

# Census Coverage Measurement (CCM) Results

## Technical Briefing

**May 22, 2012**  
**1 to 4:30 p.m.**

# Background on CCM

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# Overview

1. What is "coverage of the census"?
  - Net census coverage error
  - Components of census coverage
2. Results we are releasing
3. Sample design and size of the CCM

# Coverage of the Census (cont.)

*Net* census coverage (defined as)

$$\begin{aligned} &= \text{estimate of population from survey} \\ &\quad - \text{census count} \end{aligned}$$

if positive ( $>0$ ), referred to as net undercount

if negative ( $<0$ ), net overcount

# Coverage of the Census (cont.)

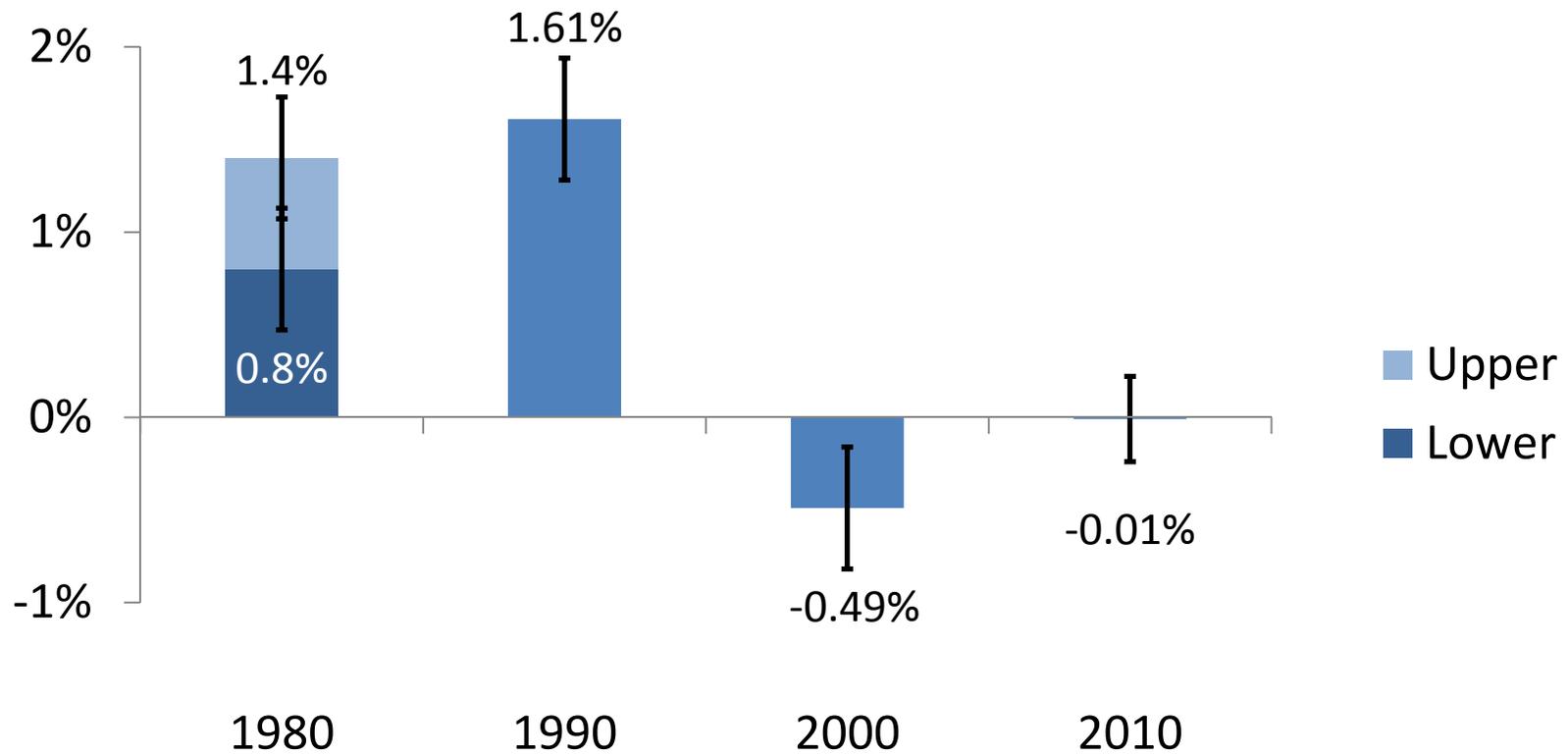
*Percent* Net coverage (defined as)

$$= \frac{\text{estimate from survey} - \text{census count}}{\text{estimate from survey}} \times 100$$

if positive ( $>0$ ), referred to as % net undercount

if negative ( $<0$ ), % net overcount

# U.S. Total Percentage Net Undercount from 1980 - 2010



# Purpose of the 2010 CCM

- Provide estimates of
  - net coverage
  - components of census coverage

For

- persons in housing units  
(not people in group quarters)
- housing units

# Purpose of the 2010 CCM (cont.)

- Use results to improve the 2020 Census
- No intent to adjust the census counts

# Components of Coverage for Persons

## Census Count

1. Correct enumerations
2. Erroneous enumerations
  - due to duplication (1 person, 2 or more records)
  - others (died before 04/01/10, visitor, et al.)
3. Census imputations (no name, all characteristics "imputed," i.e., statistically inserted)

## U.S. Persons: National Components of Census Coverage (in Millions)

Component of Census Coverage	Estimate	Standard Error	Percent	Standard Error
Census Count	300.7	0	100.0	
Correct enumerations	284.7	0.20	94.7	0.07
Erroneous enumerations	10.0	0.20	3.3	0.07
Due to duplication	8.5	0.19	2.8	0.06
For other reasons	1.5	0.05	0.5	0.01
Whole-Person Imputations	6.0	0	2.0	0

# Components of Coverage for Persons

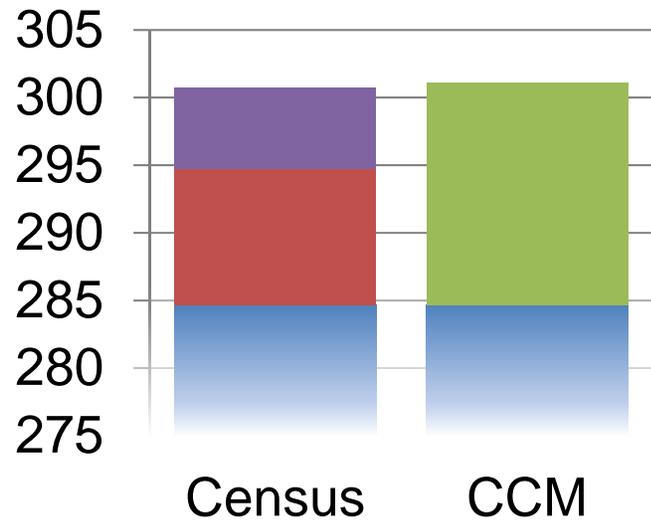
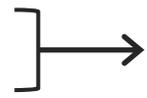
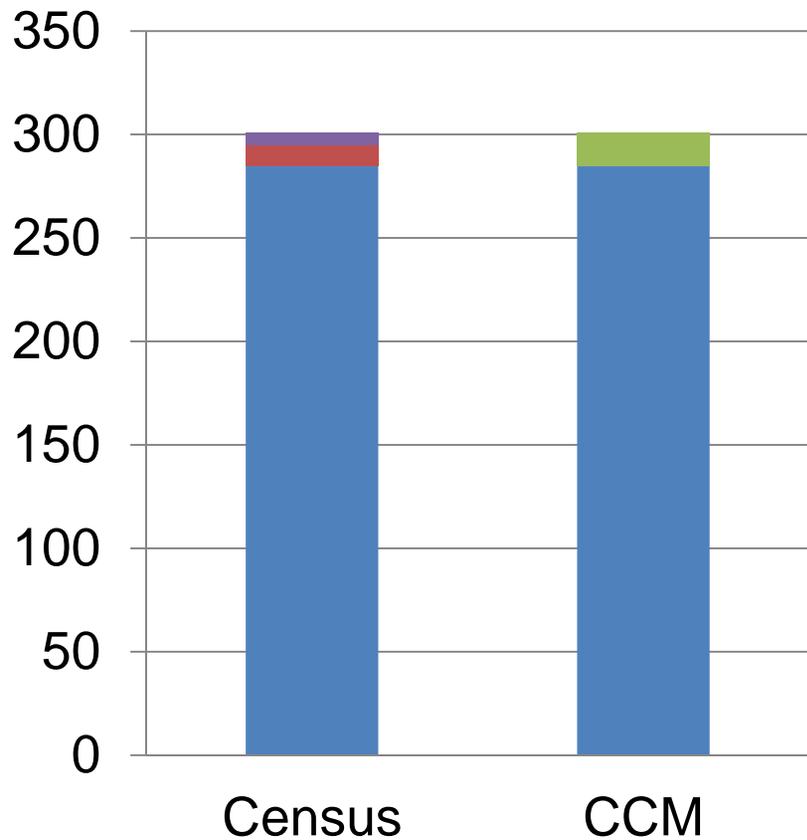
## Estimate from CCM Survey

1. Correct enumerations (same as in census count)
2. Omissions
  - people completely missed in the census
  - people whom we can't verify were enumerated,  
e.g., census imputations

## U.S. Persons: National Components of the CCM Estimate (in Millions)

Component of Census Coverage	Estimate	Standard Error	Percent	Standard Error
Estimate of Pop. from CCM	300.7	0.43	100.0	
Correct enumerations	284.7	0.20	94.7	0.1
Omissions	16.0	0.44	5.3	0.1

# Components of Census Coverage in 2010 (Level, in Millions)



- Whole-Person Census Imputations
- Erroneous Enumerations
- Correct Enumerations
- Omissions

# Components of Coverage for Housing Units

Census Count	Estimate from CCM
<ol style="list-style-type: none"><li>1. Correct enumerations</li><li>2. Erroneous enumerations<ul style="list-style-type: none"><li>• due to duplication</li><li>• others</li></ul></li></ol>	<ol style="list-style-type: none"><li>1. Correct enumerations</li><li>2. Omissions</li></ol>

# Coverage Estimates from CCM

Three major groups:

- Demographic or housing unit characteristics
- Census operations
- Geographic areas

# Coverage Estimates by Geography

- U.S. and (later) Puerto Rico
- Regions (East, Midwest, South, West)
- States and District of Columbia
- Large counties
- Large places

# Thresholds For Counties and Places (What is "Large"?)

- For net error:  
100,000+ in 2010 census population
- For components of census coverage:  
500,000+ in 2010 census population

# Sample Design for Independent (P) Sample

- Sample of block clusters, averaging 30 units
- As in 2000, exclude group quarters and remote Alaska
- Select sample from subgroups (i.e., stratify by)
  - state, DC
  - American Indian Reservation, size, tenure

# Final Size of Independent (P) Sample (approx.)

United States (not including Puerto Rico)	
Blocks Clusters (exact)	6,148
Housing Units	170,000
Persons	390,000

# Thank you

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