地圖與研究方法說明

This set of maps examines, at the neighborhood level, the 13 districts/cities of Taiwan that each have a population over 100,000, but have a relatively low Protestant church presence. (From here on the word "district" will be used to designate all the localities discussed, whether they are districts (區), cities (市), or towns (鎮).)

這套地圖以鄰里層面檢視台灣的 13 個地區/城市,其區內人口數都超過 10 萬,但基督教堂會數卻相對較少。 (此處"地區"一詞,將用於指定所討論的所有地區,無論是地區(區)、城市(市),還是城(鎮)。)

A measure of the low church presence is the fact that for each of the 13 districts the population /# of Protestant churches ratio (church density) is over 10,000, ranging from 10,042 to 20,864. In contrast, the other 56 districts in Taiwan that have a population over 100,000 all have a population /# of Protestant churches ratio that is less than 10,000, ranging from 2,171 to 9,792. Sixteen of these districts have a church density under 5,000, and another 28 of these districts have a church density between 5,000 and 8,000. 所謂堂會數相對較少,指的是這 13 個地區中的每個鄰里,其人口與堂會的比例(教會密度)超過 10,000,範 圍從 10,042 到 20,864。相比之下,台灣其他 56 個人口超過 10 萬的地區的人口/堂會比例均低於 10,000,從 2,171 到 9,792 不等。其中有 16 個教會密度低於 5,000,28 個密度在 5,000 到 8,000 之間。

Overall, the 13 districts have one church for every 12,263 people while the remaining 56 districts that have a population over 100,000 together have one church for every 5,678 people.

總體來說,這 13 個地區每 12,263 人才擁有一間堂會,而其餘 56 個人口超過 10 萬的地區,每 5,678 人就有

一間堂會。

This set of maps looks at neighborhood (里) level statistics for the 786 neighborhoods that comprise the 13 districts. The goal was to examine the neighborhood population and church locations to see what insights they might yield and to identify neighborhoods which could be strategic locations for new churches. 這套地圖以鄰里層面統計數據檢視構成 13 個地區的 786 個鄰里。目標在檢視鄰里人口和堂會位置,以進一步 了解,並確定可能設立新堂會的戰略位置。

The 13 districts include six that are in New Taipei City: (Tucheng District (土城區), Panchiao District (板橋區), Shulin District (樹林區), Hsinchuang District (新莊區), Sanchung District (三重區), and Luchou District (蘆洲區). The other seven districts/cities are: Taoyuan City Pate District (八德區), Hsinchu County Chupei City (竹北市), Hsinchu City North District (北區), Changhua County Changhua City (彰化市), Changhua County Yuanlin City (員林市), Tainan City Annan District (安南區), and Kaohsiung City Hsiaokang District (小港區). The combined December, 2014, population of these 13 districts was 3,176,132, which is 13.6% of Taiwan's total population.

這 13 個地區有 6 個在新北市,包括:土城區、板橋區、樹林區、新莊區、三重區、蘆洲區; 另外 7 個地區/ 城市為 : 桃園市八德區、新竹竹北市、新竹市北區、彰化市、員林市、台南市安南區、高雄市小港區。2014 年 12 月,這 13 個區的人口總數是 3,176,132,佔台灣總人口 13.6%。 Map 1 shows the church density range for all the districts, cities, and towns of Taiwan that had a population over 100,000 in December, 2014. The map shows that the great majority of the places (56 out of 69) fall in either the yellow or green ranges, meaning that there is at least one church for every 10,000 people. 地圖 1 顯示台灣 2014 年 12 月人口超過 10 萬的所有地區、城市和城鎮的教會密度範圍。圖中顯示絕大多數地 方(69 個中的 56 個)屬於黃色或綠色範圍,這意味著每 10,000 人至少有一個堂會。

Map 2 focuses on the 13 districts in Map 1 that are in the blue, purple, or orange range for the church density. The church density for these districts range from one church for every 10,042 people to one church for every 20,864 people. The desire for a closer look at each of these districts, in light of the low church presence for a high population area, was the motivation for making this set of maps.

地圖 2 側重於地圖 1 中的 13 個區域,這些區域的堂會密度在藍色、紫色或橙色範圍內。這些地區的堂會密度 從每 10,042 人一間堂會,到每 20,864 人一間堂會。製作這套地圖的動機,乃著眼於人口較多的區域,但堂 會數卻較少的現象,希望能對這些區域做更進一步的觀察。

A Bilingual Name List for the numbered areas on Maps 1 and 2 is provided. The map numbers for each of the districts in Map 2 were used to identify all of the maps made. For example, the maps for Tainan City's Annan District are identified as 235 A, 235 B, 235 C, and 235 D. To download this name list, please click. 我們在此提供地圖 1 和 2 上編號區域的中英文對照。地圖 2 中每個地區的地圖編號是用來識別所有製作的地圖。例如,台南市安南區的地圖被標識為 235 A、235 B、235 C 和 235 D。要下載此名單,請點擊此處。

Four neighborhood level maps were made for each of the 13 districts:

以鄰里為考量,為13個地區各製作了四種地圖:

Map A for each district shows the population range for each of the neighborhoods in the district plus the locations of the Protestant churches listed for each district in the 2017 – 2018 Taiwan Church Handbook*. Since the 2017 - 2018 TCH uses population data from December, 2014, neighborhood population data for the same year and month was used for all the maps made for this project. The name of each neighborhood, in Chinese characters, is given on Map A and on all the other maps as well.

每個地區的地圖 A,顯示該區每個鄰里的人口級距,及教堂會的位置(根據《2017~2018 年台閩地區基督教堂 會、宣教機構一覽表》。《2017~2018 年台閩地區基督教堂會、宣教機構一覽表》使用的是 2014 年 12 月的 人口數據,本報告中所有地圖也都使用這個人口數據。地圖 A 中每個鄰里的中文名稱和其他地圖相同。

Map B is a key map in this set as it looks *internally* at the distribution of both the population and the Protestant churches within each district. The method used to do this was to make from 4 to 12 groupings of neighborhoods and then determine the total population and the total number of Protestant churches within each grouping. The results for each grouping are listed in a table of data included on each of the B maps. 地圖 B 是該圖組中的關鍵地圖,因為它從內部觀察每個地區的人口和基督堂會的分佈。研究方法是先製作 4 到 12 里的群組,然後確定每個**群組**中的總人口和基督堂會的總數,再列到每個 B 圖上。

The neighborhood groupings were determined in accordance with what seemed the best way to arrange the neighborhoods that are in the vicinity of each church or cluster of churches. Sometimes this was an easy

decision, but often the groupings decided on were not that obvious and so they may appear to be arbitrary. The irregular shapes of the neighborhoods, especially those that are much longer than wide, resulted in some groupings that were not very compact. Another challenge were groupings that ended up with a church(es) located right on the border of the grouping. This happened often, but alternative ways of grouping the neighborhoods didn't seem to be any better. In summary, the neighborhood groupings are one person's judgement. The groupings could be done in different ways.

鄰里群組的分組,是看附近堂會適合分到哪區來決定。有時很容易就可以分辨,但通常不是那麼容意決定,所 以有時是比較武斷的。尤其當鄰里區域的形狀若很不規則,特別是那些長度遠大於寬度的區時,分組就比較不 嚴謹。另一個挑戰是此種分法,有可能造成某個堂會剛好座落在分組邊界上。這種情況經常發生,但用其它方 式分組似乎也不會更佳。總之,鄰里分組全憑個人判斷,分組可以以不同方式進行。

The set of B maps show very different situations. The B map for Hsinchuang shows that the Protestant churches are fairly evenly spread out among the population. The B maps for several districts, however, show that there are areas having large populations that have few or no churches. One example is Sanchung District (see map 43 B). The Sun Yat-sen Expressway traverses the northern part of Sanchung. The Sanchung neighborhoods that are north of this expressway have a total population of 116,000 people but only three Protestant churches! A band of Sanchung neighborhoods on the southern side of the expressway also have large populations but very few churches. Another example is Taoyuan City's Pate District. In Pate all 11 Protestant churches are relatively close to Highway 4, which is a north/south highway that crosses the district. In both the eastern and the western regions of Pate there are large populations but no Protestant churches.

B 圖集顯示了非常不同的情況。新莊的 B 地圖顯示,堂會在人口中相當均勻地分佈。然而,好幾個地區的 B 地圖顯示,有些人口眾多的地區很少或沒有堂會。一個例子是三重區(見地圖 43 B)。中山高速公路穿越三 重北部。位於這條高速公路以北的三重鄰里總人口為 116,000 人,但卻只有三所堂會!高速公路南側的三重 鄰里社區也有很多人口,但很少有堂會。另一個例子是桃園市的八德區。在八德的 11 個堂會都相對靠近橫跨 該區的南北 4 號高速公路。在八德東部和西部地區,雖擁有眾多人口,但卻連一間堂會都沒有。

With the possible exception of Hsinchuang, each of the B maps identify groupings of neighborhoods that have relatively large populations with few, or no, churches and so could be strategic places for starting new congregations.

除了<mark>新莊</mark>之外,每張 B 地圖都能識別人口相對較多,但很少或沒有堂會的鄰里,因而可以在此建立新會堂。

Map C shows neighborhood boundaries and Protestant church locations superimposed over satellite imagery. These maps make it easy to see concentrations of population and whether or not there are any churches in the area. Most of the maps are clear, though some, especially Luchou, have significant cloud cover that lessens the maps' usefulness.

地圖 C 將鄰里和基督教堂會位置疊加在衛星圖像上。從這些地圖可以很容易地看到人口的集中,及該區是否 有任何堂會。大多數地圖都是清晰的,雖然有些地圖,特別是蘆洲區,有相當的雲層覆蓋,以致減低了地圖的 實用性。

Map D shows the gender ratio for each neighborhood. These maps plot three ranges of the gender ratio, which is calculated as the number of males for every 100 females. A ratio of 95.0, or lower, (the blue range)

shows there are significantly more females than males living in the neighborhood. A ratio over 105.0 (the red range) shows there are significantly more males than females living in the neighborhood. Green indicates neighborhoods that have a gender ratio that is between 95.0 and 105.0. In these neighborhoods the male/female numbers are closer to being balanced.

地圖 D 顯示了每個鄰里的性別比例,包括 3 個範疇,其計算為每 100 名女性所對應的男性人數。比例為 95.0 或更低(藍色範圍)表示,女性明顯多於居住在鄰里中的男性。比率超過 105.0(紅色範圍)表示,居住在鄰 里的男性明顯多於女性。綠色表示性別比介於 95.0 和 105.0 之間的鄰里。在這些鄰里中,男女比較平衡。

Map E shows the population density for each neighborhood. These maps were only made for the six districts that are in New Taipei City. In all six of these districts the maps show neighborhoods that have over 70,000 people / square kilometer. In Hsinchuang and Luchou the population density can exceed 100,000 people / square kilometer. Sanchung has the highest density of all. The population density for 10 neighborhoods in Sanchung exceeds 150,000 people / square kilometer! No population density data was obtained for the seven districts outside of New Taipei City.

地圖 E 顯示每個鄰里的人口密度。這些地圖僅針對新北市的 6 個地區。在所有這 6 個區中,顯示擁有超過 70,000 人/平方公里的鄰里。在新莊和蘆洲,人口密度可超過 10 萬人/平方公里。三重的密度最高,10 個鄰里的人口 密度超過 15 萬人/平方公里!新北市以外的 7 個地區沒有取得人口密度數據。

It is hoped that this set of maps will be helpful tools for further understanding of the population and Protestant church distribution within these 13 districts, which are home to 3.2 million people. Together, the maps show many areas within these districts that have large populations but no churches. May the Lord raise up workers for all these areas who will go forward with faith and boldness to proclaim the gospel and

start new churches.

期望這套地圖能成為進一步瞭解這 13 個區內的人口數和基督教堂會分佈的有效工具。這些區共擁有 320 萬人 口,而這些地圖顯示了在這些地區中,人口眾多但堂會卻很少的問題。願主為這些地區興起工人,讓他們能以 信心和勇氣向前邁進,宣揚福音,建立教會。

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協同會麥啓理牧師

*Church data source: 2017 - 2018 Taiwan Church Handbook, Christian Resource Center, Taichung

統計資料來源: 2017 - 2018 年台閩地區基督教堂會, 宗派, 宣教機構一覽表 基督教資料中心發行, 台中