university educated (2.1, (0.1, 4.1)), leaders form Belize (1.9, (0.3, 3.6)), Mexico (13.1, (9.3, 16.8)), compared to Southern Manitoba, leaders from churches with new attendance in the year 2000 (8.0, (5.3, 10.8)), and an average attendance of 1-99 (4.2, (2.1, 6.2)) compared to those in churches with an average attendance of 300 or more in 2000, scored significantly higher than their comparator group. (See Table 17b.)

4.1.4. Assistance from Conference churches

Overall, responding (n/N=185/251) EMMC leaders all the questions regarding their church needs in all ten areas (mean=16.0, sd=7.1), no leader demographic effects were significant when a clustered model adjusted for church region, size group, and growth status. However, leaders that were part of churches not yet in existence in 2000 (estimate=5.4, 95% CI (2.8, 8.0)), and an average attendance of 100-299 (3.3, (1.2, 5.5)) when compared to churches with an average attendance of 300 or more in 2000, scored significantly higher than their comparator group. No effects significantly lower than their comparator. (See Table 17c.)

Likewise, 68% (n/N=185/251) EMMC church leaders responded to all the questions regarding how much their church received assistance in all ten areas (mean=9.4, sd=7.0). When the effects of the leader demographics and church region, size group, and growth status were considered in a clustered model, those ages 1-36 (estimate=2.4, 95% CI (0.5, 4.3)) compared to those over age 50, first speaking Plautdietsch (2.0, (0.3, 3.6)) compared to those over age 50, leaders from churches with new attendance in the year 2000 (13.3, (9.9, 16.7)), and an average attendance of 1-99 (4.9, (2.7, 7.3)) compared to church with an average attendance of 300 or more in 2000, and leaders from churches whose growth stagnated (2.9, (0.4, 5.5)) compared to growing churches believed their churches to receive more assistance than the comparator groups. Conversely, leaders from Central Manitoba scored significantly lower (-2.5, (-5.0, -0.1)) than those from Southern Manitoba. (See Table 17d.)

4.1.5. Expectation of future increases in Church Attendance
Over three quarters of EMMC leaders responded to the question of five-year change in attendance expected in their church (mean=18.4, sd=41.1). When we modelled this outcome by leader demographics and church region, size grouping, and growth status, we observed that the residuals were skewed by a couple of outlier observations.

Modelling the expected five-year increase in church attendance without the two outlying data points reveals that married leaders (estimate=5.5, 95% CI (0.7, 10.3)) compared to other and leaders from Mexico (56.5, (45.2, 67.9)) and Saskatchewan (26.4, (9.4, 43.5)) compared to Southern Manitoba, were significantly more optimistic than their comparator groups while non-senior Pastor were less optimistic (-6.2, (-12.0, -0.5)) with an intra-church correlation of 0.19. (See Table 17e.) The model based on all the data points but two values truncated to 100% (from 500 and 200), the yielded similar results. (See Table 17f.)

All analyses were done using SAS (version 9.1, SAS Institute Inc., Cary, NC). The proc glm was used to model non-clustered church level data, the genmod for generalized estimating equations.
5. DISCUSSION and CONCLUSION

5.1. Discussion

EMMC churches experienced a steady increase in attendance and membership due to growth and not reproduction of churches. This trend has seen the doubling of average membership per church in the last 30 years. (See Table 2.)

Increases in EMMC church attendance have exceeded affiliation with the Mennonite faith in Canada but examination reveals that this growth is almost entirely due to growth outside the EMMC heartland. (See Table 5a.) In fact, of the four regions making up the EMMC frontier, two have growth rates of 80%, Ontario had 18% despite one church withdrawing from the conference, and Belize had the only negative relative change (-9.9%). (See Table 5a.) An unexplained spike in 2000 attendance of at least 200 over 1999, followed by an immediate return in 2001, makes this reported loss suspect.

At first glance, one observes vast differences relative change in attendance by 2000 attendance groupings - small (less than 99, 9%), medium (100 to 299, 14.2%), and large (300+, -3%) churches. (See Table 5b.) On closer inspection, one observes that growing churches outnumber declining churches in every size grouping in the frontier regions and in none of the size groups in the heartland region. (See Table 5a.) This trend then may be a reflection of the size of churches in growing regions. Further study on this phenomenon is required before drawing conclusions regarding the optimal church size.

The attempt to create church neighbourhood demographic profiles based on national census data proved difficult. Vast differences in census neighbourhood sizes, inconsistent data definitions, and differences in data available made the best use of the data descriptive. A formal data request of demographic data for the church neighbourhoods may yield smaller geographic regions, more complete variables. (See Tables 6 and 7.)

The Survey of Senior Pastors consistent response rates from each region give confidence that the data represent the entire EMMC. (See Table 9.) EMMC churches rely heavily on transfers from other churches for their growth. Less than two in five additions were by baptism; perhaps half of these of people growing up in the church leaving one in five additions from the non-churched. (See Table 12a.)
Though we examined various factors for correlation with increased attendance, only debt free status was significant. (See Tables 14a-e.) Yet Schwartz claims that the quality factors measured by a standardized NCD assessment, reliably tested at over 80%\(^{37}\) correlate with growth. In fact, of the thousands of church assessed, all churches with all eight quality factor scores at least one standard deviation above the mean, were growing or maintaining. This assessment also gives assistance in strengthening these weak areas. Though the NCD has been promoted at an EMMC convention, only three churches have made the effort to examine their church health in this way. It would be prudent for church leaders that are concerned with their church health to assess their church health and work toward strength in their weak factors.

Almost half (48.5\%) of the 517 leaders on the EMMC office list responded with a completed questionnaire. Of these 21 (8.4\%) were senior pastors, 32 (12.8\%) other pastors, and 84 (33.5\%) board or council members. Also of revealing was that fully a third of identified leaders are women. (See Tables 10 and 15a-c.)

The scores to measure the perceived amount that particular jobs and activities would compromise their faith were higher for traditional leaders (first speaking Plautdietsch or from Mexican and Belizean) and lower in Saskatchewan. Surprisingly, for both jobs and activities university educated leaders hold to the more traditional view than those less educated. (See Table 17a-b.)

As expected leaders at new and small churches believe their churches required and received more assistance than those of large churches. Yet, the church assistance required score was substantially higher than the assistance received (mean 16.0 vs. 9.4). (See Table 16.) It is imperative for churches to actively share resources and experience to mutually support each other. This will be difficult in regions like the United States where “neighbouring” churches cover huge areas.

5.2. Conclusion

In spite of apparent robust growth in the EMMC, this growth is limited to the frontier regions. The demographics of the leaders indicate that outreach to other ethnic groups has not produced leaders yet. Further exploration is needed to determine the ethnicity of attendees and members of EMMC churches.

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37 Schalk, Christoph A. Organizational Diagnosis of Churches: The Statistical Development of the Natural Church Development Survey and its Relation to Organizational Psychology, Institute for Natural Church Development, Wurzburg, Germany, 1999, p.52
Further work is required to determine the factors that impact growth in EMMC churches. We made no attempt to evaluate the opinions as to which jobs and activities compromise. Further consultation with EMMC theologians will further direct research on this topic.

5.3. Limitations of the Study

The highlighted trends and characteristics of EMMC church growth, of this study are limited by various factors. First, the small sample size of 37 churches does not permit use of tests that depend on asymptotic distributions. We would have preferred to use the Pearson’s chi square test for church level contingency table but very few cells contained more than five observations. Our generalized linear models included many potential covariates and relatively small sample of churches does not have enough degrees of freedom to test them simultaneously. Therefore, we were limited to univariate models.

The definitions of annual church attendance and membership may have varied by church or across time. It is difficult to detail precisely the definition used in data collection.

A study spanning multiple countries must be carefully designed to ensure that consistent definitions and processes are used. Many demographic variables have inconsistent definitions or display options between countries. Belize, for example, had several additional marital statuses than the other countries. The locus of attributes available differed as the United States has a very limited selection of clean data while Belize and Mexico had a wide set of variables but included dirty variables. Furthermore, not all the national censuses were conducted in the same year at the start of the study period. In all four countries, neighbourhood defined as the smallest region for which data were available, varied greatly between rural and urban regions. Ideally, a radius around each church would define the neighbourhood.

The survey is also challenged by the geographic diversity of the study area. Mexico requires communication in another language.

The distribution of the Survey of Church Leaders questionnaire depended on the actions of the senior pastor. Therefore, the response may have been biased as pastors less favourable to the study were less likely to encourage completion.

For leader level contingency tables the data are clustered by church which again invalidates the Pearson’s chi square test.
Since association does not imply causation, we cannot determine precisely the factors that a church would implement to ensure growth. For example, maybe large churches have certain characteristics because they are large as opposed to characteristics causing increase in attendance or membership. Furthermore, ideally we would have collected factors from the beginning of the study period. Our period of interest is 2000 to 2005. The census data were from the beginning of that period while church and leader attributes were collected for 2005.

5.4. Expected Significance of Research

This study identifies the growth rate of EMMC churches and puts it into context. It examines characteristics of EMMC churches and leaders and identifies some of those that correlated to increased attendance. Since no research project has been conducted in the EMMC, the empirical knowledge gained will be unprecedented for the EMMC leadership as they set a direction for the conference. It also will prompt more research questions as church leaders interact with the data. It may prompt clarification of questions used to collect EMMC records of church attendance and membership.
Figure 1. Map of EMMC Churches
Figure 2. Graph Attendance by Year
Figure 3. Normal Q-Q Plot for Linear Model of Change in Attendance by Year

\[ R^2 = 0.924770 \]
Figure 4. Scatter plot of Percentage Change 2000-05 in Attendance by Church Size - Attendance in the Year 2000
**Figure 5a. Dataflow: Survey of Senior Pastors**

- Churches in the EMMC: 37
- Potential Senior Pastors in EMMC Churches: 37
- Pastors selected for Survey: 37 (100%)
  - Responding Pastors: 33 (89%)
    - Surveys Completed 33 (100%)
    - Surveys returned blank: 0 (0%)
  - Surveys not returned: 4 (11%)

**Figure 5b. Dataflow: Survey of Church Leaders**

- Churches in the EMMC: 37
- Leaders in EMMC Churches: 517
- Leaders selected for Survey: 517 (100%)
  - Responding Pastors: 268 (51.8%)
    - Surveys Completed 251 (93.7%)
    - Surveys returned blank: 17 (6.3%)
  - Surveys not returned: 249 (48.2%)

- Used for Analysis: 251
  - Complete responses 168 (66.9%)
  - Partial responses 83 (33.1%)
Figure 6. Normal Q-Q Plot for Linear Model of Percentage Increase in Attendance by Church Level Covariates

\[ R^2 = 0.889430 \]
Figure 7. Q-Q Plot for Generalized Estimating Equations Model of Jobs Compromising Christian Faith Score by Leader Demographics and Church Region, Size, Growth Status
Independent correlation matrix
Figure 8. Q-Q Plot for Generalized Estimating Equations Model of Activities Compromising Christian Faith Score by Leader Demographics and Church Region, Size, Growth Status.

Independent correlation matrix
Figure 9. Q-Q Plot for Generalized Estimating Equations of Church Assistance Required by Leader Demographics and Church Region, Size, Growth Status
Independent correlation matrix
Figure 10. Q-Q Plot for Generalized Estimating Equations of Church Assistance Received by Leader Demographics and Church Region, Size, Growth Status
Independent correlation matrix
Figure 11. Q-Q Plot for Generalized Estimating Equations of Expectation of Increased Attendance by Leader Demographics and Church Region, Size, Growth Status
Exchangeable correlation matrix (all observations)
Figure 12. Q-Q Plot for Generalized Estimating Equations of Expectation of 5-Year Increased Attendance by Leader Demographics and Church Region, Size, Growth Status
Exchangeable correlation matrix (outliers > 100 excluded)
Figure 13. Q-Q Plot for Generalized Estimating Equations of Expectation of 5-Year Increased Attendance by Leader Demographics and Church Region, Size, Growth Status
Exchangeable correlation matrix (outliers > 100 truncated to 100)
Table 1a. Canadian Affiliation of Christian denominations with counts of 50,000 or more in 1991 and 2001

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>26,994,040</td>
<td>29,639,035</td>
<td>9.80%</td>
</tr>
<tr>
<td>Catholic</td>
<td>12,335,255</td>
<td>12,921,285</td>
<td>4.80%</td>
</tr>
<tr>
<td>Protestant</td>
<td>9,427,675</td>
<td>8,654,845</td>
<td>-8.20%</td>
</tr>
<tr>
<td>Adventist</td>
<td>52,360</td>
<td>62,880</td>
<td>20.10%</td>
</tr>
<tr>
<td>Anglican</td>
<td>2,188,110</td>
<td>2,035,500</td>
<td>-7.00%</td>
</tr>
<tr>
<td>Baptist</td>
<td>663,360</td>
<td>729,475</td>
<td>10.00%</td>
</tr>
<tr>
<td>Christian and Missionary Alliance</td>
<td>59,235</td>
<td>66,285</td>
<td>11.90%</td>
</tr>
<tr>
<td>Jehovah's Witnesses</td>
<td>168,370</td>
<td>154,750</td>
<td>-8.10%</td>
</tr>
<tr>
<td>Latter-day Saints (Mormons)</td>
<td>100,770</td>
<td>104,745</td>
<td>3.90%</td>
</tr>
<tr>
<td>Lutheran</td>
<td>636,210</td>
<td>606,595</td>
<td>-4.70%</td>
</tr>
<tr>
<td>Mennonite</td>
<td>207,970</td>
<td>191,470</td>
<td>-7.90%</td>
</tr>
<tr>
<td>Pentecostal</td>
<td>436,435</td>
<td>369,475</td>
<td>-15.30%</td>
</tr>
<tr>
<td>Presbyterian</td>
<td>636,295</td>
<td>409,830</td>
<td>-35.60%</td>
</tr>
<tr>
<td>Reformed Bodies</td>
<td>119,020</td>
<td>115,735</td>
<td>-2.80%</td>
</tr>
<tr>
<td>Salvation Army</td>
<td>112,345</td>
<td>87,790</td>
<td>-21.90%</td>
</tr>
<tr>
<td>United Church</td>
<td>3,093,120</td>
<td>2,839,125</td>
<td>-8.20%</td>
</tr>
<tr>
<td>Protestant, n.o.s.</td>
<td>628,945</td>
<td>549,205</td>
<td>-12.70%</td>
</tr>
<tr>
<td>Christian Orthodox</td>
<td>387,390</td>
<td>495,245</td>
<td>27.80%</td>
</tr>
<tr>
<td>Orthodox, n.i.e.</td>
<td>79,290</td>
<td>170,060</td>
<td>114.50%</td>
</tr>
<tr>
<td>Christian, n.i.e.</td>
<td>353,040</td>
<td>780,450</td>
<td>121.10%</td>
</tr>
</tbody>
</table>

The Census includes self declared "affiliation" with a religious group. Statistics Canada groups Christian sub-groups into Catholic, Protestant, Christian Orthodox, and Christian not otherwise identified, irrespective as to how the Church leadership identifies their group.

Table 1b. Canadian Affiliation of selected Religions in 1991 and 2001

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All Christian</td>
<td>22,503,360</td>
<td>22,851,825</td>
<td>1.55%</td>
</tr>
<tr>
<td>Muslim</td>
<td>253,265</td>
<td>579,645</td>
<td>128.90%</td>
</tr>
<tr>
<td>Jewish</td>
<td>318,185</td>
<td>329,990</td>
<td>3.70%</td>
</tr>
<tr>
<td>Buddhist</td>
<td>163,415</td>
<td>300,345</td>
<td>83.80%</td>
</tr>
<tr>
<td>Hindu</td>
<td>157,010</td>
<td>297,200</td>
<td>89.30%</td>
</tr>
<tr>
<td>Sikh</td>
<td>147,440</td>
<td>278,415</td>
<td>88.80%</td>
</tr>
<tr>
<td>Eastern religions</td>
<td>26,325</td>
<td>37,545</td>
<td>42.60%</td>
</tr>
<tr>
<td>No religious affiliation</td>
<td>3,397,000</td>
<td>4,900,095</td>
<td>44.20%</td>
</tr>
</tbody>
</table>
### Table 2. Annual Attendance and Membership in EMMC Churches

<table>
<thead>
<tr>
<th>Year</th>
<th>Churches</th>
<th>Attendance</th>
<th>Members</th>
<th>Att. Members</th>
<th>Year</th>
<th>Attendance</th>
<th>Members</th>
<th>Relative Change: %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1961</td>
<td>16</td>
<td>1,182</td>
<td>74</td>
<td>0.0%</td>
<td>1961</td>
<td>1,187</td>
<td>74</td>
<td>0.0%</td>
</tr>
<tr>
<td>1962</td>
<td>16</td>
<td>1,187</td>
<td>74</td>
<td>0.0%</td>
<td>1962</td>
<td>1,187</td>
<td>74</td>
<td>0.0%</td>
</tr>
<tr>
<td>1963</td>
<td>16</td>
<td>1,187</td>
<td>74</td>
<td>0.0%</td>
<td>1963</td>
<td>1,187</td>
<td>74</td>
<td>0.0%</td>
</tr>
<tr>
<td>1964</td>
<td>16</td>
<td>1,187</td>
<td>74</td>
<td>0.0%</td>
<td>1964</td>
<td>1,187</td>
<td>74</td>
<td>0.0%</td>
</tr>
<tr>
<td>1965</td>
<td>16</td>
<td>1,187</td>
<td>74</td>
<td>0.0%</td>
<td>1965</td>
<td>1,187</td>
<td>74</td>
<td>0.0%</td>
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<tr>
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<td>2005</td>
<td>1,957</td>
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48
Table 3a. Change in EMMC and EMC Attendance, Membership, and Number of Churches, 1991 to 2001

<table>
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<tr>
<th></th>
<th>EMMC 1991</th>
<th>EMMC 2001</th>
<th>Relative Change(%)</th>
</tr>
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<tbody>
<tr>
<td>Attendance</td>
<td>4,940</td>
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<td>Membership</td>
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<td>4,635</td>
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<td>35</td>
<td>6.1%</td>
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</table>

<table>
<thead>
<tr>
<th></th>
<th>EMC 1991</th>
<th>EMC 2001</th>
<th>Relative Change(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance*</td>
<td>5,888</td>
<td>6,961</td>
<td>23.3%*</td>
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<tr>
<td>Membership</td>
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<tr>
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<td>44</td>
<td>-12.0%</td>
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</table>

*EMC attendance counts are for 1993 and 2001 (the year they began recording attendance)

The relative change in EMC attendance was extrapolated to ten years.

Table 3b. Change in EMMC Attendance, Membership and Number of Churches, 2000 to 2005

<table>
<thead>
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<th>2000</th>
<th>2005</th>
<th>Relative Change(%)</th>
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<tbody>
<tr>
<td>Attendance</td>
<td>6,105</td>
<td>6,887</td>
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<tr>
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<tr>
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<td>34</td>
<td>37</td>
<td>8.8%</td>
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</table>
Table 4a. Number of Churches in Region by Size, and Growth Status

<table>
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<tbody>
<tr>
<td></td>
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<td>Small</td>
<td>Medium</td>
<td>Large</td>
<td>Declining (-, 0%)</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td>Maintaining [0-10%]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Growing [10%, +]</td>
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<td>MB-S</td>
<td>8</td>
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<td>2</td>
<td>3</td>
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<td>3</td>
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</tr>
<tr>
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<td>2</td>
<td>2</td>
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<td>1</td>
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<tr>
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<td>1</td>
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<tr>
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<td>6</td>
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Table 4b. Number of Churches in Heartland and Frontier by Size and Growth Status Groups

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<th>Region</th>
<th>Total</th>
<th>EMMC Heartland (MB, SK)</th>
<th>EMMC Frontier (ON, US, MX, BE)</th>
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</tr>
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</tr>
<tr>
<td></td>
<td></td>
<td>Growing [10%, +]</td>
<td>New</td>
</tr>
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<td>4</td>
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<tr>
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<td>4</td>
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<tr>
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<td>1</td>
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<tr>
<td>TOTAL</td>
<td>37</td>
<td>8</td>
<td>6</td>
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*Heartland - geographic region where Mennonites first settled from Russia

*Frontier - geographic regions where Russia Mennonites moved to from Heartland
Table 5a. 2000 to 2005 Relative Change in Attendance of EMMC Churches by Region

<table>
<thead>
<tr>
<th>Regional Groupings</th>
<th>Churches 2000</th>
<th>Churches 2005</th>
<th>Attendance 2000</th>
<th>Attendance 2005</th>
<th>Relative Growth (%)</th>
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<td>Southern Manitoba</td>
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<td>2,139</td>
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<td>-6.4%</td>
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<tr>
<td>Western Manitoba</td>
<td>2</td>
<td>3</td>
<td>245</td>
<td>325</td>
<td>32.7%</td>
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<td>Central Manitoba</td>
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<td>5</td>
<td>755</td>
<td>883</td>
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<td>Saskatchewan</td>
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<td>6</td>
<td>529</td>
<td>551</td>
<td>4.2%</td>
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<td>EMMC Heartland</td>
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<td>3,761</td>
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<td>675</td>
<td>608</td>
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<td>6,105</td>
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Table 5b. 2000 to 2005 Relative Change in Attendance of EMMC Churches by Church Size Groupings

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<tr>
<td>New (after 2000)</td>
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<td>9.0%</td>
</tr>
<tr>
<td>Small [1-99]</td>
<td>16</td>
<td>14</td>
<td>1,096</td>
<td>1,195</td>
<td>9.0%</td>
</tr>
<tr>
<td>Medium [100-299]</td>
<td>12</td>
<td>11</td>
<td>2,054</td>
<td>2,345</td>
<td>14.2%</td>
</tr>
<tr>
<td>Large [300-∞)</td>
<td>6</td>
<td>6</td>
<td>2,955</td>
<td>2,867</td>
<td>-3.0%</td>
</tr>
<tr>
<td>OVERALL</td>
<td>34</td>
<td>37</td>
<td>6,105</td>
<td>6,887</td>
<td>12.8%</td>
</tr>
</tbody>
</table>

Table 5c. 2000 to 2005 Relative Change in Attendance of EMMC Churches by Church Growth Status

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Defunct (since 2000)</td>
<td>3</td>
<td>6</td>
<td>160</td>
<td>480</td>
<td>-25.6%</td>
</tr>
<tr>
<td>New (after 2000)</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>480</td>
<td>0.5%</td>
</tr>
<tr>
<td>Declining (-∞, 0)</td>
<td>11</td>
<td>11</td>
<td>1,844</td>
<td>1,372</td>
<td>-25.6%</td>
</tr>
<tr>
<td>Maintaining [0, 10%)</td>
<td>6</td>
<td>6</td>
<td>1,244</td>
<td>1,250</td>
<td>0.5%</td>
</tr>
<tr>
<td>Growing [10%, ∞)</td>
<td>14</td>
<td>14</td>
<td>2,857</td>
<td>3,785</td>
<td>32.5%</td>
</tr>
<tr>
<td>OVERALL</td>
<td>34</td>
<td>37</td>
<td>6,105</td>
<td>6,887</td>
<td>12.8%</td>
</tr>
</tbody>
</table>
Table 6. Availability of Demographic Data from National Census Web Database

<table>
<thead>
<tr>
<th></th>
<th>No. Churches</th>
<th>Canada</th>
<th>United States</th>
<th>Mexico</th>
<th>Belize</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age *: median (years)</td>
<td>37</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>% Male</td>
<td>37</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>% Married *****</td>
<td>33</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>% First spoke official language **</td>
<td>30</td>
<td>yes</td>
<td>no</td>
<td>dirty</td>
<td>yes</td>
</tr>
<tr>
<td>% White ****</td>
<td>34</td>
<td>yes</td>
<td>yes</td>
<td>dirty</td>
<td>yes</td>
</tr>
<tr>
<td>% Born outside country ***</td>
<td>27</td>
<td>yes</td>
<td>no</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>% Christian</td>
<td>33</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>% University education*</td>
<td>6</td>
<td>no</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>% University education age 20-34</td>
<td>27</td>
<td>yes</td>
<td>no</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>% University education age 35-44</td>
<td>27</td>
<td>yes</td>
<td>no</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>% University education age 45-64</td>
<td>27</td>
<td>yes</td>
<td>no</td>
<td>no</td>
<td>no</td>
</tr>
</tbody>
</table>

** Canada and Belize include population speaking official language

*** Canada and Belize include foreign born

**** Canada, USA, Belize race

***** Canada, Mexico, and Belize have Marital Status
Table 7. Medians of Church Neighbourhoods Demographics

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Male</th>
<th>Married</th>
<th>Official Language</th>
<th>White</th>
<th>Foreign Born</th>
<th>Christian</th>
<th>University Education</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>No. Churches</td>
<td>37</td>
<td>37</td>
<td>33</td>
<td>30</td>
<td>34</td>
<td>27</td>
<td>33</td>
</tr>
<tr>
<td>S Manitoba</td>
<td>35.7</td>
<td>48</td>
<td>62</td>
<td>50</td>
<td>98</td>
<td>16</td>
<td>96</td>
</tr>
<tr>
<td>W Manitoba</td>
<td>36.6</td>
<td>47</td>
<td>58</td>
<td>80</td>
<td>89</td>
<td>6</td>
<td>84</td>
</tr>
<tr>
<td>C. Manitoba</td>
<td>37.3</td>
<td>48</td>
<td>58</td>
<td>67</td>
<td>78</td>
<td>14</td>
<td>87</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>33.9</td>
<td>48</td>
<td>61</td>
<td>77</td>
<td>87</td>
<td>4</td>
<td>82</td>
</tr>
<tr>
<td>Ontario</td>
<td>37.2</td>
<td>48</td>
<td>54</td>
<td>84</td>
<td>96</td>
<td>18</td>
<td>89</td>
</tr>
<tr>
<td>Mexico</td>
<td>20.0</td>
<td>49</td>
<td>51</td>
<td>95</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Belize</td>
<td>18.0</td>
<td>51</td>
<td>65</td>
<td>1</td>
<td>92</td>
<td>94</td>
<td>6</td>
</tr>
<tr>
<td>United States</td>
<td>32.5</td>
<td>47</td>
<td></td>
<td>79</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OVERALL</td>
<td>34.3</td>
<td>48.7</td>
<td>60.2</td>
<td>68.5</td>
<td>95.7</td>
<td>13.2</td>
<td>89.8</td>
</tr>
</tbody>
</table>

* Canadian education has age groupings but not overall, Belize, Mexico have overall
** Canada and Belize include population speaking official language
*** Canada and Belize include foreign born
**** Canada, USA, Belize race
***** Canada, Mexico, and Belize have Marital Status
Table 8. Univariate Linear Models of % Increase in 2000 to 2005 Attendance by Church Neighbourhoods Demographics

<table>
<thead>
<tr>
<th>Demographic Factors</th>
<th>Churches</th>
<th>Estimate (95% CI), p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age: median (years)</td>
<td>37</td>
<td>-0.0026 (-0.02, 0.02), 0.8062</td>
</tr>
<tr>
<td>% Male</td>
<td>37</td>
<td>-1.1041 (-10.41, 8.21), 0.8161</td>
</tr>
<tr>
<td>% Married</td>
<td>33</td>
<td>-1.4865 (-2.74, -0.23), 0.0278</td>
</tr>
<tr>
<td>% First spoke official language</td>
<td>30</td>
<td>-0.5020 (-0.96, -0.04), 0.8264</td>
</tr>
<tr>
<td>% White</td>
<td>34</td>
<td>-1.0938 (-2.29, 0.10), 0.0848</td>
</tr>
<tr>
<td>% Born outside country</td>
<td>27</td>
<td><strong>1.1592 (0.36, 1.96), 0.0090</strong></td>
</tr>
<tr>
<td>% Christian</td>
<td>33</td>
<td>-1.1337 (-2.32, 0.06), 0.0726</td>
</tr>
</tbody>
</table>

* Canadian census has age groupings but not overall, Belize, Mexico have overall
** Canada and Belize include population speaking official language
*** Canada and Belize include foreign born
**** Canada, USA, Belize race
***** Canada, Mexico, Belize Marital Status
Table 9. Completed Responses of Surveys to Senior Pastors and Church Leaders by Region

<table>
<thead>
<tr>
<th>Region</th>
<th>Pastors Response</th>
<th>Leaders Response</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No (%)</td>
<td>No (%)</td>
</tr>
<tr>
<td>S MB</td>
<td>6/8 (75)</td>
<td>68/136 (50)</td>
</tr>
<tr>
<td>W MB</td>
<td>3/3 (100)</td>
<td>6/42 (14)</td>
</tr>
<tr>
<td>C MB</td>
<td>4/5 (80)</td>
<td>50/92 (54)</td>
</tr>
<tr>
<td>SK</td>
<td>6/6 (100)</td>
<td>31/66 (47)</td>
</tr>
<tr>
<td>ON</td>
<td>4/5 (80)</td>
<td>48/82 (59)</td>
</tr>
<tr>
<td>Mexico</td>
<td>3/3 (100)</td>
<td>4/10 (40)</td>
</tr>
<tr>
<td>Belize</td>
<td>3/3 (100)</td>
<td>18/40 (45)</td>
</tr>
<tr>
<td>USA</td>
<td>4/4 (100)</td>
<td>26/49 (53)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>33/37 (89.2)</td>
<td>251/517 (48.5)</td>
</tr>
</tbody>
</table>
Table 10. Demographics of Pastors and Leaders Responding to the Surveys

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pastors No (%)</th>
<th>Leaders No (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age: years (med, p25-p75)</td>
<td>22 (44, 33-50)</td>
<td>249 (43, 33-55)</td>
</tr>
<tr>
<td>Male: (%)</td>
<td>22/22 (100)</td>
<td>167/251 (66.5)</td>
</tr>
<tr>
<td>Married: (%)</td>
<td>21/22 (95)</td>
<td>229/251 (91.2)</td>
</tr>
<tr>
<td>Plautdietsch: (%)</td>
<td>14/22 (64)</td>
<td>178/251 (70.9)</td>
</tr>
<tr>
<td>Mennonite Ancestry: (%)</td>
<td>18/22 (82)</td>
<td>217/249 (87.1)</td>
</tr>
<tr>
<td>Born in Foreign Country: (%)</td>
<td>12/22 (55)</td>
<td>80/251 (31.9)</td>
</tr>
<tr>
<td>University Degree: (%)</td>
<td>12/22 (55)</td>
<td>60/251 (24.3)</td>
</tr>
<tr>
<td>Role</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Pastor</td>
<td>20/22 (91)</td>
<td>21/251 (8.4)</td>
</tr>
<tr>
<td>Other Pastor</td>
<td>0/22 (0)</td>
<td>32/251 (12.8)</td>
</tr>
<tr>
<td>Board/council member</td>
<td>2/22 (9)</td>
<td>84/251 (33.5)</td>
</tr>
<tr>
<td>Other</td>
<td>0/22 (0)</td>
<td>114/251 (45.4)</td>
</tr>
</tbody>
</table>
Table 11. Church Attendance and Membership 2004 and 2005
Comparison of EMMC Records and Survey Responses

<table>
<thead>
<tr>
<th></th>
<th>2004</th>
<th>2005</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. Churches</td>
<td>EMMC Records</td>
<td>Surveys of Senior pastors</td>
<td>No. Churches</td>
<td>EMMC Records</td>
<td>Surveys of Senior pastors</td>
</tr>
<tr>
<td>Attendance</td>
<td>27</td>
<td>208.7 (192.0)</td>
<td>193.8 (179.9)</td>
<td>29</td>
<td>200.8 (179.4)</td>
<td>194.1 (173.3)</td>
</tr>
<tr>
<td></td>
<td>27</td>
<td>17</td>
<td>2</td>
<td>29</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>Membership</td>
<td>25</td>
<td>170.9 (195.7)</td>
<td>168.2 (194.3)</td>
<td>24</td>
<td>165.3 (188.4)</td>
<td>166.9 (186.4)</td>
</tr>
<tr>
<td></td>
<td>25</td>
<td>12</td>
<td>1</td>
<td>24</td>
<td>6</td>
<td>8</td>
</tr>
</tbody>
</table>

* Mean of EMMC Churches
+ Number of Churches with higher response than the other source
Table 12a. Gains or Losses of EMMC Memberships in Calendar year 2005

<table>
<thead>
<tr>
<th></th>
<th>Gains People (%)</th>
<th>Losses People (%)</th>
<th>Net People (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baptism:</td>
<td>155 (39)</td>
<td>0 (0)</td>
<td>155 (65)</td>
</tr>
<tr>
<td>Transfer</td>
<td>243 (61)</td>
<td>61 (38)</td>
<td>182 (76)</td>
</tr>
<tr>
<td>Death</td>
<td></td>
<td>33 (21)</td>
<td></td>
</tr>
<tr>
<td>Withdrawal/Dismissal</td>
<td>66 (41)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>398 (100)</td>
<td>160 (100)</td>
<td>238 (100)</td>
</tr>
</tbody>
</table>

Table 12b. Transfers of EMMC Memberships in Calendar year 2005

<table>
<thead>
<tr>
<th></th>
<th>Gains People (%)</th>
<th>Losses People (%)</th>
<th>Net People (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfer from/to local</td>
<td>110 (45)</td>
<td>22 (36)</td>
<td>88 (48)</td>
</tr>
<tr>
<td>Transfer from/to distant</td>
<td>133 (55)</td>
<td>39 (64)</td>
<td>94 (52)</td>
</tr>
<tr>
<td>Other EMMC</td>
<td>27 (11)</td>
<td>19 (31)</td>
<td>8 (4)</td>
</tr>
<tr>
<td>EMC</td>
<td>15 (6)</td>
<td>2 (3)</td>
<td>13 (7)</td>
</tr>
<tr>
<td>Traditional Mennonite</td>
<td>86 (35)</td>
<td>6 (10)</td>
<td>80 (44)</td>
</tr>
<tr>
<td>Non-traditional Mennonite</td>
<td>15 (6)</td>
<td>8 (13)</td>
<td>7 (4)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>243 (100)</td>
<td>61 (100)</td>
<td>182 (100)</td>
</tr>
</tbody>
</table>
Table 13a. Church Initiatives to Promote Growth

<table>
<thead>
<tr>
<th>Church Initiative</th>
<th>Churches No. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Church Plant in last 5 years</td>
<td>4/37 (11)</td>
</tr>
<tr>
<td>Selected ONE particular Spiritual gifts assessment tool</td>
<td>6/29 (21)</td>
</tr>
<tr>
<td>Conducted a Natural Church Development evaluation</td>
<td>3/31 (10)</td>
</tr>
<tr>
<td>Multiple Worship Services</td>
<td>10/33 (30)</td>
</tr>
<tr>
<td>Worship Services to multiple cultures or language groups</td>
<td>9/33 (27)</td>
</tr>
<tr>
<td>Staff training in expense budget</td>
<td>15/25 (60)</td>
</tr>
<tr>
<td>Non-staff training in budget</td>
<td>11/25 (44)</td>
</tr>
<tr>
<td>Donations to community relief</td>
<td>13/27 (48)</td>
</tr>
<tr>
<td>Donations to local outreach</td>
<td>18/27 (67)</td>
</tr>
</tbody>
</table>

Table 13b. Attendee Participation in Church Life

<table>
<thead>
<tr>
<th>Event</th>
<th>No. Attendees Churches No. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attend Sunday school</td>
<td>2664/4911 (54.2)</td>
</tr>
<tr>
<td>Attend Bible study</td>
<td>1228/4720 (26.0)</td>
</tr>
<tr>
<td>Attend annual meeting</td>
<td>1725/5848 (29.5)</td>
</tr>
<tr>
<td>Received a donation receipt</td>
<td>1583/3682 (42.0)</td>
</tr>
</tbody>
</table>

Table 13c. Church Facility and Financial Resources

<table>
<thead>
<tr>
<th>Resource</th>
<th>Churches No. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Own Building</td>
<td>30/33 (91)</td>
</tr>
<tr>
<td>Worship space less than 80% full</td>
<td>21/30 (70)</td>
</tr>
<tr>
<td>Debt Free</td>
<td>20/28 (71)</td>
</tr>
<tr>
<td>Non-capital Debt Free</td>
<td>29/30 (97)</td>
</tr>
</tbody>
</table>

Table 13d. Church Organizational Structure

<table>
<thead>
<tr>
<th>Organizational Structure Decisions</th>
<th>Churches No. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>One board that sets direction of church</td>
<td>24/31 (77)</td>
</tr>
<tr>
<td>Board members have term limits</td>
<td>19/32 (59)</td>
</tr>
<tr>
<td>Board hires the senior pastor</td>
<td>15/32 (47)</td>
</tr>
<tr>
<td>Membership approves the budget</td>
<td>25/31 (81)</td>
</tr>
<tr>
<td>Pastor Oversees non-senior pastors</td>
<td>13/22 (59)</td>
</tr>
</tbody>
</table>
### Table 14a. Univariate Linear Models of % Increase in Attendance 2000-2005 by Church Initiatives to Promote Growth

<table>
<thead>
<tr>
<th>Initiative: yes vs. no</th>
<th>No.</th>
<th>Estimate (95% CI), p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Church Plant in last 5 years</td>
<td>31</td>
<td>0.1028 (-0.30, 0.51), 0.6228</td>
</tr>
<tr>
<td>Selected ONE Spiritual gifts assessment</td>
<td>23</td>
<td>-0.1649 (-0.47, 0.14), 0.3083</td>
</tr>
<tr>
<td>Natural Church Development evaluation</td>
<td>25</td>
<td>-0.0766 (-0.58, 0.43), 0.7702</td>
</tr>
<tr>
<td>Multiple Worship Services</td>
<td>27</td>
<td>0.2603 (-0.06, 0.58), 0.1231</td>
</tr>
<tr>
<td>Staff training in expense budget</td>
<td>21</td>
<td>0.0907 (-0.28, 0.46), 0.6400</td>
</tr>
<tr>
<td>Non-staff training in budget</td>
<td>21</td>
<td>0.2309 (-0.12, 0.59), 0.2171</td>
</tr>
<tr>
<td>Donations to community relief</td>
<td>21</td>
<td>0.2210 (-0.03, 0.48), 0.1070</td>
</tr>
<tr>
<td>Donations to local outreach</td>
<td>21</td>
<td>-0.1446 (-0.44, 0.15), 0.3512</td>
</tr>
</tbody>
</table>

### Table 14b. Univariate Linear Models of % Increase in Attendance 2000-2005 by Participation in Church Life

<table>
<thead>
<tr>
<th>Participation: Proportion of Attendees</th>
<th>No.</th>
<th>Estimate (95% CI), p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attend Sunday school</td>
<td>24</td>
<td>-0.3867 (-1.35, 0.58), 0.4421</td>
</tr>
<tr>
<td>Attend Bible study</td>
<td>22</td>
<td>0.2692 (-0.80, 1.34), 0.6285</td>
</tr>
<tr>
<td>Attend annual meeting</td>
<td>26</td>
<td>-0.2689 (-1.58, 1.04), 0.6915</td>
</tr>
<tr>
<td>Received a donation receipt</td>
<td>14</td>
<td>-2.2368 (-2.47, -2.00), 0.0717</td>
</tr>
</tbody>
</table>

### Table 14c. Univariate Linear Models of % Increase in Attendance 2000-2005 by Facility and Financial Resources

<table>
<thead>
<tr>
<th>Resources: yes vs. no Comparator</th>
<th>No.</th>
<th>Estimate (95% CI), p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Own Building</td>
<td>27</td>
<td>0.0889 (-0.50, 0.67), 0.7679</td>
</tr>
<tr>
<td>Worship space less than 80% full</td>
<td>24</td>
<td>0.1320 (-0.14, 0.40), 0.3448</td>
</tr>
<tr>
<td>Debt Free</td>
<td>22</td>
<td><strong>0.3310</strong> (0.07, 0.59), <strong>0.0204</strong></td>
</tr>
<tr>
<td>Non-capital Debt Free</td>
<td>24</td>
<td>0.1798 (-0.48, 0.84), 0.5987</td>
</tr>
</tbody>
</table>

### Table 14d. Univariate Linear Models of % Increase in Attendance 2000-2005 by Organizational Structure

<table>
<thead>
<tr>
<th>Structure: yes vs. no Comparator</th>
<th>No.</th>
<th>Estimate (95% CI), p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>One board that sets direction of church</td>
<td>26</td>
<td>0.1374 (-0.22, 0.49), 0.4530</td>
</tr>
<tr>
<td>Board members have term limits</td>
<td>26</td>
<td>0.1861 (-0.14, 0.51), 0.2720</td>
</tr>
<tr>
<td>Board hires the senior pastor</td>
<td>27</td>
<td>0.2021 (-0.10, 0.50), 0.1959</td>
</tr>
<tr>
<td>Membership approves the budget.</td>
<td>26</td>
<td>-0.0524 (-0.54, 0.43), 0.8340</td>
</tr>
<tr>
<td>Pastor Oversees non-senior pastors</td>
<td>18</td>
<td>-1.6712 (-2.03, -1.32), 0.3690</td>
</tr>
</tbody>
</table>

### Table 14e. Multivariate Linear Models of % Increase in Attendance 2000-2005 of Previous Factors* adjusted by Region and Church Size Group

<table>
<thead>
<tr>
<th>Comparator</th>
<th>No.</th>
<th>Estimate (95% CI), p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Received a donation receipt: proportion of attende</td>
<td>14</td>
<td>-0.0480 (-0.28, 0.19), 0.7158</td>
</tr>
<tr>
<td>Debt Free: yes vs. no</td>
<td>14</td>
<td>0.0180 (-0.33, 0.36), 0.9248</td>
</tr>
<tr>
<td>Region USA</td>
<td>S. Manitoba</td>
<td>14</td>
</tr>
<tr>
<td>Region Mexico</td>
<td>S. Manitoba</td>
<td>14</td>
</tr>
<tr>
<td>Region Ontario</td>
<td>S. Manitoba</td>
<td>14</td>
</tr>
<tr>
<td>Region Saskatchewan</td>
<td>S. Manitoba</td>
<td>14</td>
</tr>
<tr>
<td>Region Central Manitoba</td>
<td>S. Manitoba</td>
<td>14</td>
</tr>
<tr>
<td>Region Western Manitoba</td>
<td>S. Manitoba</td>
<td>14</td>
</tr>
<tr>
<td>Church Size: Small [1-99] Large [300+]</td>
<td>14</td>
<td>0.0754 (-0.27, 0.42), 0.6987</td>
</tr>
<tr>
<td>Church Size: Medium [100-299] Large [300+]</td>
<td>14</td>
<td>0.2140 (-0.19, 0.62), 0.3792</td>
</tr>
</tbody>
</table>

*(univariate p-value<0.1) **R²=0.88943
Table 15a. Leader Demographics by Region

<table>
<thead>
<tr>
<th>Region</th>
<th>No</th>
<th>Age No (med, Q1-Q3)</th>
<th>Male No (%)</th>
<th>Married No (%)</th>
<th>Plautdietsch Language No (%)</th>
<th>Mennonite Ethnicity No (%)</th>
<th>Foreign Born No (%)</th>
<th>University Education No (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S. MB</td>
<td>68</td>
<td>67 (52, 44-58)</td>
<td>51/68 (75)</td>
<td>65/68 (96)</td>
<td>48/68 (71)</td>
<td>62/68 (91)</td>
<td>7/68 (10)</td>
<td>19/68 (28)</td>
</tr>
<tr>
<td>W. MB</td>
<td>6</td>
<td>6 (41, 33-53)</td>
<td>4/6 (67)</td>
<td>6/6 (100)</td>
<td>3/6 (50)</td>
<td>6/6 (100)</td>
<td>0/6 (0)</td>
<td>3/6 (50)</td>
</tr>
<tr>
<td>C. MB</td>
<td>50</td>
<td>49 (51, 33-57)</td>
<td>28/50 (56)</td>
<td>42/50 (84)</td>
<td>32/50 (64)</td>
<td>43/49 (88)</td>
<td>2/50 (4)</td>
<td>23/50 (46)</td>
</tr>
<tr>
<td>SK/AB</td>
<td>31</td>
<td>31 (58, 38-65)</td>
<td>16/31 (52)</td>
<td>27/31 (87)</td>
<td>9/31 (29)</td>
<td>19/30 (63)</td>
<td>6/31 (19)</td>
<td>7/31 (23)</td>
</tr>
<tr>
<td>ON</td>
<td>48</td>
<td>48 (37, 33-46)</td>
<td>30/48 (63)</td>
<td>44/48 (92)</td>
<td>41/48 (85)</td>
<td>44/48 (92)</td>
<td>36/48 (75)</td>
<td>6/48 (13)</td>
</tr>
<tr>
<td>MX</td>
<td>4</td>
<td>4 (25, 21-30)</td>
<td>2/4 (50)</td>
<td>1/4 (25)</td>
<td>4/4 (100)</td>
<td>4/4 (100)</td>
<td>1/4 (25)</td>
<td>0/4 (0)</td>
</tr>
<tr>
<td>BE</td>
<td>18</td>
<td>18 (39, 34-41)</td>
<td>15/18 (83)</td>
<td>18/18 (100)</td>
<td>18/18 (100)</td>
<td>18/18 (100)</td>
<td>5/18 (28)</td>
<td>1/18 (6)</td>
</tr>
<tr>
<td>US</td>
<td>26</td>
<td>26 (34, 29-42)</td>
<td>21/26 (81)</td>
<td>26/26 (100)</td>
<td>23/26 (88)</td>
<td>21/26 (81)</td>
<td>23/26 (88)</td>
<td>2/26 (8)</td>
</tr>
<tr>
<td><strong>OVERALL</strong></td>
<td><strong>251</strong></td>
<td><strong>249 (43, 33-55)</strong></td>
<td><strong>167/251 (665)</strong></td>
<td><strong>229/251 (912)</strong></td>
<td><strong>178/251 (709)</strong></td>
<td><strong>217/249 (871)</strong></td>
<td><strong>80/251 (319)</strong></td>
<td><strong>61/251 (243)</strong></td>
</tr>
</tbody>
</table>

Table 15b. Leader Demographics by Average Attendance 2000

<table>
<thead>
<tr>
<th>Size</th>
<th>No</th>
<th>Age No (med, Q1-Q3)</th>
<th>Male No (%)</th>
<th>Married No (%)</th>
<th>Plautdietsch Language No (%)</th>
<th>Mennonite Ethnicity No (%)</th>
<th>Foreign Born No (%)</th>
<th>University Education No (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small [1-99]</td>
<td>67</td>
<td>67 (38, 31-50)</td>
<td>39/67 (58)</td>
<td>56/67 (84)</td>
<td>43/67 (64)</td>
<td>56/67 (84)</td>
<td>22/67 (33)</td>
<td>10/67 (15)</td>
</tr>
<tr>
<td>Medium [100-299]</td>
<td>84</td>
<td>83 (47, 36-57)</td>
<td>53/84 (63)</td>
<td>77/84 (92)</td>
<td>57/84 (68)</td>
<td>70/82 (85)</td>
<td>18/84 (21)</td>
<td>27/84 (32)</td>
</tr>
<tr>
<td>Large [300+]</td>
<td>85</td>
<td>84 (44, 37-55)</td>
<td>63/85 (74)</td>
<td>81/85 (95)</td>
<td>67/85 (79)</td>
<td>79/85 (93)</td>
<td>30/85 (35)</td>
<td>20/85 (24)</td>
</tr>
<tr>
<td><strong>OVERALL</strong></td>
<td><strong>251</strong></td>
<td><strong>249 (43, 33-55)</strong></td>
<td><strong>167/251 (665)</strong></td>
<td><strong>229/251 (912)</strong></td>
<td><strong>178/251 (709)</strong></td>
<td><strong>217/249 (871)</strong></td>
<td><strong>80/251 (319)</strong></td>
<td><strong>61/251 (243)</strong></td>
</tr>
</tbody>
</table>

Table 15c. Leader Demographics by Growth Status 2000-2005

<table>
<thead>
<tr>
<th>Status</th>
<th>No</th>
<th>Age No (med, Q1-Q3)</th>
<th>Male No (%)</th>
<th>Married No (%)</th>
<th>Plautdietsch Language No (%)</th>
<th>Mennonite Ethnicity No (%)</th>
<th>Foreign Born No (%)</th>
<th>University Education No (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Declining</td>
<td>60</td>
<td>60 (43, 33-51)</td>
<td>38/60 (63)</td>
<td>54/60 (90)</td>
<td>38/60 (63)</td>
<td>52/60 (87)</td>
<td>8/60 (13)</td>
<td>9/60 (15)</td>
</tr>
<tr>
<td>Maintaining</td>
<td>65</td>
<td>64 (52, 42-60)</td>
<td>42/65 (65)</td>
<td>51/65 (78)</td>
<td>38/65 (58)</td>
<td>51/63 (81)</td>
<td>7/65 (11)</td>
<td>23/65 (35)</td>
</tr>
<tr>
<td>Growing</td>
<td>111</td>
<td>110 (41, 33-53)</td>
<td>74/111 (67)</td>
<td>101/111 (91)</td>
<td>91/111 (82)</td>
<td>102/111 (92)</td>
<td>55/111 (50)</td>
<td>25/111 (23)</td>
</tr>
<tr>
<td><strong>OVERALL</strong></td>
<td><strong>251</strong></td>
<td><strong>249 (43, 33-55)</strong></td>
<td><strong>167/251 (665)</strong></td>
<td><strong>229/251 (912)</strong></td>
<td><strong>178/251 (709)</strong></td>
<td><strong>217/249 (871)</strong></td>
<td><strong>80/251 (319)</strong></td>
<td><strong>61/251 (243)</strong></td>
</tr>
</tbody>
</table>

Med=Median, Q1=first quartile, Q3=third quartile
Table 16. Descriptive Statistics of Leader Opinions about Faith Compromises, Church Assistance and Expected Growth (%)

<table>
<thead>
<tr>
<th>Leaders Opinions</th>
<th>No</th>
<th>Q1</th>
<th>Med</th>
<th>Q3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faith Compromise Jobs score: 0-32</td>
<td>211</td>
<td>5</td>
<td>11</td>
<td>16</td>
</tr>
<tr>
<td>Activities score: 0-40</td>
<td>208</td>
<td>7</td>
<td>12</td>
<td>18</td>
</tr>
<tr>
<td>Church Assistance Requires score: 0-40</td>
<td>185</td>
<td>11</td>
<td>16</td>
<td>21</td>
</tr>
<tr>
<td>Receiving score: 0-40</td>
<td>170</td>
<td>4</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td>Expected Growth 5-year attendance change: %</td>
<td>194</td>
<td>5</td>
<td>10</td>
<td>20</td>
</tr>
</tbody>
</table>
Table 17a. Generalized Estimating Equations of Jobs Compromising Faith Scores by Leader Demographics and Church Region, Size and Growth Status: n=209, Independent correlation matrix

<table>
<thead>
<tr>
<th>Variable</th>
<th>Comparator</th>
<th>Estimate (95% CI), p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 1-36</td>
<td>51+</td>
<td>0.6550 (-1.54, 2.85), 0.5591</td>
</tr>
<tr>
<td>Age 37-50</td>
<td>51+</td>
<td>-0.2279 (-1.72, 1.27), 0.7650</td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
<td>-0.8506 (-2.62, 0.92), 0.3466</td>
</tr>
<tr>
<td>Married</td>
<td>Married</td>
<td>1.2799 (-1.68, 4.24), 0.3974</td>
</tr>
<tr>
<td>Plautdietsch</td>
<td>Plautdietsch</td>
<td>2.7099 (0.14, 5.28), 0.0387</td>
</tr>
<tr>
<td>Foreign Born</td>
<td>Foreign Born</td>
<td>1.1396 (-1.86, 4.14), 0.4559</td>
</tr>
<tr>
<td>University degree</td>
<td>University degree</td>
<td>3.2894 (0.89, 5.68), 0.0071</td>
</tr>
<tr>
<td>Role: Sr. Pastor</td>
<td>Other</td>
<td>-2.2826 (-4.49, -0.07), 0.0430</td>
</tr>
<tr>
<td>Role: Pastor</td>
<td>Other</td>
<td>-1.7561 (-4.52, 1.01), 0.2137</td>
</tr>
<tr>
<td>Role: Board</td>
<td>Other</td>
<td>0.1100 (-2.06, 2.28), 0.9209</td>
</tr>
<tr>
<td>Region: USA</td>
<td>Southern Manitoba</td>
<td>-1.5425 (-8.03, 4.95), 0.6414</td>
</tr>
<tr>
<td>Region: Belize</td>
<td>Southern Manitoba</td>
<td>-1.0691 (-3.47, 1.33), 0.3834</td>
</tr>
<tr>
<td>Region: Mexico</td>
<td>Southern Manitoba</td>
<td>-1.3489 (-6.02, 3.32), 0.5715</td>
</tr>
<tr>
<td>Region: ON</td>
<td>Southern Manitoba</td>
<td>1.1432 (-1.60, 3.89), 0.4140</td>
</tr>
<tr>
<td>Region: SK</td>
<td>Southern Manitoba</td>
<td>-3.5886 (-6.81, -0.37), 0.0288</td>
</tr>
<tr>
<td>Region: C MB</td>
<td>Southern Manitoba</td>
<td>1.0027 (-1.53, 3.53), 0.4370</td>
</tr>
<tr>
<td>Region: W MB</td>
<td>Southern Manitoba</td>
<td>-4.6121 (-12.38, 3.16), 0.2448</td>
</tr>
<tr>
<td>New</td>
<td>Large [300+]</td>
<td>2.2321 (-3.76, 8.22), 0.4652</td>
</tr>
<tr>
<td>Small [1-99]</td>
<td>Large [300+]</td>
<td>-0.5850 (-4.29, 3.12), 0.7568</td>
</tr>
<tr>
<td>Medium [100-299]</td>
<td>Large [300+]</td>
<td>-0.0994 (-2.29, 2.09), 0.9292</td>
</tr>
<tr>
<td>Declining (-,0)</td>
<td>Growing [10%+]</td>
<td>1.3818 (-1.00, 3.77), 0.2563</td>
</tr>
<tr>
<td>Stagnant (0-10%)</td>
<td>Growing [10%+]</td>
<td>-0.5850 (-4.29, 3.12), 0.7568</td>
</tr>
</tbody>
</table>
Table 17b. Generalized Estimating Equations of Activities Compromising Faith Scores by Leader Demographics and Church Region, Size and Growth Status: n=207, Independent correlation matrix

<table>
<thead>
<tr>
<th>Variable</th>
<th>Comparator</th>
<th>Estimate (95% CI), p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 1-36</td>
<td>51+</td>
<td>-4.3505 (-6.79, -1.91), 0.0005</td>
</tr>
<tr>
<td>Age 37-50</td>
<td>51+</td>
<td>-0.7339 (-2.94, 1.47), 0.5140</td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
<td>0.6128 (-0.78, 2.01), 0.3903</td>
</tr>
<tr>
<td>Married</td>
<td>Married</td>
<td>-1.0142 (-3.94, 1.91), 0.4973</td>
</tr>
<tr>
<td>Plautdietsch</td>
<td>Plautdietsch</td>
<td>1.8020 (-0.47, 4.08), 0.1204</td>
</tr>
<tr>
<td>Foreign Born</td>
<td>Foreign Born</td>
<td>-1.9280 (-4.25, 0.39), 0.1037</td>
</tr>
<tr>
<td>University degree</td>
<td>University degree</td>
<td>2.0902 (0.08, 4.10), 0.0418</td>
</tr>
<tr>
<td>Role: Sr. Pastor</td>
<td>Other</td>
<td>0.9544 (-1.73, 3.64), 0.4859</td>
</tr>
<tr>
<td>Role: Pastor</td>
<td>Other</td>
<td>2.7566 (-0.23, 5.75), 0.0708</td>
</tr>
<tr>
<td>Role: Board</td>
<td>Other</td>
<td>0.8594 (-1.42, 3.14), 0.4608</td>
</tr>
<tr>
<td>Region: USA</td>
<td>Southern Manitoba</td>
<td>1.3189 (-1.10, 3.74), 0.2853</td>
</tr>
<tr>
<td>Region: Belize</td>
<td>Southern Manitoba</td>
<td>1.9316 (0.29, 3.57), 0.0208</td>
</tr>
<tr>
<td>Region: Mexico</td>
<td>Southern Manitoba</td>
<td>13.0682 (9.32, 16.81), &lt;.0001</td>
</tr>
<tr>
<td>Region: ON</td>
<td>Southern Manitoba</td>
<td>0.2156 (-2.47, 2.90), 0.8749</td>
</tr>
<tr>
<td>Region: SK</td>
<td>Southern Manitoba</td>
<td>-4.2274 (-7.40, -1.06), 0.0090</td>
</tr>
<tr>
<td>Region: C MB</td>
<td>Southern Manitoba</td>
<td>-1.4707 (-4.27, 1.33), 0.3033</td>
</tr>
<tr>
<td>Region: W MB</td>
<td>Southern Manitoba</td>
<td>-7.4118 (-11.40, -3.42), 0.0003</td>
</tr>
<tr>
<td>New</td>
<td>Medium [100-299]</td>
<td>8.0448 (5.33, 10.76), &lt;.0001</td>
</tr>
<tr>
<td>Small [1-99]</td>
<td>Large [300+]</td>
<td>4.1670 (2.10, 6.23), &lt;.0001</td>
</tr>
<tr>
<td>Medium [100-299]</td>
<td>Large [300+]</td>
<td>1.6018 (-0.25, 3.45), 0.0902</td>
</tr>
<tr>
<td>Declining (-0,0)</td>
<td>Growing [10%+]</td>
<td>1.1232 (-0.66, 2.91), 0.2169</td>
</tr>
<tr>
<td>Stagnant [0-10%]</td>
<td>Growing [10%+]</td>
<td>1.8342 (-0.63, 4.29), 0.1438</td>
</tr>
</tbody>
</table>
Table 17c. Generalized Estimating Equations of Church Requiring Assistance Scores by Leader Demographics and Church Region, Size and Growth Status: n=183, Independent correlation matrix

<table>
<thead>
<tr>
<th>Variable</th>
<th>Comparator</th>
<th>Estimate (95% CI), p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 1-36</td>
<td>51+</td>
<td>0.7680 (-2.26, 3.80), 0.6191</td>
</tr>
<tr>
<td>Age 37-50</td>
<td>51+</td>
<td>-0.4814 (-3.01, 2.05), 0.7095</td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
<td>-0.0444 (-2.45, 2.36), 0.9711</td>
</tr>
<tr>
<td>Married</td>
<td>Married</td>
<td>-2.6108 (-5.59, 0.37), 0.0864</td>
</tr>
<tr>
<td>Plautdietsch</td>
<td>Plautdietsch</td>
<td>-0.1090 (-2.54, 2.32), 0.9299</td>
</tr>
<tr>
<td>Foreign Born</td>
<td>Foreign Born</td>
<td>-0.7528 (-2.60, 1.09), 0.4232</td>
</tr>
<tr>
<td>University degree</td>
<td>University degree</td>
<td>2.0922 (-0.68, 4.86), 0.1385</td>
</tr>
<tr>
<td>Role: Sr. Pastor</td>
<td>Other</td>
<td>2.6517 (-0.83, 6.13), 0.1354</td>
</tr>
<tr>
<td>Role: Pastor</td>
<td>Other</td>
<td>-0.1621 (-2.54, 2.24), 0.8948</td>
</tr>
<tr>
<td>Role: Board</td>
<td>Other</td>
<td>0.0438 (-1.79, 1.88), 0.9627</td>
</tr>
<tr>
<td>Region: USA</td>
<td>Southern Manitoba</td>
<td><strong>4.6151 (1.46, 7.77)</strong>, <strong>0.0042</strong></td>
</tr>
<tr>
<td>Region: Belize</td>
<td>Southern Manitoba</td>
<td>1.9872 (-0.45, 4.43), 0.1103</td>
</tr>
<tr>
<td>Region: Mexico</td>
<td>Southern Manitoba</td>
<td>-3.2309 (-7.97, 1.51), 0.1814</td>
</tr>
<tr>
<td>Region: ON</td>
<td>Southern Manitoba</td>
<td>3.3133 (-0.29, 6.92), 0.0711</td>
</tr>
<tr>
<td>Region: SK</td>
<td>Southern Manitoba</td>
<td>-0.5229 (-3.19, 2.14), 0.7007</td>
</tr>
<tr>
<td>Region: C MB</td>
<td>Southern Manitoba</td>
<td>-2.0216 (-4.11, 0.07), 0.0561</td>
</tr>
<tr>
<td>Region: W MB</td>
<td>Southern Manitoba</td>
<td>-2.0571 (-5.77, 1.65), 0.2769</td>
</tr>
<tr>
<td>New</td>
<td>Large [300+]</td>
<td><strong>5.4470 (2.85, 8.05)</strong>, <strong>&lt;.0001</strong></td>
</tr>
<tr>
<td>Small [1-99]</td>
<td>Large [300+]</td>
<td>1.6999 (-0.37, 4.17), 0.1010</td>
</tr>
<tr>
<td>Medium [100-299]</td>
<td>Large [300+]</td>
<td><strong>3.3440 (1.18, 5.51)</strong>, <strong>0.0025</strong></td>
</tr>
<tr>
<td>Declining (-,0)</td>
<td>Growing (10%+)</td>
<td><strong>2.6349 (0.76, 4.51)</strong>, <strong>0.0059</strong></td>
</tr>
<tr>
<td>Stagnant (0-10%)</td>
<td>Growing (10%+)</td>
<td>1.0982 (-0.44, 2.63), 0.1610</td>
</tr>
</tbody>
</table>
Table 17d. Generalized Estimating Equations of Church Receiving Assistance Scores by Leader Demographics and Church Region, Size and Growth Status: n=168, Independent correlation matrix

<table>
<thead>
<tr>
<th>Variable</th>
<th>Comparator</th>
<th>Estimate (95% CI), p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 1-36</td>
<td>51+</td>
<td>2.3919 (0.47, 4.32), 0.0148</td>
</tr>
<tr>
<td>Age 37-50</td>
<td>51+</td>
<td>-0.5516 (-2.29, 1.18), 0.5330</td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
<td>-1.5285 (-4.12, 1.05), 0.2473</td>
</tr>
<tr>
<td>Married</td>
<td>Married</td>
<td>-1.5221 (-4.93, 1.88), 0.3812</td>
</tr>
<tr>
<td>Plautdietsch</td>
<td>Plautdietsch</td>
<td>1.9974 (0.34, 3.65), 0.0181</td>
</tr>
<tr>
<td>Foreign Born</td>
<td>Foreign Born</td>
<td>0.9595 (-3.11, 1.19), 0.3825</td>
</tr>
<tr>
<td>University degree</td>
<td>University degree</td>
<td>0.2602 (-1.53, 2.05), 0.7760</td>
</tr>
<tr>
<td>Role: Sr. Pastor</td>
<td>Other</td>
<td>1.0260 (-2.59, 4.64), 0.5782</td>
</tr>
<tr>
<td>Role: Pastor</td>
<td>Other</td>
<td>-0.8085 (-3.53, 1.92), 0.5617</td>
</tr>
<tr>
<td>Role: Board</td>
<td>Other</td>
<td>1.1472 (-1.21, 3.50), 0.3398</td>
</tr>
<tr>
<td>Region: USA</td>
<td>Southern Manitoba</td>
<td>0.2006 (-2.90, 3.31), 0.8992</td>
</tr>
<tr>
<td>Region: Belize</td>
<td>Southern Manitoba</td>
<td>1.2872 (-1.42, 3.99), 0.3507</td>
</tr>
<tr>
<td>Region: Mexico</td>
<td>Southern Manitoba</td>
<td>2.9443 (-1.08, 6.97), 0.1517</td>
</tr>
<tr>
<td>Region: ON</td>
<td>Southern Manitoba</td>
<td>0.0560 (-3.07, 3.19), 0.9710</td>
</tr>
<tr>
<td>Region: SK</td>
<td>Southern Manitoba</td>
<td>0.1408 (-1.70, 1.96), 0.8811</td>
</tr>
<tr>
<td>Region: CMB</td>
<td>Southern Manitoba</td>
<td>-2.5251 (-4.89, -0.08), 0.0445</td>
</tr>
<tr>
<td>Region: W MB</td>
<td>Southern Manitoba</td>
<td>-2.2988 (-4.81, 0.21), 0.0729</td>
</tr>
<tr>
<td>New</td>
<td>Large [300+]</td>
<td>13.3009 (9.09, 16.70), &lt;.0001</td>
</tr>
<tr>
<td>Small [1-99]</td>
<td>Large [300+]</td>
<td>4.9620 (2.67, 7.25), &lt;.0001</td>
</tr>
<tr>
<td>Medium [100-299]</td>
<td>Large [300+]</td>
<td>5.8497 (3.88, 7.82), &lt;.0001</td>
</tr>
<tr>
<td>Declining (-,0)</td>
<td>Growing [10%+]</td>
<td>0.5213 (-1.32, 2.36), 0.5791</td>
</tr>
<tr>
<td>Stagnant [0-10%]</td>
<td>Growing [10%+]</td>
<td>2.9454 (0.40, 5.49), 0.0234</td>
</tr>
</tbody>
</table>
Table 17e. Generalized Estimating Equations of Expected 5-Year Change in Attendance by Leader Demographics and Church Region, Size and Growth Status: n=190, exchangeable correlation matrix (outliers over 100 excluded).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Comparator</th>
<th>Estimate (95% CI), p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 1-36</td>
<td>51+</td>
<td>-0.2850 (-7.22, 6.65), 0.9358</td>
</tr>
<tr>
<td>Age 37-50</td>
<td>51+</td>
<td>2.8190 (-2.05, 7.69), 0.2562</td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
<td>1.8348 (-1.08, 4.75), 0.2178</td>
</tr>
<tr>
<td>Married</td>
<td>Married</td>
<td>5.4786 (0.66, 10.30), 0.0258</td>
</tr>
<tr>
<td>Plautdietsch</td>
<td>Plautdietsch</td>
<td>2.7878 (-2.18, 7.76), 0.2719</td>
</tr>
<tr>
<td>Foreign Born</td>
<td>Foreign Born</td>
<td>-0.1330 (-6.41, 6.14), 0.9669</td>
</tr>
<tr>
<td>University degree</td>
<td>University degree</td>
<td>1.7529 (-2.66, 6.16), 0.4358</td>
</tr>
<tr>
<td>Role: Sr. Pastor</td>
<td>Other</td>
<td>3.6349 (-5.59, 12.86), 0.4399</td>
</tr>
<tr>
<td>Role: Pastor</td>
<td>Other</td>
<td>-6.2371 (-12.01, -0.46), 0.0343</td>
</tr>
<tr>
<td>Role: Board</td>
<td>Other</td>
<td>-2.8709 (-6.83, 1.09), 0.1551</td>
</tr>
<tr>
<td>Region: USA</td>
<td>Southern Manitoba</td>
<td>-1.4412 (-25.07, 22.19), 0.9048</td>
</tr>
<tr>
<td>Region: Belize</td>
<td>Southern Manitoba</td>
<td>-0.1160 (-11.34, 11.10), 0.9838</td>
</tr>
<tr>
<td>Region: Mexico</td>
<td>Southern Manitoba</td>
<td>56.5397 (45.15, 67.93), &lt;.0001</td>
</tr>
<tr>
<td>Region: ON</td>
<td>Southern Manitoba</td>
<td>2.6399 (-9.22, 14.50), 0.6628</td>
</tr>
<tr>
<td>Region: SK</td>
<td>Southern Manitoba</td>
<td>26.4364 (9.43, 43.45), 0.0023</td>
</tr>
<tr>
<td>Region: C MB</td>
<td>Southern Manitoba</td>
<td>1.4393 (-12.57, 15.45), 0.8405</td>
</tr>
<tr>
<td>Region: W MB</td>
<td>Southern Manitoba</td>
<td>-12.7186 (-31.27, 5.83), 0.1790</td>
</tr>
<tr>
<td>New</td>
<td>Large [300+]</td>
<td>16.7112 (-11.52, 44.95), 0.2461</td>
</tr>
<tr>
<td>Small [1-99]</td>
<td>Large [300+]</td>
<td>-4.0777 (-12.73, 4.58), 0.3557</td>
</tr>
<tr>
<td>Medium [100-299]</td>
<td>Large [300+]</td>
<td>-0.2946 (-8.17, 7.58), 0.9416</td>
</tr>
<tr>
<td>Declining (.0)</td>
<td>Growing (10%+)</td>
<td>-9.0346 (-21.51, 3.44), 0.1559</td>
</tr>
<tr>
<td>Stagnant [0-10%]</td>
<td>Growing (10%+)</td>
<td>-11.6380 (-25.58, 2.31), 0.1019</td>
</tr>
</tbody>
</table>

Intra-Cluster Correlation=0.1879
Table 17f. Generalized Estimating Equations of Expected 5-Year Change in Attendance by Leader Demographics and Church Region, Size and Growth Status: n=192, exchangeable correlation matrix
(outliers truncated to 100)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Comparator</th>
<th>Estimate (95% CI), p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 1-36</td>
<td>51+</td>
<td>0.5588 (-6.43, 7.55), 0.8755</td>
</tr>
<tr>
<td>Age 37-50</td>
<td>51+</td>
<td>2.7507 (-2.10, 7.60), 0.2666</td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
<td>2.0149 (-0.95, 4.98), 0.1822</td>
</tr>
<tr>
<td>Married</td>
<td>Married</td>
<td><strong>5.3213 (0.35, 10.29), 0.0359</strong></td>
</tr>
<tr>
<td>Plautdietsch</td>
<td>Plautdietsch</td>
<td>2.9530 (-1.57, 7.48), 0.2006</td>
</tr>
<tr>
<td>Foreign Born</td>
<td>Foreign Born</td>
<td>-2.0710 (-7.94, 3.80), 0.4892</td>
</tr>
<tr>
<td>University degree</td>
<td>University degree</td>
<td>3.0766 (-1.55, 7.70), 0.1923</td>
</tr>
<tr>
<td>Role: Sr. Pastor</td>
<td>Other</td>
<td>4.3577 (-4.96, 13.67), 0.3591</td>
</tr>
<tr>
<td>Role: Pastor</td>
<td>Other</td>
<td><strong>-7.0412 (-12.74, -1.34), 0.0155</strong></td>
</tr>
<tr>
<td>Role: Board</td>
<td>Other</td>
<td>-2.5044 (-6.50, 1.49), 0.2191</td>
</tr>
<tr>
<td>Region: USA</td>
<td>Southern Manitoba</td>
<td>-6.0727 (-30.87, 18.73), 0.6313</td>
</tr>
<tr>
<td>Region: Belize</td>
<td>Southern Manitoba</td>
<td>9.9186 (-9.05, 28.88), 0.3053</td>
</tr>
<tr>
<td>Region: Mexico</td>
<td>Southern Manitoba</td>
<td><strong>56.1565 (43.44, 68.87), &lt;.0001</strong></td>
</tr>
<tr>
<td>Region: ON</td>
<td>Southern Manitoba</td>
<td>2.7770 (-9.58, 15.14), 0.6597</td>
</tr>
<tr>
<td>Region: SK</td>
<td>Southern Manitoba</td>
<td><strong>25.9700 (8.92, 43.02), 0.0028</strong></td>
</tr>
<tr>
<td>Region: C MB</td>
<td>Southern Manitoba</td>
<td>-0.6018 (-16.36, 15.16), 0.9404</td>
</tr>
<tr>
<td>Region: W MB</td>
<td>Southern Manitoba</td>
<td>-20.6376 (-43.11, 1.83), 0.0718</td>
</tr>
<tr>
<td>New</td>
<td>Large [300+]</td>
<td>27.6065 (-0.26, 55.48), 0.0523</td>
</tr>
<tr>
<td>Small [1-99]</td>
<td>Large [300+]</td>
<td>-1.0429 (-12.64, 10.56), 0.8601</td>
</tr>
<tr>
<td>Medium [100-299]</td>
<td>Large [300+]</td>
<td>-0.3460 (-9.71, 9.01), 0.9422</td>
</tr>
<tr>
<td>Declining (-,0)</td>
<td>Growing [10%+]</td>
<td>-11.9043 (-24.78, 0.97), 0.0699</td>
</tr>
<tr>
<td>Stagnant [0-10%]</td>
<td>Growing [10%+]</td>
<td>-10.9533 (-25.91, 4.00), 0.1512</td>
</tr>
</tbody>
</table>

Intra-Cluster Correlation=0.2589


Schalk, Christoph A. *Organizational Diagnosis of Churches: The Statistical Development of the Natural Church Development Survey and Its Relation to Organizational Psychology*, Institute for Natural Church Development, Wurzburg, Germany, 1999.


List of Appendices

1. McMaster Research Ethics Board letter of approval
2. Table of Objectives
3. Cover Letter for Survey of Senior Pastors
4. Survey of Senior Pastors questionnaire
5. Cover Letter for Survey of Church Leaders
6. Survey of Church Leaders questionnaire
7. SAS code
   a. Formats
   b. Import EMMC Records
   c. EMMC Records Pre-Analysis
   d. Import Census Data
   e. Import Surveys
   f. Surveys Pre-Analysis
   g. Analysis
McMaster University Research Ethics Board (MREB)
c/o Office of Research Services, MREB Secretariat, GH-305, e-mail: ethicsoffice@mcmaster.ca

CERTIFICATE OF ETHICS CLEARANCE TO INVOLVE HUMAN PARTICIPANTS IN RESEARCH

Application Status: New ☑ Addendum □ Renewal □ Project Number 2005 206

TITLE OF RESEARCH PROJECT:

Growth Profile of Attendance, Membership, and Churches in the Evangelical Mennonite Mission Conference

Name(s) Dept./Address Phone E-Mail

Faculty Investigator(s)/Supervisor(s)
L. Thabane Clinical Epidemiology thabani@mcmaster.ca

Student Investigator(s)
E. Rempel Mathematics eddy@rempel.ca

The application in support of the above research project has been reviewed by the MREB to ensure compliance with the Tri-Council Policy Statement and the McMaster University Policies and Guidelines for Research Involving Human Participants. The following ethics certification is provided by the MREB:

☐ The application protocol is approved as presented without questions or requests for modification.
☒ The application protocol is approved as revised without questions or requests for modification.
☐ The application protocol is approved subject to clarification and/or modification as appended or identified below:

COMMENTS AND CONDITIONS:

Reporting Frequency: Annual: Feb-22-2007 Other: 

Date: Feb-22-2006 Dr. D. Maurer, Chair, MREB:  

http://iserv.mcmaster.ca/ethics/mreb/print_approval.cfm?ID=1463
## Objectives of EMMC Research Project

<table>
<thead>
<tr>
<th>Objective</th>
<th>Hypothesis</th>
<th>Variables: outcome predictors</th>
<th>Method</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A: EMMC Records of Attendance and Membership</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Determine the annual increase in attendance, membership, and churches overall and by region (1960 to 2005)</td>
<td>H: the increase rates in attendance, membership, and number of churches remain consistent across time and across regions</td>
<td>Annual EMMC attendance, membership, churches records</td>
<td>Linear model Forecasting methods</td>
<td>EMMC Records</td>
</tr>
<tr>
<td>Compare the 10-year increase in attendance and membership of the EMMC with other religions, Christian churches, evangelical churches, Mennonite church as a whole</td>
<td>H: EMMC increase in attendance and membership is similar to that of the aggregate evangelical church and aggregate Mennonite church in Canada</td>
<td>1991, 2001 EMMC attendance and membership records 1991, 2001 Canadian census affiliation with Christian, Catholic, Protestant, Mennonite</td>
<td>Descriptive statistics</td>
<td>EMMC Records Canadian Census data</td>
</tr>
<tr>
<td>Determine the most recent EMMC 5-year relative increase in attendance, membership, churches</td>
<td>H: none</td>
<td>2000 EMMC Records of attendance &amp; membership</td>
<td>Descriptive statistics</td>
<td>EMMC Records</td>
</tr>
<tr>
<td><strong>B: National Censuses of Church Neighbourhoods</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Determine the demographics of the neighbourhoods surrounding each EMMC church</td>
<td>H: none</td>
<td>Neighbourhood demographics summary: density (urban or rural), median income, median age, gender, education levels, ethnicity, religious affiliation, marital status</td>
<td>Descriptive statistics</td>
<td>EMMC Records National census databases</td>
</tr>
<tr>
<td>Determine which neighbourhood demographics correlate with relative change in attendance 2000 to 2005</td>
<td></td>
<td></td>
<td>Linear model</td>
<td></td>
</tr>
<tr>
<td>Objective</td>
<td>Hypothesis</td>
<td>Variables: outcome predictors</td>
<td>Method</td>
<td>Data Source</td>
</tr>
<tr>
<td>-----------</td>
<td>------------</td>
<td>------------------------------</td>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td>C: Survey of Senior Pastors</td>
<td>Determine the demographic profile of Pastors of EMMC churches</td>
<td>H: none</td>
<td>Descriptive statistics</td>
<td>EMMC Records</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Verify that the definitions used for the EMMC Records of attendance and membership are similar to average attendance and endofyear membership</td>
<td>H: The EMMC records of Attendance and Membership for 2004 and 2005 are similar to Survey of Senior Pastors Average Attendance and endofyear membership. Therefore, we can precisely define those outcomes.</td>
<td>Descriptive statistics</td>
<td>EMMC Records</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Determine where the EMMC is gaining or losing members in 2005</td>
<td>H: The EMMC net increase in membership is largely due to net transfer from other churches, not by baptism of nonchurched H: The transferees into EMMC churches are coming from traditional Mennonite churches; transferees out of EMMC churches are going to less traditional Mennonite churches</td>
<td>Descriptive statistics</td>
<td>Survey of Senior Pastors</td>
</tr>
<tr>
<td>Objective</td>
<td>Hypothesis</td>
<td>Variables: outcome predictors</td>
<td>Method</td>
<td>Data Source</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>------------</td>
<td>---------------------------------------------------------------------------------------------</td>
<td>-----------------------------</td>
<td>---------------------</td>
</tr>
</tbody>
</table>
| Determine whether churches actively encourage growth in these ways       | H: none    | Church Plant in last 5 years<br>Selected ONE particular Spiritual gifts assessment tool  
Conducted a Natural Church Development evaluation
Multiple Worship Services
Worship Services to multiple cultures or language groups
Staff training in expense budget
Nonstaff training in budget
Donations to community relief
Donations to local outreach | Descriptive statistics | Survey of Senior Pastors |
| Determine the level of participation in church life by church attendees   | H: none    | 2005 average attendance<br># in Sunday school<br># in Bible study<br># at annual meeting
# donate to church | Descriptive statistics | EMMC Records Survey of Senior Pastors |
| Determine whether churches have these facility and financial resources    | H: none    | Building ownership
Worship space capacity
Average attendance
Amount of church debt
Amount of noncapital debt | Descriptive statistics | EMMC Records Survey of Senior Pastors |
<p>| Determine how churches are organized                                      | H: none    | One or several boards&lt;br&gt;Board term limit (yes vs. no)&lt;br&gt;who hires senior pastor&lt;br&gt;who approves budget&lt;br&gt;who oversees nonsenior pastors | Descriptive statistics | EMMC Records Survey of Senior Pastors |</p>
<table>
<thead>
<tr>
<th>Objective</th>
<th>Hypothesis</th>
<th>Variables: outcome predictors</th>
<th>Method</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Determine which of the above factor correlate with relative change in attendance from 2000 to 2005</td>
<td>H: the relative change in attendance from 2000 to 2005 correlates to the following variables</td>
<td>Church Region, Size, and Growth Status Church Plant in last 5 years Selected ONE particular Spiritual gifts assessment tool Conducted a Natural Church Development evaluation Multiple Worship Services Worship Services to multiple cultures or language groups Staff training in expense budget Nonstaff training in budget Donations to community relief Donations to local outreach 2005 average attendance # in Sunday school # in Bible study # at annual meeting # donate to church Building ownership Worship space capacity Average attendance Amount of church debt Amount of noncapital debt One or several boards Board term limit (yes vs. no) who hires senior pastor who approves budget who oversees nonsenior pastors</td>
<td>Univariate Linear Models Multivariate Linear Models with most significant (p&lt;0.10) effects</td>
<td>EMMC Records Survey of Senior Pastors</td>
</tr>
<tr>
<td>Objective</td>
<td>Hypothesis</td>
<td>Variables: outcome predictors</td>
<td>Method</td>
<td>Data Source</td>
</tr>
<tr>
<td>-----------</td>
<td>------------</td>
<td>-------------------------------</td>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td><strong>D: Survey of Leaders of EMMC Churches</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Determine the demographic profile of Leaders in EMMC churches</td>
<td>H: none</td>
<td>Church Region, Size, and Growth Status Age Gender Education levels Marital status Ethnicity Language first spoken Country of Birth Role</td>
<td>Descriptive statistics</td>
<td>EMMC Records Survey of Senior Pastors Survey of Church Leaders</td>
</tr>
<tr>
<td>Assessing church leaders Anabaptist Faith Orthodoxy by the jobs they oppose on faith grounds</td>
<td>H: none</td>
<td>Church Region, Size, and Growth Status Age Gender Education levels Marital status Ethnicity Language first spoken Country of Birth Role How much jobs would compromise faith</td>
<td>GEE Model to account for clustering within churches</td>
<td>EMMC Records Survey of Senior Pastors Survey of Church Leaders</td>
</tr>
<tr>
<td>Assessing church leaders Anabaptist Faith Orthodoxy by the activities they oppose on faith grounds</td>
<td>H: none</td>
<td>Church Region, Size, and Growth Status Age Gender Education levels Marital status Ethnicity Language first spoken Country of Birth Role How much activities would compromise faith</td>
<td>GEE Model to account for clustering within churches</td>
<td>EMMC Records Survey of Senior Pastors Survey of Church Leaders</td>
</tr>
<tr>
<td>Objective</td>
<td>Hypothesis</td>
<td>Variables: outcome predictors</td>
<td>Method</td>
<td>Data Source</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>------------</td>
<td>-----------------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>Make a summary measures of the assistance that is required by the churches</td>
<td>H: none</td>
<td>Church Region, Size, and Growth Status</td>
<td>GEE Model to account for clustering within churches</td>
<td>EMMC Records Survey of Senior Pastors Survey of Church Leaders</td>
</tr>
<tr>
<td>Model it by the leaders demographics and church region, size, and growth status.</td>
<td></td>
<td>Age, Gender, Education levels, Marital status, Ethnicity, Language first spoken, Country of Birth, Role, Assistance required by their church</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Make a summary measures of the assistance that is received by the churches</td>
<td>H: none</td>
<td>Church Region, Size, and Growth Status</td>
<td>GEE Model to account for clustering within churches</td>
<td>EMMC Records Survey of Senior Pastors Survey of Church Leaders</td>
</tr>
<tr>
<td>Model it by the leaders demographics and church region, size, and growth status.</td>
<td></td>
<td>Age, Gender, Education levels, Marital status, Ethnicity, Language first spoken, Country of Birth, Role, Assistance received by their church</td>
<td></td>
<td></td>
</tr>
<tr>
<td>church leaders' expectation of future church increases in attendance</td>
<td>H: none</td>
<td>Church Region, Size, and Growth Status</td>
<td>GEE Model to account for clustering within churches</td>
<td>EMMC Records Survey of Senior Pastors Survey of Church Leaders</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Age, Gender, Education levels, Marital status, Ethnicity, Language first spoken, Country of Birth, Role, Assistance received by their church</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5-yr expectation of increase in attendance</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In the last several years, Evangelical Mennonite Mission Conference (EMMC) members have suggested that the conference must change to help it grow. I am studying how much the EMMC is growing in attendance, membership, and church planting. I also wish to find out what factors help the churches grow. The results will assist the conference leaders help churches where it is needed.

I am doing this study under the direction of Dr. Lehana Thabane. This work is needed for a Masters of Science degree in the Department of Math & Statistics at McMaster University where I am currently a graduate student.

This work is supported by the EMMC which has chosen Jake Thiessen and Gin Thiessen to be my advisors. It has received approval from the McMaster University Research Ethics Board.

Your input is voluntary. Your answers are important and we hope that you will feel comfortable answering all the questions. But you can skip any question you wish. You can also return the blank form in the stamped envelope if you do not want to fill it out. Please note that the number at the top of the survey tells me whether you have decided to respond. If you need more information about the study, please contact me or Dr. Thabane at (905) 522-1155, Ext. 3720 or thabanl@mcmaster.ca

For information about your rights, you can contact Dr. Maurer, chair of the McMaster University Research Ethics Board at 905-525-9140, ext. 23030.

This survey is for both paid and volunteer church leaders that have been identified by the EMMC office.

Filled out forms will be kept secret and stored in a safe location. Your answers will be entered into a computer without your name and other personal information. Answers will only be printed in summary on all reports. The EMMC office will also receive the summary of the data.

Please complete the form and mail it in the stamped envelope within a week of receiving this package. Money is enclosed for return postage from outside of Canada. Thank you for your help.

Eddy Rempel
EMMC Church Growth Survey of Senior Pastors 2005

Begin Here

Church Attendance and Membership

The following questions will ask you about your church attendance and membership.

1. Approximately, how many people that do not attend your church worship services weekly, attend at least once a month? (check one)
   - 0-4 people
   - 5-9 people
   - 10-14 people
   - 15-19 people
   - 20-29 people
   - 30-39 people
   - 40-49 people
   - 50-69 people
   - 70-99 people
   - 100-124 people
   - 125-149 people
   - 150-174 people
   - 175-199 people
   - 200-249 people
   - 250-299 people
   - 300 or more people

2. What is the average attendance in 2004 and 2005 at weekly worship service(s) or Sunday church events?
   - 2004 average attendees
   - 2005 average attendees

3. What was the full membership total on December 31, 2004 and December 31, 2005?
   - membership December 31, 2004
   - membership December 31, 2005

4. Most of our churches have started in a Mennonite immigrant community. On December 31, 2004 and December 31, 2005, how many of your members were NOT descendents of Mennonite immigrants?
   - membership December 31, 2004
   - membership December 31, 2005

5. What percentage of members attended your worship services regularly in the last three months?
   - % of members
6. Of the MEMBERS not attending your worship services regularly in the last three months, how many did not attend regularly in the last month due to illness or immobility, study away from home, or missionary or church planting assignments?

____ Total NOT attending regularly
____ Illness or immobility (in bed, etc.)
____ Study away from home
____ Missionary or church planting assignment

7. In the last ten years, in which church plant locations has your church participated?

__________________________________________ Church plant 1
__________________________________________ Church plant 2
__________________________________________ Church plant 3

8. In 2005, how many people from the following age groupings were added to the membership by baptism or transfer from local (usually driven by car in 20 minutes or less) and distant (usually driven by car in more than 20 minutes) churches?

<table>
<thead>
<tr>
<th>Age group of members</th>
<th>Under 18</th>
<th>18-34</th>
<th>35-54</th>
<th>55+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baptism</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transfer from local church</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transfer from distant church</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. In 2005, how many members were transferred into your membership from local (usually driven by car in 20 minutes or less) or distant (usually driven by car in more than 20 minutes) churches? (leave blank to indicate 0)

<table>
<thead>
<tr>
<th>Transfer from</th>
<th>Local</th>
<th>Distant</th>
</tr>
</thead>
<tbody>
<tr>
<td>other EMMC churches</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMC churches</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Old Colony churches</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reinlander churches</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sommerfelder churches</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kleine Gemeinde churches</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bergthaler churches</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mennonite Brethren churches</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brethren in Christ churches</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Conference churches</td>
<td></td>
<td></td>
</tr>
<tr>
<td>other Mennonite churches</td>
<td></td>
<td></td>
</tr>
<tr>
<td>non-Mennonite Evangelical churches</td>
<td></td>
<td></td>
</tr>
<tr>
<td>other churches</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
10. In 2005, how many members from each of the following age groupings transferred their membership to local (usually driven by car in 20 minutes or less) churches, transferred to distant (usually driven by car in 20 minutes) churches, died, withdrew their membership, or were dismissed?

<table>
<thead>
<tr>
<th>Age group of members</th>
<th>Under 18</th>
<th>18-34</th>
<th>35-54</th>
<th>55+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transferred to local churches</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transferred to distant churches</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Died</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Withdrew their membership</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Were dismissed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. In 2005, how many members were transferred OUT of your membership to the following local (usually driven by car in 20 minutes or less) and distant (usually driven by car in more than 20 minutes) churches?

<table>
<thead>
<tr>
<th></th>
<th>Local</th>
<th>Distant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfer to other EMMC churches</td>
<td></td>
<td>members</td>
</tr>
<tr>
<td>Transfer to EMC churches</td>
<td></td>
<td>members</td>
</tr>
<tr>
<td>Transfer to Old Colony churches</td>
<td></td>
<td>members</td>
</tr>
<tr>
<td>Transfer to Reinlander churches</td>
<td></td>
<td>members</td>
</tr>
<tr>
<td>Transfer to Sommerfelder churches</td>
<td></td>
<td>members</td>
</tr>
<tr>
<td>Transfer to Kleine Gemeinde churches</td>
<td></td>
<td>members</td>
</tr>
<tr>
<td>Transfer to Berghalter churches</td>
<td></td>
<td>members</td>
</tr>
<tr>
<td>Transfer to Mennonite Brethren churches</td>
<td></td>
<td>members</td>
</tr>
<tr>
<td>Transfer to Brethren in Christ churches</td>
<td></td>
<td>members</td>
</tr>
<tr>
<td>Transfer to General Conference churches</td>
<td></td>
<td>members</td>
</tr>
<tr>
<td>Transfer to other Mennonite churches</td>
<td></td>
<td>members</td>
</tr>
<tr>
<td>Transfer to non-Mennonite Evangelical churches</td>
<td></td>
<td>members</td>
</tr>
<tr>
<td>Transfer to other churches</td>
<td></td>
<td>members</td>
</tr>
</tbody>
</table>

12. Does your church ELECT (by the congregation or membership), APPOINT (by pastor or other leaders), or SELECT (by Spiritual Gift team or committee) to fill the following ministry positions?

<table>
<thead>
<tr>
<th>Positions</th>
<th>Elect</th>
<th>Appoint</th>
<th>Select by spiritual gift</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deacons</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Elders</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Sunday school superintendent</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Treasurer</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Congregational chair</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Lay ministers / pastors</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Sunday school teachers</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Bible study leaders</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Missions / outreach chair</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Worship leaders</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Other key leaders – specify</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
13. How important is it to be a member to serve in your church?

- [ ] Very important
- [ ] Important
- [ ] Somewhat
- [ ] Unimportant
- [ ] Not at all

14. How important is it to be a member to serve as a leader in your church?

- [ ] Very important
- [ ] Important
- [ ] Somewhat
- [ ] Unimportant
- [ ] Not at all

15. How much do you think the following contributed to an increase in attendance in the last five years? (check one box in each row)

<table>
<thead>
<tr>
<th>Contribution</th>
<th>Very much</th>
<th>Much</th>
<th>Some</th>
<th>Not much</th>
<th>Very little</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational structure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building expansion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building improvements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Handicap accessibility</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pavement or canopy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identified target group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pastor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New vision</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Worship Service</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children's ministries</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prayer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revival</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reconciliation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discipleship</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freedom from bondage</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Care to community</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outreach to community</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Church plant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other 1 – specify</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other 2 – specify</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

16. Where do you meet for your weekly worship services?

- [ ] Owned building
- [ ] Rented church building
- [ ] Rented school
- [ ] Other – specify ____________________________

Participation in Church Life

The following questions will ask you about the participation in your church programs.
17. To what extent do these other groups or activities use your facilities?

<table>
<thead>
<tr>
<th>Facility</th>
<th>Very much</th>
<th>Much</th>
<th>Some</th>
<th>Not much</th>
<th>Very little</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other churches</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Families funerals</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Alcoholics Anomalous</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Community moms program</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Adult education</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>MCC meetings</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Other – specify below</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

18. Excluding meeting and staff only use, how many hours per week is your church building used for ministry?

<table>
<thead>
<tr>
<th>Hours per week</th>
<th>0-5</th>
<th>5-10</th>
<th>10-15</th>
<th>15-20</th>
<th>20+</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

19. Approximately, what is your weekly worship service day of week and time, primary language, target group, maximum (full but not over full) seating capacity of the sanctuary or meeting area, and the starting date of that worship service?

<table>
<thead>
<tr>
<th>Day of week</th>
<th>Time</th>
<th>Language</th>
<th>Target group</th>
<th>Capacity</th>
<th>Start Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

20. Approximately, how many small groups which meet at least twice a month for community, care giving, and accountability does your church have?

________ small groups

21. In a typical week, approximately, how many children (age 2-13), youth (14-17), and adults (18 and up) participate in these following?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Children</th>
<th>Youth</th>
<th>Adults</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunday School</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sunday School but not worship</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bible study</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small group or Bible study</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Worship but not Sunday school</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

22. In 2005, approximately, how many people attended the annual meeting?

Attend annual meeting ____________ people
23. In the fall of 2005, how many regular church attendees or members attended the following Bible colleges? (leave blank if zero)

Steinbach Bible College  ___________ people
Bethany Bible Institute  ___________ people
Steinrich Bible School  ___________ people
Briercrest Bible College  ___________ people
Providence College/ Seminary  ___________ people
Winnipeg College/ Seminary  ___________ people
Tyndale Bible College/Seminary  ___________ people
Ontario Bible College/Seminary  ___________ people
Prairie Bible Institute  ___________ people
Emanuel Bible College  ___________ people
Heritage Bible College  ___________ people
Rio Grande Bible Institute  ___________ people
Goshen College  ___________ people
Canadian Mennonite University  ___________ people
Evangelical Anabaptist Seminary  ___________ people
Other – Specify  ___________ people

Structure and Decision Making

The following questions will ask you about your church structure and decision making.

24. In what month does each of the following events normally occur?

Fiscal year start  ___________
Annual general meeting  ___________
Start of ministry terms  ___________
Final budget adopted  ___________
Preliminary budget adopted (if you have one)  ___________
Election of board or council members  ___________

25. Of the membership (or congregation), board (or council), senior pastor, ministry team (or committee), treasurer (or finance team), which is most likely to do each of these tasks? (check one box in each row)

<table>
<thead>
<tr>
<th>Hires the senior pastor</th>
<th>Membership/</th>
<th>Board/</th>
<th>Pastor</th>
<th>Ministry</th>
<th>Treasurer/</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Congregation</td>
<td>Council</td>
<td></td>
<td>team</td>
<td>Finance</td>
</tr>
<tr>
<td>Approves budget</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Develop budget</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Starts a new ministry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oversees non-senior pastors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contract lawn care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
26. What is the name of the body that sets the ministry direction of your church?

________________________________________________________________________

27. Does this body also lead in spiritual matters or is there a second group (e.g. council or ministerial) to lead in the spiritual matters of the church?

☐ body also leads in spiritual matters    ☐ second group for spiritual matters

28. What leadership bodies does your church have? (check all that apply)

Board    ☐
Council    ☐
Ministerial    ☐
Other – specify ____________________________    ☐

29. Is there a maximum number of consecutive years that voting board or council members can serve?

☐ Yes    ☐ No

30. What are the strengths and weaknesses of having terms for voting board or council members?

________________________________________________________________________

31. How long has your church organizational structure been in place?

☐ 0 to 1 year    ☐ 1 to 5 years    ☐ 5 to 10 years    ☐ 10 to 15 years    ☐ 15+ yrs

32. Does your church have ministry department heads?

☐ Yes    ☐ No

33. Has your church done the following planning activities for church plants in the next five years? (check one box in each row)

Active planning    ☐ Yes    ☐ No
Chosen a location    ☐ Yes    ☐ No
Targeted a people group    ☐ Yes    ☐ No

Evaluation Tools

The following questions will ask you about evaluations of your church.

34. Has your church selected ONE particular Spiritual gifts assessment tool for your use?

☐ ONE particular tool    ☐ None or several tools → skip the next question.

35. If your church uses one particular Spiritual gifts assessment tool, what is it called?

________________________________________________________________________
36. Has your church conducted a Natural Church Development evaluation?

☐ Yes  ☐ No  If no, skip to the next question.

37. Starting with the most recent, what are the last three Natural Church Development survey dates and overall and quality factor scores?

<table>
<thead>
<tr>
<th>Quality Factors</th>
<th>Most Recent</th>
<th>Second last</th>
<th>Third last</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of Survey (yyyy/Mmm/dd)</td>
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<tr>
<td>Overall</td>
<td></td>
<td></td>
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<tr>
<td>Empowering Leadership</td>
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<tr>
<td>Gift-oriented Ministry</td>
<td></td>
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<tr>
<td>Passionate Spirituality</td>
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<tr>
<td>Functional Structures</td>
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<tr>
<td>Inspiring Worship Services</td>
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<tr>
<td>Holistic Small Groups</td>
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<td></td>
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<tr>
<td>Need-oriented Evangelism</td>
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<td></td>
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<tr>
<td>Loving Relationships</td>
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</tbody>
</table>

38. Other than the Natural Church Development survey, what other tools to you’re your church strengths and weaknesses has your church used?

____________________________________________________________________

__Staffing Practices__

The following questions ask about the church staffing practices.

39. In an average week, for how many hours are you paid for ministry and how many hours do you spend in church ministry? (check one box in each row)

<table>
<thead>
<tr>
<th></th>
<th>PAID ministry</th>
<th>SPEND in ministry</th>
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<tbody>
<tr>
<td></td>
<td>☐ 0 hrs</td>
<td>☐ 0 hrs</td>
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<tr>
<td>0-10 hrs</td>
<td>☐ 10-20 hrs</td>
<td>☐ 20-40 hrs</td>
</tr>
<tr>
<td>40+ hrs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

40. How many annual vacation weeks does the church offer the senior pastor?

☐ 2 week  ☐ 3 weeks  ☐ 4 weeks  ☐ 5 weeks  ☐ 6+ weeks

41. Does your church offer the senior pastor extended health plan, RRSP or pension, or a sabbatical after six years of service? (check one box in each row)

<table>
<thead>
<tr>
<th></th>
<th>Extended health plan</th>
<th>RRSP or pension</th>
<th>Sabbatical after six years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>☐ Yes  ☐ No</td>
<td>☐ Yes  ☐ No</td>
<td>☐ Yes  ☐ No</td>
</tr>
</tbody>
</table>

42. In the last five years, has your church membership had a confidence vote for the senior pastor, whether or not the membership showed confidence in the pastor?

☐ Yes  ☐ No
Personal Pastoral Ministry

The following questions ask about your pastoral ministry at your church.

43. Before you were hired or appointed as the senior pastor, did you attend your current church, another EMMC church, another Mennonite church, or a non-Mennonite church?
   □ current  □ other EMMC  □ other Mennonite  □ Non-Mennonite

44. Approximately, what percentage of your ministry time do you spend on the following tasks?

   Preaching  _____% of ministry time
   Counselling  _____% of ministry time
   Teaching  _____% of ministry time
   Dreaming  _____% of ministry time
   Sermon preparation  _____% of ministry time
   Coaching ministries  _____% of ministry time
   Shepherding  _____% of ministry time
   Administration  _____% of ministry time
   Leadership training  _____% of ministry time
   EMMC board/council  _____% of ministry time
   Other churches  _____% of ministry time
   Associated ministries  _____% of ministry time (i.e. MCC etc.)
   Other – specify  _____%

45. How do you most often give oversight to the following ministries? (check one box in each row)

   Do yourself  Delegate to staff  Delegate to lay people
   Baptism classes
   Teach children
   Teach youth
   Teach youth
   Teach adults
   Teach seniors
   Outreach locally
   Counselling
   Community
   Hospital visitation
   Grief counselling
   Funerals
   Lead in worship
   Preaching
   Train leaders
   Mentorship
   Discipleship
Worship service components used in Churches

The following questions ask about components used in your worship services.

46. How often does your church use the following in your worship services? (check one box in each row)

<table>
<thead>
<tr>
<th>Component</th>
<th>Very much</th>
<th>Much</th>
<th>Some</th>
<th>Not much</th>
<th>Very little</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hymns</td>
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<tr>
<td>Courses</td>
<td></td>
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<tr>
<td>Worship bands</td>
<td></td>
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<tr>
<td>Choir</td>
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<tr>
<td>Responsive reading</td>
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<tr>
<td>Drums</td>
<td></td>
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<tr>
<td>Piano</td>
<td></td>
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<tr>
<td>Guitars</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Drama</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Dance</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Hand clapping with songs</td>
<td></td>
<td></td>
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<tr>
<td>Live video</td>
<td></td>
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</tr>
</tbody>
</table>

47. Does your church use pews or chairs for your worship services?

- Mostly pews
- Mixture
- Mostly chairs

Technology used in Churches

The following questions ask about technology use by your church staff.

48. Not including personal computers, how many personal computers does the church use for ministry?

___________ number of computers

49. Does your church have a website?

- Yes
- No

50. How often do your church staff use the following tools? (check one box in each row)

<table>
<thead>
<tr>
<th>Tool</th>
<th>Daily</th>
<th>Weekly</th>
<th>Monthly</th>
<th>Annually</th>
<th>Hardly ever</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-mail</td>
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<td></td>
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</tr>
<tr>
<td>Website</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Mass e-mail</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
Finances

The following questions will ask you about your church finances.

51. Rounding to whole dollars, in 2005 fiscal year how much did you budget for the following expenses?

- $ ________ TOTAL expense budget
- $ ________ EMMC general account
- $ ________ EMMC designated projects
- $ ________ Other overseas projects
- $ ________ Non-staff training in your church
- $ ________ Staff training
- $ ________ Building and property maintenance (including utilities, janitorial services)
- $ ________ Staff salary & benefits (excluding training)
- $ ________ Service debt (paying off debt & interest)
- $ ________ Building and property expansion
- $ ________ Administration (office supplies, equipment, bookkeeping, administrative & secretary salaries)
- $ ________ Post-secondary Christian education
- $ ________ Needy people, food banks

52. How does your church decide how much to budget to the EMMC?

- % of total budget
- $ per member or attendee
- Needs of EMMC
- Other – specify ____________________

53. Rounding to whole dollars, in the 2005 fiscal year, excluding money sent to the EMMC, how much did your church spend for the following physical relief efforts?

- $ ________ Physical relief to people in your local church
- $ ________ Physical relief in your community but outside your local church
- $ ________ Physical relief outside your community

54. Rounding to whole dollars, in the 2005 fiscal year, how much did your church spend for the following missionary efforts?

- $ ________ Local missionary outreach
- $ ________ Other mission organizations
- $ ________ Other EMMC and LIEAB churches (not including in EMMC projects)

55. Rounding to whole dollars, in the 2005 fiscal year, how much in donations did your church receive?

- $ ________ Total donations received
56. For donations received in 2005, how many donors were receipted by your church?

_______ Donor to be receipted

57. Rounding to whole dollars, on December 31, 2005, how much debt did your church have?

$ _______ Church debt

58. Rounding to whole dollars, on December 31, 2005, how much debt for other purposes than capital improvements and property purchases did your church have?

$ _______ Debt for other than capital improvements and property purchases

59. Is your church planning a major effort in its life and ministry (e.g. building expansion, mission effort, capital campaign, adult day care, etc)?

☐ Yes ☐ No

60. Has there been a budget shortfall in 2005?

☐ Yes ☐ No

61. To what extent would you use the following if the conference provided? (check one box in each row)

<table>
<thead>
<tr>
<th>(check one box in each row)</th>
<th>Very much</th>
<th>Much</th>
<th>Some</th>
<th>Not much</th>
<th>Very little</th>
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<tbody>
<tr>
<td>Organizational structure ideas</td>
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<td>Pastor hiring guide</td>
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<td>Staff salary guide</td>
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<tr>
<td>Staff benefit package</td>
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<td>Church evaluation tools</td>
<td>☐</td>
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<tr>
<td>Spiritual gifts tools</td>
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<tr>
<td>Bible study guides</td>
<td>☐</td>
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<td>☐</td>
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<tr>
<td>Structure guides</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>Leadership training</td>
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<td>☐</td>
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<tr>
<td>Job Descriptions</td>
<td>☐</td>
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</tbody>
</table>

Thank-you for completing the questionnaire. Your prompt assistance will allow us to have the results for the convention in July. Please mail both this survey and the church leader survey in the addressed envelope as soon as possible:

Eddy Rempel
30 Donker Drive
St. Thomas, Ontario
N5P 4J3
(519) 913-1583
eddy@rempel.ca
Dear «Role» «Name»,

In the last several years, Evangelical Mennonite Mission Conference (EMMC) members have suggested that the conference must change to ensure continued growth. I am conducting a study to evaluate the extent of EMMC growth in attendance, membership, and church plants. I also wish to determine what factors correspond with increased growth. The results will help the EMMC leaders respond to needs and opportunities of their churches.

I am conducting this study under the supervision of Dr. Lehana Thabane. This work is done as part of the requirements for a Masters of Science degree in the Department of Math & Statistics at McMaster University where I am currently a graduate student.

This work is supported by the EMMC which has appointed Jake Thiessen and Gin Thiessen to act as advisors to help with implementation. It has received ethics approval from the McMaster University Research Ethics Board.

Your participation is voluntary. Answering the questions is important and we hope that you will feel comfortable answering all of them. Nevertheless, you can skip any question you wish and still remain in the study. You can also decline to participate by returning the blank questionnaire in the stamped envelope. Please note that each respondent has been assigned a unique code to help us determine which respondents have responded or declined. If you need any further information about the study, please contact me or Dr. Thabane at (905) 522-1155, Ext. 3720 or thabanl@mcmaster.ca

For information regarding your rights as research participants, you can contact Dr. Maurer, chair of the McMaster University Research Ethics Board at 905-525-9140, ext. 2 3030.

This survey is directed to the senior pastor. If the senior pastor position is vacant or he is away for an extended period of time, the interim pastor or board chair should fill out the survey.

Completed questionnaires will be kept confidential and stored in a safe location. Your responses will be entered into a password-protected computer database without your name and other identifying information. Responses will only be presented in summary form in all reports and presentations. The EMMC office will also receive the data in summary form.

Please complete the questionnaire and mail it in the provided envelope within two weeks of receiving the package. Thank you for your cooperation.

Eddy Rempel
EMMC Survey of Church Leaders 2005

«Leaderld»

Begin Here

In the spaces provided, answer the following questions for yourself.

Personal Demographics

The following questions ask your personal demographics.

1. What is your YEAR OF BIRTH?
   __________________ Year of Birth (yyyy)

2. What is your GENDER? (check one box)
   □ female
   □ male

3. What is your MARITAL STATUS? (check one box)
   □ Never legally married (single)
   □ Legally married
   □ Separated, but still legally married
   □ Divorced
   □ Widowed

4. Which LANGUAGE did you first learn at home and still understand? (check one box)
   □ Plautdietsch (Low German)
   □ English
   □ French
   □ German (High German)
   □ Dutch
   □ Spanish
   □ First People’s or American Indian Language
   □ Other language – Specify ____________________________

5. To which ETHNIC ORIGIN or cultural group do your ancestors belong? (check one box)
   □ Mennonite
   □ English
   □ French
   □ German (other German)
   □ Dutch
   □ Spanish
   □ First People’s or American Indian Group
   □ Other ethnic origin – Specify ____________________________
6. In which COUNTRY were you BORN? (check one box)
- Canada
- United States
- Mexico
- Belize
- Other country of birth – Specify ________________________

7. Whether at a secular or Bible school, what certificates, diplomas, or degrees have you obtained? (check one box)
- None
- Secondary (high) school or equivalent
- Trade certificate or diploma
- Other non-university certificate or diploma
  (obtained at community college, technical institute)
- University certificate or diploma BELOW bachelor level
- Bachelor’s degree (e.g., B.A., B.Sc., LL.B.)
- University certificate or diploma ABOVE bachelor level
- Master’s degree(s) (e.g., M.A., M.Sc., M.Ed.)
- Degree in medicine, dentistry, veterinary medicine or optometry
- Earned doctorate (e.g., Ph.D., D.Sc., D.Ed.)

8. Which Bible College, Christian liberal arts school, or seminary diplomas or degrees have you obtained? (check all that apply)

<table>
<thead>
<tr>
<th>Institution</th>
<th>Attended</th>
<th>Diploma</th>
<th>Bachelors</th>
<th>Masters</th>
<th>Doctorate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steinbach Bible College</td>
<td></td>
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<tr>
<td>Aylmer Bible School</td>
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<tr>
<td>Bethany Bible Institute</td>
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<td>Steinrich Bible School</td>
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<td>Briercrest Bible College</td>
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<tr>
<td>Providence College/Seminary</td>
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<td>Winnipeg College/Seminary</td>
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<tr>
<td>Tyndale Bible College/Seminary</td>
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<td>Ontario Bible College/Seminary</td>
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<tr>
<td>Prairie Bible Institute</td>
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<td>Emanuel Bible College</td>
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<tr>
<td>Goshen College</td>
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<tr>
<td>Canadian Mennonite University</td>
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<tr>
<td>Evangelical Anabaptist Seminary</td>
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<tr>
<td>Other – Specify below</td>
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</tbody>
</table>

Personal Involvement in Your Church

The following questions ask about your involvement in your current local church.

9. How did you come to first attend your current church? (check best answer)
- I attended as long as I remember
- I remember first coming with my parents or guardian
- I came on my own
- I came with friends from this church
- I was hired as staff member
10. How long have you attended your current church? (check one box)
   □ Less than a year
   □ 1 or more years but less than 2 years
   □ 2 or more years but less than 5 years
   □ 5 or more years but less than 10 years
   □ 10 or more years but less than 20 years
   □ More than 20 years

11. Using a 1 for your top gift, a 2 for your second gift, and a 3 for your third gift, which of these do you believe to be your top 3 spiritual gifts? (number 3 gifts)
   - Teaching
   - Leadership
   - Helps
   - Intercession
   - Miracles
   - Apostleship
   - Prophecy
   - Wisdom
   - Craftsmanship
   - Encouragement
   - Giving
   - Evangelism
   - Administration
   - Knowledge
   - Tongues
   - Shepherding
   - Hospitality
   - Faith
   - Creative Communication
   - Interpretation

12. To what extent have your spiritual gifts been affirmed by your church friends and leaders? (check one box)
   □ Very great
   □ Great
   □ Somewhat
   □ Hardly
   □ Not at all

13. What are your primary roles or job titles at your church? (list up to 3 roles)
   ____________________________
   ____________________________
   ____________________________

14. On what church body do you serve? (check one box)
   □ Board
   □ Council
   □ Ministerial
   □ Other – specify ____________________________

15. In one week, how many hours do you spend in the ministry of your local church? (check one box)
   □ less than 5 hours
   □ 5 or more but less than 10 hours
   □ 10 or more but less than 15 hours
   □ 15 or more but less than 20 hours
   □ 20 hours or more

16. In one week, how many hours do you spend in the ministry of other associated Christian organizations (e.g. EMMC, MCC)? (check one box)
   □ less than 5 hours
   □ 5 or more but less than 10 hours
   □ 10 or more but less than 15 hours
   □ 15 or more but less than 20 hours
   □ 20 hours or more
17. In one week, how many hours do you spend volunteering with other community organizations (e.g. Red Cross, Big Brother/Sister, coaching sports)?
(check one box)
☐ less than 5 hours
☐ 5 or more but less than 10 hours
☐ 10 or more but less than 15 hours
☐ 15 or more but less than 20 hours
☐ 20 hours or more

18. How many minutes does it normally take to drive to church worship services?
(check one box)
☐ less than 5 minutes
☐ 5 or more but less than 10 minutes
☐ 10 or more but less than 15 minutes
☐ 15 or more but less than 20 minutes
☐ 20 or more but less than 30 minutes
☐ 30 or more but less than 45 minutes
☐ 45 or more but less than 60 minutes
☐ 60 minutes or more

19. Have you ever gone to another country to visit missionaries or to help with a mission project? (check one box)
☐ Yes ☐ No

20. Have you ever gone to another cultural group in Canada to visit missionaries or to help with a mission project? (check one box)
☐ Yes ☐ No

21. Are you part of a small group that meets at least twice a month for community and accountability? (check one box)
☐ Yes ☐ No

22. Are you part of a small group that meets regularly for Bible study and care? (check one box)
☐ Yes ☐ No

23. In 2005, have people from your small group left to form another small group? (check one box)
☐ Yes ☐ No

24. Have you personally been involved in the following leadership development activities in the last year? (check one box in each row)
Attended a leadership seminar ☐ Yes ☐ No
Taught a class to train leaders ☐ Yes ☐ No
Planned a leadership seminar ☐ Yes ☐ No
Mentored a person personally ☐ Yes ☐ No
Read a book on leadership ☐ Yes ☐ No

25. How often do you receive a personal evaluation of your ministry from the congregation, board, or ministry team? (check one box)
☐ Annually ☐ Every 2 years ☐ Every 5 years ☐ Never
# Personal Theological Questions

The following questions ask about your personal beliefs.

### 26. To what extent do you personally do the following?
(check one box in each row)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Very much</th>
<th>Much</th>
<th>Some</th>
<th>Not much</th>
<th>Very little</th>
</tr>
</thead>
<tbody>
<tr>
<td>Live a simple lifestyle</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Be accountable to others</td>
<td></td>
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<tr>
<td>Physically care for others</td>
<td></td>
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</tr>
<tr>
<td>Consult Bible for decisions</td>
<td></td>
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</tr>
</tbody>
</table>

### 27. How strongly do you believe the following are required for church membership?
(check one box in each row)

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Very much</th>
<th>Much</th>
<th>Some</th>
<th>Not much</th>
<th>Very little</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baptism.</td>
<td></td>
<td></td>
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<tr>
<td>Rebaptism for people already baptized as infants.</td>
<td></td>
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<tr>
<td>Rebaptism for people baptized as non-Christians.</td>
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<tr>
<td>People must be born again.</td>
<td></td>
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</tr>
</tbody>
</table>

### 28. How strongly do you believe the following statements about your church?
(check one box in each row)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Very much</th>
<th>Much</th>
<th>Some</th>
<th>Not much</th>
<th>Very little</th>
</tr>
</thead>
<tbody>
<tr>
<td>Church discipline is practiced for erring members.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Actively reaches to people of other ethnic or groups.</td>
<td></td>
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</tr>
<tr>
<td>Actively reaches to people of other social or cultural groups.</td>
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<tr>
<td>Is different from the neighbourhood by the unique lifestyle.</td>
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<tr>
<td>It is evident that the members follow Jesus.</td>
<td></td>
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<tr>
<td>Should be reserved for descendents of Mennonite immigrants from Russia.</td>
<td></td>
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</tr>
</tbody>
</table>
29. **How strongly do you believe the following statements are true about the Bible?**

*(check one box in each row)*

<table>
<thead>
<tr>
<th>Statement</th>
<th>Very much</th>
<th>Much</th>
<th>Some</th>
<th>Not much</th>
<th>Very little</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Old Testament must be interpreted in light of the New Testament.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Our view of right and wrong must be derived primarily from the New Testament.</td>
<td></td>
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</tr>
<tr>
<td>Our view of right and wrong must come equally from both the New and Old Testaments.</td>
<td></td>
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</tr>
<tr>
<td>The New Testament must be interpreted through the life and teachings of Jesus.</td>
<td></td>
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<tr>
<td>The teachings of Jesus are too difficult for ordinary Christians.</td>
<td></td>
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<tr>
<td>The Bible and church traditions should equally guide the Christian</td>
<td></td>
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</tr>
</tbody>
</table>

30. **How strongly do you believe the following statements are true about the Christian faith?** *(check one box in each row)*

<table>
<thead>
<tr>
<th>Statement</th>
<th>Very much</th>
<th>Much</th>
<th>Some</th>
<th>Not much</th>
<th>Very little</th>
</tr>
</thead>
<tbody>
<tr>
<td>The significance (importance) of Jesus is in providing salvation for our future.</td>
<td></td>
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<tr>
<td>Following Christ daily in life is necessary for a believer.</td>
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<tr>
<td>Faith inside will show itself in action outside.</td>
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<tr>
<td>Is best seen in the life of Jesus.</td>
<td></td>
<td></td>
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<tr>
<td>Is a private matter between God and me.</td>
<td></td>
<td></td>
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<tr>
<td>The teachings of Jesus are evident in my life.</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
31. How strongly do you believe the following about justice? (check one box in each row)  

<table>
<thead>
<tr>
<th>Option</th>
<th>Very much</th>
<th>Much</th>
<th>Some</th>
<th>Not much</th>
<th>Very little</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Christian may use violent means, if required, to protect their family.</td>
<td></td>
<td></td>
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<tr>
<td>War may be justified in some instances.</td>
<td></td>
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<tr>
<td>It is more important to bring spiritual help than physical help.</td>
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<tr>
<td>Christians need to influence society to help it become more just.</td>
<td></td>
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<tr>
<td>It is my Christian responsibility to look out for the physical means of my neighbour.</td>
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</tr>
</tbody>
</table>

32. How strongly do you believe working in the following jobs would compromise your Christian faith? (check one box in each row)  

<table>
<thead>
<tr>
<th>Job</th>
<th>Very much</th>
<th>Much</th>
<th>Some</th>
<th>Not much</th>
<th>Very little</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal policeman</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Local politician</td>
<td></td>
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<tr>
<td>Public school teacher</td>
<td></td>
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<tr>
<td>Lawyer</td>
<td></td>
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<tr>
<td>Medical doctor</td>
<td></td>
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</tr>
<tr>
<td>Judge</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Military service</td>
<td></td>
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<tr>
<td>Prison guard</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Police officer</td>
<td></td>
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</tbody>
</table>

33. How strongly do you believe that a Christian could participate in the following activities? (check one box in each row)  

<table>
<thead>
<tr>
<th>Activity</th>
<th>Very much</th>
<th>Much</th>
<th>Some</th>
<th>Not much</th>
<th>Very little</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sing national anthem</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Vote in a federal election</td>
<td></td>
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<tr>
<td>Observe national holidays</td>
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<tr>
<td>Pay taxes</td>
<td></td>
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<tr>
<td>Fly the national flag at home</td>
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<tr>
<td>Serve on a criminal case jury</td>
<td></td>
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<tr>
<td>Swear an oath</td>
<td></td>
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<tr>
<td>Serve in military after a draft</td>
<td></td>
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<tr>
<td>Business with non-Christians</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Observe war memorial days</td>
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</tbody>
</table>
Church

The following questions ask about your current local church.

34. To what extent does your church serve people of these groups? (check one box in each row)

<table>
<thead>
<tr>
<th>Group</th>
<th>Very much</th>
<th>Much</th>
<th>Some</th>
<th>Not much</th>
<th>Very little</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-teens</td>
<td></td>
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<tr>
<td>Youth</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Young adults</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newly weds</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parents of children</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Empty nesters</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Elderly</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Single adults</td>
<td></td>
<td></td>
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<tr>
<td>Widows/ widowers</td>
<td></td>
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<tr>
<td>Broken families</td>
<td></td>
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<tr>
<td>Other cultures</td>
<td></td>
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<tr>
<td>Single parents</td>
<td></td>
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<tr>
<td>Non-churched</td>
<td></td>
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<tr>
<td>Poor</td>
<td></td>
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</tbody>
</table>

35. What percentage increase (or decrease) in attendance of your church do you expect over the next 5 years?

____% increase (use negative for decrease)

36. To what extent does your church have strength in these areas? (check one box in each row)

<table>
<thead>
<tr>
<th>Area</th>
<th>Very much</th>
<th>Much</th>
<th>Some</th>
<th>Not much</th>
<th>Very little</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family programming</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Youth ministry</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Children ministry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elderly ministry</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Singles ministry</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Preaching</td>
<td></td>
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<tr>
<td>Welcoming</td>
<td></td>
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<tr>
<td>Accessibility</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Meeting budget</td>
<td></td>
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<tr>
<td>Vision sharing</td>
<td></td>
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<tr>
<td>Discipleship</td>
<td></td>
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<tr>
<td>Outreach</td>
<td></td>
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<td></td>
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<tr>
<td>Leadership training</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Sharing material resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breaking racial barriers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breaking social barriers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assisting other churches</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Other – specify</td>
<td></td>
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</tr>
</tbody>
</table>
37. How much do you think the following encouraged growth in attendance in the last five years? (check one box in each row)

<table>
<thead>
<tr>
<th>Category</th>
<th>Very much</th>
<th>Much</th>
<th>Some</th>
<th>Not much</th>
<th>Very little</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building expansion</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Building improvements</td>
<td></td>
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<td></td>
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<tr>
<td>Handicap accessibility</td>
<td></td>
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<tr>
<td>Pavement or canopy</td>
<td></td>
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<tr>
<td>Organizational structure</td>
<td></td>
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<td></td>
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<tr>
<td>Vision sharing</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Leadership training</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Family programming</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Youth ministry</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Children ministry</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Elderly ministry</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Singles ministry</td>
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<td></td>
</tr>
<tr>
<td>Small groups</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Worship Service</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Preaching</td>
<td></td>
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<tr>
<td>Music</td>
<td></td>
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</tr>
<tr>
<td>Welcoming</td>
<td></td>
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</tr>
<tr>
<td>Accessibility</td>
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</tr>
<tr>
<td>Meeting budget</td>
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<tr>
<td>Identified target group</td>
<td></td>
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<tr>
<td>Pastor</td>
<td></td>
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</tr>
<tr>
<td>Teaching</td>
<td></td>
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<tr>
<td>Prayer</td>
<td></td>
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<tr>
<td>Revival</td>
<td></td>
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<tr>
<td>Reconciliation</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Discipleship</td>
<td></td>
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</tr>
<tr>
<td>Missions</td>
<td></td>
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</tr>
<tr>
<td>Freedom from bondage</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Care to community</td>
<td></td>
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</tr>
<tr>
<td>Outreach to community</td>
<td></td>
<td></td>
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<tr>
<td>Church plant(s)</td>
<td></td>
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<tr>
<td>Other 1 - specify</td>
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<tr>
<td>Other 2 - specify</td>
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</tr>
</tbody>
</table>

38. To what extent are these challenges that your church will likely face in the next five years? (check one box in each row)

<table>
<thead>
<tr>
<th>Category</th>
<th>Very much</th>
<th>Much</th>
<th>Some</th>
<th>Not much</th>
<th>Very little</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aging members</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competition for donations</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Blended families</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Family moving away</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preaching</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Leadership</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Community acceptance</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Other - specify</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
39. How many years has your church organizational structure been in place? (check one box in each row)

<table>
<thead>
<tr>
<th></th>
<th>Under 1</th>
<th>1 to 2</th>
<th>2 to 5</th>
<th>5 to 10</th>
<th>Over 10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

If it has been over 10 years then skip to 43.

40. To what extent has your own work load increased or decreased since your church organizational structure been in place? (check one box in each row)

<table>
<thead>
<tr>
<th></th>
<th>Very much</th>
<th>Much</th>
<th>Some</th>
<th>Not much</th>
<th>Very little</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Decreased</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

41. To what extent has church life improved or declined since your structure has been in place? (check one box in each row)

<table>
<thead>
<tr>
<th></th>
<th>Very much</th>
<th>Much</th>
<th>Some</th>
<th>Not much</th>
<th>Very little</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Declined</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

42. To what extent has your board or council work load increased or decreased since your church organizational structure been in place? (check one box in each row)

<table>
<thead>
<tr>
<th></th>
<th>Very much</th>
<th>Much</th>
<th>Some</th>
<th>Not much</th>
<th>Very little</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Decreased</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

Conference

The following ask about the Evangelical Mennonite Mission Conference.

43. To what extent does the conference promote itself to their members? (check one box)

<table>
<thead>
<tr>
<th></th>
<th>Very much</th>
<th>Much</th>
<th>Some</th>
<th>Not much</th>
<th>Very little</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

44. How many times have you been a delegate at the EMMC convention or served a (full or part) term on a conference board or council? (check one box in each row)

<table>
<thead>
<tr>
<th></th>
<th>Delegate</th>
<th>Terms served</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>□ 0</td>
<td>□ 0</td>
</tr>
<tr>
<td>1 time</td>
<td>□</td>
<td>□ 1 term</td>
</tr>
<tr>
<td>2 times</td>
<td>□</td>
<td>□ 2 terms</td>
</tr>
<tr>
<td>3 times</td>
<td>□</td>
<td>□ 3 terms</td>
</tr>
<tr>
<td>4 or more</td>
<td>□</td>
<td>□ 4 or more</td>
</tr>
</tbody>
</table>

45. To what extent do you understand the tasks of the following conference councils or boards? (check one box in each row)

<table>
<thead>
<tr>
<th></th>
<th>Very much</th>
<th>Much</th>
<th>Some</th>
<th>Not much</th>
<th>Very little</th>
</tr>
</thead>
<tbody>
<tr>
<td>General council</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Ministerial resource council</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Board of mission and service</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Ministerial council</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>
46. To what extent do the following help the growth of our conference? (check one box in each row)

<table>
<thead>
<tr>
<th></th>
<th>Very much</th>
<th>Much</th>
<th>Some</th>
<th>Not much</th>
<th>Very little</th>
</tr>
</thead>
<tbody>
<tr>
<td>General council</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ministerial resource council</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Board of mission and service</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ministerial council</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Budget</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Church planting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overseas missions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vision and inspiration</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resources sharing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other – specify</td>
<td></td>
<td></td>
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</tbody>
</table>

47. To what extent will the following be challenges to the conference in the next 5 years? (check one box in each row)

<table>
<thead>
<tr>
<th></th>
<th>Very much</th>
<th>Much</th>
<th>Some</th>
<th>Not much</th>
<th>Very little</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aging members</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Funding</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Structure</td>
<td></td>
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</tr>
<tr>
<td>Vision</td>
<td></td>
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</tr>
<tr>
<td>Church planting</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Theological differences</td>
<td></td>
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</tr>
<tr>
<td>Generation gap</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Regional differences</td>
<td></td>
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<tr>
<td>Physical separation</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Pastors shortage</td>
<td></td>
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</tr>
<tr>
<td>Conference leadership</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Other – specify</td>
<td></td>
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</tr>
</tbody>
</table>

48. What are the strengths of our conference? (check one box in each row)

<table>
<thead>
<tr>
<th></th>
<th>Very much</th>
<th>Much</th>
<th>Some</th>
<th>Not much</th>
<th>Very little</th>
</tr>
</thead>
<tbody>
<tr>
<td>General council</td>
<td></td>
<td></td>
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<tr>
<td>Ministerial resource council</td>
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<td></td>
</tr>
<tr>
<td>Board of mission and service</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Ministerial council</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Overseas missions</td>
<td></td>
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</tr>
<tr>
<td>Funding</td>
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<tr>
<td>Structure</td>
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<tr>
<td>Vision</td>
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</tr>
<tr>
<td>Church planting</td>
<td></td>
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</tr>
<tr>
<td>Theological differences</td>
<td></td>
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</tr>
<tr>
<td>Generation gap</td>
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<tr>
<td>Regional differences</td>
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<tr>
<td>Physical separation</td>
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<tr>
<td>Pastors shortage</td>
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<td></td>
<td></td>
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<tr>
<td>Conference leadership</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Other – specify</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
49. To what extent do you read the following versions or portions of the *Recorder*? (check one box in each row)

<table>
<thead>
<tr>
<th></th>
<th>Very much</th>
<th>Much</th>
<th>Some</th>
<th>Not much</th>
<th>Very little</th>
</tr>
</thead>
<tbody>
<tr>
<td>Print version</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On-line version</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Lead article</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Missionary updates</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Prayer guide</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

50. To what extent does your church need assistance in the following areas? (check one box in each row)

<table>
<thead>
<tr>
<th></th>
<th>Very much</th>
<th>Much</th>
<th>Some</th>
<th>Not much</th>
<th>Very little</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrative</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational structure</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Policy, by-laws etc.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job descriptions</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Preaching or pulpit exchange</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching exchange</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leadership development</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Vision and inspiration</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crises help</td>
<td></td>
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</tr>
</tbody>
</table>

51. To what extent does your church receive the following from the EMMC leadership (staff, councils, board) and other EMMC churches? (check one box in each row)

<table>
<thead>
<tr>
<th></th>
<th>Very much</th>
<th>Much</th>
<th>Some</th>
<th>Not much</th>
<th>Very little</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrative</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Organizational structure</td>
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</tr>
<tr>
<td>Policy, by-laws etc.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job descriptions</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Preaching or pulpit exchange</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching exchange</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Leadership development</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Vision and inspiration</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crises help</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
Staff

The following questions ask about your church staff.

52. To what extent do you use the conference guideline to determine staff salaries? (check one box in each row)

<table>
<thead>
<tr>
<th>Use guidelines</th>
<th>Very much</th>
<th>Much</th>
<th>Some</th>
<th>Not much</th>
<th>Very little</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

53. To what extent do you set salaries above or below the conference guidelines? (check one box in each row)

<table>
<thead>
<tr>
<th>Above guidelines</th>
<th>Very much</th>
<th>Much</th>
<th>Some</th>
<th>Not much</th>
<th>Very little</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Below guidelines</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

54. To what extent is your pastor a shepherd, Chief Executive Officer (CEO) or manager of the church? (check one box in each row)

<table>
<thead>
<tr>
<th>Role</th>
<th>Very much</th>
<th>Much</th>
<th>Some</th>
<th>Not much</th>
<th>Very little</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shepherd</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Chief Executive Officer</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Manager</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

Thank you for completing the questionnaire. Your prompt assistance will allow us to have the results for the convention in July. Please mail it in the addressed envelope as soon as possible:

Eddy Rempel
30 Donker Drive,
St. Thomas, Ontario
N5P 4J3
(519) 913-1583
eddy@rempel.ca
EMMC Growth Patterns;
* Formats

options nodate pageno=1;
options pageno=1 pagesize=52 linesize=90 date;
title1 'Masters Thesis: EMMC Growth Data';
title2 'Formats';

*proc freq 2x2 table with chi square test;
%macro frege(dataM= Cohort, var1= teaching, var2= volume4, formatM=, whereM=);
odds select CrossTabFreqs ChiSq;
proc freq data=&dataM;
tables &var1 * &var2 / chisq norow nopercent;
%if %length(&formatM) ne 0 %then %do;
format &formatM;
%end;
%if %length(&whereM) ne 0 %then %do;
where &whereM;
%end;
title4 "&dataM: &var1 * &var2 Distribution";
run;
%mend frege;

* Get Median and test differences by specified class;
%macro medianp (dataM=Cohort, varM=teaching, group!vl=Volume, formatM=, whereM=);
proc means data=&dataM maxdec=2 fw=6 nmiss sum mean min p25 median p75 max;
class &groupM;
var &varM;
%if %length(&formatM) ne 0 %then %do;
format &formatM;
%end;
%if %length(&whereM) ne 0 %then %do;
where &whereM;
%end;
title4 "Median &varM by &groupM Group";
run;
ods select KruskalWallisTest;
proc nparlway data= &dataM median wilcoxon;
class &groupM;
var &varM;
%if %length(&whereM) ne 0 %then %do;
where &whereM;
%end;
title4 "Test Median &varM by &groupM Group";
quit;
run;
%mend;

*%frege (dataM=PedsfCohort, var1=medall, var2=PB, formatM=%str(mEdall med.));
*%medianp(dataM=PedsfCohort, varM=medall, GroupM=PB, formatM=)
proc format;
  value missing
    .          = '.'
    other      = 'X';
  value sign
    low--0.000001 = '-'
    0         = '0'
    0.000001-high = '+'
    other      = 'X';
  value $missing
    ''         = '.'
    other      = 'X';
  value region
    0         = '0 urban'
    1         = '1 rural';

proc format;
  value pastor
    1 = 'Pastor'
    2 = 'Interim';
  value region
    0 = 'TOTAL'
    1 = 'S MB'
    2 = 'S MB'
    3 = 'W MB'
    4 = 'C MB'
    5 = 'SK'
    6 = 'ON'
    7 = 'Mexico'
    8 = 'Belize'
    9 = 'USA';
  value region5f
    0 = 'TOTAL'
    1 = '9S MB'
    2 = '8S MB'
    3 = '7W MB'
    4 = '6C MB'
    5 = '5SK'
    6 = '4ON'
    7 = '3Mexico'
    8 = '2Belize'
    9 = '1USA';
  value ont
    0 = 'TOTAL'
    1-5,7-9 = 'Other'
    6 = 'ON';
  value region2f
    0 = 'TOTAL'
    1-4 = 'Canada'
    7 = 'Mexico'
    8 = 'Belize'
    9 = 'USA';
value region3f
  1-5='MB SK'
  6-9='ON US MX BE';
value region4f
  0='TOTAL'
  1-4='Canada'
  7-9='US MX BE';
value $region
  '0'='TOTAL'
  '1'='S MB'
  '2'='S MB'
  '3'='W MB'
  '4'='C MB'
  '5'='SK'
  '6'='ON'
  '7'='Mexico'
  '8'='Belize'
  '9'='USA';
value $region2f
  '0'='TOTAL'
  '1'-'4'='Canada'
  '7'='Mexico'
  '8'='Belize'
  '9'='USA';
value $region3f
  '0'='TOTAL'
  '1'-'4'='Canada'
  '7'-'9'='US MX BE';

proc format;
  value size
    000-099='000-099'
    100-199='100-199'
    200-299='200-299'
    300-399='300-399'
    400-999='400-999';
  value sizef
    0='New'
    001-099='[1,99]' 
    100-299='[100,299]' 
    300-high='[300,+]';
  value size3f
    1-67='[1,67]'
    68-176='[68,176]' 
    177-high='[173,+]';
  value size4f
    000-049='[00-049]' 
    050-099='[050,099]' 
    100-149='[100,149]' 
    150-199='[150,199]' 
    200-249='[200,249]' 
    250-299='[250,299]' 
    300-349='[300,349]' 
    350-399='[350,399]' 
    400-499='[400,499]' 
    500-999='[500,999]';
500-549 = '[500,549]'
550-599 = '[550,599]'
600-649 = '[600,649]'
650-699 = '[650,699]'
700-749 = '[700,749]'
750-799 = '[750,799]'
800-849 = '[800,849]'
850-899 = '[850,899]';
value decade
1960-1969 = '1960s'
1970-1979 = '1970s'
1980-1989 = '1980s'
1990-1999 = '1990s'
2000-2009 = '2000s'
2010-2019 = '2010s';

proc format;
  value Growth
    99 = '1 New'
    low-0 = '2 Declining'
    0-.10 = '3 Stagnant'
    .10-20 = '4 Growing';
  *p32 p33a p33b p33c p36 p41a p41b p41c p42 p49 p59 p60 yn.;
  value yn
    1 = 'Yes'
    2 = 'No';
  value boolean
    1 = 'Yes'
    0 = 'No';
  *p15 p46a p46b p46c p46d p46e p46f p46g p46h p46i p46j p46k p46l p61a p61b p61c p61d p61e p61f p61g p61h p61i p61j much.;
  value much
    1 = 'V much'
    2 = 'Much'
    3 = 'Some'
    4 = 'Not much'
    5 = 'V little';
  value much2f
    1, 2, 12, 13, 14, 23, 24, 25, 123 = 'V, Much'
    3, 4, 5, 34, 35 = 'Some-Lit';
  value much3f
    1, 2, 3, 12, 13, 14, 23, 24, 25, 34, 123 = 'Much-Some'
    4, 5 = 'NMuch-VLit';
  *pastors survey;

proc format;
  *p01 p01.;
  value p01f
    1 = '0-4'
2='5-9'
3='10-14'
4='15-19'
5='20-29'
6='30-39'
7='40-49'
8='50-69'
9='70-99'
10='100-124'
11='125-149'
12='150-174'
13='175-199'
14='200-249'
15='250-299'
16='300+';
*pl2* pl2.;
value pl2f
  1='ELECT'
  2='APPOINT'
  3='ELECT & APPOINT'
  12='ELECT & APPOINT'
  13='ELECT & SGT SELECT'
  23='APPOINT & SGT SELECT'
  123='ELECT & APPOINT & SGT SELECT'
  .='NA';
value pl2fa
  1,12,13,123='ELECT'
  .='NA'
  other='OTHER';
*pl3 pl4 important.;
value important
  1='V Important'
  2='Important'
  3='Somewhat'
  4='Unimportant'
  5='Not at all';
*pl6 pl6.;
value pl6f
  1='Own'
  2='Rent'
  3='R School'
  4='Other';
value pl62f
  1='Own'
  2,3,4='Other';
*pl8 hours.;
value pl8f
  1='0-5'
  2='5-10'
  3='10-15'
  4='15-20'
  5='20 +';
value pl82f
  1,2,3='0-15'
  4,5='15+';
*pl25a pl25b pl25c pl25d pl25e pl25f pl25q 

value p19f
    1='1
    2,3='2 or 3';

value p19Xf
    ,0-.4999='(0-50%)
    ,5-.7999='[50-80%]
    ,8-high='[80%+];

value p19X2f
    ,0-.7999='(0-80%)
    ,8-high='[80%+];

value p20f
    ,0,1='0/1'
    ,2-high='2+';

value p25f
    1='Mem/C'
    2='Board'
    3='Pastor'
    4='Min tm'
    5='Treas';

value p25pastor
    3='Pastor'
    1,2,4,5,12,24,25,45='other';

value p25board
    2,12,24,25='Board'
    1,3,4,5,45='other';

value p25member
    1,12='Member'
    2,24,25,3,4,5,45='other';

value p25team
    4,24,45='Team'
    1,12,2,25,3,5='other';

*p27 p27 ;

value p27f
    1='1 body'
    2='2 group';

*p31 p31 ;

value p31f
    1='0-1 yr'
    2='1-5 yrs'
    3='5-10 yrs'
    4='10-15 yrs'
    5='15+ yrs';

value p312f
    1,2='0-5 yrs'
    3,4,5='5+ yrs';

*p34 p34 ;

value p34f
    1='ONE tool'
    2='0 or many';

value p35f
    1='Wagner'
    2='Network'
    3='Blackaby'
    4='Unknown';

value p352f
    1,2,3,4='SGA'
    ,0='none';
*p39a p39b p39;
value p39f
  1='0 hrs'
  2='0-10 hrs'
  3='10-20 hrs'
  4='20-40 hrs'
  5='40+ hrs';
value p392f
  1,2,3,4='0-40 hrs'
  5='40+ hrs';
*p40 p40;
value p40f
  1='2 wk'
  2='3 wks'
  3='4 wks'
  4='5 wks'
  5='6+ wks';
value p402f
  1='2 wk'
  2,3,4,5='3+ wks';
*p43 p43;
value p43f
  1='current'
  2='EMMC'
  3='Mennonite'
  4='Non-Men';
*p45a p45b p45c p45d p45e p45f p45g p45h p45i p45j p45k p45l p45m p45n
  p45o p45p p45q p45;
value p45f
  1='Self'
  2='Delegate to staff'
  3='Delegate to lay people';
value p452f
  1,12,13,123='Self'
  2,3,23='Delegate';
*p47 p47;
value p47f
  1='Pews'
  2='Mixture'
  3='Chairs';
value p472f
  1='Pews'
  2,3='Chairs';
*p50a p50b p50c p50;
value p50f
  1='Daily'
  2='Weekly'
  3='Monthly'
  4='Annually'
  5='Hardly';
value p502f
  1,2='Weekly'
  3,4,5='Monthly-';
value p51f
  0='no $'
  1-high='yes $';
*leaders survey;

proc format;
  value age
    low-1950='55+ yrs'
    1951-1970='35-54 yrs'
    1971-1987='18-34 yrs'
    1988-high='< 18 yrs';
  value age2f
    low-1945='60+ yrs'
    1946-1955='50-59 yrs'
    1956-1965='40-49 yrs'
    1966-1975='30-39 yrs'
    1976-1985='20-29 yrs'
    1986-high='< 20 yrs';
  value age3f
    low-1940='65+ yrs'
    1941-1960='45-64 yrs'
    1961-1970='35-44 yrs'
    1971-1985='20-34 yrs'
    1986-high='< 20 yrs';
  value l01age
    low-36 = '1-36'
    37-50 = '37-50'
    51-high = '51+';
  *102 sex.; value sex
    1='Female'
    2='Male';
  *103 103.;
  value l03f
    1='Single'
    2='Married'
    3='Separated'
    4='Divorced'
    5='Widowed';
  value l032f
    2='Married'
    1,3,4,5='other';
  *104 105 ethnic.;
  value language
    1,12,14,15,124,145,146='P.dietsch'
    2='English'
    3='French'
    4='German'
    5='Dutch';
value 104 PD
 1, 12, 14, 15, 124, 145, 146 = 'P. dietsch'
 2-8 = 'other';

value ethnic
 1, 12, 14, 15, 124, 145, 146 = 'Menno.'
 2 = 'English'
 3 = 'French'
 4, 45, 48 = 'German'
 5 = 'Dutch'
 6 = 'Spanish'
 7 = 'Native'
 8 = 'OTHER';

value 105 Menno
 1, 12, 14, 15, 124, 145, 146 = 'Menno.'
 2, 3, 4, 45, 48, 5, 6, 7, 8 = 'OTHER';

*106 106. ;

value 106 f
 1 = 'Canada'
 2 = 'USA'
 3 = 'Mexico'
 4 = 'Belize'
 5 = 'Other';

*107 107. ;

value 107 f
 1 = 'None'
 2 = 'high'
 23, 3 = 'Trade d'
 234, 24, 34, 4 = 'Other d'
 245, 45, 5 = '<bachelor'
 256, 26, 56, 6 = 'Bachelor'
 67, 7 = '>bachelor'
 268, 28, 68, 8 = 'Masters'
 9 = 'Medicine'
 10 = 'Doctorate';

value 107 un
 0, 1, 2, 23, 3, 234, 24, 34, 4, 245, 45, 5 = '2< bachelor'
 256, 26, 56, 6, 67, 7, 268, 28, 68, 8, 9, 10 = '1University';

value 108 f
 0 = 'none'
 1 = 'Attended'
 2 = 'diploma'
 3 = 'Bachelor'
 4 = 'Masters'
 5 = 'Doctorate';

proc format;
value 108 u
 0, 1, 2 = '<bachelor'
 3, 4, 5 = 'bachelor+';

*109 109. ;

value 109 f
 1, 12 = 'always'
 2, 23 = 'parents'
 3, 34 = 'on own'
 4 = 'friends'
value 118f
1='(<5 min)'
2='(5-10 m)'
3='(10-15 m)'
4='(15-20 m)'
5='(20-30 m)'
6='(30-45 m)'
7='(45-60 m)'
8='(60 min+)';

value 1182f
1,2='(<10 m)'
3,4='(10-20 m)'
5,6,7,8='(20 m+)';

value 1183f
1,2='(<10 m)'
3,4,5,6,7,8='(10 m+)';

value 1184f
1,2,3,4='(<20 m)'
5,6,7,8='(20 m+)';

*125 125.;

value 125f
1='ev 1 yr'
2='ev 2 yr'
3='ev 5 yr'
4='Never';

value 1252f
14,1='ev 1 yr'
2,3='ev 5 yr'
4='Never';

*139 139.;

value 139f
1='(< 1)'
2='[1 - 2)'
3='[2 - 5)'
4='[5 - 10)'
5='(> 10)';

value 1392f
1,2,3,4='(<10)'
5='(10+)';

*144b Terms.;

value terms
1='0 terms'
2='1 term'
3='2 terms'
4='3 terms'
5='4+ term';

value 144f
1='0 terms'
2='1 term'
3='2 terms'
4='3 terms'
5='4+ terms';

value 1442f
1='0 times/terms'
2-5='1+ times/terms';
* EMMC Growth Patterns;
* Import EMMC Records;
libname SasData 'C:\Shared Documents and Such\Education\McMaster School\Thesis Project\EMMC EMC Attendance Data';

options nodate pageno=1;
options pageno=1 pagesize=52 linesize=90 date;

title1 'Masters Project: EMMC Growth Data';
title2 'EMMC Records of Attendance and Membership';

* Import EMMC Data;
title3 'EMMC';

proc import datafile="C:\Shared Documents and Such\Education\McMaster School\Thesis Project\EMMC EMC Attendance Data\EMC data.xls" out=emc replace;
run;

data emc;
set emc;
keep name region prov conf a1900-a2005 m1900-m2005;
Conf='EMC';
A2004=A2003; /*I do not have 2004 attendance data;*/
A2005=A2003; /*I do not have 2005 attendance data;*/
M2004=M2003; /*I do not have 2004 membership data;*/
M2005=M2003; /*I do not have 2005 membership data;*/
label
  name ='Church Name'
  region = 'Assigned Geographic Region'
  prov = 'Province, State, or District'
  conf = 'Conference'
  a1993 = 'Attendance 1993'
  a1994 = 'Attendance 1994'
  a1995 = 'Attendance 1995'
  a1996 = 'Attendance 1996'
  a1997 = 'Attendance 1997'
  a1998 = 'Attendance 1998'
  a1999 = 'Attendance 1999'
  a2000 = 'Attendance 2000'
  a2001 = 'Attendance 2001'
  a2002 = 'Attendance 2002'
  a2003 = 'Attendance 2003'
  a2004 = 'Attendance 2004 - actually 2003'
  a2005 = 'Attendance 2005 - actually 2003'
  m1957 = 'Membership 1957'
  m1959 = 'Membership 1959'
  m1960 = 'Membership 1960'
  m1964 = 'Membership 1964'
  m1965 = 'Membership 1965'
  m1966 = 'Membership 1966'
  m1969 = 'Membership 1969'
  m1970 = 'Membership 1970'
  m1971 = 'Membership 1971'
  m1972 = 'Membership 1972'
m1973 = 'Membership 1973'
m1974 = 'Membership 1974'
m1975 = 'Membership 1975'
m1976 = 'Membership 1976'
m1977 = 'Membership 1977'
m1978 = 'Membership 1978'
m1979 = 'Membership 1979'
m1980 = 'Membership 1980'
m1981 = 'Membership 1981'
m1982 = 'Membership 1982'
m1983 = 'Membership 1983'
m1984 = 'Membership 1984'
m1985 = 'Membership 1985'
m1986 = 'Membership 1986'
m1987 = 'Membership 1987'
m1988 = 'Membership 1988'
m1989 = 'Membership 1989'
m1990 = 'Membership 1990'
m1991 = 'Membership 1991'
m1992 = 'Membership 1992'
m1993 = 'Membership 1993'
m1994 = 'Membership 1994'
m1995 = 'Membership 1995'
m1996 = 'Membership 1996'
m1997 = 'Membership 1997'
m1998 = 'Membership 1998'
m1999 = 'Membership 1999'
m2000 = 'Membership 2000'
m2001 = 'Membership 2001'
m2002 = 'Membership 2002'
m2003 = 'Membership 2003'
m2004 = 'Membership 2004'
m2005 = 'Membership 2005';
run;

proc sort data=emc;
  by Region Prov Name;
run;

* Import EMMC Data;
title3 'EMMC';
proc import datafile="C: \Shared Documents and Such\Education\McMaster School\Thesis Project\Data\emmc data 2006Oct30.xls" out=emmc replace;
run;

data emmc;
  set emmc;
  keep R ChurchId Name Region DisfunctB Notes MotherChurch1 MotherChurch2
  Conf='EMMC';
  if r=1 then r=2; *these deceased churches are part of region 2;
  label
r = 'Region Code'
ChurchId='Church Code'
name = 'Church Name'
region = 'Assigned Geographic Region'
disfunctB= 'Indicates Church is now disfunct'
Notes = 'Notes from Gin'
MotherChurch1='Planting church 1'
MotherChurch2='Planting church 2'
StartYear='First year of data'
EndYear = 'Last year of data'
D1='ChurchId of church 1 planted from 2000 to 2005'
D2='ChurchId of church 2 planted from 2000 to 2005'
D3='ChurchId of church 3 planted from 2000 to 2005'
D4='ChurchId of church 4 planted from 2000 to 2005'
A2005D1= '# of D1 Att 2005 attributed to this church'
A2005D2= '# of D2 Att 2005 attributed to this church'
A2005D3= '# of D3 Att 2005 attributed to this church'
A2005D4= '# of D4 Att 2005 attributed to this church'
AsM2004 = 'Associate Membership 2004'
a1968 = 'Attendance 1968'
a1969 = 'Attendance 1969'
a1977 = 'Attendance 1977'
a1979 = 'Attendance 1979'
a1980 = 'Attendance 1980'
a1981 = 'Attendance 1981'
a1982 = 'Attendance 1982'
a1983 = 'Attendance 1983'
a1984 = 'Attendance 1984'
a1985 = 'Attendance 1985'
a1986 = 'Attendance 1986'
a1987 = 'Attendance 1987'
a1988 = 'Attendance 1988'
a1989 = 'Attendance 1989'
a1990 = 'Attendance 1990'
a1991 = 'Attendance 1991'
a1992 = 'Attendance 1992'
a1993 = 'Attendance 1993'
a1994 = 'Attendance 1994'
a1995 = 'Attendance 1995'
a1996 = 'Attendance 1996'
a1997 = 'Attendance 1997'
a1998 = 'Attendance 1998'
a1999 = 'Attendance 1999'
a2000 = 'Attendance 2000'
a2001 = 'Attendance 2001'
a2002 = 'Attendance 2002'
a2003 = 'Attendance 2003'
a2004 = 'Attendance 2004'
a2005 = 'Attendance 2005'
m1961 = 'Membership 1961'
m1962 = 'Membership 1962'
m1968 = 'Membership 1968'
m1969 = 'Membership 1969'
m1970 = 'Membership 1970'
m1973 = 'Membership 1973'
m1975 = 'Membership 1975'
m1976 = 'Membership 1976'
m1977 = 'Membership 1977'
m1979 = 'Membership 1979'
m1980 = 'Membership 1980'
m1981 = 'Membership 1981'
m1982 = 'Membership 1982'
m1983 = 'Membership 1983'
m1984 = 'Membership 1984'
m1985 = 'Membership 1985'
m1986 = 'Membership 1986'
m1987 = 'Membership 1987'
m1988 = 'Membership 1988'
m1989 = 'Membership 1989'
m1990 = 'Membership 1990'
m1991 = 'Membership 1991'
m1992 = 'Membership 1992'
m1993 = 'Membership 1993'
m1994 = 'Membership 1994'
m1995 = 'Membership 1995'
m1996 = 'Membership 1996'
m1997 = 'Membership 1997'
m1998 = 'Membership 1998'
m1999 = 'Membership 1999'
m2000 = 'Membership 2000'
m2001 = 'Membership 2001'
m2002 = 'Membership 2002'
m2003 = 'Membership 2003'
m2004 = 'Membership 2004'
m2005 = 'Membership 2005';
run;

proc sort data=emmc;
  by r churchid;
run;

data sasdata.emc;
  set emc;
run;

data sasdata.emmc;
  set emmc;
run;
* EMMC Growth Patterns; 
* EMMC Records Pre-Analysis; 
libname SasData 'C:\Shared Documents and Such\Education\McMaster School\Thesis Project\Data\SASData';

options nodate pageno=1; 
options pageno=1 pagesize=52 linesize=90 date;

title1 'Masters Project: EMMC Growth Data';
title2 'EMMC Records of Attendance and Membership';

* Import EMC Data; 
title3 'EMC';

data emc;
  set sasdata.emc;
run;

* Import EMMC Data; 
title3 'EMMC';

data emmc;
  set sasdata.emmc;
run;

proc sort data=emmc;
  by r ChurchId;
run;

data emmc2;
  merge emmc (in=e)
    SasData.pastors (in=p keep=ChurchId p02a p02b p03a p03b);
  by ChurchId;
  if e;
    if M2004=. then M2004=p03a;  if M2005=. then M2005=p03b;
    if A2004=. then A2004=p02a;  if A2005=. then A2005=p02b;
run;

* Total and Regional outcomes sums and annual change; 
title3 'Total & Regional outcomes (Att, Mem, & churches) sums & annual change';
proc sort data=emmc2;
  by r;
run;

proc means data=emmc2 maxdec=2 fw=4 N noprint;
  var A2005;
run;

proc means data=emmc2 maxdec=2fw=4 N noprint;
   var A2005;
   by r;
run;
data Aregion;
   set Aregion ATotal;
   if r=. then do; r=0; Region='Total'; end;
run;
data Mregion;
   set Mregion MTotal;
   if r=. then do; r=0; Region='Total'; end;
run;
data Nregion;
   set Nregion NTotal;
   if r=. then do; r=0; Region='Total'; end;
run;
data region;
   merge Aregion Mregion Nregion;
   by region;
   drop _FREQ_ _TYPE_
   label region='Region';
run;
title4 'Regional Total Attendance, Membership, Churches';
proc print data=region;
format r region.;
run;

* annual increase;
data region;
  set region;
  *Membership;
  *NOTE: some regions have 0 so %increases are not defined;
  if M1961 > 0 then M6162=(((M1961-M1961)/M1961)+1)**(1/1)-1; else
      M6162=.
    if M1962 > 0 then M6268=(((M1962-M1962)/M1962)+1)**(1/6)-1;
    if M1968 > 0 then M6869=(((M1968-M1968)/M1968)+1)**(1/1)-1;
    if M1969 > 0 then M6970=(((M1969-M1969)/M1969)+1)**(1/1)-1;
    if M1970 > 0 then M7073=(((M1970-M1970)/M1970)+1)**(1/3)-1;
    if M1973 > 0 then M7375=(((M1973-M1973)/M1973)+1)**(1/2)-1;
    if M1975 > 0 then M7576=(((M1975-M1975)/M1975)+1)**(1/1)-1;
    if M1976 > 0 then M7677=(((M1976-M1976)/M1976)+1)**(1/1)-1;
    if M1977 > 0 then M7779=(((M1977-M1977)/M1977)+1)**(1/2)-1;
    if M1979 > 0 then M7980=(((M1979-M1979)/M1979)+1)**(1/1)-1;
    if M1980 > 0 then M8081=(((M1980-M1980)/M1980)+1)**(1/1)-1;
    if M1981 > 0 then M8182=(((M1981-M1981)/M1981)+1)**(1/1)-1;
    if M1982 > 0 then M8283=(((M1982-M1982)/M1982)+1)**(1/1)-1;
    if M1983 > 0 then M8384=(((M1983-M1983)/M1983)+1)**(1/1)-1;
    if M1984 > 0 then M8485=(((M1984-M1984)/M1984)+1)**(1/1)-1;
    if M1985 > 0 then M8586=(((M1985-M1985)/M1985)+1)**(1/1)-1;
    if M1986 > 0 then M8687=(((M1986-M1986)/M1986)+1)**(1/1)-1;
    if M1987 > 0 then M8788=(((M1987-M1987)/M1987)+1)**(1/1)-1;
    if M1988 > 0 then M8889=(((M1988-M1988)/M1988)+1)**(1/1)-1;
    if M1989 > 0 then M8990=(((M1989-M1989)/M1989)+1)**(1/1)-1;
    if M1990 > 0 then M9091=(((M1990-M1990)/M1990)+1)**(1/1)-1;
    if M1991 > 0 then M9192=(((M1991-M1991)/M1991)+1)**(1/1)-1;
    if M1992 > 0 then M9293=(((M1992-M1992)/M1992)+1)**(1/1)-1;
    if M1993 > 0 then M9394=(((M1993-M1993)/M1993)+1)**(1/1)-1;
    if M1994 > 0 then M9495=(((M1994-M1994)/M1994)+1)**(1/1)-1;
    if M1995 > 0 then M9596=(((M1995-M1995)/M1995)+1)**(1/1)-1;
    if M1996 > 0 then M9697=(((M1996-M1996)/M1996)+1)**(1/1)-1;
    if M1997 > 0 then M9798=(((M1997-M1997)/M1997)+1)**(1/1)-1;
    if M1998 > 0 then M9899=(((M1998-M1998)/M1998)+1)**(1/1)-1;
    if M1999 > 0 then M9900=(((M1999-M1999)/M1999)+1)**(1/1)-1;
    if M2000 > 0 then M0001=(((M2000-M2000)/M2000)+1)**(1/1)-1;
    if M2001 > 0 then M0102=(((M2001-M2001)/M2001)+1)**(1/1)-1;
    if M2002 > 0 then M0203=(((M2002-M2002)/M2002)+1)**(1/1)-1;
    if M2003 > 0 then M0304=(((M2003-M2003)/M2003)+1)**(1/1)-1;
    if M2004 > 0 then M0405=(((M2004-M2004)/M2004)+1)**(1/1)-1;

  * Attendance;
  if A1968 > 0 then A6869=(((A1968-A1968)/A1968)+1)**(1/1)-1;
  if A1969 > 0 then A6977=(((A1969-A1969)/A1969)+1)**(1/1)-1;
  if A1977 > 0 then A7779=(((A1977-A1977)/A1977)+1)**(1/2)-1;
  if A1979 > 0 then A7980=(((A1979-A1979)/A1979)+1)**(1/1)-1;
  if A1980 > 0 then A8081=(((A1980-A1980)/A1980)+1)**(1/1)-1;
  if A1981 > 0 then A8182=(((A1981-A1981)/A1981)+1)**(1/1)-1;
  if A1982 > 0 then A8283=(((A1982-A1982)/A1982)+1)**(1/1)-1;
  if A1983 > 0 then A8384=(((A1983-A1983)/A1983)+1)**(1/1)-1;
  if A1984 > 0 then A8485=(((A1984-A1984)/A1984)+1)**(1/1)-1;
  if A1985 > 0 then A8586=(((A1985-A1985)/A1985)+1)**(1/1)-1;
```plaintext
if A1986 > 0 then A8687 = (((A1987 - A1986) / A1986) + 1)**(1/1) - 1;
if A1987 > 0 then A8788 = (((A1988 - A1987) / A1987) + 1)**(1/1) - 1;
if A1988 > 0 then A8889 = (((A1989 - A1988) / A1988) + 1)**(1/1) - 1;
if A1989 > 0 then A9090 = (((A1990 - A1989) / A1989) + 1)**(1/1) - 1;
if A1990 > 0 then A9191 = (((A1991 - A1990) / A1990) + 1)**(1/1) - 1;
if A1991 > 0 then A9292 = (((A1992 - A1991) / A1991) + 1)**(1/1) - 1;
if A1992 > 0 then A9293 = (((A1993 - A1992) / A1992) + 1)**(1/1) - 1;
if A1993 > 0 then A9394 = (((A1994 - A1993) / A1993) + 1)**(1/1) - 1;
if A1994 > 0 then A9495 = (((A1995 - A1994) / A1994) + 1)**(1/1) - 1;
if A1995 > 0 then A9596 = (((A1996 - A1995) / A1995) + 1)**(1/1) - 1;
if A1996 > 0 then A9697 = (((A1997 - A1996) / A1996) + 1)**(1/1) - 1;
if A1997 > 0 then A9798 = (((A1998 - A1997) / A1997) + 1)**(1/1) - 1;
if A1998 > 0 then A9899 = (((A1999 - A1998) / A1998) + 1)**(1/1) - 1;
if A1999 > 0 then A9900 = (((A2000 - A1999) / A1999) + 1)**(1/1) - 1;
if A2000 > 0 then A0001 = (((A2001 - A2000) / A2000) + 1)**(1/1) - 1;
if A2001 > 0 then A1010 = (((A2002 - A2001) / A2001) + 1)**(1/1) - 1;
if A2002 > 0 then A2010 = (((A2003 - A2002) / A2002) + 1)**(1/1) - 1;
if A2003 > 0 then A3010 = (((A2004 - A2003) / A2003) + 1)**(1/1) - 1;
if A2004 > 0 then A4010 = (((A2005 - A2004) / A2004) + 1)**(1/1) - 1;

* # Churches;
if N1961 > 0 then N6162 = (((N1962 - N1961) / N1961) + 1)**(1/1) - 1;
if N1962 > 0 then N6262 = (((N1962 - N1961) / N1962) + 1)**(1/6) - 1;
if N1963 > 0 then N6362 = (((N1963 - N1962) / N1962) + 1)**(1/6) - 1;
if N1964 > 0 then N6462 = (((N1964 - N1963) / N1963) + 1)**(1/6) - 1;
if N1965 > 0 then N6562 = (((N1965 - N1964) / N1964) + 1)**(1/6) - 1;
if N1966 > 0 then N6662 = (((N1966 - N1965) / N1965) + 1)**(1/6) - 1;
if N1967 > 0 then N6762 = (((N1967 - N1966) / N1966) + 1)**(1/6) - 1;
if N1968 > 0 then N6862 = (((N1968 - N1967) / N1967) + 1)**(1/6) - 1;
if N1969 > 0 then N6962 = (((N1969 - N1968) / N1968) + 1)**(1/6) - 1;
if N1970 > 0 then N7062 = (((N1970 - N1969) / N1969) + 1)**(1/6) - 1;
if N1971 > 0 then N7162 = (((N1971 - N1970) / N1970) + 1)**(1/6) - 1;
if N1972 > 0 then N7262 = (((N1972 - N1971) / N1971) + 1)**(1/6) - 1;
if N1973 > 0 then N7362 = (((N1973 - N1972) / N1972) + 1)**(1/6) - 1;
if N1974 > 0 then N7462 = (((N1974 - N1973) / N1973) + 1)**(1/6) - 1;
if N1975 > 0 then N7562 = (((N1975 - N1974) / N1974) + 1)**(1/6) - 1;
if N1976 > 0 then N7662 = (((N1976 - N1975) / N1975) + 1)**(1/6) - 1;
if N1977 > 0 then N7762 = (((N1977 - N1976) / N1976) + 1)**(1/6) - 1;
if N1978 > 0 then N7862 = (((N1978 - N1977) / N1977) + 1)**(1/6) - 1;
if N1979 > 0 then N7962 = (((N1979 - N1978) / N1978) + 1)**(1/6) - 1;
if N1980 > 0 then N8062 = (((N1980 - N1979) / N1979) + 1)**(1/6) - 1;
if N1981 > 0 then N8162 = (((N1981 - N1980) / N1980) + 1)**(1/6) - 1;
if N1982 > 0 then N8262 = (((N1982 - N1981) / N1981) + 1)**(1/6) - 1;
if N1983 > 0 then N8362 = (((N1983 - N1982) / N1982) + 1)**(1/6) - 1;
```
data region;
  set region;
  label

M6162 = '61-62 % gain Membership'
M6268 = '62-68 % gain Membership'
M6869 = '68-69 % gain Membership'
M6970 = '69-70 % gain Membership'
M7073 = '70-73 % gain Membership'
M7375 = '73-75 % gain Membership'
M7576 = '75-76 % gain Membership'
M7677 = '76-77 % gain Membership'
M7779 = '77-79 % gain Membership'
M7980 = '79-80 % gain Membership'
M8081 = '80-81 % gain Membership'
M8182 = '81-82 % gain Membership'
M8283 = '82-83 % gain Membership'
M8384 = '83-84 % gain Membership'
M8485 = '84-85 % gain Membership'
M8586 = '85-86 % gain Membership'
M8687 = '86-87 % gain Membership'
M8788 = '87-88 % gain Membership'
M8889 = '88-89 % gain Membership'
M8990 = '89-90 % gain Membership'
M9091 = '90-91 % gain Membership'
M9192 = '91-92 % gain Membership'
M9293 = '92-93 % gain Membership'
M9394 = '93-94 % gain Membership'
M9495 = '94-95 % gain Membership'
M9596 = '95-96 % gain Membership'
M9697 = '96-97 % gain Membership'
M9798 = '97-98 % gain Membership'
M9899 = '98-99 % gain Membership'
M9900 = '99-00 % gain Membership'
M0001 = '00-01 % gain Membership'
M0102 = '01-02 % gain Membership'
M0203 = '02-03 % gain Membership'
M0304 = '03-04 % gain Membership'
M0405 = '04-05 % gain Membership'

A6869 = '68-69 % gain Attendance'
A6977 = '69-77 % gain Attendance'
A7779 = '77-79 % gain Attendance'
A7980 = '79-80 % gain Attendance'
A8081 = '80-81 % gain Attendance'
A8182 = '81-82 % gain Attendance'
A8283 = '82-83 % gain Attendance'
A8384 = '83-84 % gain Attendance'
A8485 = '84-85 % gain Attendance'
A8586 = '85-86 % gain Attendance'
A8687 = '86-87 % gain Attendance'
A8788 = '87-88 % gain Attendance'
A8889 = '88-89 % gain Attendance'
A8990 = '89-90 % gain Attendance'
A9091 = '90-91 % gain Attendance'
A9192 = '91-92 % gain Attendance'
A9293 = '92-93 % gain Attendance'
A9394 = '93-94 % gain Attendance'
A9495 = '94-95 % gain Attendance'
A9596 = '95-96 % gain Attendance'
A9697 = '96-97 % gain Attendance'
A9798 = '97-98 % gain Attendance'
A9899 = '98-99 % gain Attendance'
A9900 = '99-00 % gain Attendance'
A0001 = '00-01 % gain Attendance'
A0102 = '01-02 % gain Attendance'
A0203 = '02-03 % gain Attendance'
A0304 = '03-04 % gain Attendance'
A0405 = '04-05 % gain Attendance'

N6162 = '61-62 % gain # Churches'
N6268 = '62-68 % gain # Churches'
N6869 = '68-69 % gain # Churches'
N6970 = '69-70 % gain # Churches'
N7073 = '70-73 % gain # Churches'
N7375 = '73-75 % gain # Churches'
N7576 = '75-76 % gain # Churches'
N7677 = '76-77 % gain # Churches'
N7779 = '77-79 % gain # Churches'
N7980 = '79-80 % gain # Churches'
N8081 = '80-81 % gain # Churches'
N8182 = '81-82 % gain # Churches'
N8283 = '82-83 % gain # Churches'
N8384 = '83-84 % gain # Churches'
N8485 = '84-85 % gain # Churches'
N8586 = '85-86 % gain # Churches'
N8687 = '86-87 % gain # Churches'
N8788 = '87-88 % gain # Churches'
N8889 = '88-89 % gain # Churches'
N8990 = '89-90 % gain # Churches'
N9091 = '90-91 % gain # Churches'
N9192 = '91-92 % gain # Churches'
N9293 = '92-93 % gain # Churches'
N9394 = '93-94 % gain # Churches'
N9495 = '94-95 % gain # Churches'
N9596 = '95-96 % gain # Churches'
N9697 = '96-97 % gain # Churches'
N9798 = '97-98 % gain # Churches'
N9899 = '98-99 % gain # Churches'
N9900 = '99-00 % gain # Churches'
N0001 = '00-01 % gain # Churches'
N0102 = '01-02 % gain # Churches'
N0203 = '02-03 % gain # Churches'
N0304 = '03-04 % gain # Churches'
N0405 = '04-05 % gain # Churches';

run;

* Title

title4 'EMMC Regional Membership Data';
proc print data=region;
format r region.;
run;
proc print data=region;
  var r
      M6162 M6268 M6869 M6970 M7073 M7375
      M7576 M7677 M7779 M7980 M8081 M8182 M8283
      M8384 M8485 M8586 M8687 M8788 M8889 M8990 M9091
      M9192 M9293 M9394 M9495 M9596 M9697 M9798 M9899
      M9900 M0001 M0102 M0203 M0304 M0405;
  format   M6162 M6268 M6869 M6970 M7073 M7375
            M7576 M7677 M7779 M7980 M8081 M8182 M8283
            M8384 M8485 M8586 M8687 M8788 M8889 M8990 M9091
            M9192 M9293 M9394 M9495 M9596 M9697 M9798 M9899
            M9900 M0001 M0102 M0203 M0304 M0405 6.3 r;
run;

title4 'EMMC Regional Attendance Data';
proc print data=region;
  format r region.;
run;

proc print data=region;
  var r
      A6869 A6977 A7779 A7980 A8081 A8182 A8283 A8384
      A8485 A8586 A8687 A8788 A8889 A8990 A9091 A9192
      A9293 A9394 A9495 A9596 A9697 A9798 A9899 A9900
      A0001 A0102 A0203 A0304 A0405;
  format   A6869 A6977 A7779 A7980 A8081 A8182 A8283 A8384
           A8485 A8586 A8687 A8788 A8889 A8990 A9091 A9192
           A9293 A9394 A9495 A9596 A9697 A9798 A9899 A9900
           A0001 A0102 A0203 A0304 A0405 6.3 r;
run;

title4 'EMMC Regional Number of Churches';
proc print data=region;
      N1979-N2005;
  format r region.;
run;

proc print data=region;
  var r
      N6162 N6268 N6869 N6970 N7073 N7375 N7576 N7677
      N7779 N7980 N8081 N8182 N8283 N8384 N8485 N8586
      N8687 N8788 N8889 N8990 N9091 N9192 N9293 N9394
      N9495 N9596 N9697 N9798 N9899 N9900 N0001 N0102
      N0203 N0304 N0405;
  format   N6162 N6268 N6869 N6970 N7073 N7375 N7576 N7677
           N7779 N7980 N8081 N8182 N8283 N8384 N8485 N8586
           N8687 N8788 N8889 N8990 N9091 N9192 N9293 N9394
           N9495 N9596 N9697 N9798 N9899 N9900 N0001 N0102
           N0203 N0304 N0405 6.3 r;
run;

data regionA;
set region;
where R=0;
keep A1961-A2005;
run;

data regionM;
set region;
where R=0;
keep M1961-M2005;
run;

data regionN;
set region;
where R=0;
keep N1961-N2005;
run;

*proc print data=regionN;run;

proc transpose data=regionA out=tregionA;
run;

proc transpose data=regionM out=tregionM;
run;

proc transpose data=regionN out=tregionN;
run;

data tregionA;
set tregionA;
Year=round(substr(_NAME_,2,4),1);
Attendance=Coll;
drop _NAME_ _LABEL_ COLL;
run;

data tregionM;
set tregionM;
Year=round(substr(_NAME_,2,4),1);
Membership=Coll;
drop _NAME_ _LABEL_ COLL;
run;

data tregionN;
set tregionN;
Year=round(substr(_NAME_,2,4),1);
Churches=Coll;
drop _NAME_ _LABEL_ COLL;
run;

*proc print data=tregionA;run;
*proc print data=tregionM;run;
*proc print data=tregionN;run;

data Tregion;
merge tregionA tregionM tregionN;
by Year;
run;
title4 'Annual Attendance, Membership, and Number of Churches';
proc print data=tregion;
run;

* Q: What kind of model would work here?
* Growth Rate Model;
title4 'Attendance model';
proc reg data=tregion;
  model Attendance= Year ;
  plot Attendance*Year;
  plot predicted.*residual.;
  plot nqq.*Attendance;
  plot npp.*Attendance;
run;
quit;

title4 'Membership model';
proc reg data=tregion;
  model Membership= Year ;
  plot Membership*Year;
  plot predicted.*residual.;
  plot nqq.*Membership;
  plot npp.*Membership;
run;
quit;

* EMC 10-year;
title3 'EMC 10-year Growth Rate';
proc means data=emc maxdec=2 fw=4 N noprint;
  var A2005;
  output out=MemcTotal sum(m1957 m1959 m1960 m1964-m1966 m1969-m2005)
    =m1957 m1959 m1960 m1964-m1966 m1969-m2005;
  output out=NemcTotal n(m1957 m1959 m1960 m1964-m1966 m1969-m1992 
    N2005;
run;
proc means data=emc maxdec=2 fw=4 N noprint;
  var A2005;
  by region;
  output out=Memcregion sum(m1957 m1959 m1960 m1964-m1966 m1969-m2003)
    =m1957 m1959 m1960 m1964-m1966 m1969-m2003;
  output out=Nemcregion n(m1957 m1959 m1960 m1964-m1966 m1969-m1992 
    N2005;
run;
data Aemcregion;
  set Aemcregion AemcTotal;
  if region='' then region='Total';
run;

data Memcregion;
  set Memcregion MemcTotal;
  if region='' then region='Total';
run;

data Nemcregion;
  set Nemcregion NemcTotal;
  if region='' then region='Total';
run;
proc sort data=Aemcregion; by region; run;
proc sort data=Memcregion; by region; run;
proc sort data=Nemcregion; by region; run;
data emcregion;
  merge Aemcregion Memcregion Nemcregion;
  by region;
run;

data emcregion sasdata.emcregion;
  set emcregion;
  if M1991 > 0 then M9101=(M2001-M1991)/M1991; else M9101=.;
  if A1993 > 0 then A9303=(A2003-A1993)/A1993; else A9303=.;
  if N1991 > 0 then N9101=(N2001-N1991)/N1991; else N9101=.;
run;
title4 '10-year EMC Regional and Overall Growth Rate (1991 to 2001)';
proc print data=emcregion;
  format M9101 A9303 N9101 5.2;
run;
* EMMC 1991 to 2001 10 year increase;
title3 'EMMC 1991 to 2001 10-year Increase';
data region sasdata.region;
  set region;
  if M1991 > 0 then M9101=(M2001-M1991)/M1991; else M9101=.;
  if A1991 > 0 then A9101=(A2001-A1991)/A1991; else A9101=.;
  if N1991 > 0 then N9101=(N2001-N1991)/N1991; else N9101=.;
  label M9101='10-yr % gain Membership' A9101='10-yr % gain Attendance' N9101='10-yr % gain # Churches';
run;
title4 '10-year Regional and Overall Growth Rate (1991 to 2001)';
proc print data=region;
  format M9101 A9101 N9101 5.2 r region.
run;

* Five-year growth rates - ;
title3 'Individual Church Five-year Rates - Growth Status';
data emmc2;
  set emmc2;
  if DisfunctB ne 1;
    NPlants=0; if A2005D1>0 then NPlants=NPlants+1;if A2005D2>0 then NPlants=NPlants+1;if A2005D3>0 then NPlants=NPlants+1;if A2005D4>0 then NPlants=NPlants+1;
    A2005P=sum(A2005D1,A2005D2,A2005D3,A2005D4); if A2005P=. then A2005P=0;
    if M2000 > 0 then M0005=(M2005-M2000)/M2000; else M0005=.;
    if A2000 > 0 then A0005=(A2005-A2000)/A2000; else A0005=.;
    if A2000 > 0 then AP0005=(A2005+A2005P-A2000)/A2000; else AP0005=.;
    G=A0005;
    GP=AP0005;
    Size=A2000;
label
    M0005='5-yr % gain Membership (2000-2005)'
    A0005='5-yr % gain Attendance (2000-2005)'
    AP0005='5-yr % gain Attendance inc plants (2000-2005)'
    G = '% Attendance gain 2000 to 2005'
    GP = '% Attendance gain (inc plants) 2000-05'
    Size='EMMC Records Attendance 2000';
run;

proc sort data=emmc2;
  by A0005 r ChurchId;
run;

proc print data=emmc2;
  var R ChurchId StartYear EndYear D1-D4 A2005D1-A2005D4
  format M0005 A0005 5.2 r region. G Growth.
run;

proc freq data=emmc2;
  tables A2000 G GP R / list missing;
run;
data SasData.emmc2;
  set emmc2;
run;
* EMMC Growth Patterns;
* Import Census Data;
libname SasData 'C:\Shared Documents and Such\Education\McMaster School\Thesis Project\Data\SASData';

options nodate pageno=1;
options pageno=1 pagesize=52 linesize=90 date;

title1 'Masters Project: EMMC Growth Data';
title2 'EMMC Pastors and Leaders Survey Data';

* Import Church Neighbourhood Data from National Censuses;
title3 'Import Pastors Data';

proc import datafile="C:\Shared Documents and Such\Education\McMaster School\Thesis Project\Data\Community Profile of EMMC Churches 2006Oct24.xls";
  out=census replace;
  sheet='data';
run;

data census;
  set census;
  if ChurchId=33 then ChurchId=23; if ChurchId=35 then ChurchId=45;
  * EMMC General Board Proposal;
    Region=round((ChurchId-5)/10);
  
  label
    ChurchId = 'Church Identifier'
    RegionLevel = 'Region Level'
    RegionType = 'Region Type'
    RegionName = 'Region Name'
    PPopulation = 'Population in 2001'
    PPop9101 = '1996 to 2001 population change (%)'
    PDensity = 'Population density per square kilometre'
    Area = 'Land area (square km)'
    PMalePer = '% Male'
    PAgeMed = 'Median age of the population'
    PLangFrOnly = '% of pop who first learned French'
    PLang0 = '% of pop who first learned Belize:
      Creole/4 Garifuna'
    PLangChHin = '% of pop who first learned Belize: Chinese or Hindi'
    PLangCreole = '% of pop who first learned Belize: 2 Creole/4 Garifuna'
    PLangEng = '% of pop who first learned English'
    PLangGer = '% of pop who first learned Belize: German'
    PLangMaya = '% of pop who first learned Belize: Maya
    languages'
    PLangSp = '% of pop who first learned Belize:
      Spanish'
    PLangOther = '% of pop who first learned languages other'
    PLangUnknown = '% of pop who first learned languages Unknown'

0 ??'

run;
PMovedPrv1Yr=' % of pop 1 yr+ in diff prov/ter or country 1 yr ago'
PMovedPrv5Yr=' % of pop 5 years+ in diff prov/ter or country 5 yrs ago'
FForeignBorn=' % of population that is Foreign-born'
PImmigBef91 = ' % of pop that has Immigrated before 1991'
PImmig9101 = ' % of pop that has Immigrated between 1991 and 2001'
NNonPermRes = ' % of pop that is Non-permanent residents'
PRaceAborig = ' % of Pop has Aboriginal identity -Canada has 2 questions'
PRaceVisMin = ' % of pop that is Visible minority'
PRaceBlack = ' % of pop that is Visible minority Black'
PRaceCreole = ' % of pop that is Creole'
PRaceLatin = ' % of pop that is Visible minority Latin American'
PRaceChin = ' % of pop that is Visible minority Chinese'
PRaceFil = ' % of pop that is Visible minority Filipino'
PRaceMennonite = ' % of pop that is Mennonite race'
PRaceSEAsian = ' % of pop that is Visible minority Southeast Asian'
PRaceArab = ' % of pop that is Visible minority Arab'
PRaceAsian = ' % of pop that is Visible minority Asian'
PRaceWhite = ' % of pop that is NOT Aboriginal or Visible minority'
PRaceUnkn = ' % of pop that is of Unknown race'
PRelCath = ' % of pop that is Catholic religion'
PRelOrth = ' % of pop that is Orthodox'
PRelProtest = ' % of pop that is Protestant'
PRelAng = ' % of pop that is Anglican'
PRelBap = ' % of pop that is Baptist'
PRelMeth = ' % of pop that is Methodist'
PRelPent = ' % of pop that is Pentecostal'
PRelSA = ' % of pop that is Salvation Army'
PRelNaz = ' % of pop that is Nazarine'
PRelMennonite = ' % of pop that is Mennonite'
PRelMor = ' % of pop that is Mormon'
PRel7DayA = ' % of pop that is Seventh Day Adventist'
PRelJW = ' % of pop that is Jehovahs Witnesses'
PRelOthChr = ' % of pop that is Christian, n.i.e.(other)'
PRelMuslim = ' % of pop that is Muslim'
PRelJew = ' % of pop that is Jewish'
PRelBud = ' % of pop that is Buddhist'
PRelHin = ' % of pop that is Hindu'
PRelSikh = % of pop that is Sikh
PRelBah = % of pop that is Bahai
PRelEast = % of pop that is Eastern religions
PRelOther = % of pop that is Other religions
PRelUnknown = % of pop that is religion Unknown
PRelNone = % of pop that is No religion
PEduFT = % of pop 15 yrs+ school full time
PEduPartT = % of pop 15 yrs+ school part time
PAge2034 = % of pop aged 20-34
PEdu2034NoHS = % of pop aged 20-34 w < high school
PEdu2034HS = % of pop aged 20-34 w high school
PEdu2034TC = % of pop aged 20-34 w trades diploma
PEdu2034CD = % of pop aged 20-34 w college diploma
PEdu2034UD = % of pop aged 20-34 w university degree
PAge3544 = % of pop aged 35-44
PEdu3544NoHS = % of pop aged 35-44 w < high school
PEdu3544HS = % of pop aged 35-44 w high school
PEdu3544TC = % of pop aged 35-44 w trades diploma
PEdu3544CD = % of pop aged 35-44 w college diploma
PEdu3544UD = % of pop aged 35-44 w university degree
PPage4564 = % of pop aged 45-64
PEdu4564NoHS = % of pop aged 45-64 w < high school
PEdu4564HS = % of pop aged 45-64 w high school
PEdu4564TC = % of pop aged 45-64 w trades diploma
PEdu4564CD = % of pop aged 45-64 w college diploma
PEdu4564UD = % of pop aged 45-64 w university degree
PEduUnknown = % of pop unknown education
PEduNoHS = % of pop w < high school
PEduHS = % of pop w high school
PEduCD = % of pop w trade diploma
PEduUD = % of pop w university degree
PEincMed = Median total income of persons 15 years+ ($)
PEmpTransit = % of employed lab force 15+ w transit
PEmpWalk = % of employed lab force 15+ w Walk/Bicycle
PEmpLabForce = % of the pop age 15 + Participating in labour force
PEmplRate = % of pop aged 15 and over that are Employed
PEmpUnempR = 'Unemployment rate of labour force aged 15 and over'
PPage15Plus = % of the pop ages 15 and over'
PMarNo = % of pop no marriage (Canada of Age 15+)
PMarComLaw = % of pop with common law marriage (Canada of Age 15+)
PMarSingle = % of pop single (Canada of Age 15+)
PMarMarried = % of pop with marriage (Canada of Age 15+)
PMarSep = % of pop separated (Canada of Age 15+)
PMarDiv = % of pop divorced (Canada of Age 15+)
PMarWid = % of pop widowed (Canada of Age 15+)
PMarVisiting = % of pop with visiting partner (Belize ?)
PMarUnk = % of pop with unknown Married status
Dwellings = 'Total private dwellings'
DwelRented = % of dwellings that were rented
Dwellings that were constructed 1991-2001'

Dwelling Value = 'Average value of dwelling ($)'
HH Relatives = '% of household that are 1-person households'
HH Median Income 2000 ($) = All

HH Relatives
HH Median Income 2000 ($) = 1-person
HH Relatives
HH Median Income 2000 ($) = 2+ persons

HH Average = 'Average household size'
HH Average Family Size = 'Average family size'
HH Total = 'Total households'
HH Families = '% of households that are families'
HH Age 65+ = '% of households with householder 65 years and over'
HH Unmarried = '% of households with unmarried partner'

HH Married = '% of households that are married couples'
HH Common-Law = '% of households that are common-law couple families'
HH Lone Parent = '% of families that are lone parent
HH Male Lone Parent = '% of families that are male lone parent families'
HH Median Income 2000 ($) = All

HH Median Income 2000 ($) = Couple
HH Median Income 2000 ($) = Lone-parent family

proc freq data = census;
  table ChurchId RegionLevel RegionType RegionName
    PP Population PPop9101 PDensity Area PMalePer PAgeMed
    PLangFrOnly PLang0 PLangChHin PLangCreole PLangEng
    PLangGer PLangMaya
    PLangSp PLangOther PLangUnknown PMovedPrev1Yr PMovedPrev5Yr
    PForeignBorn PImmigBef91 PImmig9101 PNonPermRes
    Race Aborig
    RaceVisMin RaceBlack RaceCreole RaceLatin RaceChin
    RaceFil RaceMenno RaceSEA RaceEIndian RaceArab
    RaceW RaceV RaceK Kor RaceJap RaceO Asian
    RaceOther RaceMul RaceWhite RaceUnkn
    Rel Cath RelOrth RelProtest RelAng RelBap RelMeth
    Rel Pent
    RelSA RelNaz RelMenno RelMor Rel17DayA Rel17
    Rel East
    RelOther RelUnknown RelNone
PEduFT PEduPartT PAge2034 PEdu2034NoHS PEdu2034HS PEdu2034TC PEdu2034CD
run;

list missing;
format ChurchId RegionLevel PPopulation PPop9101 PDensity Area PMalePer PAgeMed PLangFrOnly PLang0 PLangChIn PLangCreole PlangEng PLangGer PLangMaya PLangSp PLangOther PLangUnknown PMovedPrv1Yr PMovedPrv5Yr PForeignBorn PImmigBef91 PImmig9101 PNonPermRes PRaceAborig PRaceVisMin PRaceBlack PRaceCreole PRaceLatin PRaceChin PRaceChin PRaceSAsian PRaceFil PRaceMenno PRaceSEAsian PRaceEIndian PRaceArab PRaceAsian PRaceWAsian PRaceViet PRaceKor PRaceJap PRaceOAsian PRacePac PRaceOther PRaceMult PRaceWhite PRaceUnkn PRelCath PRelOrth PRelProtest PRelAng PRelBap PRelMeth PRelPent PRelSA PRelNaz PRelMenno PRelMor PRel17DayA PRel1JW PRel1OthChr PRelMuslim PRelJew PRelBud PRelHin PRelSikh PRelBah PRelEast PRelOther PRelUnknown PRelNone PEduFT PEduPartT PAge2034 PEdedu2034NoHS PEdu2034HS PEdu2034TC PEdu2034CD PEdu2034UD PAge3544 PEdu3544NoHS PEdu3544HS PEdu3544TC PEdu3544CD PEdu3544UD PEduUnknownu PEduNoHS PEduHS PEduCD PEduUD PIncMed PEmpTransit PEmpWalk PEmpLabForce PEmplRate PEmpUnempR PAge15Plus PMarNo PMarComLaw PMarSingle PMarMarried PMarDiv PMarWid PMarVisiting PMarUnk Dwellings DwelRented Dwel19101Blt DwelAveValue H1person H1incMed H1PerIncMed H2PerIncMed HSizeAve FSizeAve Hhld HFam HAge65plus HUnmF HMarc FCLaw FLoneP FMLoneP FIncAve FCoupIncAve FLonePIncAve

run;

RegionType RegionName $missing.;
data census;
  set census;

  PEd2034HS=sum(PEd2034HS, PEd2034TC, PEd2034CD, PEd2034UD);
PEd3544HS=sum(PEd3544HS, PEd3544TC, PEd3544CD, PEd3544UD);
PEd4564HS=sum(PEd4564HS, PEd4564TC, PEd4564CD, PEd4564UD);
PEdHS=sum(PEdHS, PEdTC, PEdCD, PEdUD);

  PEd2034CDU=sum(PEd2034CD, PEd2034UD);
PEd3544CDU=sum(PEd3544CD, PEd3544UD);
PEd4564CDU=sum(PEd4564CD, PEd4564UD);
PEdCDU=sum(PEdCD, PEdUD);

  *PEduNoHS PEduHS PEeduTC PEeduCD PEeduUD;
  label PEd2034HS = ' % of pop aged 20-34 with high school or more'
    PEd3544HS = ' % of pop aged 35-44 with high school or more'
    PEd4564HS = ' % of pop aged 45-64 with high school or more'
    PEdHS = ' % of pop with high school or more'
    PEd2034CDU = ' % of pop aged 20-34 w college or university'
    PEd3544CDU = ' % of pop aged 35-44 w college or university'
    PEd4564CDU = ' % of pop aged 45-64 w college or university'
    PEdCDU = ' % of pop with college or university';

run;

title4 'Census Demographics';
proc means data=census maxdec=1 fw=4 n missing median mean min max;
  var PEdHS PEd2034HS PEd3544HS PEd4564HS
       PEdCDU PEd2034CDU PEd3544CDU PEd4564CDU
       PEeduUD PEedu2034UD PEedu3544UD PEedu4564UD;
run;

data SasData.census;
  set census;
run;
* EMMC Growth Patterns;
* Import Surveys;
libname SasData 'C:\Shared Documents and Such\Education\McMaster School\Thesis Project\Data\SASData';

options nodate pageno=1;
options pageno=1 pagesize=52 linesize=90 date;

title1 'Masters Project: EMMC Growth Data';
title2 'EMMC Pastors and Leaders Survey Data';

* Import Pastors Data;
title3 'Import Pastors Data';

proc import datafile="C:\Shared Documents and Such\Education\McMaster School\Thesis Project\Data\pastors and leaders data 2006Nov01 total.xls"
  out=pastorslist replace;
sheet='pastorslist';
run;

proc import datafile="C:\Shared Documents and Such\Education\McMaster School\Thesis Project\Data\pastors and leaders data 2006Nov01 total.xls"
  out=pastors1 replace;
sheet='pastors1';
run;

proc import datafile="C:\Shared Documents and Such\Education\McMaster School\Thesis Project\Data\pastors and leaders data 2006Nov01 total.xls"
  out=pastors2 replace;
sheet='pastors2';
run;

data pastorslist; set pastorslist;
  if ChurchId=33 then ChurchId=23; if ChurchId=35 then ChurchId=45;
  *EMMC General Board Proposal;
    Region=round((ChurchId-5)/10);
run;

data pastors1; set pastors1;
  if ChurchId=33 then ChurchId=23; if ChurchId=35 then ChurchId=45;
  *EMMC General Board Proposal;
run;

data pastors2; set pastors2;
  if ChurchId=33 then ChurchId=23; if ChurchId=35 then ChurchId=45;
  *EMMC General Board Proposal;
run;

proc sort data=pastorslist;
  by ChurchId;
run;
**PROC SORT**
```r
proc sort data=pastors1;
   by ChurchId;
run;
```
```r
proc sort data=pastors2;
   by ChurchId;
run;
```

* Import Leaders Data;
**title3 'Import Leaders Data';**
```r
proc import datafile="C:\Shared Documents and Such\Education\McMaster School\Thesis Project\Data\pastors and leaders data 2006Nov01 total.xls"
   out=leaderslist replace;
   sheet='leaderslist';
run;
```
```r
proc import datafile="C:\Shared Documents and Such\Education\McMaster School\Thesis Project\Data\pastors and leaders data 2006Nov01 total.xls"
   out=leaders1 replace;
   sheet='leaders1';
run;
```
```r
proc import datafile="C:\Shared Documents and Such\Education\McMaster School\Thesis Project\Data\pastors and leaders data 2006Nov01 total.xls"
   out=leaders2 replace;
   sheet='leaders2';
run;
```
```r
data leaderslist; set leaderslist;
   if ChurchId=33 then ChurchId=23; if ChurchId=35 then ChurchId=45;
   *EMMC General Board Proposal;
   Region=round((ChurchId-5)/10);
run;
```
```r
proc sort data=leaderslist;
   by LeaderId;
run;
```
```r
proc sort data=leaders1;
   by LeaderId;
run;
```
```r
proc sort data=leaders2;
   by LeaderId;
run;
```

*Response Rate;
title3 'Response Rate';
proc sort data=pastorslist; by ChurchId; run;
data pastors;
merge pastorslist (in=ps keep=Region ChurchId EligibleB SentD)
pastors1 (in=p1)
pastors2 (in=p2);
by ChurchId;
if ps;
if ChurchId=99 then delete;
label ChurchId='Church Id'
ReceivedD='Received date'
EnterD  = 'Date Entered'
EnterId   = 'Enterer Id: 1-Eddy, 2-Yolanda, 3-Susie,'...
p01   = ' # people that do not attend weekly, attend
monthly'
p02a = '2004 average worship attendees'
p02b = '2005 average worship attendees'
p03a = 'membership December 31, 2004'
p03b = 'membership December 31, 2005'
p04a = 'Non-Mennonite desendent members end 2004'
p04b = 'Non-Mennonite descendent members end 2005'
p05   = ' % members attended worship regularly 3 mth'
p06a = 'Members Total NOT attending regularly'
p06b = 'Members not attending due to Illness or
immobility'
p06c = 'Members not attending due to Study away from home'
p06d = 'Members not attending due to Mission/church
planting'
p07a = 'In last ten years, Church plant 1'
p07b = 'In last ten years, Church plant 2'
p07c = 'In last ten years, Church plant 3'
p08a1 = '2005 people under age 18 added by Baptism'
p08a2 = '2005 people age 18-34 added by Baptism'
p08a3 = '2005 people age 35-54 added by Baptism'
p08a4 = '2005 people age 55+ added by Baptism'
p08b1 = '2005 people < age 18 added by Transfer from local
church'
p08b2 = '2005 people age 18-34 added by Transfer from local
church'
p08b3 = '2005 people age 35-54 added by Transfer from local
church'
p08b4 = '2005 people age 55+ added by Transfer from local
church'
p08c1 = '2005 people < age 18 added by Transfer from
distant church'
p08c2 = '2005 people age 18-34 added by Transfer from
distant church'
p08c3 = '2005 people age 35-54 added by Transfer from
distant church'
p08c4 = '2005 people age 55+ added by Transfer from distant
church'
p09a1 = '2005 Members transferred from other Local EMC churches'
p09a2 = '2005 Members transferred from other Distant EMC churches'
p09b1 = '2005 Members transferred from Local EMC churches'
2005 Members transferred from Distant EMC
2005 Members transferred from Local Old Colony
2005 Members transferred from Distant Old Colony
2005 Members transferred from Local Reinlander
2005 Members transferred from Distant Reinlander
2005 Members transferred from Local Sommerfelder
2005 Members transferred from Distant Sommerfelder
2005 Members transferred from Local Kleine
2005 Members transferred from Distant Kleine
2005 Members transferred from Local Bergthaler
2005 Members transferred from Distant Bergthaler
2005 Members transferred from Local Mennonite Brethren
2005 Members transferred from Distant Mennonite Brethren
2005 Members transferred from Local General Conference
2005 Members transferred from Distant General Conference
2005 Members transferred from other Local Mennonite churches
2005 Members transferred from other Distant Mennonite churches
2005 Members transferred from Local non-Mennonite Evan churches
2005 Members transferred from other Local churches
2005 Members transferred from other Distant churches
2005 people under age 18 who were transferred to local churches
2005 people age 18-34 who were transferred to local churches
2005 people age 35-54 who were transferred to local churches
2005 people age 55+ who were transferred to local churches
2005 people under age 18 who were transferred to distant churches
2005 people age 18-34 who were transferred to distant churches
2005 people age 35-54 who were transferred to distant churches
2005 people age 55+ who were transferred to distant churches
distant churches' membership ' p10b2 = '2005 people age 18-34 who were transferred to
distant churches' membership ' p10b3 = '2005 people age 35-54 who were transferred to
distant churches' membership ' p10b4 = '2005 people age 55+ who were transferred to
distant churches' membership ' p10c1 = '2005 people under age 18 who died'
distant churches' membership ' p10c2 = '2005 people age 18-34 who died'
distant churches' membership ' p10c3 = '2005 people age 35-54 who died'
distant churches' membership ' p10c4 = '2005 people age 55+ who died'
distant churches' membership ' p10d1 = '2005 people under age 18 who Withdrew their
distant churches' membership ' p10d2 = '2005 people age 18-34 who Withdrew their
distant churches' membership ' p10d3 = '2005 people age 35-54 who Withdrew their
distant churches' membership ' p10d4 = '2005 people age 55+ who Withdrew their membership'
distant churches' membership ' p10e1 = '2005 people under age 18 who dismissed from
distant churches' membership ' p10e2 = '2005 people age 18-34 who dismissed from
distant churches' membership ' p10e3 = '2005 people age 35-54 who dismissed from
distant churches' membership ' p10e4 = '2005 people age 55+ who dismissed from membership'
distant churches' membership ' p11a1 = '2005 Members transferred to other Local EMMC
distant churches' membership ' p11a2 = '2005 Members transferred to other Distant EMMC
distant churches' membership ' p11b1 = '2005 Members transferred to Local EMC churches'
distant churches' membership ' p11b2 = '2005 Members transferred to Distant EMC churches'
distant churches' membership ' p11c1 = '2005 Members transferred to Local Old Colony
distant churches' membership ' p11c2 = '2005 Members transferred to Distant Old Colony
distant churches' membership ' p11d1 = '2005 Members transferred to Local Reinlander
distant churches' membership ' p11d2 = '2005 Members transferred to Distant Reinlander
distant churches' membership ' p11e1 = '2005 Members transferred to Local Sommerfelder
distant churches' membership ' p11e2 = '2005 Members transferred to Distant Sommerfelder
distant churches' membership ' p11f1 = '2005 Members transferred to Local Kleine Gemeinde
distant churches' membership ' p11f2 = '2005 Members transferred to Distant Kleine Gemeinde
distant churches' membership ' p11g1 = '2005 Members transferred to Local Bergthaler
distant churches' membership ' p11g2 = '2005 Members transferred to Distant Bergthaler
distant churches' membership ' p11h1 = '2005 Members transferred to Local Mennonite
Brethren churches' membership ' p11h2 = '2005 Members transferred to Distant Mennonite
Brethren churches' membership ' p11i1 = '2005 Members transferred to Local Brethren in Christ ch'
p11i2 = '2005 Members transferred to Distant Brethren in Christ ch'
p11j1 = '2005 Members transferred to Local General Conference ch'
p11j2 = '2005 Members transferred to Distant General Conference ch'
p11k1 = '2005 Members transferred to other Local Mennonite Church ch'
p11k2 = '2005 Members transferred to other Distant Mennonite Church'
p11l1 = '2005 Members transferred to Local non-Mennonite Evan ch'
p11l2 = '2005 Members transferred to Distant non-Mennonite Evan ch'
p11m1 = '2005 Members transferred to other Local churches'
p11m2 = '2005 Members transferred to other Distant churches'
p12a = 'Method of selecting Deacons'
p12b = 'Method of selecting Elders'
p12c = 'Method of selecting Sunday school superintendent'
p12d = 'Method of selecting Treasurer'
p12e = 'Method of selecting Congregational chair'
p12f = 'Method of selecting Lay ministers / pastors'
p12g = 'Method of selecting Sunday school teachers'
p12h = 'Method of selecting Bible study leaders'
p12i = 'Method of selecting Missions / outreach chair'
p12j = 'Method of selecting Worship leaders'
p12k = 'Method of selecting Other key leaders'
p12kOther = 'Other position'
p13 = 'How important is it to be a member to serve in your church?'
p14 = 'How important is it to be a member to lead in your church?'
p15a = 'Organizational structure contribution to inc in att 5 yrs'
p15b = 'Building expansion contribution to att in last 5 yrs'
p15c = 'Building improvements contribution att in last 5 yrs'
p15d = 'Handicap accessibility contribution att in last 5 yrs'
p15e = 'Pavement or canopy contribution att in last 5 yrs'
p15f = 'Identified target group contribution att in last 5 yrs'
p15g = 'Pastor contribution to increase in att in last 5 yrs'
p15h = 'New vision contribution to 5 yr increase in att'
p15i = 'Small groups contribution to 5 yr increase in att'
p15j = 'Worship Service contribution to 5 yr increase in att'
p15k = 'Children ministries contribution to 5 yr increase in att'
p15l = 'Teaching contribution to 5 yr increase in att'
p15m = 'Prayer contribution to 5 yr increase in att'
p15n = 'Revival contribution to 5 yr increase in att'
<table>
<thead>
<tr>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 3</th>
<th>Column 4</th>
<th>Column 5</th>
<th>Column 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>p15o</td>
<td>'Reconciliation contribution to 5 yr increase in att'</td>
<td>p15p</td>
<td>'Discipleship contribution to 5 yr increase in att'</td>
<td>p15q</td>
<td>'Missions contribution to 5 yr increase in att'</td>
</tr>
<tr>
<td>p15s</td>
<td>'Care to community contribution to 5 yr increase in att'</td>
<td>p15t</td>
<td>'Outreach to community contribution to 5 yr increase in att'</td>
<td>p15u</td>
<td>'Church plant contribution to 5 yr increase in att'</td>
</tr>
<tr>
<td>p15wOther</td>
<td>'Other 2'</td>
<td>p16</td>
<td>'Where do you meet for your weekly worship services?'</td>
<td>p17</td>
<td>'Use of your facilities by Other churches'</td>
</tr>
<tr>
<td>p17b</td>
<td>'Use of your facilities by Families funerals'</td>
<td>p17c</td>
<td>'Use of your facilities by Alcoholics Anomalous'</td>
<td>p17d</td>
<td>'Use of your facilities by Community moms program'</td>
</tr>
<tr>
<td>p17f</td>
<td>'Use of your facilities by MCC meetings'</td>
<td>p17g</td>
<td>'Use of your facilities by Other'</td>
<td>p17gOther</td>
<td>'Use of your facilities by Other'</td>
</tr>
<tr>
<td>p19a1</td>
<td>'Day of week of service 1'</td>
<td>p19a2</td>
<td>'Time of service 1'</td>
<td>p19a3</td>
<td>'Language of service 1'</td>
</tr>
<tr>
<td>p19a5</td>
<td>'Capacity of service 1'</td>
<td>p19a6</td>
<td>'Start Date of service 1'</td>
<td>p19b1</td>
<td>'Day of week of service 2'</td>
</tr>
<tr>
<td>p19b3</td>
<td>'Language of service 2'</td>
<td>p19b4</td>
<td>'Target group of service 2'</td>
<td>p19b5</td>
<td>'Capacity of service 2'</td>
</tr>
<tr>
<td>p19b7</td>
<td>'Day of week of service 3'</td>
<td>p19c1</td>
<td>'Time of service 3'</td>
<td>p19c2</td>
<td>'Language of service 3'</td>
</tr>
<tr>
<td>p19c4</td>
<td>'Capacity of service 3'</td>
<td>p19c5</td>
<td>'Start Date of service 3'</td>
<td>p19d1</td>
<td>'Day of week of service 4'</td>
</tr>
<tr>
<td>p19d3</td>
<td>'Language of service 4'</td>
<td>p19d4</td>
<td>'Target group of service 4'</td>
<td>p19d5</td>
<td>'Capacity of service 4'</td>
</tr>
<tr>
<td>p20</td>
<td>'# small groups which meet least twice mth does church have?'</td>
<td>p21a1</td>
<td>'# children (age 2-13) participate in Sunday School'</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
p21a2 = '# youth (14-17) participate in Sunday School'
p21a3 = '# adults (18 and up) participate in Sunday School'
p21b1 = '# children (age 2-13) participate in SS but not worship'
p21b2 = '# youth (14-17) participate in SS but not worship'
p21b3 = '# adults (18 and up) participate in SS but not worship'
p21c1 = '# children (age 2-13) participate in Bible study'
p21c2 = '# youth (14-17) participate in Bible study'
p21c3 = '# adults (18 and up) participate in Bible study'
p21d1 = '# children (age 2-13) participate in Small group/Bible study'
p21d2 = '# youth (14-17) participate in Small group/Bible study'
p21d3 = '# adults (18 and up) participate in Small group/Bible study'
p21e1 = '# children (age 2-13) participate in Worship but not SS'
p21e2 = '# youth (14-17) participate in Worship but not SS'
p21e3 = '# adults (18 and up) participate in Worship but not SS'

College'
p23b = '# church attendees attended Bethany Bible Institute'
p23c = '# church attendees attended Steinrich Bible School'
p23d = '# church attendees attended Briercrest Bible College'
p23e = '# church attendees attended Providence College/Seminary'
p23f = '# church attendees attended Winnipeg College/Seminary'
p23g = '# church attendees attended Tyndale Bible College/Seminary'
p23h = '# church attendees attended Ontario Bible College/Seminary'
p23i = '# church attendees attended Prairie Bible Institute'
p23j = '# church attendees attended Emanuel Bible College'
p23k = '# church attendees attended Heritage Bible College'
p23l = '# church attendees attended Rio Grande Bible Institute'
p23m = '# church attendees attended Goshen College'
p23n = '# church attendees attended Canadian Mennonite University'
p23o = '# church attendees attended Evangelical Anabaptist Seminary'
p23p = '# church attendees attended Other - Specify'
p23pOther = 'Other school attended'
p24a = 'Month of Fiscal year start'
p24b = 'Month of Annual general meeting'
p24c = 'Month of Start of ministry terms'
p24d = 'Month of Final budget adopted'
"Month of Preliminary budget adopted (if you have one)"

"Month of Election of board or council members"

"Who Hires the senior pastor"

"Who Approves budget"

"Who Develop budget"

"Who Starts a new ministry"

"Who Oversees non-senior pastors"

"Who Contract lawn care"

"body that sets the ministry direction of your church"

"body also lead in spiritual matters or there is a 2nd group"

"We have a Board: 1,2"

"We have a Council: 1,2"

"We have a Ministerial: 1,2"

"We have a Other leadership body: 1,2"

"Name of other leadership body"

"Max # of consecutive yrs that voting members can serve: 1,2"

"Strengths and weaknesses of board terms 1"

"Strengths and weaknesses of board terms 2"

"Strengths and weaknesses of board terms 3"

"Prevents monopoly of power"

"Advantages board of Term Limits"

"Allows new ideas/independent thought"

"Advantages of board Term Limits"

"Developes new leaders"

"Advantages of Term Limits of Board members"

"Allows unsuit people a way out"

"Advantages of board Term Limits"

"Encourages ownership"

"Advantages of board Term Limits"

"Allows rest"

"Advantages of Term Limits of Board members"

"Allows gifted outsiders in"

"Advantages of board Term Limits"

"Prevents coasting"

"Advantages of board Term Limits"

"More willing to commit"

"Advantages of board Term Limits"

"Consistency"

"Advantages of No Term Limits of Board members"

"Keeps gifted, committed leaders"

"Advantages of No board Term Limits"

"Time to learn"

"Advantages of No Term Limits of Board members"

"Members hard to replace"

"Advantages of No board Term Limits"

"Term church organizational structure been in place?: 1-4"

"Does your church have ministry department heads?"

"Church planting activity in next 5 years - Actively planning: 1,2"

"Church planting activity in next 5 years - Chosen a location: 1,2"
Church planting activity in next 5 yrs - Targeted a people group: 1, 2

Selected ONE particular Spiritual gifts assessment tool: 1, 2

Which Spiritual gifts assessment tool 1-4

Conducted a Natural Church Development evaluation: 1, 2

Most recent NCD Survey Date

Most recent NCD Score - Overall

Most recent NCD Score - Empowering Leadership

Most recent NCD Score - Gift-oriented Ministry

Most recent NCD Score - Passionate Spirituality

Most recent NCD Score - Functional Structures

Most recent NCD Score - Inspiring Worship Services'

Most recent NCD Score - Holistic Small Groups'

Most recent NCD Score - Need-oriented Evangelism'

Most recent NCD Score - Loving Relationships'

Second most recent NCD Score - Overall

Second most recent NCD Score - Empowering Leadership

Second most recent NCD Score - Gift-oriented Ministry

Second most recent NCD Score - Passionate Spirituality

Second most recent NCD Score - Functional Structures

Second most recent NCD Score - Inspiring Worship Services'

Second most recent NCD Score - Holistic Small Groups'

Second most recent NCD Score - Need-oriented Evangelism'

Second most recent NCD Score - Loving Relationships'

Third most recent NCD Survey Date

Third most recent NCD Score - Overall

Third most recent NCD Score - Empowering Leadership

Third most recent NCD Score - Gift-oriented Ministry

Third most recent NCD Score - Passionate Spirituality

Third most recent NCD Score - Functional Structures

Third most recent NCD Score - Inspiring Worship Services'

Third most recent NCD Score - Holistic Small Groups'

Third most recent NCD Score - Need-oriented Evangelism'

Third most recent NCD Score - Loving Relationships'

Other tools to measure church strengths

Other tools to measure church strengths
Indicates Other tools to measure church strengths:

- In an average week, hours you are paid for ministry
- In an average week, hours you spend in church ministry
- # annual vacation weeks for the senior pastor
- Does your church offer sr pastor extended health plan:
- Does your church offer sr pastor RRSP or pension:
- Does your church offer sr pastor a sabbatical after 6 yr:
- In 5 years, confidence vote for the senior pastor
- Before hired as pastor attended

- % time spend on Preaching
- % time spend on Counselling
- % time spend on Teaching
- % time spend on Dreaming
- % time spend on Sermon preparation
- % time spend on Coaching ministries
- % time spend on Shepherding
- % time spend on Administration
- % time spend on Leadership training
- % time spend on EMMC board/council
- % time spend on Other churches
- % time spend on Associated ministries
- % time spend on Other

Other task spent time on:

- How do you oversee Baptism classes
- How do you oversee Teach children
- How do you oversee Teach youth
- How do you oversee Teach youth
- How do you oversee Teach adults
- How do you oversee Teach seniors
- How do you oversee Outreach locally
- How do you oversee Counselling
- How do you oversee Community
- How do you oversee Hospital visitation
- How do you oversee Grief counselling
- How do you oversee Funerals
- How do you oversee Lead in worship
- How do you oversee Preaching
- How do you oversee Train leaders
- How do you oversee Mentorship
- How do you oversee Discipleship
- Frequent use of Hymns in worship service
- Frequent use of Courses in worship service
- Frequent use of Worship bands in worship service
- Frequent use of Choir in worship service
- Frequent use of Responsive reading in worship
- Frequent use of Drums in worship service
- Frequent use of Piano in worship service
- Frequent use of Guitars in worship service
Frequent use of Drama in worship service
Frequent use of Dance in worship service
Frequent use of Hand clapping with songs in worship service
Frequent use of Live video in worship service
Church use pews or chairs for worship
# personal computers does the church use for ministry
'have church website: 1, 2'
'Frequent use of E-mail: 1-'
'Frequent use of Website: 1-
'Frequent use of Mass e-mail: 1-
'Exchange rate June 30, 2005
http://fx.sauder.ubc.ca/data.html'
'TOTAL expense budget'
'EMMC general account'
'EMMC designated projects'
'Other overseas projects'
'Non-staff training in your church'
'Staff training'
'BUILDING and property maintenance'
'Staff salary & benefits'
'Service debt'
'BUILDING and property expansion'
'Administration'
'Post-secondary Christian education'
'Needy people, food banks'
'Method church budgets to EMMC:'
'Other methods of EMMC budgeting'
'$ spent on Physical relief to people in your local church'
'$ spent on Physical relief in community but outside church'
'$ spent on Physical relief outside your community'
'$ budgeted for Local missionary outreach'
'$ budgeted for Other mission organizations'
'$ budgeted for Other EMMC and LEAB churches'
'Total donations received'
'# donors were receipted by your church'
'church debt: $'
'debt for non-capital improvements & property purchases: 1, 2'
'planning a major effort in its life and ministry: 1, 2'
'budget shortfall in 2005: 1, 2'
'Would use Organizational structure ideas: 1-5'
'Would use Pastor hiring guide: 1-5'
'Would use Staff salary guide: 1-5'
'Would use Staff benefit package: 1-5'
'Would use Church evaluation tools: 1-5'
'Would use Spiritual gifts tools: 1-5'
'Would use Bible study guides: 1-5'
'Would use Structure guides: 1-5'
'Would use Leadership training: 1-5'
'Would use Job Descriptions: 1-5';
run;

**proc sort data=pastors; by EligibleB; run;**

**title4 'Response Rate of Pastors Questionnaires';**
**proc freq data=pastors;**
  **table Region*EnterId / missing nocol nopercent;**
  **by EligibleB;**
  **format Region region.;**
**run;**
**data pastorsE SasData.pastorsE;**
  **set pastors;**
  **if EligibleB=0 then delete;**
**run;**

*Response Rate;
**title3 'Response Rate';**
**data leaders;**
  **merge leaderslist (in=1) leaders1 (in=11) leaders2 (in=12);**
  **by LeaderId;**
  **if 1;**
**run;**
**data leaders;**
  **set leaders;**
  **if LeaderId=9999 then delete;**
  **if BlankB ne 1 then BlankB=0;**
  **label ChurchId='Church Id'**
  **LeaderId='Leader Id'**
  **ReceivedD='Received date'**
  **EnterD = 'Date Entered'**
  **EnterId = 'Enterer Id: 1-Eddy, 2-Yolanda, 3-Susie,...'**
  **BlankB = 'Indicates Questionnaire was completely PastorQ = 'Indicates completed Pastors Questionnaire'**
  **101 = 'YEAR OF BIRTH: '**
  **102 = 'GENDER: 1-2'**
  **103 = 'MARITAL STATUS: 1-5'**
  **104 = 'LANGUAGE did you first learn at home & still understand: 1-7'**
  **104Other= 'Other language'**
  **105 = 'ETHNIC ORIGIN or cultural group your ancestors belong: 1-7'**
  **105Other= 'Other ethnic origin'**
  **106 = 'COUNTRY were you BORN: 1-4'**
  **106Other= 'Other country of birth'**
  **107 = 'Certificates, diplomas, or degrees have you obtained: 1-9,0'**
  **108a01 = 'Attended Steinbach Bible College (but no degree): 1,0'**
  **108b01 = 'Diploma Steinbach Bible College: 1,0'**
1,0' Bachelors Steinbach Bible College: 1,0'
1,0' Masters Steinbach Bible College: 1,0'
1,0' Doctorate Steinbach Bible College: 1,0'
1,0' Attended Aylmer Bible School (but no degree):
1,0' Diploma Aylmer Bible School: 1,0'
1,0' Bachelors Aylmer Bible School: 1,0'
1,0' Masters Aylmer Bible School: 1,0'
1,0' Doctorate Aylmer Bible School: 1,0'
1,0' Attended Bethany Bible Institute (but no degree): 1,0'
1,0' Diploma Bethany Bible Institute: 1,0'
1,0' Bachelors Bethany Bible Institute: 1,0'
1,0' Masters Bethany Bible Institute: 1,0'
1,0' Doctorate Bethany Bible Institute: 1,0'
1,0' Attended Steinrich Bible School (but no degree): 1,0'
1,0' Diploma Steinrich Bible School: 1,0'
1,0' Bachelors Steinrich Bible School: 1,0'
1,0' Masters Steinrich Bible School: 1,0'
1,0' Doctorate Steinrich Bible School: 1,0'
1,0' Attended Briercrest Bible College (but no degree): 1,0'
1,0' Diploma Briercrest Bible College: 1,0'
1,0' Bachelors Briercrest Bible College: 1,0'
1,0' Masters Briercrest Bible College: 1,0'
1,0' Doctorate Briercrest Bible College: 1,0'
1,0' Attended Providence College/ Seminary (but no degree): 1,0'
1,0' Diploma Providence College/ Seminary: 1,0'
1,0' Bachelors Providence College/ Seminary: 1,0'
1,0' Masters Providence College/ Seminary: 1,0'
1,0' Doctorate Providence College/ Seminary: 1,0'
1,0' Attended Winnipeg College/ Seminary (but no degree): 1,0'
1,0' Diploma Winnipeg College/ Seminary: 1,0'
1,0' Bachelors Winnipeg College/ Seminary: 1,0'
1,0' Masters Winnipeg College/ Seminary: 1,0'
1,0' Doctorate Winnipeg College/ Seminary: 1,0'
1,0' Attended Tyndale Bible College/Seminary (but no degree): 1,0'
1,0' Diploma Tyndale Bible College/Seminary:
1,0' Bachelors Tyndale Bible College/Seminary:
1,0' Masters Tyndale Bible College/Seminary:
1,0' Doctorate Tyndale Bible College/Seminary:
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<thead>
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<th>No.</th>
<th>Degree</th>
<th>Institution</th>
<th>Details</th>
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<tr>
<td>108a09</td>
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<td>(but Diploma Ontario Bible College/Seminary: 1,0')</td>
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<tr>
<td>108b09</td>
<td>1,0'</td>
<td>Diploma Ontario Bible College/Seminary:</td>
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<td>1,0'</td>
<td>Bachelors Ontario Bible College/Seminary:</td>
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<td>108d09</td>
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<td>Bachelors Prairie Bible Institute:</td>
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<tr>
<td>108d10</td>
<td>1,0'</td>
<td>Masters Prairie Bible Institute:</td>
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<td>Masters Emanuel Bible College:</td>
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<td>Doctorate Emanuel Bible College:</td>
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<td>Bachelors Heritage Bible College:</td>
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<td>Masters Heritage Bible College:</td>
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<td>1,0'</td>
<td>Doctorate Heritage Bible College:</td>
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<tr>
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<td>Diploma Rio Grande Bible Institute:</td>
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<td>Bachelors Rio Grande Bible Institute:</td>
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<tr>
<td>108d13</td>
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<td>Masters Rio Grande Bible Institute:</td>
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<td>1,0'</td>
<td>Doctorate Rio Grande Bible Institute:</td>
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<td>1,0'</td>
<td>Bachelors Goshen College:</td>
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<tr>
<td>108d14</td>
<td>1,0'</td>
<td>Masters Goshen College:</td>
<td></td>
</tr>
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<td>108e14</td>
<td>1,0'</td>
<td>Doctorate Goshen College:</td>
<td></td>
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<td>Degree: 1,0'</td>
<td>Attended Canadian Mennonite University (but</td>
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<tr>
<td>108b15</td>
<td>1,0'</td>
<td>Diploma Canadian Mennonite University:</td>
<td></td>
</tr>
<tr>
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<td>Bachelors Canadian Mennonite University:</td>
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<tr>
<td>108d15</td>
<td>1,0'</td>
<td>Masters Canadian Mennonite University:</td>
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1,0' = 'Doctorate Canadian Mennonite University:
1,0' = 'Attended Evangelical Anabaptist Seminary
(but no degree): 1,0'
1,0' = 'Diploma Evangelical Anabaptist Seminary:
1,0' = 'Bachelors Evangelical Anabaptist Seminary:
1,0' = 'Masters Evangelical Anabaptist Seminary:
1,0' = 'Doctorate Evangelical Anabaptist Seminary:
1,0' = 'Attended Other School (but did not earn a
degree): 1,0'
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1,0' = 'Masters Millar Institute of the Bible: 1,0'
1,0' = 'Doctorate Millar Institute of the Bible:
You come to first attend your current church: 1-5

Time you attended your current church: 1-6

Gift Rank - Teaching
Gift Rank - Apostleship
Gift Rank - Encouragement
Gift Rank - Giving
Gift Rank - Leadership
Gift Rank - Mercy
Gift Rank - Evangelism
Gift Rank - Shepherding
Gift Rank - Helps
Gift Rank - Administration
Gift Rank - Discernment
Gift Rank - Craftsmanship
Gift Rank - Creative Communication
Gift Rank - Miracles
Gift Rank - Healing
Gift Rank - Tongues
Gift Rank - Interpretation
Gift Rank - Prophecy
Gift Rank - Administration
Gift Rank - Hospitality
Gift Rank - Intercession
Gift Rank - Wisdom
Gift Rank - Knowledge
Gift Rank - Faith
Gift Rank - Discernment
Gift Rank - Craftsmanship
Gift Rank - Creative Communication
Gift Rank - Miracles
Gift Rank - Healing
Gift Rank - Tongues
Gift Rank - Interpretation

Spiritual gifts been affirmed: 1-5
First job titles at your church
Second job titles at your church
Third job titles at your church
Pastor was one of top 3 roles - assigned from
Pulpit was top 3 roles - assigned from
Youth work was top 3 roles - assigned from
Board was top 3 roles - assigned from
Council was top 3 roles - assigned from
Elder was top 3 roles - assigned from
Admin/secretary was top 3 roles - assigned from
Report was top 3 roles - assigned from
Human resources was top 3 roles - assigned from
Treasury/books was top 3 roles - assigned from
Maintinance was top 3 roles - assigned from
Custodian was top 3 roles - assigned from
Ministerial was top 3 roles - assigned from
Hospitality was top 3 roles - assigned from 113abc.
Deacon was top 3 roles - assigned from 113abc.
Care giving was top 3 roles - assigned from 113abc.
Small Groups was top 3 roles - assigned from 113abc.
Young Adults was top 3 roles - assigned from 113abc.
Mens ministry was top 3 roles - assigned from 113abc.
Ladies ministry was top 3 roles - assigned from 113abc.
Kids ministry was top 3 roles - assigned from 113abc.
Nursery was top 3 roles - assigned from 113abc.
SpGifts was top 3 roles - assigned from 113abc.
Discipleship was top 3 roles - assigned from 113abc.
Mentorship was top 3 roles - assigned from 113abc.
Education was top 3 roles - assigned from 113abc.
SS Super was top 3 roles - assigned from 113abc.
Teaching was top 3 roles - assigned from 113abc.
Library was top 3 roles - assigned from 113abc.
Worship/music was top 3 roles - assigned from 113abc.
Missions was top 3 roles - assigned from 113abc.
Church body do you serve: 1-3'
Other church body
week # you spend in the ministry of your local church: 1-5'
week, # you spend in associated Christian organizations: 1-5'
week, # hours do you spend on community organizations: 1-5'
# minutes take to drive to church worship
Have you visited missionaries in another country: 1-2'
Have you visited another cultural group in Canada: 1-2'
Part of small group meets twice month for community: 1-2'
Part of small group meets regularly for Bible study: 1-2'
In 2005, your small group form another small group: 1-2'
124a = 'Leadership development last year - Attended seminar: 1-2'
124b = 'Leadership development last year - Taught class: 1-2'
124c = 'Leadership development last year - Planned seminar: 1-2'
124d = 'Leadership development last year - Mentored someone: 1-2'
124e = 'Leadership development last year - Read a book: 1-2'
125 = 'How often do you receive a personal evaluation: 1-4'
126a = 'Do you - Live a simple lifestyle: 1-5'
126b = 'Do you - Be accountable to others: 1-5'
126c = 'Do you - Physically care for others: 1-5'
126d = 'Do you - Consult Bible for decisions: 1-5'
127a = 'Required for membership - Baptism: 1-5'
127b = 'Required for membership - Rebaptism if baptized as infants: 1-5'
127c = 'Required for membership - Rebaptism if baptized as non-Xians: 1-5'
127d = 'Required for membership - People must be born again: 1-5'
128a = 'Church discipline is practiced for erring members: 1-5'
128b = 'Actively reaches to other ethnic or groups: 1-5'
128c = 'Actively reaches to other social or cultural groups: 1-5'
128d = 'Is different from the neighbourhhood by the unique lifestyle: 1-5'
128e = 'It is evident that the members follow Jesus: 1-5'
128f = 'Should be reserved for descendents of Mennonite immigrants: 1-5'
129a = 'True about Bible - The OT must be interpreted by NT: 1-5'
129b = 'True about Bible - ethics must be derived primarily from the NT: 1-5'
129c = 'True about Bible - ethics must come equally from both the NT/OT: 1-5'
129d = 'True about Bible - NT interpreted by life & teachings of Jesus: 1-5'
129e = 'True about Bible - teachings of Jesus too hard for Christians: 1-5'
129f = 'True about Bible - Bible & traditions equal guide Christian: 1-5'
130a = 'True about faith - significance of Jesus is future salvation: 1-5'
130b = 'True about faith - Following Christ daily in life is necessary: 1-5'
130c = 'True about faith - Faith inside will show in action: 1-5'
130d = 'True about faith - Is best seen in the life of Jesus: 1-5'
130e = 'True about faith - Is a private matter between God and me: 1-5'
130f = 'True about faith - The teachings of Jesus evident in my life: 1-5'
Believe about justice - may use violent to protect family: 1-5'
Believe about justice - War may be justified in some instances: 1-5'
Believe about justice - more important sp than phys help: 1-5'
Believe about justice - Christians help society be more just: 1-5'
Believe about justice - Christian job to phys care neighbour: 1-5'
'Compromise your Christian faith - Federal policeman: 1-5'
'Compromise your Christian faith - Local politician: 1-5'
'Compromise your Christian faith - Public school teacher: 1-5'
'Compromise your Christian faith - Lawyer: 1-5'
'Compromise your Christian faith - Medical doctor: 1-5'
'Compromise your Christian faith - Judge: 1-5'
'Compromise your Christian faith - Military service: 1-5'
'Compromise your Christian faith - Prison guard: 1-5'
'Compromise your Christian faith - Police officer: 1-5'
'Christian could participate - Sing national anthem: 1-5'
'Christian could participate - Vote in a federal election: 1-5'
'Christian could participate - Observe national holidays: 1-5'
'Christian could participate - Pay taxes: 1-5'
'Christian could participate - Fly the national flag at home: 1-5'
'Christian could participate - Serve on a criminal case jury: 1-5'
'Christian could participate - Swear an oath: 1-5'
'Christian could participate - Serve in military after a draft: 1-5'
'Christian could participate - Business with non-
Christians: 1-5'
'Christian could participate - Observe war memorial days: 1-5'
'Church serve - Children: 1-5'
'Church serve - Pre-teens: 1-5'
'Church serve - Youth: 1-5'
'Church serve - Young adults: 1-5'
'Church serve - Newly weds: 1-5'
'Church serve - Parents of children: 1-5'
'Church serve - Empty nesters: 1-5'
'Church serve - Elderly: 1-5'
'Church serve - Single adults: 1-5'
'Church serve - Widows/ widowers: 1-5'
'Church serve - Broken families: 1-5'
'Church serve - Other cultures: 1-5'
'Church serve - Single parents: 1-5'
Has your board work load increased since church structure: 1-5'

Has your board work load decreased since church structure: 1-5'

Does the conference promote itself to their members: 1-5'

Has # times have you been a delegate at the EMMC convention: 1-5'

# times have you served a term on a conference board or council: 1-5'

Understand the tasks of - General council: 1-5'

Understand the tasks of - Ministerial resource council: 1-5'

Understand the tasks of - Board of mission and service: 1-5'

Understand the tasks of - Ministerial council: 1-5'

# times have you been a delegate at the EMMC convention: 1-5'

# times have you served a term on a conference board or council: 1-5'

Understand the tasks of - General council: 1-5'

Understand the tasks of - Ministerial resource council: 1-5'

Understand the tasks of - Ministerial council: 1-5'

Help growth of conference - General council: 1-5'

Help growth of conference - Ministerial resource council: 1-5'

Help growth of conference - Board of mission and service: 1-5'

Help growth of conference - Ministerial council: 1-5'

Help growth of conference - Budget: 1-5'

Help growth of conference - Church planting: 1-5'

Help growth of conference - Overseas missions: 1-5'

Help growth of conference - Vision and inspiration: 1-5'

Help growth of conference - Resources sharing: 1-5'

Help growth of conference - Other - specify: 1-5'

Help growth of conference - Other:

Challenges to conference in next 5 years - Aging members: 1-5'

Challenges to conference in next 5 years - Funding: 1-5'

Challenges to conference in next 5 years - Structure: 1-5'

Challenges to conference in next 5 years - Vision: 1-5'

Challenges to conference in next 5 years - Church planting: 1-5'

Challenges to conference in next 5 yrs - Theological differences: 1-5'

Challenges to conference in next 5 yrs - Generation gap: 1-5'

Challenges to conference in next 5 yrs - Regional differences: 1-5'

Challenges to conference in next 5 yrs - Physical separation: 1-5'

Challenges to conference in next 5 yrs - Pastors shortage: 1-5'

Challenges to conference in next 5 yrs - Conference leadership: 1-5'
Encouraged 5-year attendance growth - Accessibility: 1-5'
Encouraged 5-year attendance growth - Meeting budget: 1-5'
Encouraged 5-year attendance growth - Identified target group: 1-5'
Encouraged 5-year attendance growth - Pastor: 1-5'
Encouraged 5-year attendance growth - Teaching: 1-5'
Encouraged 5-year attendance growth - Prayer: 1-5'
Encouraged 5-year attendance growth - Revival: 1-5'
Encouraged 5-year attendance growth - Reconciliation: 1-5'
Encouraged 5-year attendance growth - Discipleship: 1-5'
Encouraged 5-year attendance growth - Missions: 1-5'
Encouraged 5-year attendance growth - Freedom from bondage: 1-5'
Encouraged 5-year attendance growth - Care to community: 1-5'
Encouraged 5-year attendance growth - Outreach to community: 1-5'
Encouraged 5-year attendance growth - Church plant(s): 1-5'
Encouraged 5-year attendance growth - Other 1 - specify: 1-5'
Encouraged 5-year attendance growth - Other1 - specify: 1-5'
Encouraged 5-year attendance growth - Other2 - specify: 1-5'
Church challenges in 5 years - Aging members: 1-5'
Church challenges in 5 years - Competition for donations: 1-5'
Church challenges in 5 years - Blended families: 1-5'
Church challenges in 5 years - Family moving away: 1-5'
Church challenges in 5 years - Preaching: 1-5'
Church challenges in 5 years - Leadership: 1-5'
Church challenges in 5 years - Community acceptance: 1-5'
Church challenges in 5 years - Other - specify: 1-5'
Church challenges in 5 years - Other - specify: 1-5'
Your church organizational structure been in place: 1-5'
Your own work load increased since church structure: 1-5'
Has your own work load decreased since church structure: 1-5'
Has church life improved since your structure: 1-5'
Has church life declined since your structure: 1-5'
142a = 'Has your board work load increased since church structure: 1-5'
142b = 'Has your board work load decreased since church structure: 1-5'
143 = 'Does the conference promote itself to their members: 1-5'
144a = '# times have you been a delegate at the EMMC convention: 1-5'
144b = '# times have you served a term on a conference board or council: 1-5'
145a = 'Understand the tasks of - General council: 1-5'
145b = 'Understand the tasks of - Ministerial resource council: 1-5'
145c = 'Understand the tasks of - Board of mission and service: 1-5'
145d = 'Understand the tasks of - Ministerial council: 1-5'
146a = 'Help growth of conference - General council: 1-5'
146b = 'Help growth of conference - Ministerial resource council: 1-5'
146c = 'Help growth of conference - Board of mission and service: 1-5'
146d = 'Help growth of conference - Ministerial council: 1-5'
146e = 'Help growth of conference - Budget: 1-5'
146f = 'Help growth of conference - Church planting: 1-5'
146g = 'Help growth of conference - Overseas missions: 1-5'
146h = 'Help growth of conference - Vision and inspiration: 1-5'
146i = 'Help growth of conference - Resources sharing: 1-5'
146j = 'Help growth of conference - Other - specify: 1-5'
147a = 'Challenges to conference in next 5 years - Aging members: 1-5'
147b = 'Challenges to conference in next 5 years - Funding: 1-5'
147c = 'Challenges to conference in next 5 years - Structure: 1-5'
147d = 'Challenges to conference in next 5 years - Vision: 1-5'
147e = 'Challenges to conference in next 5 years - Church planting: 1-5'
147f = 'Challenges to conference in next 5 yrs - Theological differences: 1-5'
147g = 'Challenges to conference in next 5 yrs - Generation gap: 1-5'
147h = 'Challenges to conference in next 5 yrs - Regional differences: 1-5'
147i = 'Challenges to conference in next 5 yrs - Physical separation: 1-5'
147j = 'Challenges to conference in next 5 yrs - Pastors shortage: 1-5'
147k = 'Challenges to conference in next 5 yrs - Conference leadership: 1-5'
Challenges to conference in next 5 years - Other - specify: 1-5'

Other

Strengths of our conference - General council: 1-5'

Strengths of our conference - Ministerial resource council: 1-5'

Strengths of our conference - Board of mission and service: 1-5'

Strengths of our conference - Ministerial council:

Strengths of our conference - Overseas missions:

Strengths of our conference - Funding: 1-5'

Strengths of our conference - Structure: 1-5'

Strengths of our conference - Vision: 1-5'

Strengths of our conference - Church planting: 1-5'

Strengths of our conference - Theological differences: 1-5'

Strengths of our conference - Generation gap: 1-5'

Strengths of our conference - Regional differences:

Strengths of our conference - Physical separation:

Strengths of our conference - Pastors development:

Strengths of our conference - Conference leadership: 1-5'

Strengths of our conference - Other - specify: 1-5'

Strengths of our conference - Other

Read the Recorder - Print version: 1-5'

Read the Recorder - On-line version: 1-5'

Read the Recorder - Lead article: 1-5'

Read the Recorder - Missionary updates: 1-5'

Read the Recorder - Prayer guide: 1-5'

Church need assistance in - Financial: 1-5'

Church need assistance in - Administrative: 1-5'

Church need assistance in - Organizational structure: 1-5'

Church need assistance in - Policy, by-laws etc.: 1-5'

Church need assistance in - Job descriptions: 1-5'

Church need assistance in - Preaching or pulpit exchange: 1-5'

Church need assistance in - Teaching exchange: 1-5'

Church need assistance in - Leadership development: 1-5'

Church need assistance in - Vision and inspiration: 1-5'

Church need assistance in - Crises help: 1-5'

Your church receives from the EMMC - Financial: 1-
151b = 'Your church receives from the EMMC - Administrative: 1-5'
151c = 'Your church receives from the EMMC - Organizational structure: 1-5'
151d = 'Your church receives from the EMMC - Policy, by-laws, etc.: 1-5'
151e = 'Your church receives from the EMMC - Job descriptions: 1-5'
151f = 'Your church receives from the EMMC - Preaching/pulpit exchange: 1-5'
151g = 'Your church receives from the EMMC - Teaching exchange: 1-5'
151h = 'Your church receives from the EMMC - Leadership development: 1-5'
151i = 'Your church receives from the EMMC - Vision and inspiration: 1-5'
151j = 'Your church receives from the EMMC - Crises help: 1-5'
152 = 'Use conference guideline set staff salary: 1-5'
153a = 'Do you set salaries above the conference guidelines: 1-5'
153b = 'You set salaries below the conference guidelines: 1-5'
154a = 'Your pastor a shepherd of the church: 1-5'
154b = 'Your pastor a Chief Executive Officer (CEO): 1-5'
154c = 'Your pastor a manager of the church: 1-5'

format ReceivedD EnterD date.;
run;

title4 'Entered Ineligibles';
proc print data=leaders;
  var ChurchId LeaderId Region Pastor EligibleB BlankB ReceivedD EnterD EnterId;
  where EligibleB=0 and EnterId ne .;
run;

proc freq data=leaders;
  table Region Pastor EligibleB*BlankB*EnterId / list missing;
  format EnterId missing.;
run;

* Remove ineligible leaders from list;
data leadersE SasData.leadersE;
  set leaders;
  if EligibleB=0 and (BlankB=1 or EnterId=.) then delete;
run;

proc sort data=leadersE; by EligibleB; run;

title4 'Response Rate of Leaders Questionnaires';
proc freq data=leadersE;
  table Region*EnterId / missing nocol nopercent;
  format Region region.;
proc sort data=leadersE; by Churchld Leaderld; run;
proc freq data=leadersE noprint;
  table Churchld / out=ChurchLeaders;
  table BlankB / out=BlankLeaders;
  table Enterld / out=ReturnedLeaders;
  by Churchld;
  format Enterld missing.;
run;
data BlankLeaders;
  set BlankLeaders;
  if BlankB=1;
    NumBlank=Count;
    label NumBlank='Number of Blank Questionnaires Returned';
run;
data ReturnedLeaders;
  set ReturnedLeaders;
  if Enterid ne .;
    NumReturned=Count; *includes blank returned questionnaires (for now);
    label NumReturned='Number of Non-blank Leaders Questionnaires Returned';
run;
*Church Response Table;
title3 'Church Response';
proc sort data=PastorsE; by ChurchId; run;
proc sort data=ChurchLeaders; by Churchld; run;
data ChurchResponse;
  merge PastorsE (in=c keep= Region ChurchId EnterId)
    ChurchLeaders (in=l keep= ChurchId Count rename= count=NumLeaders)
    BlankLeaders (in=l keep= ChurchId NumBlank)
    ReturnedLeaders (in=l keep= ChurchId NumReturned);
  by ChurchId;
  if c;
  if NumReturned=. then NumReturned=0;
  if NumBlank=. then NumBlank=0;
  NumReturned=NumReturned-NumBlank; *count only filled out completed;
  ResponseRate=NumReturned/NumLeaders;
  if EnterId ne . then NumPastors=1; else NumPastors=0;
  label NumLeaders='Numbers of leaders receiving questionnaires' 
    NumPastors='One indicates pastors returning questionnaires: 0,1'
    ResponseRate='Proportion of leaders returning questionnaires';
run;
* Response Table;
title4 'Response Table';
proc print data=ChurchResponse;
  var Region ChurchId NumPastors NumLeaders NumBlank NumReturned 
    ResponseRate;
  format ResponseRate percent. ; *NumPastors missing.;
* Region Response Table;*
`proc means data=ChurchResponse n sum;`
`var NumPastors NumLeaders NumBlank NumReturned;`
`by Region;`
`format NumPastors missing.;`
`run;`

* Total Response Table;*
`proc means data=ChurchResponse n sum;`
`var NumPastors NumLeaders NumBlank NumReturned;`
`format NumPastors missing.;`
`run;`

data SasData.ChurchResponse;
`set ChurchResponse;`
`run;`

*;`
`proc freq data=pastorsE;`
`tables ReceivedD*Region / missing nocol norow nopercent;`
`format Region region. ReceivedD weeku3.;`
`run;`

`proc freq data=leadersE;`
`tables ReceivedD*Region / missing nocol norow nopercent;`
`format Region region. ReceivedD weeku3.;`
`run;`

data leadersER;
`set leadersE;`
`if EnterId ne . and BlankB ne 1;`
`run;`

title4 'Pastors';
`proc contents data=pastorsE; run;`

title4 'Leaders';
`proc contents data=leadersE; run;`

*Missing Variables;*
title3 'Missing Variables';

title4 'Pastors';
`proc freq data=pastorsE;`
`table Region ChurchId SentD ReceivedD EnterD EnterId`
p01 p02a p02b p03a p03b p04a p04b p05 p06a p06b p06c p06d p07a
p07b p07c
p08a1 p08a2 p08a3 p08a4 p08b1 p08b2 p08b3 p08b4 p08c1 p08c2
p08c3 p08c4
p09a1 p09a2 p09b1 p09b2 p09c1 p09c2 p09d1 p09d2 p09e1 p09e2
p09f1 p09f2
p09g1 p09g2 p09h1 p09h2 p09i1 p09i2 p09j1 p09j2 p09k1 p09k2
p09l1 p09l2
p09m1 p09m2 p10a1 p10a2 p10a3 p10a4 p10b1 p10b2 p10b3 p10b4
p10c1 p10c2
p10c3 p10c4 p10d1 p10d2 p10d3 p10d4 p10e1 p10e2 p10e3 p10e4
p11a1 p11a2
p11b1 p11b2 p11c1 p11c2 p11d1 p11d2 p11e1 p11e2 p11f1 p11f2
p11g1 p11g2
p11h1 p11h2 p11i1 p11i2 p11j1 p11j2 p11k1 p11k2 p11l1 p11l2
p11m1 p11m2
p12a p12b p12c p12d p12e p12f p12g p12l p12i p12j p12k p12kOther
p13 p14
p15a p15b p15c p15d p15e p15f p15g p15h p15i p15j p15k p15l p15m
p15n p15o
p15p p15q p15r p15s p15t p15u p15v p15vOther p15w p15wOther p16
p16Other
p17a p17b p17c p17d p17e p17f p17g p17gOther p18 p19a1 p19a2
p19a3 p19a4
p19a5 p19a6 p19b1 p19b2 p19b3 p19b4 p19b5 p19b6 p19c1 p19c2
p19c3 p19c4
p19c5 p19c6 p19d1 p19d2 p19d3 p19d4 p19d5 p19d6 p20 p21a1 p21a2
p21a3
p21b1 p21b2 p21b3 p21c1 p21c2 p21c3 p21d1 p21d2 p21d3 p21e1
p21e2 p21e3
p22 p23a p23b p23c p23d p23e p23f p23g p23h p23i p23j p23k p23l
p23m
p23n p23o p23p
p27
p28a p28b p28c p28d p28dOther p29 p30a p30b p30c p30AdLim1-
p30AdLim9
p30AdNoL1-p30AdNoL4 p31 p32 p33a p33b p33c p34 p35 p35x p36
p37a1 p37a2 p37a3 p37b1 p37b2 p37c1 p37c2 p37c3 p37d1
p37d2 p37d3
p37e1 p37e2 p37e3 p37f1 p37f2 p37f3 p37g1 p37g2 p37g3 p37h1
p37h2 p37h3
p37i1 p37i2 p37i3 p37j1 p37j2' p37j3 p38a p38b p39a p39b p40
p41a p41b p41c p42 p43 p44a p44b p44c p44d p44e p44f p44g p44h
p44i p44j
p44k p44l p44m p44n p44o p44p p44q p44r
p45a p45b p45c p45d p45e p45f p45g p45h
p45i
p45j p45k p45l p45m p45n p45o p45p p45q
p46a p46b p46c p46d p46e p46f p46g p46h p46i p46j p46k p46l p47
p48 p49
p50a p50b p50c p51Exchng p51a p51b p51c p51d p51e p51f p51g p51h
p51i p51j
p51k p51l p51m p52 p52Other p53a p53b p53c p54a p54b p54c p55
p56 p57 p58
p59 p60 p61a p61b p61c p61d p61e p61f p61g p61h p61i p61j / list
missing;
format Region ChurchId SentD ReceivedD EnterD EnterId
title4 'Leaders';
proc freq data=leadersER;

run;
<table>
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<tr>
<th>LeaderId</th>
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data SasData.pastors;
  set pastorsE;
run;

data SasData.leaders;
  set leadersER;
run;
* EMMC Growth Patterns;
* Surveys Pre-Analysis;
libname SasData 'C:\Shared Documents and Such\Education\McMaster School\Thesis Project\Data\SASData';

options nodate pageno=1;
options pageno=1 pagesize=52 linesize=90 date;

title1 'Masters Project: EMMC Growth Data';
title2 'Preparation for Analysis of EMMC Pastors and Leaders Survey Data';

data emmc;
  set SasData.emmc;
run;

data pastors;
  set SasData.pastors;
run;

data leaders;
  set SasData.leaders;
run;

data Pastor;
  set Pastors;
  *set missing variables to 0 where it implies such;
  if EnterId ne . then do;
    if p04a= . then p04a=0;
    if p04b= . then p04b=0;
    if p06b= . then p06b=0;
    if p06c= . then p06c=0;
    if p06d= . then p06d=0;
    if p06a= . then p06a=sum(p06b,p06c,p06d);
    if p08a1= . then p08a1=0;
    if p08a2= . then p08a2=0;
    if p08a3= . then p08a3=0;
    if p08a4= . then p08a4=0;
    if p08b1= . then p08b1=0;
    if p08b2= . then p08b2=0;
    if p08b3= . then p08b3=0;
    if p08b4= . then p08b4=0;
    if p08c1= . then p08c1=0;
    if p08c2= . then p08c2=0;
    if p08c3= . then p08c3=0;
    if p08c4= . then p08c4=0;
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    if p09b1= . then p09b1=0;
    if p09b2= . then p09b2=0;
    if p09c1= . then p09c1=0;
    if p09c2= . then p09c2=0;
    if p09d1= . then p09d1=0;

if p09d2=. then p09d2=0;
if p09e1=. then p09e1=0;
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if p09f1=. then p09f1=0;
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if p09g1=. then p09g1=0;
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if p09h1=. then p09h1=0;
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if p09j1=. then p09j1=0;
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if p09l1=. then p09l1=0;
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if p09m1=. then p09m1=0;
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if p10a1=. then p10a1=0;
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if p11f1=. then p11f1=0;
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if p11g1=. then p11g1=0;
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if p11h1=. then p11h1=0;
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if p11i1=. then p11i1=0;
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if p11k1=. then p11k1=0;
if p11k2=. then p11k2=0;
if p11l1=. then p11l1=0;
if p11l2=. then p11l2=0;
if p11m1=. then p11m1=0;
if p11m2=. then p11m2=0;

if p21a1=. then p21a1=0;
if p21a2=. then p21a2=0;
if p21a3=. then p21a3=0;
if p21b1=. then p21b1=0;
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if p21b3=. then p21b3=0;
if p21c1=. then p21c1=0;
if p21c2=. then p21c2=0;
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if p21d1=. then p21d1=0;
if p21d2=. then p21d2=0;
if p21d3=. then p21d3=0;
if p21e1=. then p21e1=0;
if p21e2=. then p21e2=0;
if p21e3=. then p21e3=0;

if p23a=. then p23a=0;
if p23b=. then p23b=0;
if p23c=. then p23c=0;
if p23d=. then p23d=0;
if p23e=. then p23e=0;
if p23f=. then p23f=0;
if p23g=. then p23g=0;
if p23h=. then p23h=0;
if p23i=. then p23i=0;
if p23j=. then p23j=0;
if p23k=. then p23k=0;
if p23l=. then p23l=0;
if p23m=. then p23m=0;
if p23n=. then p23n=0;
if p23o=. then p23o=0;
if p23p=. then p23p=0;

if p48=. then p48=0;
end;
run;

data Pastors;
set Pastors;
*estimate # of occastional visitors;
if p01=01 then p01a=2;
else if p01=02 then p01a=7;
else if p01=03 then p01a=12;
else if p01=04 then p01a=17;
else if p01=05 then p01a=25;
else if p01=06 then p01a=35;
else if p01=07 then p01a=45;
else if p01=08 then p01a=60;
else if p01=09 then p01a=85;
else if p01=10 then p01a=113;
else if p01=11 then p01a=137;
else if p01=12 then p01a=162;
else if p01=13 then p01a=187;
else if p01=14 then p01a=225;
else if p01=15 then p01a=275;
else if p01=16 then p01a=350;

else if p01a=1

p05z=p05*p03b;
p05y=p05*p02b;
p06ax=p06a/p02b;
p04x=p04b/p03b;
p06=sum(p06a, p06b, p06c, p06d);
if p07a=' ' and p07b=' ' and p07c=' ' then p07=0; else p07=1;

*Hypothesis A5: Where EMMC is gaining and losing members;
p08a=sum(p08a1, p08a2, p08a3, p08a4);
p08b=sum(p08b1, p08b2, p08b3, p08b4);
p08c=sum(p08c1, p08c2, p08c3, p08c4);

p10a=sum(p10a1, p10a2, p10a3, p10a4);
p10b=sum(p10b1, p10b2, p10b3, p10b4);
p10c=sum(p10c1, p10c2, p10c3, p10c4);
p10d=sum(p10d1, p10d2, p10d3, p10d4);
p10e=sum(p10e1, p10e2, p10e3, p10e4);

p09a=sum(p09a1, p09a2);
p09b=sum(p09b1, p09b2);
p09c=sum(p09c1, p09c2);
p09d=sum(p09d1, p09d2);
p09e=sum(p09e1, p09e2);
p09f=sum(p09f1, p09f2);
p09g=sum(p09g1, p09g2);
p09h=sum(p09h1, p09h2);
p09i=sum(p09i1, p09i2);
p09j=sum(p09j1, p09j2);
p09k=sum(p09k1, p09k2);
p09l=sum(p09l1, p09l2);
p09m=sum(p09m1, p09m2);
p09n=sum(p09n1, p09n2, p09n3, p09n4);
p09o=sum(p09o1, p09o2, p09o3, p09o4);
p09p=sum(p09p1, p09p2, p09p3, p09p4);
p09q=sum(p09q1, p09q2, p09q3, p09q4);
p09r=sum(p09r1, p09r2, p09r3, p09r4);
p09s=sum(p09s1, p09s2, p09s3, p09s4);
p09t=sum(p09t1, p09t2, p09t3, p09t4);
p09u=sum(p09u1, p09u2, p09u3, p09u4);
p09v=sum(p09v1, p09v2, p09v3, p09v4);
p09w=sum(p09w1, p09w2, p09w3, p09w4);
p09x=sum(p09x1, p09x2, p09x3, p09x4);
p09y=sum(p09y1, p09y2, p09y3, p09y4);
p09z=sum(p09z1, p09z2, p09z3, p09z4);

p11a=sum(p11a1, p11a2);
p11b=sum(p11b1, p11b2);
p11c=sum(p11c1, p11c2);
p11d=sum(p11d1, p11d2);
p11e=sum(p11e1, p11e2);
p11f=sum(p11f1, p11f2);
pllg=sum(pllg1,pllg2);
pllh=sum(pllh1,pllh2);
plli=sum(plli1,plli2);
pllj=sum(pllj1,pllj2);
pllk=sum(pllk1,pllk2);
plll=sum(plll1,plll2);
pllm=sum(pllm1,pllm2);
plll=sum(plll1,plll2,plll3,plll4,plll5,plll6,plll7,plll8,plll9,plll10,plll11,plll12);
pll2=sum(pll21,pll22,pll23,pll24,pll25,pll26,pll27,pll28,pll29,pll210,pll211,pll212);
pllcg=sum(pllc1,pllc2,pllc3,pllc4,pllc5,pllc6,pllc7,pllc8,pllc9,pllc10,pllc11,pllc12);
pllhj=sum(pllh1,pllh2,pllh3,pllh4,pllh5,pllh6,pllh7,pllh8,pllh9,pllh10,pllh11,pllh12);
*totals members lost and gained :
p08b=max(p08b,p091);p091=max(p08b,p091);*due to incomplete survey results;
p08c=max(p08c,p092);p092=max(p08c,p092);
p10a=max(p10a,p111);p111=max(p10a,p111);
p10b=max(p10b,p112);p112=max(p10b,p112);
p08=sum(p08a,p08b,p08c);
p09=sum(p091,p092);
p10=sum(p10a,p10b,p10c,p10d,p10e);
p11=sum(p111,p112);
p17=min(p17a,p17b,p17c,p17d,p17e,p17f,p17g);
if p19a1='Sunday' then p19=1;
if p19b1='Sunday' then p19=2;
if p19c1='Sunday' then p19=3;
if p19a3 ne p19b3 and p19>1 then p19z=1; else p19z=0;
p19aX=p02b/p19a5;
p19bX=p02b/p19b5;
p19cX=p02b/p19c5;
p19X=p02b/max(p19a5,p19b5,p19c5);
p21a=sum(p21a1,p21a2,p21a3);
p21b=sum(p21b1,p21b2,p21b3);
p21c=sum(p21c1,p21c2,p21c3);
p21d=sum(p21d1,p21d2,p21d3);
p21e=sum(p21e1,p21e2,p21e3);
p23=sum(p23a,p23b,p23c,p23d,p23e,p23f,p23g,p23h,p23i,p23j,p23k,p23l);
p23m,p23n,p23o,p23p);
if p33a=1 or p33b=1 or p33c=1 then p33=1; else p33=0;
p44=sum(p44a,p44b,p44c,p44d,p44e,p44f,p44g,p44h,p44i,p44j,p44k,p44l,p44m);
if p56>0 then p55x=p55/p56;
if p03b>0 then p55y=p55/p03b;
if p02b>0 then p55z=p55/p02b;
p21ax=p21a/p02b;
p21bx=p21b/p02b;
p21cx=p21c/p02b;
p21dx=p21d/p02b;
p21ex=p21e/p02b;
p56x=p56/p03b;
p56y=p56/p02b;
p55x=p55/p02b;
if p56>0 then p55z=p55/p56;
p23x=p23/p02b;
p22x=p22/p02b;
p22y=p22/p03b;

p37=0; if p37a1 ne . then p37=p37+1; if p37a2 ne . then
p37=p37+1;
if p37a3 ne . then p37=p37+1;

label p01a = 'Lookup of p01-# non-weekly attenders that attend
once a mth'
p04x = 'Members at end of 2005 that are Non-Mennonite
descendants'
p05y = '# attendees regularly in worship last 3 mth'
p05z = '# members regularly in worship last 3 mth'
p06 = '# non-attending members'
p07 = 'Indicates church was involved in church
plant in last 10 yrs'
p08a = '# added to membership by baptism in 2005'
p08b = '# added to membership by transfer from local
church in 2005'
p08c = '# added to membership by transfer from distant
church 2005'
p08 = '# added to membership in 2005'
p10a = '# deleted from membership by transfer to local
church 2005'
p10b = '# deleted from membership by transfer to distant
church 2005'
p10c = '# deleted from membership by death in 2005'
p10d = '# deleted from membership by withdrawal in 2005'
p10e = '# deleted from membership by dismissal in 2005'
p10 = '# deleted from membership in 2005'
p09a = '2005 Members transferred from other EMMC churches'
p09b = '2005 Members transferred from EMC churches'
p09c = '2005 Members transferred from Old Colony churches'
p09d = '2005 Members transferred from Reinlander churches'
p09e = '2005 Members transferred from Sommerfelder
churches'
p09f = '2005 Members transferred from Kleine Gemeinde
churches'
p09g = '2005 Members transferred from 'Bergthaler churches'
p09h = '2005 Members transferred from Mennonite Brethren
churches'
p09i = '2005 Members transferred from Brethren in Christ
churches'
p09j = '2005 Members transferred from General Conference
churches'
p09k = '2005 Members transferred from other Mennonite
Evangelical
churches'
p09l = '2005 Members transferred from non-Mennonite
churches'
p09m = '2005 Members transferred from non-specified
churches' p091 = '2005 Members transferred from other local
churches' p092 = '2005 Members transferred from other distant
churches' p09 = '2005 Members transferred from other
churches' p09cg = '2005 Members transferred from traditional Mennonite'
p09hj = '2005 Members transferred from non-traditional Mennonite'

Mennonite' p11a = '2005 Members transferred to other EMMC churches'
p11b = '2005 Members transferred to EMC churches'
p11c = '2005 Members transferred to Old Colony churches'
p11d = '2005 Members transferred to Reinlander churches'
p11e = '2005 Members transferred to Sommerfelder churches'
p11f = '2005 Members transferred to Kleine Gemeinde churches'
p11g = '2005 Members transferred to Bergthaler churches'
p11h = '2005 Members transferred to Mennonite Brethren churches'
p11i = '2005 Members transferred to Brethren in Christ churches'
p11j = '2005 Members transferred to General Conference churches'
p11k = '2005 Members transferred to other Mennonite churches'
Evangelical' p11l = '2005 Members transferred to non-Mennonite churches'
p11m = '2005 Members transferred to non-specified churches'
p11n = '2005 Members transferred to other local churches'
p112 = '2005 Members transferred to other distant churches'

Mennonite' p17 = 'Church building used Much or Very Much by
outside group'
p19 = '# of worship services'
p19aX = 'Average % of capacity in 1st service p02b/p19a5'
p19bX = 'Average % of capacity in 2nd service p02b/p19b5'
p19cX = 'Average % of capacity in 3rd service p02b/p19c5'
p19X = 'Average % capacity largest service
p19X=p02b/max(p19a5,p19b5,p19c5)'
p19z = 'Indicates that they have multiple cultural groups: 1,0'
p21a = '# who in Sunday School'
p21b = '# who in Sunday School but not worship'
p21c = '# who in Bible study'
p21d = '# who in Small group or Bible study'
p21e = '# who in Worship but not Sunday school'
p23 = '# in Bible College-fall 2005'
p33 = 'church planning plant in next 5 years (0,1)'
p37 = '# of NCD Surveys done'
p44 = '% time spend in ministry (check if they add
to 100%)
p55x = 'Donation per receipted giver'
p55y = 'Donation per member'
p55z = 'Donation per average attendance'

p21ax = '% 2005 attendees in Sunday School'
p21bx = '% 2005 attendees in SS but not worship'
p21cx = '% 2005 attendees in Bible study'
p21dx = '% 2005 attendees in Small group/Bible study'
p21ex = '% 2005 attendees in Worship but not SS'
p22x = '% 2005 attendees attended the annual meeting'
p22y = '% 2005 members attended the annual meeting'
p23x = '% 2005 attendees in Bible Colleges in fall'
p56x = '% of average attendees that are receipted givers'
p56y = '% of members that are receipted givers'
p55x = 'donations per average attender p55/p02b'
p55z = 'total donations per receipted donor p55/p56';

run;

data pastors;
set pastors;
p53bX=p53b/p51Exchng;
p54aX=p54a/p51Exchng;
p54bX=p54b/p51Exchng;
p54cX=p54c/p51Exchng;
if p51a>0 then p51eZ=p51e/p51a;
if p51a>0 then p51fZ=p51f/p51a;
if p55>0 then p53bZ=p53b/p55;
if p55>0 then p54aZ=p54a/p55;
label p53bX = '$C spent on Physical relief in your community outside church'
p54aX = '$C budgeted for Local missionary outreach'
p54bX = '$C budgeted for Other mission organizations'
p54cX = '$C budgeted for Other EMMC and LIEAB churches'
p51eZ = 'Proportion of expense budget on non-staff training'
p51fZ = 'Proportion of expense budget on staff trainingp51f/p51a'
p53bZ = 'Proportion of donations on community relief 53b/p55'
p54aZ = 'Proportion of donations on local outreach p54a/p55';
run;

*Define leader survey summary variables;
title3 'Define leader survey summary variables';
data Leaders2;
set Leaders;
*set missing variables to 0 where it implies such;
if 107=. then 107=0;
if 108a01=. then 108a01=0;
if 108b01= . then 108b01=0;
if 108c01= . then 108c01=0;
if 108d01= . then 108d01=0;
if 108e01= . then 108e01=0;
if 108a02= . then 108a02=0;
if 108b02= . then 108b02=0;
if 108c02= . then 108c02=0;
if 108d02= . then 108d02=0;
if 108e02= . then 108e02=0;
if 108a03= . then 108a03=0;
if 108b03= . then 108b03=0;
if 108c03= . then 108c03=0;
if 108d03= . then 108d03=0;
if 108e03= . then 108e03=0;
if 108a04= . then 108a04=0;
if 108b04= . then 108b04=0;
if 108c04= . then 108c04=0;
if 108d04= . then 108d04=0;
if 108e04= . then 108e04=0;
if 108a05= . then 108a05=0;
if 108b05= . then 108b05=0;
if 108c05= . then 108c05=0;
if 108d05= . then 108d05=0;
if 108e05= . then 108e05=0;
if 108a06= . then 108a06=0;
if 108b06= . then 108b06=0;
if 108c06= . then 108c06=0;
if 108d06= . then 108d06=0;
if 108e06= . then 108e06=0;
if 108a07= . then 108a07=0;
if 108b07= . then 108b07=0;
if 108c07= . then 108c07=0;
if 108d07= . then 108d07=0;
if 108e07= . then 108e07=0;
if 108a08= . then 108a08=0;
if 108b08= . then 108b08=0;
if 108c08= . then 108c08=0;
if 108d08= . then 108d08=0;
if 108e08= . then 108e08=0;
if 108a09= . then 108a09=0;
if 108b09= . then 108b09=0;
if 108c09= . then 108c09=0;
if 108d09= . then 108d09=0;
if 108e09= . then 108e09=0;
if 108a10= . then 108a10=0;
if 108b10= . then 108b10=0;
if 108c10= . then 108c10=0;
if 108d10= . then 108d10=0;
if 108e10= . then 108e10=0;
if 108a11= . then 108a11=0;
if 108b11= . then 108b11=0;
if 108c11= . then 108c11=0;
if 108d11= . then 108d11=0;
if 108e11= . then 108e11=0;
if 108a12= . then 108a12=0;
if 108b12= . then 108b12=0;
if 108c12= . then 108c12=0;
if 108d12. then 108d12=0;
if 108e12. then 108e12=0;
if 108a13. then 108a13=0;
if 108b13. then 108b13=0;
if 108c13. then 108c13=0;
if 108d13. then 108d13=0;
if 108e13. then 108e13=0;
if 108a14. then 108a14=0;
if 108b14. then 108b14=0;
if 108c14. then 108c14=0;
if 108d14. then 108d14=0;
if 108e14. then 108e14=0;
if 108a15. then 108a15=0;
if 108b15. then 108b15=0;
if 108c15. then 108c15=0;
if 108d15. then 108d15=0;
if 108e15. then 108e15=0;
if 108a16. then 108a16=0;
if 108b16. then 108b16=0;
if 108c16. then 108c16=0;
if 108d16. then 108d16=0;
if 108e16. then 108e16=0;
if 108a17. then 108a17=0;
if 108b17. then 108b17=0;
if 108c17. then 108c17=0;
if 108d17. then 108d17=0;
if 108e17. then 108e17=0;
if 108a18. then 108a18=0;
if 108b18. then 108b18=0;
if 108c18. then 108c18=0;
if 108d18. then 108d18=0;
if 108e18. then 108e18=0;
if 108a19. then 108a19=0;
if 108b19. then 108b19=0;
if 108c19. then 108c19=0;
if 108d19. then 108d19=0;
if 108e19. then 108e19=0;
if 108a20. then 108a20=0;
if 108b20. then 108b20=0;
if 108c20. then 108c20=0;
if 108d20. then 108d20=0;
if 108e20. then 108e20=0;
if 108a21. then 108a21=0;
if 108b21. then 108b21=0;
if 108c21. then 108c21=0;
if 108d21. then 108d21=0;
if 108e21. then 108e21=0;
if 108a22. then 108a22=0;
if 108b22. then 108b22=0;
if 108c22. then 108c22=0;
if 108d22. then 108d22=0;
if 108e22. then 108e22=0;
if 108a23. then 108a23=0;
if 108b23. then 108b23=0;
if 108c23. then 108c23=0;
if 108d23. then 108d23=0;
if 108e23. then 108e23=0;
if l11a=. then l11a=0;
if l11b=. then l11b=0;
if l11c=. then l11c=0;
if l11d=. then l11d=0;
if l11e=. then l11e=0;
if l11f=. then l11f=0;
if l11g=. then l11g=0;
if l11h=. then l11h=0;
if l11i=. then l11i=0;
if l11j=. then l11j=0;
if l11k=. then l11k=0;
if l11l=. then l11l=0;
if l11m=. then l11m=0;
if l11o=. then l11o=0;
if l11p=. then l11p=0;
if l11q=. then l11q=0;
if l11r=. then l11r=0;
if l11s=. then l11s=0;
if l11t=. then l11t=0;
if l11u=. then l11u=0;
if l11v=. then l11v=0;
if l11w=. then l11w=0;
if 144a=. then 144a=0;
if 144b=. then 144b=0;

*Christian Education;
108a=max(108a01,108a02,108a03,108a04,108a05,108a06,108a07,108a08 ,108a09 ,
108a10,108a11,108a12,108a13,108a15,108a16,108a17);
108b=max(108b01,108b02,108b03,108b04,108b05,108b06,108b07,108b08 ,108b09 ,
108c=max(108c01,108c02,108c03,108c04,108c05,108c06,108c07,108c08 ,108c09 ,
108e=max(108e01,108e02,108e03,108e04,108e05,108e06,108e07,108e08,108e09,108e10,108e11,108e12,108e13,108e14,108e15,108e16,108e17);
if 108a=1 then 108=1; if 108b=1 then 108=2; if 108c=1 then 108=3; if 108d=1 then 108=4; if 108e=1 then 108=5;
10801=max(108a01,108b01,108c01,108d01,108e01);
10802=max(108a02,108b02,108c02,108d02,108e02);
10803=max(108a03,108b03,108c03,108d03,108e03);
10804=max(108a04,108b04,108c04,108d04,108e04);
10805=max(108a05,108b05,108c05,108d05,108e05);
10806=max(108a06,108b06,108c06,108d06,108e06);
10807=max(108a07,108b07,108c07,108d07,108e07);
10808=max(108a08,108b08,108c08,108d08,108e08,108a09,108b09,108c09,108d09,108e09);
10810=max(108a10,108b10,108c10,108d10,108e10);
10811=max(108a11,108b11,108c11,108d11,108e11);
10812=max(108a12,108b12,108c12,108d12,108e12);
10813=max(108a13,108b13,108c13,108d13,108e13);
10814=max(108a14,108b14,108c14,108d14,108e14);
10815=max(108a15,108b15,108c15,108d15,108e15);
10816=max(108a16,108b16,108c16,108d16,108e16);
10817=max(108a17,108b17,108c17,108d17,108e17);
10818=max(108a18,108b18,108c18,108d18,108e18);
10819=max(108a19,108b19,108c19,108d19,108e19);
10820=max(108a20,108b20,108c20,108d20,108e20);
10821=max(108a21,108b21,108c21,108d21,108e21);
10822=max(108a22,108b22,108c22,108d22,108e22);
10823=max(108a23,108b23,108c23,108d23,108e23);

* Average multiple answers;

if 132a>5 then 132a=int(mean(int(132a/10),mod(132a,10)));
if 132b>5 then 132b=int(mean(int(132b/10),mod(132b,10)));
if 132c>5 then 132c=int(mean(int(132c/10),mod(132c,10)));
if 132d>5 then 132d=int(mean(int(132d/10),mod(132d,10)));
if 132e>5 then 132e=int(mean(int(132e/10),mod(132e,10)));
if 132f>5 then 132f=int(mean(int(132f/10),mod(132f,10)));
if 132g>5 then 132g=int(mean(int(132g/10),mod(132g,10)));
if 132h>5 then 132h=int(mean(int(132h/10),mod(132h,10)));
if 132i>5 then 132i=int(mean(int(132i/10),mod(132i,10)));

if 133a>5 then 133a=int(mean(int(133a/10),mod(133a,10)));
if 133b>5 then 133b=int(mean(int(133b/10),mod(133b,10)));
if 133c>5 then 133c=int(mean(int(133c/10),mod(133c,10)));
if 133d>5 then 133d=int(mean(int(133d/10),mod(133d,10)));
if 133e>5 then 133e=int(mean(int(133e/10),mod(133e,10)));
if 133f>5 then 133f=int(mean(int(133f/10),mod(133f,10)));
if 133g>5 then 133g=int(mean(int(133g/10),mod(133g,10)));
if 133h>5 then 133h=int(mean(int(133h/10),mod(133h,10)));
if 133i>5 then 133i=int(mean(int(133i/10),mod(133i,10)));
if 133j>5 then 133j=int(mean(int(133j/10),mod(133j,10)));
if 150a > 5 then 150a = int(mean(int(l50a/10), mod(l50a, 10)));  
if 150b > 5 then 150b = int(mean(int(l50b/10), mod(l50b, 10)));  
if 150c > 5 then 150c = int(mean(int(l50c/10), mod(l50c, 10)));  
if 150d > 5 then 150d = int(mean(int(l50d/10), mod(l50d, 10)));  
if 150e > 5 then 150e = int(mean(int(l50e/10), mod(l50e, 10)));  
if 150f > 5 then 150f = int(mean(int(l50f/10), mod(l50f, 10)));  
if 150g > 5 then 150g = int(mean(int(l50g/10), mod(l50g, 10)));  
if 150h > 5 then 150h = int(mean(int(l50h/10), mod(l50h, 10)));  
if 150i > 5 then 150i = int(mean(int(l50i/10), mod(l50i, 10)));  
if 150j > 5 then 150j = int(mean(int(l50j/10), mod(l50j, 10)));  

if 151a > 5 then 151a = int(mean(int(l51a/10), mod(l51a, 10)));  
if 151b > 5 then 151b = int(mean(int(l51b/10), mod(l51b, 10)));  
if 151c > 5 then 151c = int(mean(int(l51c/10), mod(l51c, 10)));  
if 151d > 5 then 151d = int(mean(int(l51d/10), mod(l51d, 10)));  
if 151e > 5 then 151e = int(mean(int(l51e/10), mod(l51e, 10)));  
if 151f > 5 then 151f = int(mean(int(l51f/10), mod(l51f, 10)));  
if 151g > 5 then 151g = int(mean(int(l51g/10), mod(l51g, 10)));  
if 151h > 5 then 151h = int(mean(int(l51h/10), mod(l51h, 10)));  
if 151i > 5 then 151i = int(mean(int(l51i/10), mod(l51i, 10)));  
if 151j > 5 then 151j = int(mean(int(l51j/10), mod(l51j, 10)));  

*Leader Opinions on Jobs and Activities in Christian Faith:  
132 = 40 - \((132b + 132c + 132d + 132e + 132f + 132g + 132h + 132i)\);  
133 = \((133a + 133b + 133c + 133d + 133e + 133f + 133g + 133h + 133i + 133j) - 10;  
*Leader Opinions on Needing and Receiving Church Assistance:  
150 = 50 - \((150a + 150b + 150c + 150d + 150e + 150f + 150g + 150h + 150i + 150j)\);  
151 = 50 - \((151a + 151b + 151c + 151d + 151e + 151f + 151g + 151h + 151i + 151j)\);  

label 101Age = 'Age at the end of 2005 - from 101'  
106home = 'Church in birth COUNTRY: 0-No, 1-Yes'  
108 = 'Highest level of Bible College education:  
1, 2, 3, 4, 5'  
108a = 'Attended a Bible College (but did not earn a degree): 1, 0'  
108b = 'Earned a Diploma at a Bible College: 1, 0'  
108c = 'Earned a Bachelors at a Bible College: 1, 0'  
108d = 'Earned a Masters at a Bible College: 1, 0'  
108e = 'Earned a Doctorate at a Bible College: 1, 0'  
10801 = 'At least Attended Steinbach Bible College: 1, 0'  
10802 = 'At least Attended Aylmer Bible School: 1, 0'  
10803 = 'At least Attended Bethany Bible Institute: 1, 0'  
10803 = 'At least Attended Steinrich Bible School: 1, 0'  
10804 = 'At least Attended Steinrich Bible School: 1, 0'  
10805 = 'At least Attended Briercrest Bible College: 1, 0'  
10806 = 'At least Attended Providence College/ Seminary: 1, 0'  
10807 = 'At least Attended Winnipeg College/ Seminary: 1, 0'  
10808 = 'At least Attended Tyndale Bible College/Seminary: 1, 0'
10810 = 'At least Attended Prairie Bible Institute: 1,0'
10811 = 'At least Attended Emanuel Bible College: 1,0'
10812 = 'At least Attended Heritage Bible College: 1,0'
10813 = 'At least Attended Rio Grande Bible Institute: 1,0'
10814 = 'At least Attended Goshen College: 1,0'
10815 = 'At least Attended Canadian Mennonite University: 1,0'
10816 = 'At least Attended Evangelical Anabaptist Seminary: 1,0'
10817 = 'At least Attended Other (than 1 to 16) School: 1,0'
10818 = 'At least Attended Elim Bible Institute: 1,0'
10819 = 'At least Attended Nipawin Bible Institute: 1,0'
10820 = 'At least Attended Winkler Bible Institute: 1,0'
10821 = 'At least Attended Capenwray: 1,0'
10822 = 'At least Attended Impact Studies Alabama: 1,0'
10823 = 'At least Attended Miller Institute of the Bible: 1,0'
132 = 'Job Compromising faith: 0-32'
133 = 'Oppose Participation in: 0-40'
150 = 'Church Needs Assistance: 0-40'
151 = 'Church Receives Assistance: 0-40';
run;

* merge leaders data of Pastors to Pastors dataset;
title3 'merge leaders data of Pastors to Pastors dataset';
*Rerpose of Pastors in the Leader Questionnaire;
title4 'Response of Pastors in the Leader Questionnaire';

data lp;
  set leaders2;
  if PastorQ=1;
  rename Age=lp01Age 101=lp01 102=lp02 103=lp03 104=lp04 105=lp05
    106=lp06 106home=lp06home 107=lp07 108=lp08 108e=lp08e
    108d=lp08d 108c=lp08c 108b=lp08b 108a=lp08a 118=lp18;
run;

data pastors2;
  merge pastors (in=p)
    lp (in=l keep= LeaderId ChurchId Pastor PastorQ lp01 lp02
    lp03
    lp04 lp05 lp06 lp06home lp07 lp08e lp08d lp08c lp08b lp08a
    lp18);
  by ChurchId;
  if p;
run;
*save data;
data sasdata.pastors2;
   set pastors2;
run;

data sasdata.leaders2;
   set leaders2;
run;
* EMMC Growth Patterns;
* Analysis;
libname SasData 'C:\Shared Documents and Such\Education\McMaster School\Thesis Project\Data\SASData';

options nodate pageno=1;
options pageno=1 pagesize=52 linesize=90 date;

title1 'Masters Project: EMMC Growth Data';
title2 'EMMC Pastors and Leaders Survey Data';

* Survey Response;
title3 'Survey Response';
data ChurchResponse;
   set SasData.ChurchResponse;
run;

* Response Table by Church;
title4 'Response Table by Church';
proc print data=ChurchResponse;
   var Region Churchid NumPastors NumLeaders NumBlank NumReturned ResponseRate;
   format ResponseRate percent. ; *NumPastors missing. ;
run;

* Total Response Table Overall;
title4 'Response Table Overall';
proc means data=ChurchResponse n nmiss sum;
   var NumPastors NumLeaders NumBlank NumReturned;
   format NumPastors missing. ;
run;

* Region Response Table by Region;
title4 'Response Table by Region';
%freq (dataM=ChurchResponse, var1=NumPastors, var2=Region, formatM=%str( Region Region. NumPastors boolean.));
%medianp(dataM=ChurchResponse, varM=NumLeaders, GroupM=Region, formatM=%str( Region Region.));
%medianp(dataM=ChurchResponse, varM=NumBlank, GroupM=Region, formatM=%str( Region Region.));
%medianp(dataM=ChurchResponse, varM=NumReturned, GroupM=Region, formatM=%str( Region Region.));
%medianp(dataM=ChurchResponse, varM=ResponseRate, GroupM=Region, formatM=%str( Region Region.));

* Pastors Response over Time;
title4 'Pastors Response over Time';
proc freq data=sasdata.pastorsE;
   tables ReceivedD*Region / missing nocol norow nopercent;
   format Region region. ReceivedD weeku3.;
run;
* Leaders Response over Time;
title 4 'Leaders Response over Time';
proc freq data=sasdata.leadersE;
tables ReceivedD*Region / missing nocol norow nopercent;
   format Region region. ReceivedD weeku3.;
run;

* Calculated and Summary Variables;

*EMMC: Increase in attendance and membership;
title 3 'EMMC: Increase in attendance and membership';
data EMMCannual;
   set sasdata.EMMCannual;
run;
proc export data=EMMCannual
   outfile="C:\Shared Documents and Such\Education\McMaster School\Thesis Project\Manuscript\EMMCannual.xls"
   replace;
run;

title 4 'Annual Attendance, Membership, and Number of Churches';
proc print data=EMMCannual;
run;

proc gplot data=EMMCannual;
   plot (Attendance Membership Churches) *Year;
run;

* Growth Rate Model;
title 4 'Attendance model';

proc glm data=EMMCannual;
model Attendance= Year;
   output out=Eout r=Residuals;
run;
quit;
title 4 'Normal Q-Q Plot for Annual Change in Attendance';
proc univariate data=Eout noprint;
   qqplot Residuals / normal cframe = ligr square vaxis=axis1;
   axis1 label=(a=90 r=0);
run;

*EMMC: Increase in attendance and membership same as EMC;
title 3 'EMMC: Increase in attendance and membership same as EMC';
data emcregion;
   set sasdata.emcregion;
run;

title4 'EMC 10-year EMC Regional and Overall Growth Rate (1991 to 2001)';
proc print data=emcregion;
  format M9101 A9303 N9101 5.2;
run;

data region;
  set sasdata.region;
run;
title4 'EMCC 10-year Regional and Overall Growth Rate (1991 to 2001)';
proc print data=region;
  format M9101 A9101 N9101 5.2 r region.;
run;

*Census Data;
title3 'Census Data';
title4 'Census Data';
data census censusdiv censussubdiv;
  set SasData.census;
  if RegionLevel=1 then output censusdiv;
  if RegionLevel=2 then output censussubdiv;
  output census;
run;

*Census: Demographics of church neighbourhoods;
title3 'Census: Demographics of church neighbourhoods';
data censussubdiv;
  set censussubdiv;
  if PRaceMenno=. then PRWhite=PRaceWhite; else
  PRWhite=PRaceWhite+PRaceMenno;
  if 70 le ChurchId le 99 then do;
    PMSing=(PMarComLaw+PMarSingle)/(1-PMarNo);
    PMMar=(PMarMarried+PMarSep)/(1-PMarNo);
    PMSep=(PMarSep)/(1-PMarNo);
    PMDiv=PMarDiv/(1-PMarNo);
    PMWid=PMarWid/(1-PMarNo);
  end;
  else do;
    PMSing=PMarComLaw+PMarSingle;
    PMMar=PMarMarried;
    PMSep=PMarSep;
    PMDiv=PMarDiv;
    PMWid=PMarWid;
  end;
  * Official Language;
  if 01 le ChurchId le 69 then PLangOff=PlangEng; *Canada;
  if 70 le ChurchId le 79 then PLangOff=PLangSp; *Mexico;
if 80 le ChurchId le 99 then PLangOff=PlangEng; *Belize, United States;

* Religion Christian;
PRelCh=sum(PRelCath,PRelOrth,PRelProtest,PRelAng,PRelBap,PRelMet
h,
PRelPent,PrelSA,PrelNaz,PRelMenno,PRelOthChr);

label
PRWhite = '% pop Race White (or Mennonite in Belize)'
PMSing = '% pop single (inc common-law) age 15+ (Can)
or age'
PMMar = '% pop married age 15+ (Can) or marriagible age'
PMSep = '% pop separated age 15+ (Can) or marriagible age'
PMDiv = '% pop divorce age 15+ (Can) or marriagible age'
PMWid = '% pop widowed age 15+ (Can) or marriagible age'
PLangOff='% pop. first learned Official Language'
PRelCh = '% pop any Christian (excluding Mormon, 7th
Day, JW)';
run;
data emmc;
  set SasData.emmc;
run;
data pastors2;
  set SasData.pastors2;
run;
data leaders2;
  set SasData.leaders2;
run;
proc sort data=censussubdiv; by ChurchId; run;

*includes disfunct churches;
data emmc2;
  merge emmc (in=e drop=Region)
    Pastors2 (in=p keep=ChurchId p02a p02b p03a p03b);
  by ChurchId;
  if e;
run;

*title3 'EMMC: Attendance and membership records';
title3 'EMMC: Attendance and membership records';

*count # where survey > emmc, survey<emmc, the same;
data emmc3;
set emmc2;
  if p02a > A2004 then pA04 = 1; else if p02a < A2004 then pA04 = -1;
  else if p02a = A2004 then pA04 = 0;
  if p02a = . or A2004 = . then pA04 = .;
  if p02b > A2005 then pA05 = 1; else if p02b < A2005 then pA05 = -1;
  else if p02b = A2005 then pA05 = 0;
  if p02b = . or A2005 = . then pA05 = .;
  if p03a > M2004 then pM04 = 1; else if p03a < M2004 then pM04 = -1;
  else if p03a = M2004 then pM04 = 0;
  if p03a = . or M2004 = . then pM04 = .;
  if p03b > M2005 then pM05 = 1; else if p03b < M2005 then pM05 = -1;
  else if p03b = M2005 then pM05 = 0;
  if p03b = . or M2005 = . then pM05 = .;
  label pA04 = '2004 Att Survey/EMMC Records: lower(-1), same(0), higher(-1)'
  pA05 = '2005 Mem Survey/EMMC Records: lower(-1), same(0), higher(-1)'
  pM04 = '2004 Att Survey/EMMC Records: lower(-1), same(0), higher(-1)'
  pM05 = '2005 Mem Survey/EMMC Records: lower(-1), same(0), higher(-1)';
run;

proc freq data = emmc3;
tables pA04 pA05 pM04 pM05 /;
  *tables (pA04 pA05 pM04 pM05)* r /;
  format r r pA04 pA05 pM04 pM05 *r / region.;
run;
title4 'Comparison of 2004 attendance from Survey/EMMC Records - both complete';
proc means data = emmc3 maxdec = 2 fw = 6 n missing mean median stddev;
  var A2004 p02a;
  where A2004 ne . and p02a ne .;
run;
title4 'Comparison of 2005 attendance from Survey/EMMC Records - both complete';
proc means data = emmc3 maxdec = 2 fw = 6 n missing mean median stddev;
  var A2005 p02b;
  where A2005 ne . and p02b ne .;
run;
title4 'Comparison of 2004 membership from Survey/EMMC Records - both complete';
proc means data = emmc3 maxdec = 2 fw = 6 n missing mean median stddev;
  var M2004 p03a;
  where M2004 ne . and p03a ne .;
run;
title4 'Comparison of 2005 membership from Survey/EMMC Records - both complete';
proc means data = emmc3 maxdec = 2 fw = 6 n missing mean median stddev;
  var M2005 p03b;
  where M2005 ne . and p03b ne .;
run;
title3 'EMMC: What is the 5-year growth of the EMMC? - not including defunct';

title4 '2000 and 2005 EMMC Attendance and membership';

proc means data=emmc4 maxdec=1 fw=4 n missing sum;
run;

proc means data=emmc4 maxdec=2 fw=5 n missing min mean median max;
   var A0005 M0005;
run;
EMMC: Growth by Regional, Size Grouping, Growth Status;

title3 'EMMC: Growth by Region';

proc means data=emmc4 maxdec=1 fw=4 n missing sum;
  class R; var A2000; format R Region. Size sizef. GP Growth. ; run;

proc means data=emmc4 maxdec=1 fw=4 n missing sum;
  class R; var A2005; format R Region. Size sizef. GP Growth. ; run;

proc means data=emmc4 maxdec=1 fw=4 n missing sum;
  class R; var M2000; format R Region. Size sizef. GP Growth. ; run;

proc means data=emmc4 maxdec=1 fw=4 n missing sum;
  class R; var M2005; format R Region. Size sizef. GP Growth. ; run;

title3 'EMMC: Growth by Size Grouping';

proc means data=emmc4 maxdec=1 fw=4 n missing sum;
  class Size; var A2000; format R Region. Size sizef. GP Growth. ; run;

proc means data=emmc4 maxdec=1 fw=4 n missing sum;
  class Size; var A2005; format R Region. Size sizef. GP Growth. ; run;

proc means data=emmc4 maxdec=1 fw=4 n missing sum;
  class Size; var M2000; format R Region. Size sizef. GP Growth. ; run;

proc means data=emmc4 maxdec=1 fw=4 n missing sum;
  class Size; var M2005; format R Region. Size sizef. GP Growth. ; run;

title3 'EMMC: Growth by Growth Status';

proc means data=emmc4 maxdec=1 fw=4 n missing sum;
  class GP; var A2000; format R Region. Size sizef. GP Growth. ; run;

proc means data=emmc4 maxdec=1 fw=4 n missing sum;
  class GP; var A2005; format R Region. Size sizef. GP Growth. ; run;

proc means data=emmc4 maxdec=1 fw=4 n missing sum;
  class GP; var M2000; format R Region. Size sizef. GP Growth. ; run;

proc means data=emmc4 maxdec=1 fw=4 n missing sum;
  class GP; var M2005; format R Region. Size sizef. GP Growth. ; run;

*Combine data sources - Exclude disfuncf churches;

data Pastors3;
  merge emmc4 (in=e)
    censussubdiv (in=d drop=Region)
    Pastors2 (in=p);
  by ChurchId;
  if e;
if DisfunctB=0 then output Pastors3;
run;

*Response by Region, Size, Growth Status;
title3 'Pastors: Response by Region, Size, Growth Status';

proc sort data=emmc; by ChurchId; run;
data ChurchResponse2;
merge ChurchResponse (in=c)
pastors3 (in=e keep=ChurchId M0005 A0005 AP0005 G GP Size);
by ChurchId;
if c;
run;

title4 'Survey Response, and Size & Growth Status designations';
proc print data=ChurchResponse2;
var Region ChurchId NumPastors NumLeaders NumBlank NumReturned ResponseRate G GP Size;
format Region region. ResponseRate 5.2 G GP 6.2 Size size.;
run;

*EMMC Growth Status and Size groupings;
title4 'EMMC: Growth Status and Size groupings';
title3 'Survey Response, and Size & Growth Status designations';

proc freq data=pastors3;
tables A2000 Size G GP R / list missing;
*tables G*GP A2000*GP A2000*R GP*R / missing;
format A0005 5.2 R region. G GP Growth. A2000 size.;
run;

data pastors3;
set pastors3;
if Size=. then Size=0;
GPz=GP; if GP=. then GPz=99;
run;
proc sort data=pastors3; by ChurchId; run;
proc sort data=leaders2; by ChurchId; run;
data leaders3;
merge leaders2 (in=l)
pastors3 (in=p keep=ChurchId A2000 Size G GP GPz R p28a p28b p28c);
by ChurchId;
if 1;
  if Pastor=1 then Role=1;
  else if Pastor ne 1 and 113Pastor=1 then Role=2;
  else if 113Board=1 or 113Council=1 or 114 in (1,2) then Role=3;
  else Role=4;
label Role='Role 1-Sr.Pastor, 2-Pastor, 3-Board/Council, 4-other';
run;
title4 'Region, Size, and Growth Status groupings';
proc freq data=pastors3;
  tables Size*R GPz*R Size*GPz GPz*Size / missing chisq nopercent
  nocoll norow;
  format r Region. G GP GPz Growth. Size sizef. NPlants sign.;
run;

proc freq data=pastors3;
  tables NPlants*(R Size GPz) / missing chisq;
  format r Region. G GP GPz Growth. Size sizef. NPlants sign.;
run;

%medianp(dataM=pastors3,varM=A2000,GroupM=R,formatM=%str(R Region.));
%medianp(dataM=pastors3,varM=A2000,GroupM=Size,formatM=%str(Size sizef.));
%medianp(dataM=pastors3,varM=A2000,GroupM=GPz,formatM=%str(GPz Growth.));

%medianp(dataM=pastors3,varM=A2005,GroupM=R,formatM=%str(R Region.));
%medianp(dataM=pastors3,varM=A2005,GroupM=Size,formatM=%str(Size sizef.));
%medianp(dataM=pastors3,varM=A2005,GroupM=GPz,formatM=%str(GPz Growth.));

%medianp(dataM=pastors3,varM=AP0005,GroupM=R,formatM=%str(R Region.));
%medianp(dataM=pastors3,varM=AP0005,GroupM=Size,formatM=%str(Size sizef.));
%medianp(dataM=pastors3,varM=AP0005,GroupM=GPz,formatM=%str(GPz Growth.));

proc sort data=pastors3;
  by descending R ;
run;

title4 'Linear Model of % Change in Attendance adjusted for region and Size';
proc glm data=pastors3;
  class R Size;
  model GP= R Size / solution;
  format r Region. Size sizef.;
  output out=GPout R=Residuals;
run;
quit;

title4 'Normal Q-Q Plot Linear Model of % Change in Att for region and Size';
proc univariate data=gpout noprint;
  qplotplot Residuals / normal cframe = ligr square vaxis=axis1;
  axis1 label=(a=90 r=0);
run;

*Census: Church Neighbourhood Demographics date;
title3 'Census: Church Neighbourhood Demographics date';
title4 'Canadian Census Education level by Age groups';
proc means data=pastors3 maxdec=1 fw=4 n missing median mean min max;
  var PEdu2034NoHS PEdu2034HS PEdu2034TC PEdu2034CD PEdu2034UD
      PEdu3544NoHS PEdu3544HS PEdu3544TC PEdu3544CD PEdu3544UD
      PEdu4564NoHS PEdu4564HS PEdu4564TC PEdu4564CD PEdu4564UD;
  where ChurchId le 69;
run;

title4 'Non-Canadian Census Education level by Age groups';
proc means data=pastors3 maxdec=1 fw=4 n missing median mean min max;
  where ChurchId > '69;
run;

title4 'Census Education demographics';
proc means data=pastors3 maxdec=3 fw=5 n missing median mean min max;
  var PEduUD PMalePer PAgeMed
      PlangGer PlangEng PlangSp PLangOff
      PForeignBorn PRelCh PRWhite PMMar;
run;

*Census Demographics;
title3 'Census Demographics: Education';
%medianp(dataM=pastors3,varM=PEduUD,GroupM=R,formatM=%str(R Region.
      PEduUD 5.2));
%medianp(dataM=pastors3,varM=PEdu2034UD,GroupM=R,formatM=%str(R Region.
      PEdu2034UD 5.2));
%medianp(dataM=pastors3,varM=PEdu3544UD,GroupM=R,formatM=%str(R Region.
      PEdu3544UD 5.2));
%medianp(dataM=pastors3,varM=PEdu4564UD,GroupM=R,formatM=%str(R Region.
      PEdu4564UD 5.2));
%medianp(dataM=pastors3,varM=PEduUD,GroupM=Size,formatM=%str(Size
      sizef. PEduUD 5.2));
%medianp(dataM=pastors3,varM=PEdu2034UD,GroupM=Size,formatM=%str(Size
      sizef. PEdu2034UD 5.2));
%medianp(dataM=pastors3,varM=PEdu3544UD,GroupM=Size,formatM=%str(Size
      sizef. PEdu3544UD 5.2));
%medianp(dataM=pastors3,varM=PEdu4564UD,GroupM=Size,formatM=%str(Size
      sizef. PEdu4564UD 5.2));

%medianp(dataM=pastors3,varM=PEduUD,GroupM=GP,formatM=%str(GP Growth.
      PEduUD 5.2));
%medianp(dataM=pastors3,varM=PEdu2034UD,GroupM=GP,formatM=%str(GP Growth.
      PEdu2034UD 5.2));
%medianp(dataM=pastors3,varM=PEdu3544UD,GroupM=GP,formatM=%str(GP Growth.
      PEdu3544UD 5.2));
%medianp(dataM=pastors3,varM=PEdu4564UD,GroupM=GP,formatM=%str(GP Growth.
      PEdu4564UD 5.2));

*Other census demographics;
title3 'Census Demographics: Gender - male';
%medianp(dataM=pastors3,varM=PMalePer,GroupM=R,formatM=%str(R Region.
      PMalePer 5.3));
run;
quit;
proc glm data=pastors3;
   model GP=PMMar / solution;
run;
quit;
proc glm data=pastors3;
   model GP=PLangOff / solution;
run;
quit;
proc glm data=pastors3;
   model GP=PRWhite / solution;
run;
quit;
proc glm data=pastors3;
   model GP=PRForeignBorn / solution;
run;
quit;
proc glm data=pastors3;
   model GP=PRelCh / solution;
run;
quit;
proc glm data=pastors3;
   model GP=PMalePer PAgeMed PLangOff PRWhite PForeignBorn PMMar PRelCh / solution;
run;
quit;
proc glm data=pastors3;
   model GP=PMalePer PAgeMed PLangOff PRWhite PForeignBorn PMMar PRelCh / solution;
   where ChurchId<70;
run;
quit;

*Pastors;

*Demographic characteristics of Pastors (leaders questionnaire);
title3 'Pastors: Demographic characteristics of Pastors (leaders questionnaire)';

%frege (dataM=leaders3, var1=Role, var2=LeaderId, formatM=%str(LeaderId sign. Role Role.), whereM=%str(PastorQ=1));
%medianp(dataM=leaders3, varM=101Age, GroupM=LeaderId, formatM=%str(LeaderId sign.)); whereM=%str(PastorQ=1));
%frege (dataM=leaders3, var1=102, var2=LeaderId, formatM=%str(LeaderId sign. 102 sex.), whereM=%str(PastorQ=1));
%frege (dataM=leaders3, var1=103, var2=LeaderId, formatM=%str(LeaderId sign. 103 1032f.), whereM=%str(PastorQ=1));
%frege (dataM=leaders3, var1=104, var2=LeaderId, formatM=%str(LeaderId sign. 104 104PD.), whereM=%str(PastorQ=1));
*Pastors: Demographic characteristics of Pastors (leaders questionnaire);

**title3 Pastors: Demographic characteristics of Pastors (leaders questionnaire);**

*... , whereM=%str(PastorQ=1));

%freqe (dataM=leaders3, varl=Role, var2=R, formatM=%str(R Region. Role Role.), whereM=%str(PastorQ=1));
%freqe (dataM=leaders3, varl=Role, var2=Size, formatM=%str(Size sizef. Role Role.), whereM=%str(PastorQ=1));
%freqe (dataM=leaders3, varl=Role, var2=GPz, formatM=%str(GPz Growth. Role Role.), whereM=%str(PastorQ=1));

%mediannp (dataM=leaders3, varM=101Age, GroupM=Leaderid, formatM=%str(Leaderid Sign.), whereM=%str(PastorQ=1));
%mediannp (dataM=leaders3, varM=101Age, GroupM=R, formatM=%str(R Region.), whereM=%str(PastorQ=1));
%mediannp (dataM=leaders3, varM=101Age, GroupM=Size, formatM=%str(Size sizef.), whereM=%str(PastorQ=1));
%mediannp (dataM=leaders3, varM=101Age, GroupM=GPz, formatM=%str(GPz Growth.), whereM=%str(PastorQ=1));

%freqe (dataM=leaders3, varl=102, var2=R, formatM=%str(R Region. 102 sex.), whereM=%str(PastorQ=1));
%freqe (dataM=leaders3, varl=102, var2=Size, formatM=%str(Size sizef. 102 sex.), whereM=%str(PastorQ=1));
%freqe (dataM=leaders3, varl=102, var2=GPz, formatM=%str(GPz Growth. 102 sex.), whereM=%str(PastorQ=1));

%freqe (dataM=leaders3, varl=103, var2=R, formatM=%str(R Region. 103 1032f.), whereM=%str(PastorQ=1));
%freqe (dataM=leaders3, varl=103, var2=Size, formatM=%str(Size sizef. 103 1032f.), whereM=%str(PastorQ=1));
%freqe (dataM=leaders3, varl=103, var2=GPz, formatM=%str(GPz Growth. 103 1032f.), whereM=%str(PastorQ=1));

%freqe (dataM=leaders3, varl=104, var2=R, formatM=%str(R Region. 104 104PD.), whereM=%str(PastorQ=1));
%freqe (dataM=leaders3, varl=104, var2=Size, formatM=%str(Size sizef. 104 104PD.), whereM=%str(PastorQ=1));
%freqe (dataM=leaders3, varl=104, var2=GPz, formatM=%str(GPz Growth. 104 104PD.), whereM=%str(PastorQ=1));

%freqe (dataM=leaders3, varl=105, var2=R, formatM=%str(R Region. 105 menno.), whereM=%str(PastorQ=1));
%freqe (dataM=leaders3, varl=105, var2=Size, formatM=%str(Size sizef. 105 menno.), whereM=%str(PastorQ=1));
%freqe (dataM=leaders3, var1=105, var2=GPz, formatM=%str(GPz Growth. 105
105 menno.), whereM=%str(PastorQ=1));

%freqe (dataM=leaders3, var1=106 home, var2=R, formatM=%str(R Region.
106 home boolean.), whereM=%str(PastorQ=1));
%freqe (dataM=leaders3, var1=106 home, var2=Size, formatM=%str(Size sizef.
106 home boolean.), whereM=%str(PastorQ=1));
%freqe (dataM=leaders3, var1=106 home, var2=GPz, formatM=%str(GPz Growth.
106 home boolean.), whereM=%str(PastorQ=1));

%freqe (dataM=leaders3, var1=107, var2=R, formatM=%str(R Region. 107
107 un.), whereM=%str(PastorQ=1));
%freqe (dataM=leaders3, var1=107, var2=Size, formatM=%str(Size sizef.
107 107 un.), whereM=%str(PastorQ=1));
%freqe (dataM=leaders3, var1=107, var2=GPz, formatM=%str(GPz Growth. 107
107 un.), whereM=%str(PastorQ=1));

*Pastors: Where is the EMMC gaining and losing members;
title3 'Pastors: Where is the EMMC gaining and losing members';
title4 'Total Members gained and lost by source';

proc means data=pastors3 maxdec=0 fw=4 n missing sum;
    var   p08 p10 p08a p09 p08b p08c p11 p10a p10b
    where EnterId ne .;
run;

*Pastors: Church Growth Initiatives;
title3 'Pastors: Church Growth Initiatives';
%freqe (dataM=pastors3, var1=NPlants, var2=R, formatM=%str(R Region.
NPlants sign.));
%freqe (dataM=pastors3, var1=NPlants, var2=Size, formatM=%str(Size sizef.
NPlants sign.));
%freqe (dataM=pastors3, var1=NPlants, var2=GPz, formatM=%str(GPz Growth.
NPlants sign.));
%freqe (dataM=pastors3, var1=p34, var2=R, formatM=%str(R Region. p34
p34 f.));
%freqe (dataM=pastors3, var1=p34, var2=Size, formatM=%str(Size sizef.
p34 p34 f.));
%freqe (dataM=pastors3, var1=p34, var2=GPz, formatM=%str(GPz Growth.
p34 p34 f.));
%freqe (dataM=pastors3, var1=p36, var2=R, formatM=%str(R Region. p36
yn.));
%freqe (dataM=pastors3, var1=p36, var2=Size, formatM=%str(Size sizef.
p36 yn.));
%frege (dataM=pastors3, varl=p36, p36  yn.));
%frege (dataM=pastors3, varl=p19, p19f.));
%frege (dataM=pastors3, varl=p19, p19 f.));
%frege (dataM=pastors3, varl=p19, p19 f.));
%frege (dataM=pastors3, varl=p19z, p19z boolean.));
%frege (dataM=pastors3, varl=p19z, p19z boolean.));
%frege (dataM=pastors3, varl=p19z, p19z boolean.));
%frege (dataM=pastors3, varl=p51fz, p51fz sign.));
%frege (dataM=pastors3, varl=p51fz, p51fz sign.));
%frege (dataM=pastors3, varl=p51fz, p51fz sign.));
%frege (dataM=pastors3, varl=p51fz, p51fz sign.));
%frege (dataM=pastors3, varl=p51ez, p51ez sign.));
%frege (dataM=pastors3, varl=p51ez, p51ez sign.));
%frege (dataM=pastors3, varl=p51ez, p51ez sign.));
%frege (dataM=pastors3, varl=p53bz, p53bz sign.));
%frege (dataM=pastors3, varl=p53bz, p53bz sign.));
%frege (dataM=pastors3, varl=p53bz, p53bz sign.));
%frege (dataM=pastors3, varl=p54az, p54az sign.));
%frege (dataM=pastors3, varl=p54az, p54az sign.));
%frege (dataM=pastors3, varl=p54az, p54az sign.));

title3 'Pastors: Church Initiatives Models';
proc glm data=pastors3;
class NPlants;
model GP= NPlants / solution;
format NPlants sign. p34 p34f. p36 yn. p19 p19f.;
run;
quit;
proc glm data=pastors3;
class p34;
model GP= p34 / solution;
format p34 p34f. p36 yn. p19 p19f.;
run;
quit;
proc glm data=pastors3;
  class p36;
  model GP= p36 / solution;
  format p34 p34f. p36 yn. p19 p19f. p51fz p51ez p53bz p54az sign.;
run;
quit;
proc glm data=pastors3;
  class p19;
  model GP= p19 / solution;
  format p34 p34f. p36 yn. p19 p19f. p51fz p51ez p53bz p54az sign.;
run;
quit;
proc glm data=pastors3;
  class p51fz;
  model GP= p51fz / solution;
  format p34 p34f. p36 yn. p19 p19f. p51fz p51ez p53bz p54az sign.;
run;
quit;
proc glm data=pastors3;
  class p51ez;
  model GP= p51ez / solution;
  format p34 p34f. p36 yn. p19 p19f. p51fz p51ez p53bz p54az sign.;
run;
quit;
proc glm data=pastors3;
  class p53bz;
  model GP= p53bz / solution;
  format p34 p34f. p36 yn. p19 p19f. p51fz p51ez p53bz p54az sign.;
run;
quit;
proc glm data=pastors3;
  class p54az;
  model GP= p54az / solution;
  format p34 p34f. p36 yn. p19 p19f. p51fz p51ez p53bz p54az sign.;
run;
quit;

*Pastors: Determine the participation in church life;
title3 'Pastors: Determine the participation in church life';

*Participation; *by groupings;
title4 'participation in church life';
* by attendees;
*...., whereM=%str(p21a ne .));
%medianp(dataM=pastors3, varM=p02b, GroupM=ChurchId, formatM=%str(ChurchId sign.), whereM=%str(p21a ne .));
%medianp(dataM=pastors3, varM=p21a, GroupM=ChurchId, formatM=%str(ChurchId sign.), whereM=%str(p21a ne .));
%medianp(dataM=pastors3, varM=p02b, GroupM=R, formatM=%str(R Region.), whereM=%str(p21a ne .));
%medianp(dataM=pastors3, varM=p21a, GroupM=R, formatM=%str(R Region.), whereM=%str(p21a ne .));
%mediannp(dataM=pastors3, varM=p02b, GroupM=Size, formatM=%str(Size sizef.), whereM=%str(p21a ne .));
%mediannp(dataM=pastors3, varM=p21a, GroupM=Size, formatM=%str(Size sizef.), whereM=%str(p21a ne .));
%mediannp(dataM=pastors3, varM=p02b, GroupM=GPz, formatM=%str(GPz Growth.), whereM=%str(p21a ne .));
%mediannp(dataM=pastors3, varM=p21a, GroupM=GPz, formatM=%str(GPz Growth.), whereM=%str(p21a ne .));
*..., whereM=%str(p21c ne .));
%mediannp(dataM=pastors3, varM=p02b, GroupM=ChurchId, formatM=%str(ChurchId sign.), whereM=%str(p21c ne .));
%mediannp(dataM=pastors3, varM=p21c, GroupM=ChurchId, formatM=%str(ChurchId sign.), whereM=%str(p21c ne .));
*..., whereM=%str(p22 ne .));
%mediannp(dataM=pastors3, varM=p02b, GroupM=ChurchId, formatM=%str(ChurchId sign.), whereM=%str(p22 ne .));
%mediannp(dataM=pastors3, varM=p22, GroupM=ChurchId, formatM=%str(ChurchId sign.), whereM=%str(p22 ne .));
%mediannp(dataM=pastors3, varM=p02b, GroupM=R, formatM=%str(R Region.), whereM=%str(p22 ne .));
%mediannp(dataM=pastors3, varM=p22, GroupM=R, formatM=%str(R Region.), whereM=%str(p22 ne .));
%mediannp(dataM=pastors3, varM=p02b, GroupM=Size, formatM=%str(Size sizef.), whereM=%str(p22 ne .));
%mediannp(dataM=pastors3, varM=p22, GroupM=Size, formatM=%str(Size sizef.), whereM=%str(p22 ne .));
%mediannp(dataM=pastors3, varM=p02b, GroupM=GPz, formatM=%str(GPz Growth.), whereM=%str(p22 ne .));
%mediannp(dataM=pastors3, varM=p22, GroupM=GPz, formatM=%str(GPz Growth.), whereM=%str(p22 ne .));
*... whereM=%str(p56 ne .));
%mediannp(dataM=pastors3, varM=p02b, GroupM=ChurchId, formatM=%str(ChurchId sign.), whereM=%str(p56 ne .));
%mediannp(dataM=pastors3, varM=p56, GroupM=ChurchId, formatM=%str(ChurchId sign.), whereM=%str(p56 ne .));
proc glm data=pastors3;
   model GP=p21ax / solution;
run;
quit;
proc glm data=pastors3;
   model GP=p21cx/ solution;
run;
quit;
proc glm data=pastors3;
   model GP=p22x / solution;
run;
quit;
proc glm data=pastors3;
   model GP=p56x / solution;
run;
quit;
*Pastors: Resources & Facilities;
title3 'Pastors: Resources & Facilities';
%freqe (dataM=pastors3, var1=p16, var2=R, formatM=%str(R Region. p16 p162f.));
%freqe (dataM=pastors3, var1=p19x, var2=R, formatM=%str(R Region. p19x p19X2f.));
%freqe (dataM=pastors3, var1=p57, var2=R, formatM=%str(R Region. p57 sign.));
%freqe (dataM=pastors3, var1=p58, var2=R, formatM=%str(R Region. p58 sign.));

proc glm data=pastors3;
   class p16;
   model GP=p16 / solution;
   format p16 p162f. p19x p19X2f. p57 sign. p58 sign.;
run;
quit;
proc glm data=pastors3;
   class p19X;
   model GP=p19X / solution;
   format p16 p162f. p19x p19X2f. p57 sign. p58 sign.;
run;
quit;
proc glm data=pastors3;
   class p57;
   model GP=p57 / solution;
   format p16 p162f. p19x p19X2f. p57 sign. p58 sign.;
run;
quit;
proc glm data=pastors3;
   class p58;
   model GP=p58 / solution;
   format p16 p162f. p19x p19X2f. p55 p57 sign. p58 sign.;
run;
quit;

*Pastors: Organizational Structure;
title3 'Pastors: Organizational Structure';
.*...whereM=%str(EnterId ne .));
%freqe (dataM=pastors3, var1=p27, var2=R, formatM=%str(R Region. p27 p27f.), whereM=%str(EnterId ne .));
%freqe (dataM=pastors3, var1=p29, var2=R, formatM=%str(R Region. p29 yn.), whereM=%str(EnterId ne .));
%freqe (dataM=pastors3, var1=p25a, var2=R, formatM=%str(R Region. p25a p25board.), whereM=%str(EnterId ne .));
%freqe (dataM=pastors3, var1=p25b, var2=R, formatM=%str(R Region. p25b p25member.), whereM=%str(EnterId ne .));
%freqe (dataM=pastors3, var1=p25e, var2=R, formatM=%str(R Region. p25e p25pastor.), whereM=%str(EnterId ne .));
title4 'Univariate Models';
proc glm data=pastors3;
   class p27;
   model GP= p27 / solution;
                  p27 p27f. p29 yn.;
run;
quit;
proc glm data=pastors3;
   class p29;
   model GP= p29 / solution;
                  p27 p27f. p29 yn.;
run;
quit;
proc glm data=pastors3;
   class p25a;
   model GP= p25a / solution;
                  p27 p27f. p29 yn.;
run;
quit;
proc glm data=pastors3;
   class p25b;
   model GP= p25b / solution;
                  p27 p27f. p29 yn.;
run;
quit;
proc glm data=pastors3;
   class p25e;
   model GP= p25e / solution;
                  p27 p27f. p29 yn.;
run;
quit;
*Pastors: Multivariate Church Level Model;
title3 'Pastors: Multivariate Church Level Model';
proc glm data=pastors3;
   class p57;
   model GP=p56x p57 / solution;
   format p16 p162f. p19x p19x2f. p57 sign. p58 sign.;
   output out=pout r=Res;
run;
quit;
title4 'Normal Q-Q Plot for Church Level covariates';
proc univariate data=pout noprint;
   qqplot Res / normal cframe = ligr square vaxis=axis1;
   axis1 label=(a=90 r=0);
run;
proc glm data=pastors3;
class R Size p57;
model GP= p56x p57 R Size / solution;
output out=pout2 r=Residuals;
run;
quit;

title4 'Normal Q-Q Plot Linear Model of % Increase in Att by Church Covariates';
proc univariate data=pout2 nopr:nt;
qqplot Residuals / normal cframe = ligx square vaxis=axis1;
axis1 label=(a=90 r=0);
run;

*Leaders: Demographics of church leaders;
title3 'Leaders: Demographics of church leaders';

*Leaders: Demographic characteristics of Leaders (leaders questionnaire);
title3 'Leaders: Demographic characteristics of Leaders (leaders questionnaire)';

%freqe (dataM=leaders3, var1=Role, var2=LeaderId, formatM=%str(LeaderId sign. Role: Role.));
%medianp(dataM=leaders3, varM=101Age, GroupM=LeaderId, formatM=%str(LeaderId sign. 102 sex.));
%freqe (dataM=leaders3, var1=102, var2=LeaderId, formatM=%str(LeaderId sign. 103 103f.));
%freqe (dataM=leaders3, var1=103, var2=LeaderId, formatM=%str(LeaderId sign. 104 104PD.));
%freqe (dataM=leaders3, var1=104, var2=LeaderId, formatM=%str(LeaderId sign. 105 105menno.));
%freqe (dataM=leaders3, var1=105, var2=LeaderId, formatM=%str(LeaderId sign. 106home boolean.));
%freqe (dataM=leaders3, var1=106home, var2=LeaderId, formatM=%str(LeaderId sign. 107 107un.));

*Leaders: Demographic characteristics of Leaders (leaders questionnaire);
title3 'Leaders: Demographic characteristics of Leaders (leaders questionnaire)';

%freqe (dataM=leaders3, var1=Role, var2=R, formatM=%str(R Region. Role.));
%freqe (dataM=leaders3, var1=Role, var2=Size, formatM=%str(Size sizef. Role Role.));
%freqe (dataM=leaders3, var1=Role, var2=GPz, formatM=%str(GPz Growth. Role Role.));

%medianp(dataM=leaders3, varM=101Age, GroupM=LeaderId, formatM=%str(Leaderid Sign.));
%medianp(dataM=leaders3, varM=101Age, GroupM=R, formatM=%str(R Region.));
%medianp(dataM=leaders3, varM=101Age, GroupM=Size, formatM=%str(Size sizef.));
%medianp(dataM=leaders3, varM=101Age, GroupM=GPz, formatM=%str(GPz Growth.));

%freqe (dataM=leaders3, var1=102, var2=R, formatM=%str(R Region. 102 sex.));
%freqe (dataM=leaders3, var1=102, var2=Size, formatM=%str(Size sizef. 102 sex.));
%freqe (dataM=leaders3, var1=102, var2=GPz, formatM=%str(GPz Growth. 102 sex.));
%freqe (dataM=leaders3, var1=103, var2=R, formatM=%str(R Region. 103 1032f.));
%freqe (dataM=leaders3, var1=103, var2=Size, formatM=%str(Size sizef. 103 1032f.));
%freqe (dataM=leaders3, var1=103, var2=GPz, formatM=%str(GPz Growth. 103 1032f.));
%freqe (dataM=leaders3, var1=104, var2=R, formatM=%str(R Region. 104 104PD.));
%freqe (dataM=leaders3, var1=104, var2=Size, formatM=%str(Size sizef. 104 104PD.));
%freqe (dataM=leaders3, var1=104, var2=GPz, formatM=%str(GPz Growth. 104 104PD.));
%freqe (dataM=leaders3, var1=105, var2=R, formatM=%str(R Region. 105 105menno.));
%freqe (dataM=leaders3, var1=105, var2=Size, formatM=%str(Size sizef. 105 105menno.));
%freqe (dataM=leaders3, var1=105, var2=GPz, formatM=%str(GPz Growth. 105 105menno.));
%freqe (dataM=leaders3, var1=106home, var2=R, formatM=%str(R Region. 106home boolean.));
%freqe (dataM=leaders3, var1=106home, var2=Size, formatM=%str(Size sizef. 106home boolean.));
%freqe (dataM=leaders3, var1=106home, var2=GPz, formatM=%str(GPz Growth. 106home boolean.));
%freqe (dataM=leaders3, var1=107, var2=R, formatM=%str(R Region. 107 107un.));
%freqe (dataM=leaders3, var1=107, var2=Size, formatM=%str(Size sizef. 107 107un.));
* Leaders: Leaders level outcomes for models;
title3 'Leaders: Leaders level outcomes for models';

symbol v=plus;
data leaders3;
set leaders3;
  logl32=log(132+1);
  * 132 = 'Job Compromising faith: 0-32'
  133 = 'Christian Participation in: 0-40'
  150 = 'Church Needs Assistance: 0-40'
  151 = 'Church Receives Assistance: 0-40';
  label logl32='log 132 Job Compromising faith: 0-32';
run;

proc means data=leaders3 maxdec=1 fw=4 n missing mean stddev min q1 median q3 max;
  var 132 133 150 151 135;
run;
proc freq data=leaders3;
tables 132 133 150 151 135;
run;

%medianp(dataM=leaders3,varM=132,GroupM=LeaderId,formatM=%str(LeaderId Sign.));
%medianp(dataM=leaders3,varM=132,GroupM=R,formatM=%str(R Region.));
%medianp(dataM=leaders3,varM=132,GroupM=Size,formatM=%str(Size sizef. ));
%medianp(dataM=leaders3,varM=132,GroupM=GPz,formatM=%str(GPz Growth. ));

%medianp(dataM=leaders3,varM=133,GroupM=LeaderId,formatM=%str(LeaderId Sign.));
%medianp(dataM=leaders3,varM=133,GroupM=R,formatM=%str(R Region.));
%medianp(dataM=leaders3,varM=133,GroupM=Size,formatM=%str(Size sizef. ));
%medianp(dataM=leaders3,varM=133,GroupM=GPz,formatM=%str(GPz Growth. ));

%medianp(dataM=leaders3,varM=150,GroupM=LeaderId,formatM=%str(LeaderId Sign.));
%medianp(dataM=leaders3,varM=150,GroupM=R,formatM=%str(R Region.));
%medianp(dataM=leaders3,varM=150,GroupM=Size,formatM=%str(Size sizef. ));
%medianp(dataM=leaders3,varM=150,GroupM=GPz,formatM=%str(GPz Growth. ));

%medianp(dataM=leaders3,varM=151,GroupM=LeaderId,formatM=%str(LeaderId Sign.));
%medianp(dataM=leaders3,varM=151,GroupM=R,formatM=%str(R Region.));
%medianp(dataM=leaders3,varM=151,GroupM=Size,formatM=%str(Size sizef. ));
%medianp(dataM=leaders3,varM=l51,GroupM=GPz,formatM=%str(GPz Growth. ));

%medianp(dataM=leaders3,varM=l35,GroupM=LeaderId,formatM=%str(LeaderId Sign.));
%medianp(dataM=leaders3,varM=l35,GroupM=R,formatM=%str(R Region.));
%medianp(dataM=leaders3,varM=l35,GroupM=Size,formatM=%str(Size sizef. ));
%medianp(dataM=leaders3,varM=l35,GroupM=GPz,formatM=%str(GPz Growth. ));

proc corr data=leaders3;
  var 101Age 102 103 104 105 106home 107 Role;
run;
*104=1.05;

* 132: Job Compromise Christian Faith;
title4 '132: Job Compromise Christian Faith';
proc genmod data=leaders3;
  class 101Age 102 103 104 106home 107 Role R Size GPz ChurchId /
PARAM=GLM;
  model 132= 101Age 102 103 104 106home 107 Role R Size GPz /
dist=normal link=identity;
  repeated subject=ChurchId / type=exch covb corrw;
  format 101Age 101Age. 102 sex. 103 1032£. 104 104PD. 105 105menno.
  GPz Growth. ;
  output out=132out pred= Pred resraw= Residuals;
run;
quit;
title4 'Normal Q-Q Plot for Generalized Estimating Equations of Jobs
Compromise Christian Faith by Leader Demographics';
proc univariate data=132out noprint;
  qqplot Residuals / normal cframe = ligrid square vaxis=axis1;
  axis1 label=(a=90 r=0);
run;

* 133: Participate in Activities;
title4 ' 133: Participate in Activities';
proc genmod data=leaders3;
  class 101Age 102 103 104 106home 107 Role R Size GPz ChurchId /
PARAM=GLM;
  model 133= 101Age 102 103 104 106home 107 Role R Size GPz /
dist=normal link=identity;
  repeated subject=ChurchId;
  repeated subject=ChurchId / type=exch covb corrw;

GPz Growth.
  output out=133out pred= Pred resraw= Residuals;
run;
quit;
title4 'Normal Q-Q Plot for Generalized Estimating Equations of Activities Compromise Christian Faith by Leader Demographics';
proc univariate data=133out noprint;
  qqqplot Residuals / normal cframe = ligr square vaxis=axis1;
  axis1 label=(a=90 r=0);
run;

* 150: Church Needs Assistance;
title4 '150: Church Needs Assistance';

proc genmod data=leaders3;
  class 101Age 102 103 104 106home 107 Role R Size GPz ChurchId / PARAM=GLM;
  model 150= 101Age 102 103 104 106home 107 Role R Size GPz /
           dist=normal link=identity;
           *repeated subject=ChurchId;
           repeated subject=ChurchId / type=exch covb corrw;
  GPz Growth.
  output out=150out pred= Pred resraw= Residuals;
run;
quit;
title4 'Normal Q-Q Plot Generalized Estimating Equations of Church Assistance Needs by Leader Demographics';
proc univariate data=150out noprint;
  qqqplot Residuals / normal cframe = ligr square vaxis=axis1;
  axis1 label=(a=90 r=0);
run;

* 151: Church Receives Assistance;
title4 '151: Church Receives Assistance';

proc genmod data=leaders3;
  class 101Age 102 103 104 106home 107 Role R Size GPz ChurchId / PARAM=GLM;
  model 151= 101Age 102 103 104 106home 107 Role R Size GPz /
           dist=normal link=identity;
           repeated subject=ChurchId / type=exch covb corrw;
  GPz Growth.
  output out=151out pred= Pred resraw= Residuals;
run;
quit;
title4 'Normal Q-Q Plot for Generalized Estimating Equations of
proc univariate data=l51out noprint;
  qqplot Residuals / normal cframe = ligr square vaxis=axis1;
  axis1 label=(a=90 r=0);
run;

%medianp(dataM=leaders3,varM=l35,GroupM=R,formatM=%str(R Region.));
proc print data=leaders3;
  var Leaderid 135 R Size GP;
  format R region5f. Size sizef. GPz Growth.;
  where 135>=100;
run;
data leaders3;
  set leaders3;
  135a=l35; if 135>=100 then 135a=100;
  label 135a='Expected 5-year % Change in Attendance 135 truncated at 100';
run;
* 135: Expectation of Increased Attendance;
title4 '135: Expectation of Increased Attendance';
*all;
proc genmod data=leaders3;
  class 101Age 102 103 104 106home 107 Role R Size GPz ChurchId /
  PARAM=GLM;
  model 135= 101Age 102 103 104 106home 107 Role R Size GPz /
    dist=normal link=identity;
  repeated subject=ChurchId / type=exch covb corrw;
  GPz Growth.;
  output out=l35out pred= Pred resraw= Residuals;
run;
quit;
title4 'Normal Q-Q Plot for Generalized Estimating Equations of Expectation of Increased Attendance by Leader Demographics';
proc univariate data=l35out noprint;
  qqplot Residuals / normal cframe = ligr square vaxis=axis1;
  axis1 label=(a=90 r=0);
run;
*remove outliers;
proc genmod data=leaders3;
  class 101Age 102 103 104 106home 107 Role R Size GPz ChurchId /
  PARAM=GLM;
  model 135= 101Age 102 103 104 106home 107 Role R Size GPz /
    dist=normal link=identity;
  repeated subject=ChurchId / type=exch covb corrw;
  GPz Growth.;
  output out=l35xout pred= Pred resraw= Residuals;
  where 135<200;
run;
quit;
title4 'Normal Q-Q Plot for Generalized Estimating Equations of Expectation
*excluding outliers';
*of Increased Attendance by Leader Demographics';
proc univariate data=135xout noprint;
    qqplot Residuals / normal cframe = ligr square vaxis=axis1;
    axis1 label=(a=90 r=0);
run;

*truncated outcome;
proc genmod data=leaders3;
    class 101Age 102 103 104 106home 107 Role R Size GPz ChurchId /
PARAM=GLM;
    model 135a= 101Age 102 103 104 106home 107 Role R Size GPz /
    dist=normal link=identity;
    repeated subject=ChurchId / type=exch covb corrw;
    format 101Age 101Age. 102 sex. 103 1032f. 104 104PD. 105 105menno.
    GPz Growth.;
    output out=135aout pred= Pred resraw= Residuals;
run;
quit;
title4 'Normal Q-Q Plot for Generalized Estimating Equations of Expectation of Increased Attendance outliers truncated by Leader Demographics';
proc univariate data=135aout noprint;
    qqplot Residuals / normal cframe = ligr square vaxis=axis1;
    axis1 label=(a=90 r=0);
run;

*Q-Q Plot;
*Church Level Data;
title1 'Normal Q-Q Plot for Linear Model of Change in Attendance by Year';
proc univariate data=Eout noprint;
    qqplot Residuals / normal cframe = ligr square vaxis=axis1;
    axis1 label=(a=90 r=0);
run;

title1 'Scatterplot of Percentage Change in Attendance by Year';
proc gplot data=Pastors3;
    plot GP * Size;
    format GP percent.
run;
title1 'Normal Q-Q Plot Linear Model of Percentage Change in Attendance';
title2 'by Region and Size';
proc univariate data=gputout noprint;
   qqplot Residuals / normal cframe = ligr square vaxis=axis1;
   axis1 label=(a=90 r=0);
run;

title1 'Normal Q-Q Plot for Linear Model of Percentage Increase in Attendance';
title2 'by Church Level Covariates';
proc univariate data=pout2 noprint;
   qqplot Residuals / normal cframe = ligr square vaxis=axis1;
   axis1 label=(a=90 r=0);
run;

* Leader Level;
title1 'Q-Q Plot for Linear Model of Jobs Compromise Christian Faith Score';
title2 'by Leader Demographics and Church Region, Size, Growth Status';
proc univariate data=l32out noprint;
   qqplot Residuals / normal cframe = ligr square vaxis=axis1;
   axis1 label=(a=90 r=0);
run;

title1 'Q-Q Plot for Linear Model of Activities Compromise Christian Faith Score';
title2 'by Leader Demographics and Church Region, Size, Growth Status';
proc univariate data=l33out noprint;
   qqplot Residuals / normal cframe = ligr square vaxis=axis1;
   axis1 label=(a=90 r=0);
run;

title1 'Q-Q Plot for Generalized Estimating Equations of Church Assistance Required';
title2 'by Leader Demographics and Church Region, Size, Growth Status';
proc univariate data=l50out noprint;
   qqplot Residuals / normal cframe = ligr square vaxis=axis1;
   axis1 label=(a=90 r=0);
run;

title1 'Q-Q Plot for Generalized Estimating Equations of Church Assistance Received';
title2 'by Leader Demographics and Church Region, Size, Growth Status';
proc univariate data=l51out noprint;
   qqplot Residuals / normal cframe = ligr square vaxis=axis1;
   axis1 label=(a=90 r=0);
run;

title1 'Q-Q Plot for Generalized Estimating Equations of Expectation of Increased Attendance';
title2 'by Leader Demographics and Church Region, Size, Growth Status';
proc univariate data=135out noprint;
   qqplot Residuals / normal cframe = ligr square vaxis=axis1;
   axis1 label=(a=90 r=0);
run;

title1 'Q-Q Plot for Generalized Estimating Equations of Expectation of 5-year Increased Attendance (outliers excluded)';
title2 'by Leader Demographics and Church Region, Size, Growth Status';
proc univariate data=135xout noprint;
   qqplot Residuals / normal cframe = ligr square vaxis=axis1;
   axis1 label=(a=90 r=0);
run;

title1 'Q-Q Plot for Generalized Estimating Equations of Expectation of 5-year Increased Attendance (outliers truncated)';
title2 'by Leader Demographics and Church Region, Size, Growth Status';
proc univariate data=135aout noprint;
   qqplot Residuals / normal cframe = ligr square vaxis=axis1;
   axis1 label=(a=90 r=0);
run;