Seoul Data Catalogue

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Contents

Preface

Hello, welcome to my website! This site offers a handful of geospatial data of Seoul, including population, housing, landuse, industry, traffic, society, hospitality, and environment. Feel free to browse through this book, and drop me a note if you have any enquiries.

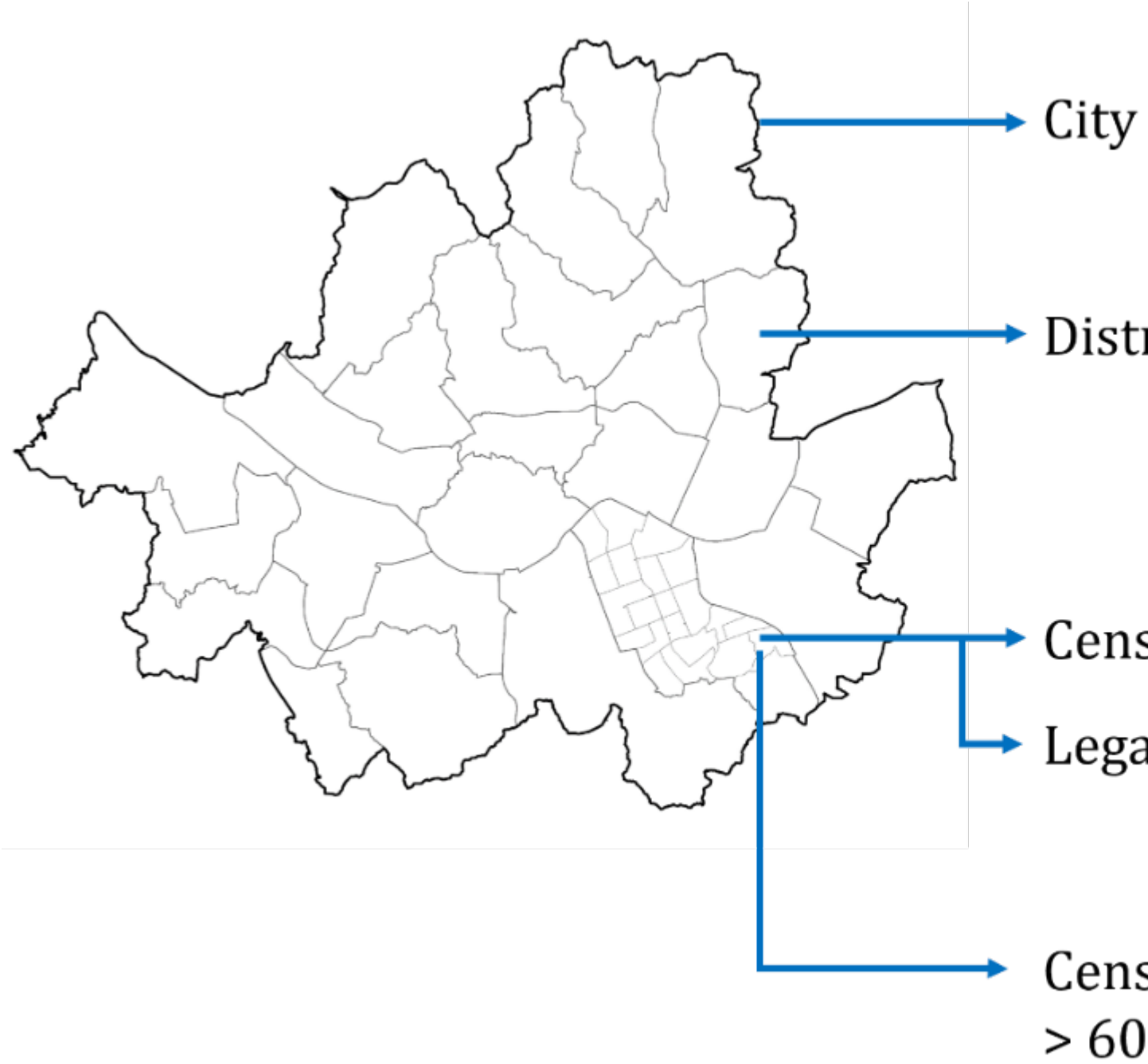
Chapter 1

Introduction of Seoul

1.1 Overview

- Capital of South Korea
- Area: 605.21 km2 (233.67 sq mi)
- Population: 9,971,111 (678,102 international residents, 2015 NSO)
- Language: Korean
- Currency: Won

1.2 City Hierarchy



The city has four hierarchies, Si, Gu, Dong, and *Jipgegu*, from city to block level. Within the *Si*(city) scale, Seoul has 25 administrative districts, gu, of which the spatial size is similar to the boroughs in London. The river Han penetrates horizontally through the city centre, from east to west, which divides 14 gus to the north, and 11 to the south.

Chapter 2

Spatial Boundary

2.1 Administrative District *(Gu)*

Gu, is a sub-municipal unit in South Korea. *Gu* is normally regulated when a city has at least a population of 500,000 persons. Seoul has 25 *gu*s, of which the area and population varies. Seocho has the largest area ($47km^2$) whereas Jung has the smallest ($9.96km^2$). Songpa and Jung are the most and least populated areas, which are approximately 640,830 and 117,781 persons. To find out more see https://en.wikipedia.org/wiki/List_of_districts_of_Seoul.

2.2 Census tracts *(Dong)*

Dong, known as census tracts, are the smallest boundary of which the authority is owned by the urban government. Each gu comprises two types of boundaries as *Hengjeong dong*s and *Beopjeong dong*s. *Hengjeong dong*s, sub-municipal districts, were established for administrative convenience, such as resident registration. These *dong*s could be consolidated, divided, or founded due to population increase or decrease e.g. Jongno 1-2-3-4ga dong. *Beopjeong dong*s, legal districts, are towns or villages that were left for historical significance (Legal dongs were based on cadastral maps made from the Land investigation project during the Japanese colonial years). Due to its historial and symbolic meanings, people tend to remember the names easier than administrative ones. As of 2014, Seoul has 424 administrative dongs and 467 legal dongs. Gildong in Songpa district was most populated area in 2014 at 49,535 persons, whereas Sogongdong in Jung district was the least populated at 735 persons.

2.3 Administrative Census Block *(Jipgegu)*

The finest scale is *Jipgegu*, or census block. This boundary is mainly to retrieve the population from a minimum statistical area, thus does not function as an administrative unit. Each Jipgegu consists of 60-500 residents, and the boundaries are renewed every year. As of 2013, Seoul has 16,470 jipgegus. All boundary data were provided in a shapefile in a 5-year period from 1975-2015, except the *Jipgegu* where the last update was in 2016.

Figure 2.1: Districts(Gu) in Seoul

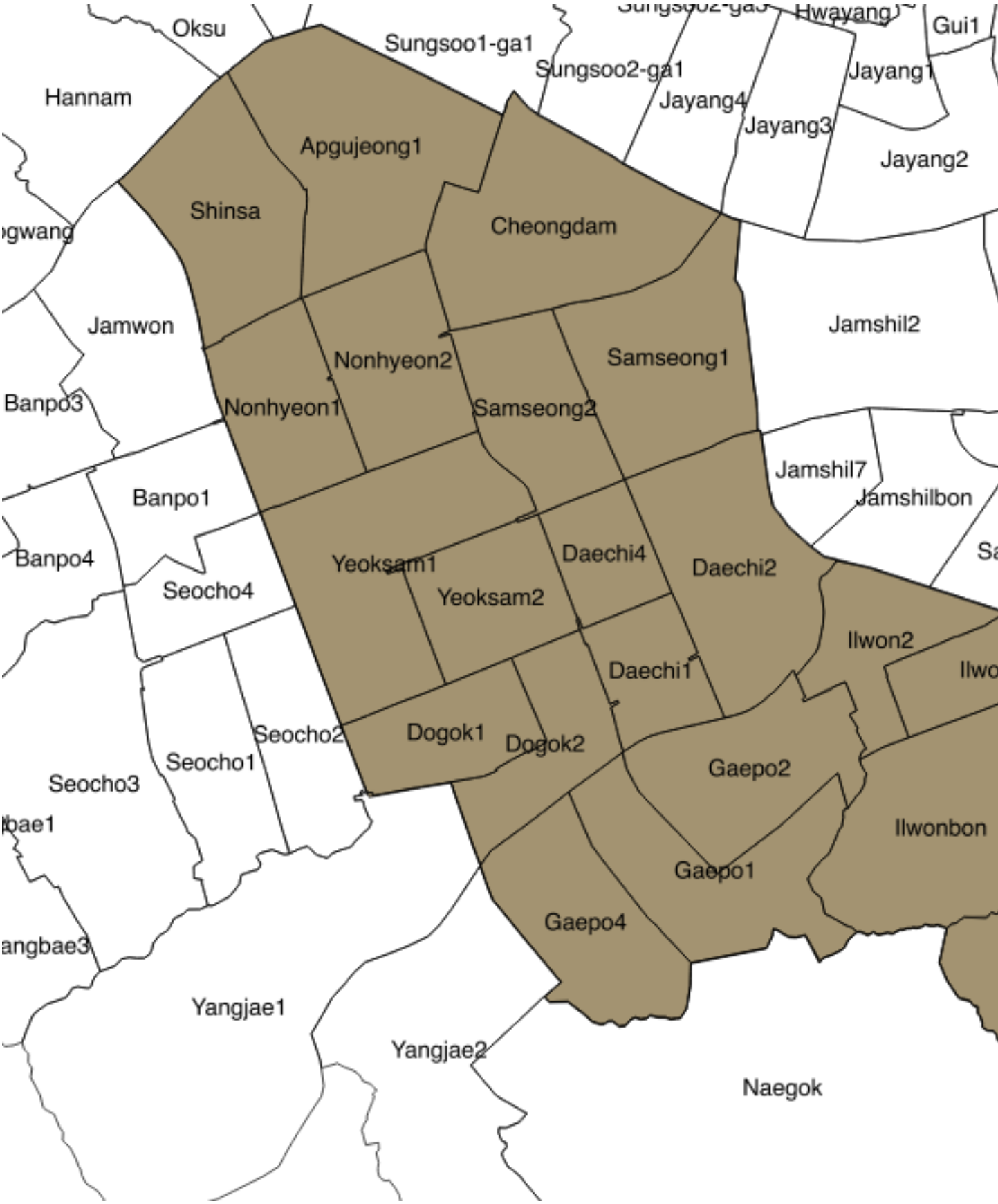


Figure 2.2: Census tracts(Dong) in Gangnam

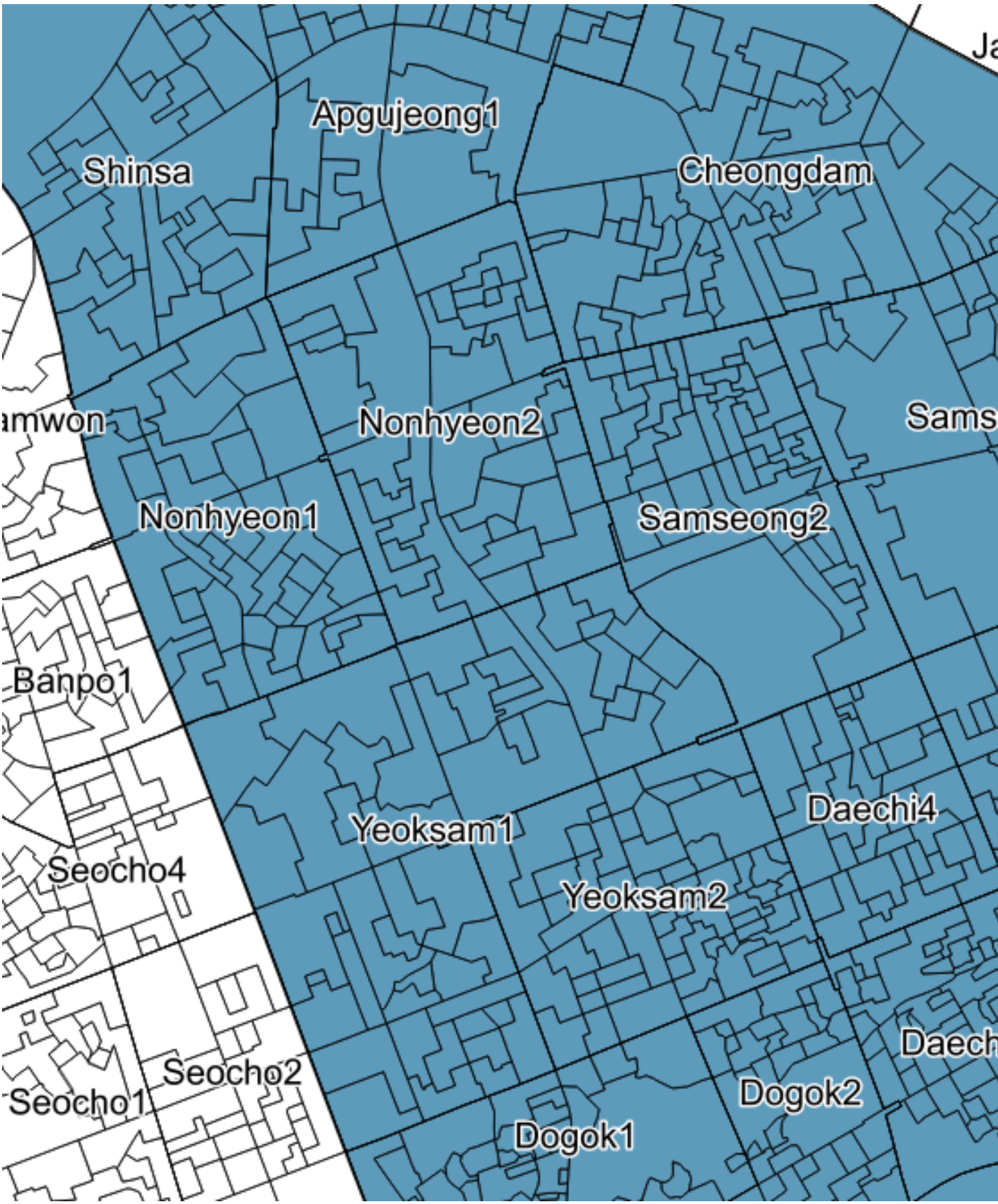


Figure 2.3: Census block(Jipgyegu) in Gangnam

Chapter 3

Population

3.1 Population Census

Population data of residence

- Reference: Korean Statistics Office
- Time Period : 2011 - 2015
- Data Collected: Monthly
- Data Type : .csv
- Spatial range : Seoul

Field	Description
std_yy	Baseline year
std_mt	Baseline month
sexdstn_cd	Sex
agrde_cd	Age group
rspop_cnt	Population
adstrd_cd	Census tract code
signgu_cd	City code

3.2 Employees at Working place

Data on the number of employees per census block, based on the basic survey data of the business

• Reference: Seoul city • Time Period : 2011 - 2013 • Data Collected: Annually • Data Type : .csv • Spatial range : Seoul

3.3 De Facto Population

: / : : (csv) : 2017.01.01-2018.04.18 : : : KT

: - : SE_SPOP_LOCAL_RESD_YYMM - : SE_SPOP_TEMP_RESD_YYMM - : SE_SPOP_LONG_RESD_YYMM - : SE_SPOP_ORGN_CT_YYMM - : , 1 , , , KT (LTE) . LTE .

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Chapter 4

Traffic

Traffic GIS DB - O-D Matrix - Traffic Volume (67 within Seoul) - Road network - Bus(Regular, Intercity)

4.1 Traffic facilities

Traffic facilities are the geographic locations of bus stops and subway stations in Seoul. This dataset is provided by Seoul TOPIS(Transport Operation and Information Services,), and KAIS(Korean Address Information System,), during the period of January 2015 - August 2016. The data are saved in an excel sheet and a shape format.

- EPSG(Coordinates): 5181(Korea 2000 Central Belt)

In the folder, you will probably notice two sets of files, which either starts with TB_O_SB_STATN or TB_E_BUSSTOP:

Type	Description	Code
Facilities	Subway location	TB_O_SB_STATN
Facilities	Bus location	TB_E_BUSSTOP

* Bus stop: Attributes

NO	Attribute Name	Note
1	ID	
2	Bus stop number	
3	Bust stop name	
4	Year	Jan.2015-Aug.2016
5	TM-X	
6	TM-Y	

- Bus stop: Shape file attributes (EPSG:5181)

NO	Column Code	Column Name
1	YYYYMM	Year+Month

NO	Column Code	Column Name
2	LINE_NO	Bus number
3	SEQ_NO	Order
4	BUS_STA_NM	Bus stop name
5	X_COORD	X coordinate
6	Y_COORD	Y coordinate
7	ARSID	Reference

- Subway: Attributes

NO	Attribute Name	Note
1	ID	
2	Station name	
3	Line number	
4	Year	Jan.2015-Aug.2016
5	TM-X	
6	TM-Y	

- Subway: Shape file attributes (EPSG:5181)

NO	Column Code	Column Name
1	GU_NM	Year+Month
2	GU_CD	Bus number
3	SUB_STA_SN	Order
4	KOR_SUB_NM	Bus stop name
5	Point_X	X coordinate
6	Point_Y	Y coordinate

Chapter 5

Pollution

Chapter 6

Patients

HIRA data