

# HOW DOES BLS DEAL WITH MEASUREMENT UNCERTAINTY?

---

**Erica L. Groshen**

Commissioner

U.S. Bureau of Labor Statistics

2015 Policy Summit on Housing, Human Capital, and  
Inequality

Pittsburgh, Pennsylvania

June 18, 2015



BUREAU OF LABOR STATISTICS  
U.S. DEPARTMENT OF LABOR

[www.bls.gov](http://www.bls.gov)

# Agenda

---

- BLS mission
- Why do we need measurements?
- When do measurements fail?
- How can a statistical agency help reduce uncertainty?
- How can we improve outcomes for data users and the public?

# BLS mission

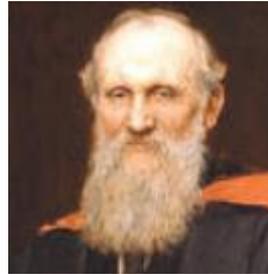
---

- ... principal Federal agency responsible for measuring
  - ▶ labor market activity,
  - ▶ working conditions, and
  - ▶ price changes in the economy.
- ... collect, analyze, and disseminate essential economic information
- to support public and private decision-making.



# Why do we need measurements?

- “If you can not measure it, you cannot improve it.” Lord Kelvin ~1883
- Measurements reduce uncertainty
  - ▶ Give us a read on current conditions
  - ▶ Allow tests of hypotheses about relationships
  - ▶ Create shared framework of facts to frame options
- Result: Better decisions and outcomes



# When do measurements fail?

- Measurements do not simply fail because they have standard errors
- Measurements fail when you have bad measures
  - ▶ Incorrect
  - ▶ Biased, not trustworthy
  - ▶ Irrelevant
  - ▶ Too late
  - ▶ Inaccessible



# How can a statistical agency help reduce uncertainty?

A red letter 'A' block with a white background and a red border.

Accurate... Get it right

A blue letter 'O' block with a white background and a blue border.

Objective... Free from bias

A green letter 'R' block with a white background and a green border.

Relevant... Information you can use

A blue letter 'T' block with a white background and a blue border.

Timely... Put it out quickly

A purple letter 'A' block with a white background and a purple border.

Accessible... Meet you where you are

# How can a statistical agency help reduce uncertainty? (cont'd)

- Reduce standard error
  - ▶ Increase participation
  - ▶ Increase sample sizes
  - ▶ Augment data with alternative sources (e.g., “big data”)
  - ▶ Doable with funding and/or legislation



# How can a statistical agency help reduce uncertainty? (cont'd)

## ■ Improve communication

### ▶ Standard errors

- Where to find these measures
- How to understand them

### ▶ Non-sampling errors

### ▶ Methods (e.g., What is the revision process?)

### ▶ Limitations

## ■ Listen to users about their needs



# How can BLS improve outcomes for data users and the public?

---

- Provide access for non-production uses
  - ▶ Research data center (FSRDCs)
  - ▶ Interagency agreements
  - ▶ For meta-analyses, different time frames, matching, etc.
- Meet unforeseen needs
  - ▶ Requires pre-existing flexibility and capacity
  - ▶ Dependent on funding



# How can BLS improve outcomes for data users and the public? (cont'd)

- Encourage appropriate use of data
  - ▶ Reject **blind faith** in point estimates **and nihilism**
  - ▶ Promote policies and norms of practice



# In closing—what you can do

---

- Help increase response rates
  - ▶ Participate in our surveys
  - ▶ Tell others it's safe and important to respond
- Support efforts to manage uncertainty
  - ▶ Budget and data-sharing legislation
  - ▶ Communicate your data needs
- Don't let cheap shots, sloppy work or nihilism go unanswered

# Contact Information

---

**Erica L. Groshen**

Commissioner

U.S. Bureau of Labor Statistics

*[www.bls.gov](http://www.bls.gov)*

202-691-7800

Groshen.Erica@bls.gov



***[www.bls.gov](http://www.bls.gov)***