



**OFFICE OF FINANCIAL MANAGEMENT**

STATE OF WASHINGTON

# **CENSUS ADMINISTRATOR MANUAL**

**FORECASTING DIVISION**

**FEBRUARY 2009**



# Table of Contents

	<u>Page</u>
<b>Section 1 – Census Considerations .....</b>	<b>1</b>
Purpose of a Census .....	1
Importance of an Accurate Census.....	1
Census Costs .....	1
Should I Census? .....	2
<b>Section 2 – Pre-Census Preparations .....</b>	<b>4</b>
Census Staffing .....	4
Recruitment and Pay .....	5
Screening.....	5
Training.....	5
<b>Section 3 – Census Controls.....</b>	<b>7</b>
<b>Section 4 – Census Maps .....</b>	<b>8</b>
Maps are a Major Census Control Feature .....	8
Types of Maps Needed.....	8
Census Boundaries .....	8
Census Blocks .....	8
Preparation of Maps .....	8
Enumerator and Supervisor Maps .....	12
Responsibilities in Preparing Maps.....	12
Most Common Mistakes by Administration/Supervision .....	12
<b>Section 5 – Appendix.....</b>	<b>13</b>



## **Section 1 Census Considerations**

**CONFIDENTIALITY:** In order to obtain the needed information, it is necessary to guarantee complete confidentiality. Information is **NOT** to be shared with police, city/town departments, apartment managers, or anyone else requesting names, addresses, or even the number of persons residing in a specific housing unit.

### **Purpose of a Census:**

The purpose of a census may vary, but for the most part a city or town conducts a census to:

1. Obtain an accurate count of their city population for state funding; or,
2. Count the population and housing in a newly annexed area to fulfill annexation certification requirements.

### **Importance of an Accurate Census:**

The census needs to provide an accurate, verifiable count of city residents by house and persons in group quarter facilities. A census is an investment of time and resources by the city and OFM. It is important to remember that a poorly conducted census is not acceptable and will be rejected.

A census for a city's April 1 population needs to resolve all questions and issues pertaining to a city's population determination.

### **Census Costs:**

Factors: The following factors influence census costs:

- Total number of people (population size of the city is a very important factor);
- Total number of housing units;
- Number of census staff on city payroll;
- Density of housing units (transportation costs);
- Number of callbacks requiring re-canvass;
- Amount of information collected;
- Weather;
- Enumerators' ability;
- Boundary problems;
- Publicity;
- Amount of field checking needed; and,
- Wages.

Calculating the cost of a census. Under average circumstances a city of 5,000 people will cost about:

\$4 to \$6 per person  
\$10 to \$15 per house

Size of City	Cost per person	Total Census Cost
10,000	\$6.00	\$60,000
5,000	\$5.00	\$25,000
2,500	\$4.00	\$10,000
800	\$2.50	\$2,000

Per person census costs increase with city size. Larger cities require more enumerators and administration/supervision. There is an urban anonymity factor – people do not know each other, are less likely to be home, and even if home, are less likely to know or tell you about the people next door who are not home.

### Should I Census?

A census is required for annexed territories.

Cities wanting to count for accurate state funding generally feel current state population figures used for funding underestimate their population. Thus, the goal of the census is to increase the population and revenue allocations above what would be expected by another round of “annual estimates.”

*A census is an investment in time and resources for both the city and OFM. We all want a successful outcome.*

1. Does it look like the Census 2000 shorted the City?

What was the difference between OFM’s 2000 estimate of housing for the city and the housing counted by the census? Could the census have undercounted them? A federal census undercount will result in a low estimate until the next census.

2. Why do you feel the current OFM population estimate is in error?

The estimate is developed from housing, occupancy rates, and average household size. Where could the problem be and how can you check? Do you feel the OFM vacancy rates are too high? What do the postal data show? Do you have active utility billing rates for 2000 and the estimate year—or other administrative data? Can you do a quick survey to see if new constructions have a high occupancy or vacancy rate? How are seasonal units affecting your vacancy rates?

3. About how much larger does your city need to get to have the census cost recouped by the increase in revenues through the next federal census?

For example, pretend the year is 2005. Selected revenues distributed to cities amount to \$33 per person for 2005 (estimated). The computation below is based on this estimate.

- A city about 10,000 in size with no extenuating factors will cost about \$5.00 per person to count—or \$50,000 to count the whole city;
- Thus,  $\$50,000/\$33 = 1,515$  more people to pay for the cost of the census in one year; or,
- $1,515/5 \text{ years} = 303$  more people to break even in five years by 2010 when the federal census will do a count.

## Section 2 Pre-Census Preparations

### Census Staffing:

Every census needs someone in charge—a census administrator/director. If this person is not doing the actual count, then you will need an enumerator, or a few enumerators, depending on the size of the city.

Staffing depends mainly on the size of the city/town. In a city or town of 1,000 or less—one person could do the entire count. In a city of 20,000—it will take about eighteen people to do the count. You will need enough people to visit every house in the city in seven days.

The number of enumerators you need depend on the size of the city (Column 1), the number of people one enumerator can count in a day (Column 2), and the number of days you have to contact all houses in the city (Column 4). The table below shows how these variables relate.

(1)	(2)	(3)=(1)/ (2)	(4)	(5)=(3)/4
Size of City	Average People Counted per Day	Required Enumeration Days	No. of Days You Have to Complete First Visit to All Houses	Number of Enumerators Needed
10,000	150	66.7	7	9.5
5,000	150	33.3	7	4.8
2,500	150	16.6	7	2.4
800	150	5.3	7	0.8
800	50	16	7	2.3
800	150	5.3	2	2.7

Factors that will affect the number of enumerators needed are those that make people easy or difficult to count:

- Rural or recreational areas with substantial distance between houses and long access roads reduce the number of persons counted per day;
- Densely settled suburbs with single family residences in a friendly community making it easier to speed up the count;
- Gated communities; or,
- Weather

When many enumerators are needed, supervisors have to be added to staff the census. A census administrator cannot manage a herd of people in the field, evaluate census progress, resolve issues, and keep everything running smoothly.

In large cities, one or more supervisors will help with the pre-census map preparation, hiring and training of field staff, and other pre-census functions. A general rule is one supervisor per six or seven enumerators.

Large cities need more controls to run smoothly. Large census crews need control. It is always advisable to only use enough enumerators to get the job done within the deadline.

## **Recruitment and Pay**

Administrator and other supervisory positions, if needed, should be hired three to four weeks ahead of the census to do the pre-census preparations.

1. Enumerators can be hired by media advertising, from local clubs, or local colleges. Using city staff, such as police or fire department staff, can pose problems.
2. Enumerators must be able to work the hours needed to complete the census.
3. There is no one way to pay census staff. Possible ways to pay are:
  - Daily wage;
  - Hourly wage;
  - Per person enumerated (this method not advisable);
  - Per housing unit;
  - Mileage; and,
  - Enumeration areas differ, be fair, equal pay for equal work.

## **Screening**

Screening depends upon the source of enumerators.

1. Preliminary: Clarify hours worked (i.e., weekends, evenings) and skills (i.e., physical endurance, phone skills, public contact) in application form or interview.
2. Final Screening: Should involve map reading, definition, and enumeration test.
  - Testing is done efficiently in group sessions
  - Use city personnel to administer tests
  - Make up in screening where you lack control in acquisition (clubs, etc.). Some people simply are not suitable.

## **Training**

Discuss forms, confidentiality requirements (have them sign oath), reporting requirements, etc.

Discuss important points in Enumerator Manual (how to canvass, what is a housing unit, who is a resident, occupied vs. vacant).

There are pros and cons to assigning enumerators to their “home” area of town.

Field training should be done, even with just one person. Check and recheck each person's "understanding" of census definitions and performance before that person is released in the field to enumerate for several hours on their own.

Only use enumerators who can appropriately canvass a block and count people.

OFM may be able to assist with training.

**Caution:** Some enumerators object to recording names. They need to be identified and weeded out.

## **Section 3 Census Controls**

The office space, training, maps, forms, reporting schedule, and regular assessment of progress are all types of census controls that are needed for a successful census. Census controls sometimes depend on the size of the population to be counted. Other census controls, such as maps, are always prepared the same regardless of the size of the population counted.

- A census in a small town or small annexation may only require a separate space on a table to keep all of the census forms and materials together.
- A census in a city of 30,000 will require a separate room with office equipment and office supplies and possibly a dedicated phone line.
- Equipment may include desks, tables, chairs, file boxes, cabinets and computers.
- Supplies may include a calculator, pencils, 3-ring notebooks, clipboards, paper clips, and rubber bands.
- Forms and manuals include the Enumerator's Manual, Field Enumeration Sheets, telephone notices, news release forms, and pay and mileage forms.
- The News Releases are important forms. The first release gives authenticity to the census and can be used to hire enumerators. It tells why the census is needed and gains cooperation from the wary public. The last release may be used to pick up missed persons.

## Section 4 Census Maps

### Maps are a Major Census Control Feature

- Maps provide means of making assignments.
- Maps assure a total canvass with controls for preventing duplicate coverage.
- Maps provide means of identifying enumeration problems during census.
- In conjunction with the Field Enumeration Sheets, maps provide a means of identifying every housing unit in the city.

### Types of Maps Needed

- Master Control Maps: 1" = 400'
- Enumerator Maps: 1" = 400' (make more than number of enumerators)
- Director and Supervisor Maps: 1" = 800' (one per person)

### Census Boundaries

Boundaries on maps will consist of city or county boundaries and U.S. Census Bureau geographical area boundaries. You need to compare your counts with the last federal counts of population and housing.

Different boundaries will be color-coded:

Municipal Boundaries	<b>Green</b>
Annexations	<b>Red</b>
Block Group	<b>Orange</b>
Blocks	<b>Black</b>

### Census Blocks

Census blocks are the building blocks of the census. Enumerators are assigned blocks and canvass them in a systematic fashion.

1. Enclosed Block: All block boundaries are streets
2. Non-Enclosed Block: One or more block boundaries are other than a street.

### Preparation of Maps

1. Obtain maps of appropriate scales.
2. Field-check roads. Take out the non-existent roads. Clarify boundary problems, and locate situations needing "unique" handling (group quarters facilities, congregate care, security apartments and condos).
3. Use white-out or tape to eliminate non-existent roads.
4. Mark last census (2000) city limits (**green**)
5. Mark annexation boundaries since last census (**red**)

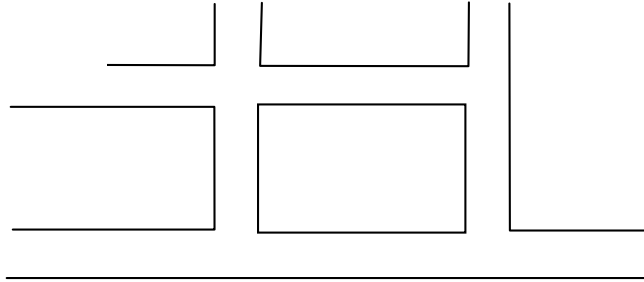
6. Number annexations A-1, A-2, A-3, etc., in chronological order (order annexed) and enter ordinance number if possible.
7. Mark Block Group boundaries (**orange**)
8. Mark and number blocks (**black**)
  - Identify and mark square, enclosed blocks.
  - Identify and mark irregular, enclosed blocks.
  - Identify and mark non-enclosed blocks.
  - Use “\_ \_ \_ \_ \_” to indicate non-road boundary. (See map).
9. Number the blocks consecutively within each block group in a serpentine fashion. This numbering system is an important part of map preparation.

Physical examination of existing roads is a must!

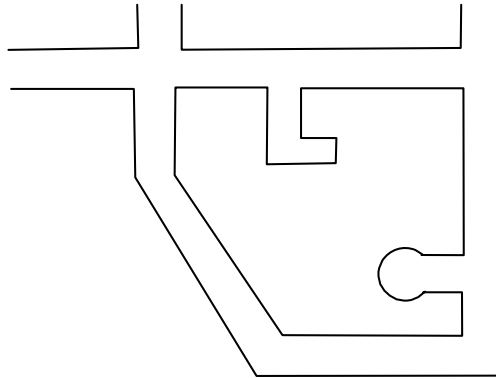
Enter all information on master control maps (i.e., group quarters location, roads that do not exist, non-enclosed block boundary markers, house addresses, “river”, etc.).

## 1. Enclosed Blocks Bounded by Roads

*Regular*

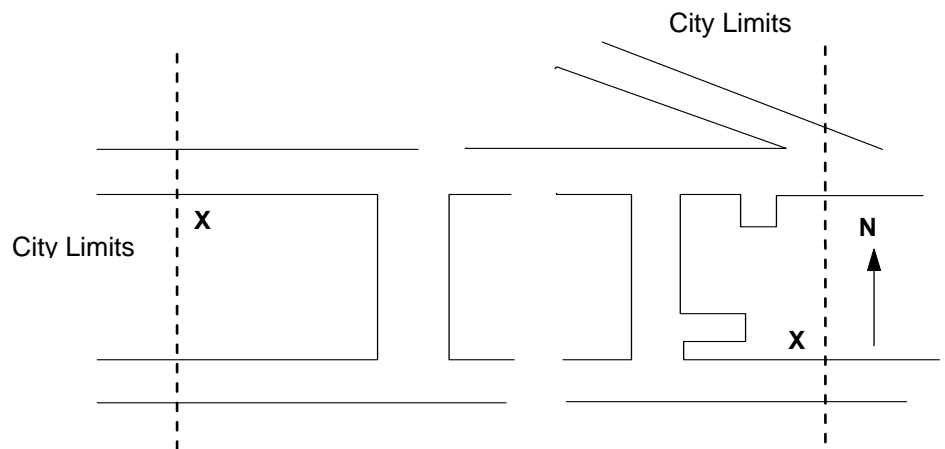


*Irregular*

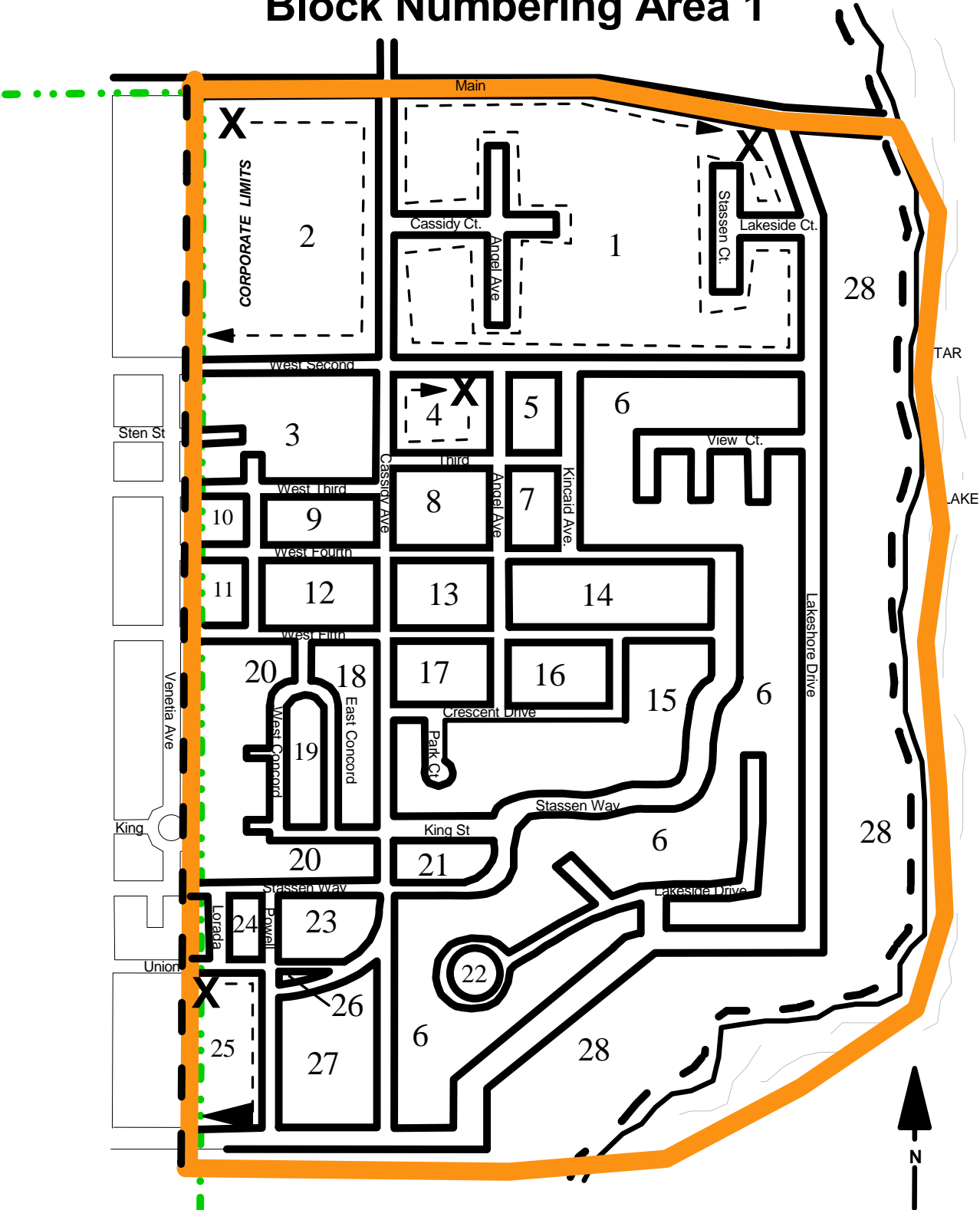


## 2. Non-Enclosed Blocks

*Border on impassable features such as lakes, rivers, gullies or on city or census geographical boundaries*



# Block Numbering Area 1



City of Stonesville

## **Enumerator and Supervisor Maps**

- Enumerator maps are backed in manila and should have enough information so enumerators know where they are.
- Mark all boundary clarifications, unique situations in blocks and block groups. Mark everything the same as on master control map.
- Enumerator's maps should reflect areas with about 1,000 people. This is about what one person can count in a week.
- Supervisor maps are smaller in scale and contain all their enumerator areas.

## **Responsibilities in Preparing Maps**

Maps may be prepared by city staff or persons hired to administrate the census. City and/or annexation boundaries need to be accurate and any clarification entered on the maps. Unique situations or unique enumeration areas need to be known and identified and enumeration problems resolved.

For example:

- Arrangements for obtaining the information for a nursing home or dormitory should be made ahead of time. Arrange for the enumerator to pick up the information.
- In a security apartment or condo situation, arrangements with the manager can include specific hours for the enumerator to visit or distribute telephone notices.

*Please note that if city planning staff do all of the map preparation, then the census personnel hired after the fact must have time to become familiar with the area.*

## **Most Commonly Made Mistakes by Administration/Supervision**

- Underestimating the time required to do a census
- Overestimating the number of employees needed
- Unclear chain of command/responsibilities
- Inadequate maps (leads to missed blocks and double coverage)
- Inadequate checking of enumerator performance and progress of census. (Leads to re-canvass of areas improperly covered and late and unacceptable census)
- Failure to use pre-census publicity

**Section 5  
Appendix**

**APPLICATION FOR THE POSITION OF ENUMERATOR**

**NAME:** \_\_\_\_\_ **TELEPHONE:** \_\_\_\_\_

**ADDRESS:** \_\_\_\_\_

Will you be available for full-time employment during the census period? (Both day and evening hours and on weekends)

YES:  NO:

Are you able to read a road map?

YES:  NO:

How long have you lived in this city/area? \_\_\_\_\_

List two references (name, address, phone) who are residents of the city/area:

_____	_____
_____	_____
(       )	(       )

**NOTE: This job requires a lot of walking and writing. Working hours will be both during the day and into the evening. Employment may last from one day to two/three weeks.**

Interviewing and testing are tentatively scheduled for:

**Date:** \_\_\_\_\_

**Signature of Applicant:** \_\_\_\_\_

**Date:** \_\_\_\_\_

## CITY LETTERHEAD

(Date)

To: Residents, (City/Town) of (Name of City/Town):

This is to verify (Enumerator's Name) is an employee of the (City/Town) of (Name of City/Town) and is assigned to count residents and housing units for the Special Census conducted between (Date When Census Starts) and (Date When Census Ends).

Mayor: (Mayor's Signature)

I, (Enumerator's Name), promise not to divulge any information learned as a consequence of my job as a census enumerator in the (City/Town) of (Name of City/Town) census. Any person(s) requesting information will be referred to the census director. I will report all such incidents to the census director.

If you have any questions, the census director is (Census Director's Name) and (he/she) can be contacted at (Telephone Number).

Enumerator: (Enumerator's Signature)



**OFFICIAL  
POPULATION  
CENSUS**

(City/Town) of (Name of City/Town)

I missed you today when I came to talk to you about the population census. The (City/Town) of (Name of City/Town) would like to make sure all persons living in your household are counted so that (Name of City/Town) will receive the full amount of government funds allotted for public services.

**The information is strictly confidential**

For your convenience, you can give us the information by telephone:

PLEASE CALL \_\_\_\_\_

Between the hours of \_\_\_\_\_ to \_\_\_\_\_

Days: \_\_\_\_\_

When you call, please help us locate you by giving the following information:

Date: \_\_\_\_\_

Area: \_\_\_\_\_

Block: \_\_\_\_\_

Housing Unit Number: \_\_\_\_\_

**THANK YOU FOR YOUR HELP**

**Census Enumerator**