

The Missing Link: A Novel Approach to Resolving Ungeocoded Records

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The Challenge of Ungeocoded Addresses



Why Use eLot?

The most comprehensive and robust list of addresses that the Census periodically ingests comes from the U.S. Postal Service and is called the DSF.

The eLot file is a nationwide USPS product that allows users to sort addresses into approximate delivery order.

When attributes of both the DSF and the eLot file are combined with Census data, there is the potential to reduce the workload of the already existing geocoding project by about one third.

D80238R061325532552025A0107

Copyright Detail Code

ZIP Code

Low Delivery Point Code

High #4 Code

Ascending/Descending Flag

Delivery Point Code

Carrier Route ID

Low Delivery Point Code

eLOT Sequence Number

When the information from the eLot file, the DSF, and the Census tables are joined into one unifying file, it is then **sequenced** based on the concatenation of:
Zipcode + Carrier ID + eLot + DelSeqNum

	ZIPCODE	CARRIER ID	eLOT	DelSeqNum	SEQUENCE
▶	83201	C011	0144	0470	83201C01101440470
	83201	C011	0144	0471	83201C01101440471
	83201	C011	0144	0472	83201C01101440472
	83201	C011	0145	0135	83201C01101450135
	83201	C011	0145	0136	83201C01101450136
	83201	C011	0146	0473	83201C01101460473
	83201	C011	0146	0502	83201C01101460502
	83201	C011	0147	0137	83201C01101470137
	83201	C011	0147	0138	83201C01101470138

The 'eLot' arranges the Zip+4 segments into delivery order within an entire Carrier Route, while the 'DelSeqNum' sorts the addresses within a given Zip+4/eLot by their delivery order.

House Number	Street	Type	SEQUENCE
3900	Galapago	Road	80217C04700220416
3912	Galapago	Road	80217C04700220417
3916	Galapago	Road	80217C04700220418
3920	Galapago	Road	80217C04700220419
3930	Galapago	Road	80217C04700220420
3934	Galapago	Road	80217C04700220421
4000	Galapago	Road	80217C04700230422
4008	Galapago	Road	80217C04700230423
4012	Galapago	Road	80217C04700230424
4018	Galapago	Road	80217C04700230425
4030	Galapago	Road	80217C04700230426
4032	Galapago	Road	80217C04700230427
4036	Galapago	Road	80217C04700230428



Ungeocoded Records:

96793C04801950108
62 Keanuhea Pl

96793C04801960109
31 Keanuhea Pl

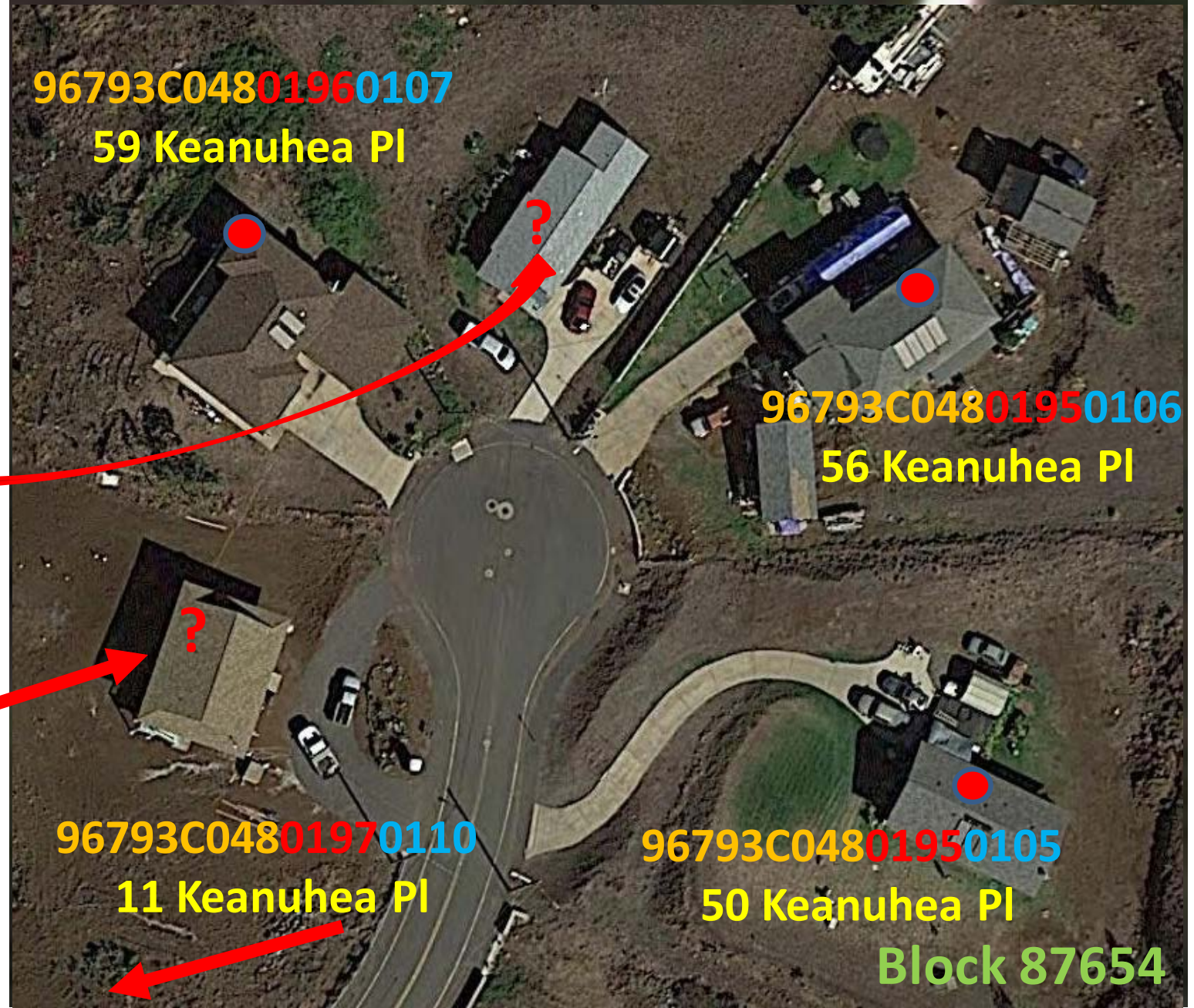
96793C04801960107
59 Keanuhea Pl

96793C04801950106
56 Keanuhea Pl

96793C04801970110
11 Keanuhea Pl

96793C04801950105
50 Keanuhea Pl

Block 87654



Block 12345

Block 56789

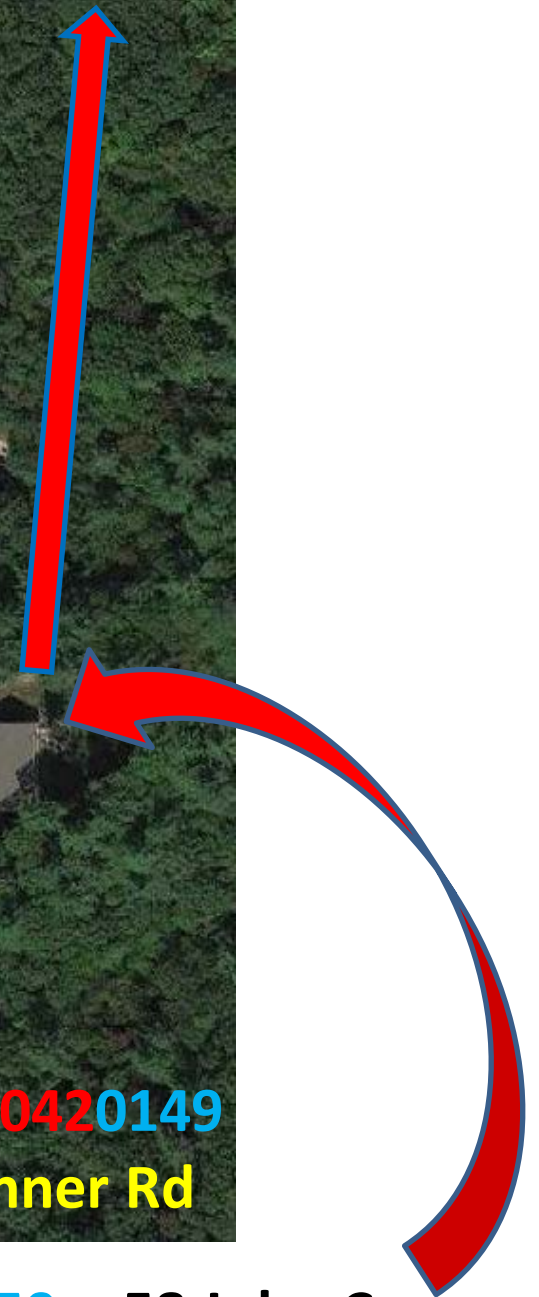
32801R00600420152
60 John Conner Rd

32801R00600500159
75 John Conner Rd

32801R00600420151
72 John Conner Rd

32801R00600500161
55 John Conner Rd

32801R00600420149
40 John Conner Rd



Ungeocoded Record - 32801R00600420150 – 58 John Conner Rd

eLot Sequence:
80206C05600900117
3557 N Adams St

Ungeocoded
3551 N Adams St
eLot Sequence:
80206C05600900118

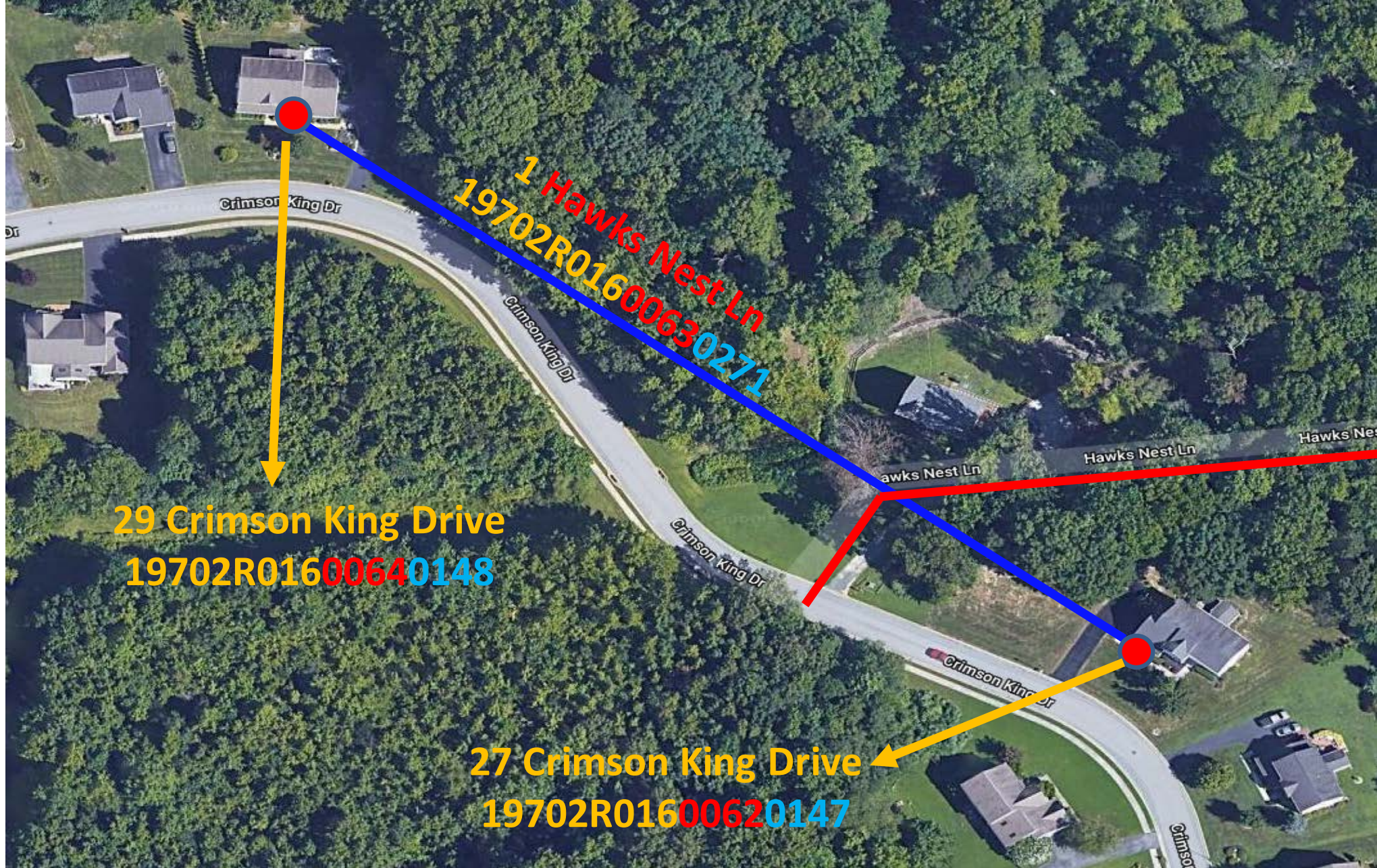
eLot Sequence:
80206C05600900119
3545 N Adams St



1 Hawks Nest Ln
19701R01600630271

29 Crimson King Drive
19701R01600640148

27 Crimson King Drive
19701R01600620147



1 Hawks Nest Ln
19702R01600630271

29 Crimson King Drive
19702R01600640148

27 Crimson King Drive
19702R01600620147

Preliminary Results

	Delaware	Idaho	Montana	North Dakota	Washington D.C.	New Hampshire	Rhode Island	Hawaii	Maine	South Dakota		
Total number of Ungeocoded Records	5,804	29,636	12,322	22,051	1,030	11,148	1,973	6,521	11,370	11,021		
Records with 2 eLot Sequenced Neighbors Assigned to the Same Block	2,025	6,415	3,411	3,120	324	4,571	758	1,397	5,621	2,649		
	34.9%	21.6%	27.7%	14.1%	31.5%	41.0%	38.4%	21.4%	49.4%	24.0%		
Records with 2 eLot Sequenced Neighbors Assigned to the Same Block Group	4,376	16,711	10,146	13,781	679	8,093	1,276	3,247	9,334	7,696		
	75.4%	56.4%	82.3%	62.5%	65.9%	72.6%	64.7%	49.8%	82.1%	69.8%		
Records with 2 eLot Sequenced Neighbors Assigned to the Same Tract	4,594	17,420	10,591	15,844	720	8,973	1,445	3,933	9,958	8,326		
	79.2%	58.8%	86.0%	71.9%	69.9%	80.5%	73.2%	60.3%	87.6%	75.5%		

You entered:

1454 MANUELS DRIVE
FORT MYERS FL

1454 MANUELS DR
FORT MYERS FL 33901-5824



CARRIER ROUTE	COUNTY	DELIVERY POINT CODE
C010	LEE	54
CHECK DIGIT	COMMERCIAL MAIL RECEIVING AGENCY	LAC™
6	N	-
eLOT™	eLOT ASCENDING/DESCENDING INDICATOR	RECORD TYPE CODE
0128	A	S
PMB DESIGNATOR	PMB NUMBER	DEFAULT FLAG
-	-	-
EWS FLAG	DPV CONFIRMATION INDICATOR	
-	Y	

Source:

<https://tools.usps.com/zip-code-lookup.htm?byaddress>

Additional Uses of the eLot Attribute

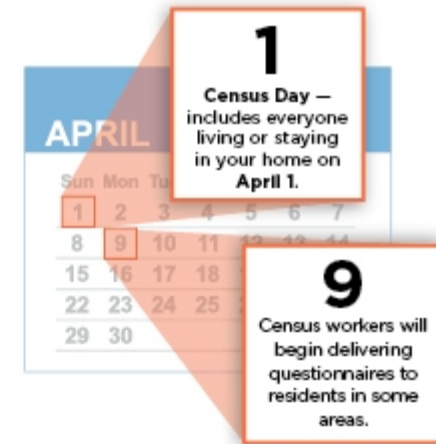
The Decennial Statistical Studies Division of the Census is conducting research using the eLot information as an additional tool to assess whether addresses on our Master Address File are really housing units.

The eLot information can indicate if either the basic street address or the complete address of an apartment building residence is on a carrier route. We will be using the 2018 End-to-End Test data to examine this further.



2018 Census Test Begins in Providence

Respond online, by mail or by phone.



Questions? Comments?

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