

# Fostering Modern and Innovative Data Collection Methods

**Ken Robertson**

Assistant Commissioner

US Bureau of Labor Statistics

UNECE Workshop on Statistical Data Collection

‘Resourceful Data Acquisition’

October 2018



# Background

- U.S. Bureau of Labor Statistics'  
Office of Industry Employment Statistics  
(BLS/OIES)



# OIES Data Collections

- 2 Monthly Surveys (of establishments):
  - ▶ Current Employment Statistics (CES), and
  - ▶ Job Openings and Labor Turnover Survey (JOLTS)
- 1 Quarterly Census (of establishments):
  - ▶ Quarterly Census of Employment and Wages (QCEW)

# Data Collection - QCEW

- Quarterly collection of ~10,000,000 worksites
  - ▶ Administrative data on 8.4 million UI accounts, collected by UI for administrative purposes
  - ▶ **Multiple Worksite Report**: 144,000 UI accounts reporting on 1.8 million worksites, collected by BLS to obtain worksite reporting for each business establishment
- Annual Refiling Survey – to verify industry and addresses: ~ 1/3 of businesses with 3+ employees surveyed each year

# Data Collection: JOLTS

- 16,000 business establishments collected with 2 “closings” per reference period
  - ▶ Eight weeks after reference period is initial close of collection estimates
  - ▶ ~Four weeks later close of collection for final estimates

# Data Collection: CES

- 651,000 business establishments collected with 5 “closings” per reference period

- **IT NEVER STOPS**



# Data Collection: CES

- 5 “closings” per reference period
  - ▶ Closings of collection following reference period for National data at:
    - 3 weeks (1<sup>st</sup> close, preliminary estimate),
    - 7 weeks (2<sup>nd</sup> close, 1<sup>st</sup> revised estimate),
    - 11 weeks (3<sup>rd</sup> close, 2<sup>nd</sup> revised estimate)
  - ▶ Closings of collection following reference period for State and (substate) Area data at:
    - 5 weeks (1<sup>st</sup> close, preliminary estimate),
    - 9 weeks (2<sup>nd</sup> close, final [revised] estimate),

Program								
CES			JOLTS			QCEW		
Site	Managers	Staff	Site	Managers	Staff	Site	Managers	Staff
OIES CES Data Collection Branches (2)	2	10	OIES JOLTS Data Collection Staff	0	1	OIES QCEW Data Collection Branch	1	7
Data Collection Help Desk	1	9	Data Collection Center Atlanta	5	26	Regional Office (6)	3	24
Data Collection Center Atlanta	10	62				State Office (53)	53	342
Data Collection Center Dallas	8	39						
Data Collection Center KC	17	89						
Data Collection Center FWB	11	79						
EDI Center Chicago	6	28						
IT Resources	3	24	IT Resources	0	1	IT Resources	1	15
TOTAL	58	340	TOTAL	5	28	TOTAL	58	388



# Data Collection

## Resource Management

### ■ Resources:

- ▶ Data Collection Related Management, Staffing, and contracts: about \$70 million per year
- ▶ Management:
  - 121 managers, front-line supervisors, and Quality Assurance staff
- ▶ Staffing:
  - 756 staff focused on data collection, review, editing, and recontact activities
  - Some staff (44) focused on IT systems to facilitate work

# Planning for Innovation

## ■ How?

### ▶ Plan for and allow for failures

- Create a culture that recognizes that it's good to try new things
- Identifying things that don't work still adds value

### ▶ Develop leaders

- Try to have co-leaders on project teams – expanding leadership training opportunities
- Reward leadership efforts

# Planning for Innovation

## ■ How?

- ▶ Reward teamwork and individual efforts
- ▶ Recognize successes
- ▶ Plan for training opportunities
  - Plan to have \$\$\$ for training
  - Seminars
  - Online training
  - University courses

# Planning for Innovation

- U.S. Bureau of Labor Statistics annual management process
  - ▶ Identify work and research items to put in management and employee work plans
    - Accountability at the employee level
  - ▶ Identify work and research items to report further up the management chain
    - Accountability at the management and agency level

# Recent Collection Innovations

- Online spreadsheet web form
  - ▶ Replaces Excel spreadsheet upload
  - ▶ Problem with Excel – respondents like it!
    - Modify spreadsheet for own use
    - Modification makes automatic extraction of data elements problematic
  - ▶ New tool allows copy/paste of columns from Excel

# Recent Collection Innovations

## ■ Online data entry via spreadsheet web form



**BUREAU OF LABOR STATISTICS**  
Current Employment Statistics

[Update Respondent Information](#) | [Help](#) | [Logout](#)

### Data Entry

The online spreadsheet below offers a number of features to facilitate data entry. [View hints for entering data.](#)

- **Copy & paste** across cells (use keyboard commands Ctrl+'C' for copy and Ctrl+'V' for paste).
- **Sort rows** ascending/descending (click on the column header).
- **Expand** location information (click '+' next to 'Location Information').

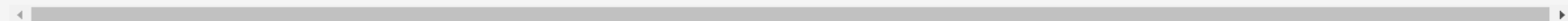
June 2018

July 2018

August 2018

Please report data for the pay period that includes the 12<sup>th</sup> of the month.

	Location ⊕	Pay Frequency ⊖		All Employees ⊖					Production/Non-supervisory Employees ⊖			
	Location	Payroll	Commissions	Count	Women	Payroll (excluding commissions)	Commissions (paid at least monthly)	Hours (including overtime)	Count	Payroll (excluding commissions)	Commissions (paid at least monthly)	Hours (including overtime)
1		▼	▼									
2		▼	▼									
3		▼	▼									
4		▼	▼									
5		▼	▼									
6		▼	▼									
7		▼	▼									
8		▼	▼									



# Recent Collection Innovations

- Expanding use of email blasts as a prompting mechanism
- Annual Refiling Survey has about 1.2 million reporters each year
  - ▶ Updates industry and address

# Recent Collection Innovations

- Expanding use of email blasts as a prompting mechanism: results
- Web collection
  - ▶ In 2012 – 6.2 percent of survey done by web
  - ▶ In 2014 – 27.5 percent
  - ▶ In 2017, survey completely paperless
    - Response from companies signing up for web reporting achieved a 77 percent unit response rate



# Recent Product Innovations

## ■ Nonprofit data

- ▶ Matching publicly available IRS data on nonprofit companies to BLS' QCEW, provides U.S. census level data on nonprofit companies

# Recent Product Innovations

- Data on companies with foreign direct investment (FDI)
  - ▶ Matching data from the U.S. Bureau of Economic Analysis on FDI with the QCEW and the Occupational Employment Statistics survey
    - Data on companies and occupational staffing patterns of companies with and without FDI

# Final Thoughts

- Data collection is serious business
  - ▶ It needs adequate funding
  - ▶ It needs constant management attention to ensure fiduciary responsibility of this large expenditure of resources
  - ▶ It needs managers and staff who are willing and able to test new processes, to innovate, to obtain responses from as many as possible with the fewest resources

# Final Thoughts

- Data collection is hard
  - ▶ High cost
  - ▶ Decline in respondent willingness to participate in government surveys
- Wherever possible, leverage alternate data sources
  - ▶ Create new products at lower cost
  - ▶ Reduce respondent burden
  - ▶ Caution: provenance and consistency are critical

# Contact Information

**Ken Robertson**

Assistant Commissioner

Industry Employment Statistics

CES, QCEW, BED, JOLTS

202-691-5440

[robertson.ken@bls.gov](mailto:robertson.ken@bls.gov)

