Workplace Geocoding Issues

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We ❤️ CTPP flow data
Place of Work is critical

POW County - Flows to Mecklenburg Map

LEGEND
State-County
Workers 16 and Over Estimate to Meck

- 37,440
- 17,293
- 2,855

Monday, October 28, 2013
We rely on ACS and CTPP Travel Time data

Average Travel Time to Work
Means: Car, Truck, or Van

Source: 2006 American Community Survey
At what location did this person work LAST WEEK? If this person worked at more than one location, print where he or she worked most last week.

a. Address (Number and street name)
   915 Second Ave
   If the exact address is not known, give a description of the location such as the building name or the nearest street or intersection.

b. Name of city, town, or post office
   seattle

c. Is the work location inside the limits of that city or town?
   ☒ Yes
   ☐ No, outside the city/town limits

d. Name of county
   King

e. Name of U.S. state or foreign country
   WA

f. ZIP Code
   98174

How did this person usually get to work LAST WEEK? If this person usually used more than one method of transportation during the trip, mark (X) the box of the one used for most of the distance.

☐ Car, truck, or van
☐ Bus or trolley bus
☐ Streetcar or trolley car
☐ Subway or elevated
☐ Motorcycle
☐ Bicycle
☐ Walked

Was this person –
Mark (X) ONE box.

☐ an employee of a PRIVATE FOR-PROFIT company or business, or of an individual, for wages, salary, or commissions?

☒ an employee of a PRIVATE NOT-FOR-PROFIT, tax-exempt, or charitable organization?

☐ a local GOVERNMENT employee (city, county, etc.?)

☐ a state GOVERNMENT employee?

☐ a Federal GOVERNMENT employee?

☐ SELF-EMPLOYED in own NOT INCORPORATED business, professional practice, or farm?

☐ SELF-EMPLOYED in own INCORPORATED business, professional practice, or farm?

☐ working WITHOUT PAY in family business or farm?

For whom did this person work?
If now on active duty in the Armed Forces, mark (X) this box → ☒
and print the branch of the Armed Forces.

Name of company, business, or other employer

US DOT

What kind of business or industry was this?
Describe the activity at the location where employed, (For example: hospital, newspaper publishing, mail order house, auto engine manufacturing, bank)

government

Is this mainly – Mark (X) ONE box.

☐ manufacturing?

☐ wholesale trade?

☐ retail trade?
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Seattle

c. Is the work location inside the limits of that city or town?

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☐ Bus or trolley bus
☐ Streetcar or trolley car
☐ Subway or elevated
☐ Railroad
☐ Motorcycle
☐ Bicycle
☐ Walked
☐ Worked at home → SKIP to question 39a

Was this person – Mark (X) ONE box.

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For whom did this person work?

If now on active duty in the Armed Forces, mark (X) this box and print the branch of the Armed Forces.

Name of company, business, or other employer

Boeing

What kind of business or industry was this?

Describe the activity at the location where employed. (For example: hospital, newspaper publishing, mail order house, auto engine manufacturing, bank)

☐ aircraft

Is this mainly – Mark (X) ONE box.

☒ manufacturing?
☐ wholesale trade?
☐ retail trade?
Different locations for Boeing “in Seattle”
2006-2010 CTPP

• AASHTO is already working on the next round of CTPP.
• Standard geocoding – about 75% coded to small geography
• Extended workplace allocation – additional 15%
• 9-10% of records only have a County and Place geocode, not fine enough for TAZ or tract
Counties with extended allocation (in WHITE)
Percent of Workers in each State living in County without extended allocation
Extended Workplace Allocation

- Industry
- Occupation
- Means of Transportation to Work
- Travel Time to work
Extended Allocation Process for 2006-2010 CTPP

Source: Rapino, M. In CTPP Status Report, September 2012
BEA vs. ACS results in Baltimore City and Baltimore County
Ladders of Opportunity
Connecting people to jobs with supportive wages.
Using home and workplace location, with travel mode, time of departure, for transit service planning.
Problem 2: Port of Los Angeles—residence and total workers
POW State-County-Tract - Flows 9800.31, Los Angeles County.
Continuous Business Process Improvement

- Will Internet response improve workplace geocoding? CB seeing about 60% of response using Internet
- Can the ACS Internet response include a “Google maps” component to spot mark their work location?
- Licensing updated business list from Dunn & Bradstreet
Potential alternatives to using ACS for small area flows

- Administrative Records
  - LEHD/LODES alone
    - Difficulties with Multiple Worksites from LEHD/LODES
  - Combining ACS with LEHD/LODES

- Cellphone data (NCHRP 08-95 project)

- Household Travel Surveys
Thank you!
We ❤ ACS