

**Waste Management Pilot  
Multicultural Behavior Study Planning Session #2 Meeting Notes  
April 25, 2014**

**Attendees:**

- Waste Management: Candy Castellanos
- King County: Gerty Coville
- T.D. Wang: Rebecca Deng, Sayra Moran
- ECOSS: Socorro Medina, Kevin Burrell
- Ecologica: Stuart Vázquez
- Portland State University, College of Urban and Public Affairs: Renee Bogin Curtiss
- C+C: Liv Faris, Ha Na Park, Natalie Beaulieu

**Goals and objectives of meeting:**

1. Formulate educated guesses and establish what our assumptions are for developing the multicultural behavior study.
2. Review and discuss GIS Map and ACS Data Analysis
3. Define what the goals and objectives are for the multicultural study.
4. Determine next steps in the development of the multicultural behavior study.

**Discussion Sessions:**

1. GIS Maps (King County GIS + WM)
2. American Community Survey Data Analysis
3. Multicultural Behavior Study Scope and Design
4. Next Steps + Deliverables

*GIS MAPS + Interactive Spreadsheet:*

- The purpose for these GIS maps was to have a clear visual representation of potential areas of focus for the multicultural behavior study.
- The group discussed how the GIS Maps were developed. The process to generating the GIS Map consisted of:
  - Matching all WM UTC Customers to their respective Census Tract
  - Analyzing the language proficiency of those Census Tracts with WM UTC Customers using the data used were from American Community Survey 2006 – 2010 & 2008 – 2012.
  - A total of 9 maps were generated (Census Tracts with WM UTC Customers that: Speak English only, Speak a language other than English, Speak Spanish, Chinese, Vietnamese, Korean, Russian and African Languages, total # of WM UTC Customers and geographic areas that are part of WM UTC and incorporated King County)
- NOTE: It is important to remember that the maps do not reflect if those that speak a language other than English reside in single-family household or multi-dwelling units. This adds another layer of complexity to take into account.
- The GIS maps were transferred into an excel spreadsheet to make the data more interactive. Some additional data points were added: cities within the Census Tracts and the exact # of WM customers in each Census Tract.

### American Community Survey Data Analysis

- The additional data on language proficiency from ACS 2008 – 2010 were extracted and analyzed to answer additional questions raised when examining the GIS maps.
- This data looks at language spoken at home by ability to speak English for population 5 years and older. The three categories are: 1) Speak [language other than English], 2) Speak [language other than English] and English very well, and 3) Speak [language other than English] and English less than very well.
- ACS is part of the Census and it has more detailed information compared to decennial Census.
- A total of 40 languages in King County UTC tracts were examined to determine the top 7 languages.
- Top 7 languages in KC in order are: Spanish, Chinese, Vietnamese, African languages, Tagalog, Korean and Russian
- Top 7 languages in KC UTC in order are: Spanish, Chinese, Vietnamese, Tagalog, Russian, Korean, African Languages
- Same Top 7 languages but the order changes slightly when looking only at KC WM UTC Census Tracts.

### Multicultural Behavior Study Scope & Design

- The data analyzed and discussed during this meeting has multiple limitations. Therefore, we are using this as a guiding point to inform the start of the design of a study yet it will be an experimental and groundbreaking journey. Some limitations include:
  - The data only looks at language proficiency and not household type (SF vs. Multi-dwelling)
  - It does not take into account country of origin, levels of assimilation or acculturation, generation, and immigration.
- According to ESJ Ordinance, we must underserved population that is over 5% of the total population.
  - For now, focus on Spanish-speakers as primary audience of interest.
  - What we're doing here will make an impact on future interactive studies on the Spanish language communities. Therefore, it is critical to continue to advocate for research done well in a culturally competent way.
- Study Design Discussion:
  - Two main questions and distinction between the two must be made:
    - Are the recycling behaviors universal regardless of language proficiency or ethnicity?
    - Do different audiences with varied level of language proficiency and ethnicity have unique outreach tools that would be effective in raising awareness and implementing behavior change? Or is the effectiveness of outreach tools universal regardless of their language proficiency or ethnicity?
  - Design the study to look at side-by-side comparison between WM UTC households that speak Spanish and English very well vs. household that speak Spanish and English less than very well.

- It will be important to talk to everyone that lives in the household so that we can closely examine how information about recycling is transmitted within the household. Closely examine the recycling dynamics.
- Potential questions to ask: who does the most recycling, who influences others' to recycle or throw it in the garbage?
- Garbage characterization: Have a longer period of time when the garbage characterization might happen so we can collect unbiased sample.
- Garbage characterization: do a more thorough analysis so we can see how the garbage was layered and where the recyclables were found.
- All participants must be compensated for their time and participation.

Next Steps + Action Items:

- Additional Data Analysis:
  - Look at data for King County without the Census Tracts that belong to Seattle.
- Additional Questions to Think About:
  - Sample size, recruitment strategies, location of our focus, and prioritizing our criteria for participant selection.
  - Moving forward, how can we leverage all the studies so that we can compare data from single-family and multi-dwelling units? How can we make correlations between the two studies?
- Action Items:
  - C+C → Refine the data analysis for King County
  - C+C → Send to Candy the one Seattle address in Census Tract 93.00 that appeared as WM UTC Customer.
  - C+C → Schedule a follow-up meeting with the planning team in June.