COLLECTION IN THE TIME OF CORONA

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prepared for
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Producing the CPI Under Lockdown
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U.S. CPI: AGGREGATION STAGES

**STAGE 1**
- Aggregate sampled items into component indexes
- 243 item x 32 area = 7,776
- 176 sampled x 75 cities = **13,200 for data collection**
- Urban population only
- Hybrid use of Laspeyres and Geomean formula

**STAGE 2**
- Aggregate elementary indexes into products
- **Lowe** formula used for CPI-U, CPI-W, R-CPI-E
- **Tornqvist** formula used for Chained CPI-U (but published with ~one year lag)
U.S. CPI: DATA SOURCES

Housing Survey
- ~5,900 rents /mo (~78 per city /mo)
- Sample in each city rotated every 6 years
- Each unit priced once every 6 months

Commodities & Services Pricing Survey
- ~90,000 quotes /mo (~1,200 per city /mo)
- ~Quotes priced monthly or bimonthly
- Continuous sample rotation (one every 4 years for each item-city)

Consumer Expenditure Survey
- CAPI, ~25,000 /year
- Diary, ~12,000 /year
- Continuous, monthly collection
- Households interviewed quarterly for one year

➢ Source of outlet frame
➢ Source of item sampling weights
BLS: Office of Field Operations

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Two surveys
- Housing
- Commodities and Services (C&S)

Headquarters in Washington, DC
6 Regional Offices
80 Full Time Economists
420 Economic Assistants
BLS: Office of Field Operations

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Equipment Used for Data Collection

- Surface Pro
- iPhone
Conducted Coronavirus Pandemic Tabletop Exercise to assess BLS’s readiness

- Ceased all personal-visit data collection on March 16th
- Maximized use of telephone and internet
- Developed modified data collection procedures
Housing Survey Data Collection

Collection Modes: Housing Survey

- 2019 Personal visit
- 2019 Telephone
- 2020 Personal visit
- 2020 Telephone
Housing Survey Data Collection

Response Rates: Housing Survey

- 2019 Collected rents
- 2019 Uncollected rents
- 2020 Collected rents
- 2020 Uncollected rents

February March April May June July August September

0% 10% 20% 30% 40% 50% 60% 70% 80%

U.S. Bureau of Labor Statistics • bls.gov
C&S Survey Data Collection

Collection Modes: C&S Survey

- February: 2019 Personal visit, 2019 Telephone, 2019 Internet, 2020 Personal visit, 2020 Telephone, 2020 Internet
- April: 2019 Personal visit, 2019 Telephone, 2019 Internet, 2020 Personal visit, 2020 Telephone, 2020 Internet
- May: 2019 Personal visit, 2019 Telephone, 2019 Internet, 2020 Personal visit, 2020 Telephone, 2020 Internet
- June: 2019 Personal visit, 2019 Telephone, 2019 Internet, 2020 Personal visit, 2020 Telephone, 2020 Internet
- August: 2019 Personal visit, 2019 Telephone, 2019 Internet, 2020 Personal visit, 2020 Telephone, 2020 Internet
- September: 2019 Personal visit, 2019 Telephone, 2019 Internet, 2020 Personal visit, 2020 Telephone, 2020 Internet
C&S Survey Data Collection

Response Rates: C&S Survey

- 2019 Collected prices
- 2019 Uncollected prices
- 2020 Collected prices
- 2020 Uncollected prices

February, March, April, May, June, July, August, September
C&S Survey Data Collection

Response Rates: Specific Item Categories

- Full Service Meals & Snacks
- Food at Employee Sites & Schools
- Alcoholic Beverages Away From Home
- Admissions to Sporting Events
DATA QUALITY

- Developed new productivity measures
- Created a dashboard and ad hoc reports to monitor production
- Instituted additional data quality activities to assess impact and compliance to new data collection procedures
POST-PANDEMIC

- Status of states and localities
- Assessment of the most efficient, effective and safest way to collect data
- Respondents’ willingness to engage and participate
- Opportunity to establish more alternative data source arrangements
Contact Information

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