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Reaching the World's 500 Largest Cities: A Demographic and Statistical Analysis

Introduction

The year 2008 marked a significant watershed in human history: For the first time in recorded history demographers estimated that more than 50% of the global population lived in urban areas (DESA 2007:1-3, figures 1.1-2, table 1.1). The percentage of urban population is not an objective fact. The World Bank calculates urban population, for its authoritative "World Development Indicators" database, from "people living in urban areas as defined by national statistical offices" rather than a standard global definition (World Bank Website, see also World Bank 2013). In practice national definitions of urban areas vary significantly. For example, Canada defines an urban area as a place with 1,000 people whereas Japan uses a figure of 50,000 (Haub 2009). Nevertheless, however defined, for the first time demographers are agreed that global urban population has outstripped the rural population. The UN predicts that urban population will continue to grow by 1.8 percent per year from 2007 to 2025 (DESA 2007:4). Even though global population will continue to grow, the UN projects that rural population will stop growing by 2020 (Haub 2009). Furthermore, all evidence indicates that a larger percentage of people than ever before live in very large urban areas.

The rapid growth of urban populations has brought "big cities" to the forefront of mission strategic planning. In late 2013 the General Conference of Seventh-day Adventists hosted a conference of world church leaders entitled, It's Time: Refocusing Adventist Urban Mission for the 21st Century. This was to undertake strategic planning for urban mission worldwide (Oliver 2013). Those attending included the executive officers and Adventist Mission directors from the General Conference headquarters and all its 13 divisions, and the Middle East and North Africa Union (MENA). The research described in this paper was initially compiled for and reported at the It's Time conference (September 27 to October 1, 2013).

The goal of the research was to understand the condition of the Seventh-day Adventist Church in urban areas with a population over 1 million. Data-collection was undertaken in July and August, 2013.

Urban Definitions

Over years of urban studies definitions on how to describe urban areas continue to change. Definitions range from the most basic urban terminology referring to a city, and include more complex geo-sociological terms such as metropolis (a very large city), megalopolis (a string of cities), and more recently agglomeration (Pumain and Moriconi-Ebrard 1997). Agglomeration refers to an urban area that takes in several cities, such as Tokyo, Chicago, Sao Paulo, Seoul, New Delhi, and Washington, DC. Agglomerations can connect entire regions and sometimes cross territorial or even national boundaries.

According to demographer Thomas Brinkoff, in 2013 there were 504 urban agglomerations with a population of more than one million (Major Agglomerations of the World 2013). We used the 504 figure as a basis for collecting data on the Adventist presence in the world's largest urban areas, even though Brinkoff has since added to this list. As of October 1, 2014 there are now 527 cities listed with a population of more than one million.

Methodology

The data for this study was collected through emails generated by an online database¹ over a four-week period in July and August 2013. Of 504 cities queried in this study, 500 were returned with information deemed to be valid. In each case information was reported by union leaders, who collected data in consultation with local fields. In cases where information was not gathered in a timely manner, follow-up communication often produced results. Each union leader was given a list of the large urban areas in their territory and basic parameters of how to define each urban area.

The questionnaire asked seven basic questions to determine the Adventist footprint in urban areas:

- 1. Total Seventh-day Adventist membership in the city.
- 2. Total number of churches and companies.
- 3. Total number of denominationally owned and operated medical institutions.
- 4. Total number of denominationally owned and operated educational institutions.
 - 5. Total number of denominationally owned and operated media outlets.

- 6. Total number of denominationally owned and operated publishing houses.
 - 7. Other Seventh-day Adventist owned institutions not listed above.

With 500 urban areas reported there was an adequate sample size to provide a fairly accurate picture of the global Seventh-day Adventist presence in large urban areas. Tabulators studied the returned data to remove or adjust anomalies reported in the data. This study was not intended to provide pinpoint accuracy, but to provide a general picture or snapshot of church health in large cities.

Distribution of Urban Areas

This study encompasses 500 urban areas of one million or more. These include 12 agglomerations of at least 20 million population, 29 agglomerations with at least 10 million population, and 74 cities of at least 5 million population. These large urban areas are spread across all the inhabited continents. Nearly half (236/500) of these cities are located within the 10/40 Window.²

Map 1. Global Urban Areas

© Cities <= 20 Mil. Pop (12 Cities)

© Cities <= 10 Mil. Pop (29 Cities)

• Cities <= 1 Mil. Pop (500 Cities)

• Cities <= 1 Mil. Pop (500 Cities)

■ 1040 Window

■ Country in 1040 Window

Map 2 demonstrates the distribution of large urban areas by nation (Major Agglomerations of the World 2013).

Map 2. Distribution of Large Urban Areas by Country



According to Thomas Brinkoff's database there are nine nations³ with more than ten large urban areas:

Claire	70
China	79
India	51
United States of America	50
Brazil	21
Indonesia	15
Russia	15
Mexico	14
Japan	13
Germany	10

Altogether there are 268 large cities in only nine nations. The large cities in these nine nations have a population of nearly 1 billion people. Clearly the most populated nations also have the most urban areas, with China, India, and the United States leading the group with more than 50 large urban areas in each nation. The only geopolitical areas without at least one nation with more than 10 large cities include Africa (Nigeria has 8) and the Middle East (Turkey 8, Iran 7).

The number of cities according to the divisions and attached fields of the Seventh-day Adventist World Church changes the landscape. Since each division of the world church has responsibility for mission in its territory, the scale or magnitude of the challenge grows with the number of large cities.

Table 1. Cities of 1 Million or More by Division or Attached Field

Division	Cities of 1 million or more
Northern Asia-Pacific Division	105
North America Division	56
Southern Asia Division	52
Middle East and North Africa U	nion 47
(Attached to the GC)	
Southern Asia-Pacific Division	41
South America Division	34
Inter-America Division	34
Inter-European Division	31
Euro-Asia Division	28
West-Central Africa Division	26
Trans-European Division	19
East-Central Africa Division	10
Southern Africa-Indian Ocean D	ivision 9
South Pacific Division	6
Israel (Attached to the GC)	1

Map 3. Cities by Division



Table 2. Cities of 1 million or More by Union (Minimum of 10 or more per union)

00	
83	
47	
27	
14	
13	
12	
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10	
	27 14 13 12



Map 4. Cities by Union (10 or more)

Adventist Footprint in Large Urban Areas

As of June 30, 2013 the global population was an estimated 7,133,547,000, and at the same time there was a reported total of 17,994,120 Seventh-day Adventist church members. There was thus a general global populationto-member ratio of 396.4 to 1; a total of approximately 2,522 Seventh-day Adventist church members per million people worldwide.

However, if we look at the 500 cities of at least one million people, their total population was approximately 1,704,240,000, with a church membership of 3,111,801. This means that in the million-plus cities, the population-to-member ratio was 547.7 to 1, equivalent to 1,826 members per million people in the general population. As expected the average Adventist presence inside large urban areas is substantially lower than the global average. These numbers confirm that Adventists have a huge challenge in the world's cities and that they have not worked the cities in the same way that they have the rural populations.

As of June 30, 2013 there were 143,337 Seventh-day Adventist congregations (churches and companies) serving the entire world, with a ratio of population to congregation of 49,767 people for one Adventist congregation. Thus, on average, each Seventh-day Adventist congregation serves about 50,000 people globally. In some places this would be much higher and others much lower.

In large urban areas, however, the figures are much more challenging. In the cities studied there were 19,114 Adventist congregations. With the global urban population of 1,704,240,000 at the time of the study, there was a ratio of urban population to Adventist urban congregations of 89,167 per congregation. This means that, on average, there is more than an 80% differential in the number of people served by each Adventist congregation in large cities as opposed to the worldwide average. Overall more than 23.89% of the global population lives in 500 agglomerations of more than 1 million, but only 13.34% of Adventist congregations are in those same 500 urban areas.

The study also took a look at Adventist primary, secondary, and tertiary educational institutions. There is a global total of 7,883, which means that worldwide each educational institution serves 2,280 church members and 900,000 people. However, educational institutions in large urban areas total only 1,202. Thus, each "big city" educational institution serves 2,588 members and 1.4 million people—50% more people than educational institutions outside cities of 1 million or more.

Areas Where the Church Is Strong

Despite the general picture of urban weakness, it is important to note that several million-plus cities have exceptional ratios of population to church members. These cities are all in areas where the predominant religio-cultural background is Christian. Five of these cities are in Sub-Saharan Africa; seven are in Latin America, while another is in Haiti, the lone francophone city on this list. The only other city with a very strong ratio comes from an area of India with a Christian background.

Cities with a population to member ratio of 19:1 to 56:1 include Lusaka, Zambia (19:1); Harare, Zimbabwe; Kigali, Rwanda; Port-au-Prince, Haiti; Santo Domingo, Dominican Republic; Cartagena, Colombia; San Salvador, El Salvador; Kumasi, Ghana; Hubli-Dharwar, India; Managua, Nicaragua; Manaus, Brazil; Kampala, Uganda; São Luís, Brazil; Barquisimeto, Venezuela (56:1).

In terms of raw numbers, two of the cities with more than a million population have over 100,000 Adventist church members: Lusaka, Zambia and São Paulo, Brazil. There are five additional cities with 75,000 members or more: Harare, Zimbabwe; Lima, Peru; New York, USA; Port-au-Prince,

Haiti; and Santo Domingo, Dominican Republic. In total there are 46 large cities with more than 20,000 church members (see Map 5).

Map 5. Cities with More Than 20,000 Church Members



Areas Where the Church Is Weak

When looking for where the church is weakest, there are 119 cities that have fewer than 125 church members residing in them. Since 125 members was the global average size of an Adventist congregation in 2013, in effect, in each of these cities there are not enough Adventists to support even one traditional church. Even worse, 33 of these cities have no Seventh-day Adventist congregations at all. Map 6 shows the geographical reality of the cities where the church is weakest, predominately across North Africa, in the Middle East, and Asia—otherwise known as the 10/40 Window. There are other European and African cities that are also on this profile, but the 10/40 Window contains the majority of the cities where the church is weakest.

Map 6. Cities with Fewer than 125 Church Members



Eight of these cities have no official Adventist presence. Nearly all of these cities are in Muslim areas, the lone exception being Pyongyang, North Korea. Six of the eight of the large urban areas with no Adventist members are in the Middle East and North Africa Union, which begins to hint at the challenge the church faces in this region.

Table 4. Large Urban Areas with no Adventist Members

Ankara, Turkey	0:4,450,000
Kabul, Afghanistan	0:3,350,000
Aleppo, Syria	0:2,900,000
Meshed, Iran	0:2,900,000
Pyongyang, N Korea	0:2,750,000
Dammam, Saudi Arabia	0:2,200,000
Bursa, Turkey	0:1,850,000
Mecca, Saudi Arabia	0:1,740,000

Another disturbing bit of information that this study brought out was that there are 42 cities with 10 or fewer Seventh-day Adventist church members. Their distribution is shown in Table 5. Check the Notes at the end of the paper for the names of each of these cities.

Table 5. Number of Cities with 10 or Fewer Church Members by Union

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26	Middle East and North Africa Union ⁴
7	North India Union Section ⁵
4	Chinese Union Mission ⁶
1	Israel Attached Field ⁷
1	Southern Union (ESD) ⁸
1	East Kenya Union ⁹
1	Sahel Union Mission ¹⁰
1	Korea Union Conference ¹¹

By combining the map of the highest Adventist membership in large urban areas, with the map of the urban areas where the membership is the lowest (map 7), we can see a stark picture. With little exception, majority Christian areas are the areas where the Adventist church is strongest in large urban areas, while in the areas dominated by rival world religions or belief systems—Islam, Hinduism, Buddhism, Chinese traditional beliefs, secularism, and postmodernity—large urban areas are all marked by a very weak Seventh-day Adventist presence.

Map 7. Highest Concentration and Lowest Concentration of Adventists Cities by SDA



This geographical divergence between where the church has a very strong footprint and a very weak one is mirrored no matter what slice of the data is taken into consideration. Congregations, educational institutions, and medical institutions all show the same geographical separation between the Christian areas and those areas of the world that represent other world religions and philosophies. The one exception would be the development of educational institutions, particularly in India and Indonesia. Map 8 shows the total institutional presence.

Map 8. Total Presence of All Adventist Institutions



When one compares areas where the Seventh-day Adventist Church has a strong presence with those areas where it is marginally represented, it put a different complexion on the overall ratios of church members and congregations to population. Not only are these ratios in million-plus cities worse than the global or divisional averages, but also, in some areas of the world the ratios for large urban areas are very poor. This is revealed by Table 5, which shows the ratio of members per million for each division, ranked highest to lowest.

Table 5. Average church members per million people in large urban areas

Southern Africa-Indian Ocean Division	9,757
Inter-American Division	6,854
East-Central Africa Division	6,424
South American Division	5,154
West-Central Africa Division	2,563
North American Division	2,471
South Pacific Division	2,366
Southern Asia-Pacific Division	959
Southern Asia Division	635
Trans-European Division	553
Northern Asia-Pacific Division	488
Inter-European Division	452
Euro-Asia Division	329
MENA	15

Table 5 graphically reveals that there are Adventist urban "haves" and "have nots." Seven divisions have an average of 2,000 or more church members per million of the wider population; in contrast with six other divisions where the church members per million figure is less than 1,000. In the Middle East North Africa Union (MENA) there are only 15 Seventhday Adventists per million urban dwellers. Adventist leaders have known that the church was weak in the big cities of the 10/40 Window, but until this research no one realized just how weak. What is striking is the weakness of the church in Europe's big cities. All three European divisions are not merely weak in a comparative sense; their membership per million of population is lower than the overall members per million ratio in the 10/40 Window as a whole, which is 605:1 compared to the Trans-European division with 553:1, the Inter-European division with 452:1, and the Euro-Asia Division with 329:1 (ASTR 2014: 80). This picture is further confirmed if one considers congregations as shown in Table 6 (ranked strongest to weakest).

Table 7. Population to Congregations in Large Urban Areas

Southern Africa-Indian Ocean Division	19,448
East-Central Africa Division	25,517
South American Division	26,330
Inter-American Division	29,094
South Pacific Division	51,322
West-Central Africa Division	55,931
North American Division	94,356
Euro-Asia Division	136,100
Trans-European Division	215,873
Southern Asia Division	228,288
Southern Asia-Pacific Division	263,611
Inter-European Division	273,213
Northern Asia-Pacific Division	310,161
MENA	4,366,912

The exact order of the ranking is slightly different but again confirms that in sub-Saharan Africa and Latin America, the church is doing moderately well in million-plus cities, even though in these territories there are large urban populations with few or no Adventist congregations. In the 10/40 Window, Europe, East Asia, and in strongly Islamic, Buddhist, and Hindu regions of Southern and Southeast Asia, the church's presence in urban areas is extremely weak. Furthermore, the results of extensive membership audits in the Southern Asia Division, which were reported in 2013 and 2014, would deleteriously affect the membership ratios in that division, perhaps significantly).

Planning for Improvement

The "It's Time" Conference made a series of recommendations and set a series of goals, which were adopted by the 2013 Annual Council. ¹² The objectives focused on improving membership and congregation presence and ratios. However, there was encouragement to divisions and unions not merely to seek improvement in all their million-plus cities, but to break them down into categories, and seek improvement in presence and ratio in each category. Otherwise, an initiative in just a few cities could see a territory's overall population and congregation ratios improve while leaving many large cities still effectively unreached.

Each territory should find a categorization schema that is appropriate for its own territory. For example, the Southern Africa-Indian Ocean Division only has nine million-plus cities, none of which has a population to member ratio over 665:1. In MENA, the lowest ratio (by some considerable distance) is 5,000:1 (in Beirut). The South Pacific Division has only six million-plus cities. Thus, categorization schemes need to reflect the reality "on the ground," both in terms of how many categories will be used and the definitional criteria for each. However, bearing this in mind, Adventist Mission proposes that each division and union should group its large urban areas into five categories, based on population to congregation ratios. This is used, rather than the population to member ratio, because congregations are used in Adventist planning for church growth in all the divisions of the world.

Typically, this would be based on standard deviation, which measures how dispersed data are from their mean. However, this dataset is distorted by the number of cities with very large populations and very few or no congregations—in statistical terms, these outliers distort standard deviation. The scheme of five classes, which are shared below, partly uses the median, mean and one standard deviation, but it also recognizes that in this dataset, cities are disproportionately clustered at the lower end of the ratios.

We propose making the first category, of "most reached" big cities, those with fewer than 50,000 people per congregation. The median, mean and standard deviation are then used to establish the remaining classes. As noted earlier, the global congregation to population ratio is 89,167 people per congregation in large urban areas. The mean for all 500 million-plus cities is 560,360 people per congregation—but this is heavily skewed by the cities at the top end of the distribution. The median for these cities is 206,904 people per congregation, while one standard deviation is 1,143,071 per congregation.

The model we are suggesting in practice works out as follows if applied to the full global dataset of 500 cities:

Category A: 89 cities with fewer than 50,000 people per congregation Category B: 139 cities with between 50,000 and 207,000 people per congregation (207,000 = median)

Category C: 103 cities between 207,000 and 560,000 people per congregation (i.e., between the median and the mean)

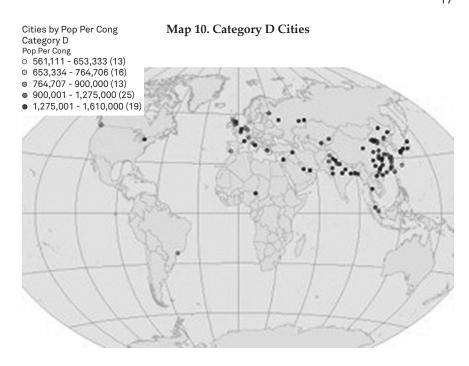
Category D: 86 cities with from 560,000 to 1.7 million people per congregation (i.e., one standard deviation away from the mean)

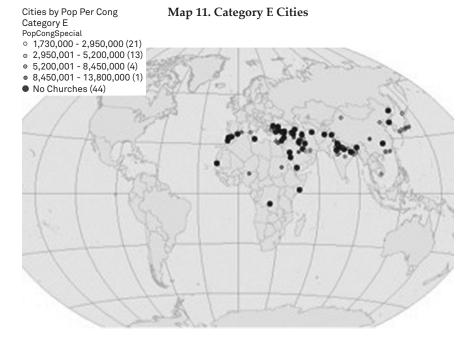
Category E: 83 cities with over 1.7 million people per congregation (i.e., beyond one standard deviation away from the mean)
This categorization brings home again the reality of the uneven

Adventist distribution in big cities already mentioned in this article. Map 9 shows the distribution of the 89 "category A" cities, which are largely in the Americas, sub-Saharan Africa, with outposts in India, China and the Philippines.



Maps 10 and 11 show the 86 Category D and 83 Category E cities—the least reached (or unreached) large urban areas. There are outliers in North and South America, but they are overwhelmingly in India, MENA, China, and Southeast Asia.





Regardless of how a division or union decides to classify its large urban areas, using the above categorizations will allow the Seventh-day Adventist Church to make a decided advance in big cities to which it has collectively committed. Each organizational unit of the denomination—conference/mission, union and division—should make plans to improve the number of congregations, the number of church members, the population to member ratio, and the population to congregation ratio not only in the million-plus cities in its territory, but in every category or class of large cities it is responsible for.

The Adventist Advantage

In conclusion it is worth considering the advantage Seventh-day Adventists have in trying to reach urban areas, once the church puts its minds to it and plans for it.

In 1997, a United Nations Development Program survey of mayors of large cities identified what they perceived as key urban problems. Even though this survey is over 15 years old, every subsequent document of the UNDP on urban affairs refers to the issues listed in this document, making this survey a seminal work in urban studies (United Nations Development Program 1997).

The survey listed the following eight most important quality of life issues facing large cities: (1) employment/job creation, (2) solid waste collection and disposal (3) urban poverty, (4) shelter and housing. (5) water and sanitation, (6) public transport and traffic, (7) health services, and (8) civil society participation.

There is little that the Seventh-day Adventist denomination could do, at least in most of the world, about solid waste collection and disposal; but almost all the other identified problems are ones that are addressed, at least implicitly, in the distinctive Adventist message of wholeness and hope, founded in the good news of Jesus Christ as Savior and High Priest, and in the prophetic message of the angels of Revelation 14. Seventh-day Adventists should not be afraid that they have nothing relevant to say to the millions packed into the world's 500 largest cities. Instead, the Adventist distinctive message is one that the people in the world's cities need to hear—one that can transform lives in the great cities of the world, even as we look forward to the transformation of the world consequent on the Second Coming of Jesus Christ. Adventists look forward to living in the New Jerusalem—but before moving to the heavenly city, there is much we need to do first in our earthly cities.

Notes

¹The questionnaire was developed by the authors in consultation with church leaders. The database for gathering information was programed by Evert Nugent, General Conference of Seventh-day Adventists, with assistance from Joshua Marcoe, Office of Archives, Statistics, and Research, General Conference of Seventh-day Adventists (ASTR). Tabulation of data was conducted by David Trim (ASTR) and Richard McEdward. Maps for presentation were created by Jerry Chase, Ohio Conference of Seventh-day Adventists.

²For the General Conference official list of 10/40 Window Countries see ASTR 2014:80-81. This is essentially the Joshua Project's revised definition of the 10/40 Window: http://joshuaproject.net/resources/articles/10_40_window, (accessed October 8, 2014).

³The General Conference uses United Nations' list of standard countries and areas: see ASTR 2014:75.

⁴Adana, Turkey; Aleppo, Syria; Ahvaz, Iran; Ankara, Turkey; Antalya, Turkey; Basra, Iraq; Bursa, Turkey; Damascus, Syria; Dammam, Saudi Arabia; Erbil, Iraq; Fes, Morocco; Gaziantep, Turkey; Isfahan, Iran; Konya, Turkey; Marrakesh, Morocco; Mecca, Saudi Arabia; Medina, Saudi Arabia; Meshed, Iran; Mosul, Iraq; Oran, Algeria; Rabat, Morocco; Sana'a, Yemen; Shiraz, Iran; Tabriz, Iran; Tripoli, Libya; and Qom, Iran.

⁵Allahabad, Asansol, Dhanbad, Gwalior, Jodhpur, Kanpur, and Kota.

⁶Hengyang, Jining, Jixi, and Zhuzhou.

⁷Gaza.

⁸Kabul, Afghanistan.

⁹Mogadishu, Somalia.

¹⁰Nouakchott, Mauritania.

¹¹Pyongyang, Democratic People's Republic of Korea.

¹²http://news.adventist.org/fileadmin/news.adventist.org/files/news/2013/It_s_Time_document.pdf (accessed 1 October 2014).

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