Multi-Family Address List Creation Using Open Data & Delivery-Point Validation

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Creating a Consolidated Multi-Family Address List to Improve Service-Delivery to Arlington County Residents and Facilitate Compliance with 2020 Census Requirements

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Multi-Family Address List Project Purpose

• The Multi-Family Address List is a consolidated list of apartment and condominium addresses which will be used by County staff to enhance service delivery to Arlington’s multi-family population

• Rental unit address information is not regularly collected by many localities (property taxes are assessed on an entire complex and to the complex owner, not on individual rental units or their tenants)

• The purpose of this project was to fulfill Arlington County’s stated vision of fostering an inclusive community by creating a dataset that thoroughly accounts for all multi-family development in the County
Additional Benefit – CENSUS 2020

- An additional benefit is enabling easier compliance with new 2020 Census requirements to include the provision of address information for each unit within each apartment or condominium building (i.e. unit numbers and/or letters).

- Most localities in Virginia do not regularly collect address data for every multi-family unit. This circumstance is also not limited to Virginia as can be seen in a recent New York Times article discussing the same issue being faced by New York City (https://www.nytimes.com/2018/03/09/nyregion/census-2020-new-york.html).

- Potentially a benefit for MANY Virginia Localities
Enhancing Existing Efforts

- While Arlington chose to conduct an online survey to capture these addresses, given historic survey response rates, it was estimated that 2-3 weeks of full-time staff hours could be required to follow-up with individual building managers.
- To significantly reduce these estimated staff hours, Arlington partnered with VT-SDAL to develop an automated and replicable approach to multi-family unit address discovery and verification.
Approach

- Combining Available Arlington Open Data
  - Estimate Height
  - Estimate Floors
  - Estimate Rental Units per Floor
  - Make wide guess on addresses

- Using a USPS DPV Vendor Service
  - Validate existence of actual delivery point
  - Create list of those still needing manual verification
• Delivery Point Validation™ (DPV®) is the process of verifying that an address is actually deliverable, meaning that mail can be sent to that address.

• Delivery points are different from street addresses. A single street address may have multiple delivery points, such as individual units in an apartment building. To identify delivery points individually, the USPS gives each one a unique 11-digit number composed of the delivery point's nine-digit ZIP+4 Code plus an extra two digits that narrow the designation to the delivery point itself.

• Use of the USPS DPV product is limited to entities leasing and reselling the service (SmartyStreets) - > $50K for an annual license.
Efficient Use of the DPV Service

• Checking every possible combination of address, floors/stories, and apartment addressing scheme is certainly untenable
• Goal
  – Perform as few queries as necessary of the DPV service while assuring no addresses are missed
• Approach
  – Make a best guess, with wide parameters, at what the addresses might be, then validate against the DPV service
  – Over-guess floors by 2, units by 10
Results & Issues

• Result: Successful Creation of Replicable Method
  – In combination with mailings, emailings and fieldwork, this effort has helped in the collection of address data from over 96% of the County’s total number of apartment complexes

• Issue: Garden Apartments
  – While very good at mid- and high-rise apartment buildings, not very good for many large garden apartment complexes (2-3 story, many buildings).
  – Varied and sometimes very odd addressing schemes