

May 2012



Special Request Results

Why We Did This Report

This memo responds to a request from Council Member Spelman regarding the difference in 311 and 911 calls between short-term rentals (STRs) and other residential properties.

What We Did

To complete this special request, we:

- Randomly sampled 466 residential properties with a geographic distribution comparable to that of the identified STRs and determined the number of 311 and 911 calls at these locations
- Compared the call distribution to that of STRs

See Attachment A for the distribution of STRs and our sample.



For more information on this or any of our reports, email oca_auditor@austintexas.gov

SPECIAL REQUEST REPORT ON SHORT-TERM RENTALS (REVISED 5/24/12)

Mayor and Council,

I am pleased to present this special request report on short-term rentals.

BACKGROUND

On April 20, 2012, the Office of the City Auditor presented the Short-term Rentals Audit to the Audit and Finance Committee. This audit included the number and types of 311 and 911 calls among short-term rentals and compared them to calls for the City as a whole.

OBJECTIVE AND SCOPE

Our objective was to determine whether short-term rental properties differ from other residential properties in their use of the 311 and 911 systems.

The scope included 311 and 911 calls in calendar year 2011.

WHAT WE FOUND

We found that the average number of calls per property and the percent of properties associated with 311 or 911 calls were similar for STRs and the sample of residential properties (see Exhibit 1).

EXHIBIT 1
Properties Associated with 311 and 911 Calls

	STRs	Sampled Residential
Percent with 311 Calls	22.86%	23.82%
Average # of 311 Calls	1.71	1.85
Percent with 911 Calls	26.87%	28.54%
Average # of 911 Calls	1.96	2.02

SOURCE: OCA analysis of 311 and 911 call data for CY 2011.

We found that the most common call types were similar for short-term rentals (STRs) and residential properties in our sample. Eight of the top ten 311 call categories and seven of the top ten 911 categories were the same for both groups. See Exhibit 2 for the full list of top call types.

EXHIBIT 2
Top Call Types for 311 and 911 Calls

STR 311 Categories	Residential 311 Categories	STR 911 Categories	Residential 911 Categories
Austin Resource Recovery (ARR) Cart Management	ARR Cart Management	Alarm Burglar	Alarm Burglar
Code Compliance	Water Waste Report	City Ordinance Violation	DOC / C.O. Violation
Water Waste Report	Code Compliance	Suspicious Person	Suspicious Person
ARR Missed Garbage	ARR Missed Garbage	ID Property Crimes	Hang-up Residence
APD Nonemergency – Unavailable	APD Nonemergency - Unavailable	Service	Suspicious Vehicle
ARR Missed Recycling	ARR Missed Recycling	Burglary Residence	Disturbance Other
Street Light Issue – Address	Street Light Issue-Address	Suspicious Vehicle	ID Property Crimes
ARR General	ARR General	Check Welfare Service	Parking Violation
ARR Billing Inquiry	ARR Missed Yard Trimmings	Disturbance Other	Hang-up Mobile
ARR Call Transfer – CIC Only	ARR Missed Bulky Items Collection	Alarm Robbery (tied)	Family Disturbance
		Parking Violation (tied)	

SOURCE: OCA analysis of 311 and 911 call data for CY 2011.

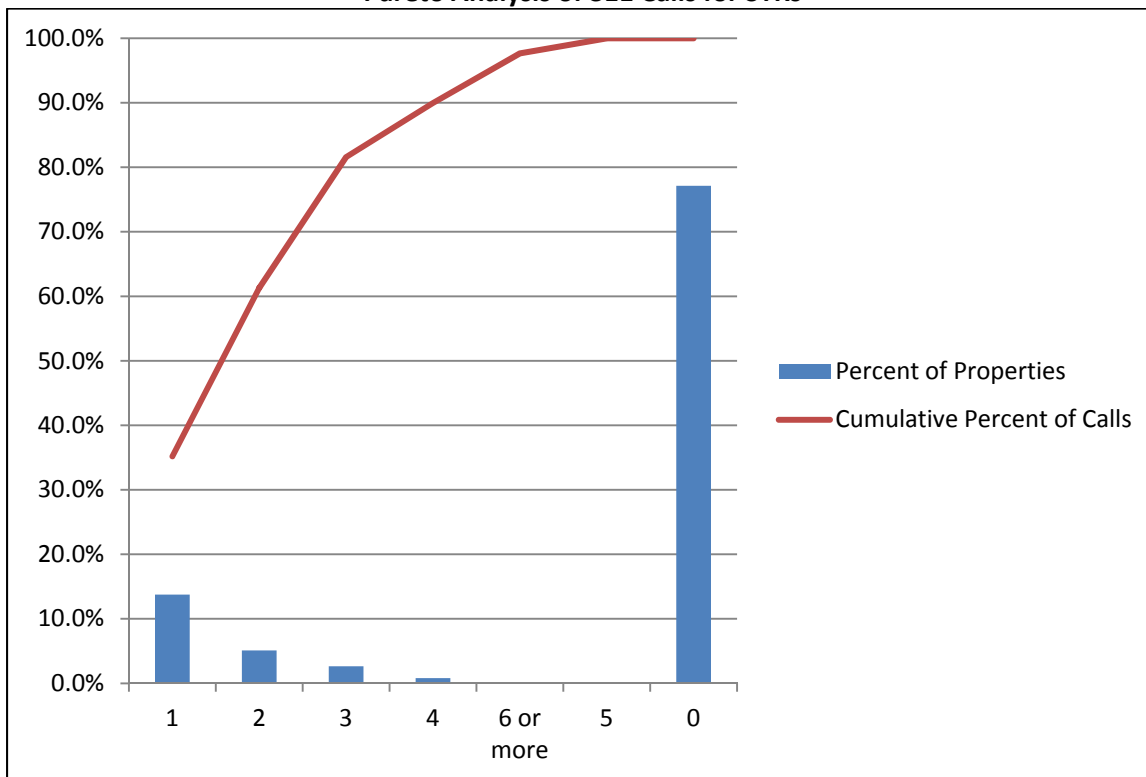
For STRs, the majority of 311 calls came from properties with only a few calls each (see Exhibit 3). This indicates that service level is driven by the overall number of properties, rather than by a small group of frequent users (see Exhibit 4 for Pareto analysis).

EXHIBIT 3
Distribution of 311 Calls Among STRs

311 Calls per Property	Number of Properties	Percent of Properties	Percent of 311 Calls
0	847	77.1%	0.0%
1	151	13.8%	35.2%
2	56	5.1%	26.1%
3	29	2.6%	20.3%
4	9	0.8%	8.4%
5	2	0.2%	2.3%
6 or more	4	0.2%	7.7%
Total	1098	100.0%	100.0%

SOURCE: OCA analysis 311 data for CY 2011.

EXHIBIT 4
Pareto Analysis of 311 Calls for STRs



SOURCE: OCA analysis of 311 call data for CY 2011.

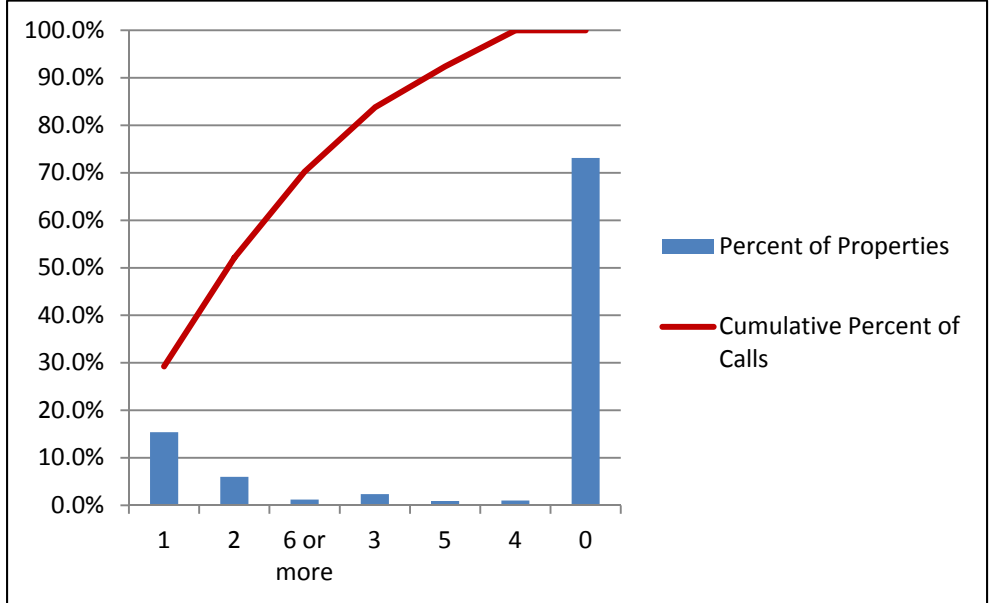
For 911 calls, approximately half the calls came from STR properties with only one or two calls, but frequent users (with six or more calls) accounted for 18% of calls despite being only one percent of all properties (see Exhibit 5, and Exhibit 6 for Pareto analysis).

EXHIBIT 5
Distribution of 911 Calls Among STRs

911 Calls per Property	Number of Properties	Percent of Properties	Percent of 911 Calls
0	803	73.1%	0.0%
1	169	15.4%	29.2%
2	66	6.0%	22.8%
3	26	2.4%	13.5%
4	11	1.0%	7.6%
5	10	0.9%	8.7%
6 or more	13	1.2%	18.2%
Total	1098	100.0%	100.0%

SOURCE: OCA analysis of 911 data for CY 2011.

**EXHIBIT 6
Pareto Analysis of 911 Calls for STRs**



SOURCE: OCA analysis of 911 data for CY 2011.

Among the sampled residential properties, for both 311 and 911 calls the majority came from properties with either one or two calls or six or more calls (see Exhibits 7 and 8). This indicates that service level is a combination of the overall number of properties and a few frequent users (see Exhibits 9 and 10 for Pareto analysis). The frequent users with six or more calls accounted for 25% of 311 calls and 22% of 911 calls, despite making up 0.6% and 1.5% of the population, respectively.

**EXHIBIT 7
Distribution of 311 Calls Among Sampled Residential Properties**

311 Calls per Property	Number of Properties	Percent of Properties	Percent of 311 Calls
0	355	76.18%	0.00%
1	79	16.95%	38.54%
2	16	3.43%	15.61%
3	10	2.15%	14.63%
4	3	0.64%	5.85%
5	0	0.00%	0.00%
6 or more	3	0.64%	25.37%
Total	466	100.00%	100.00%

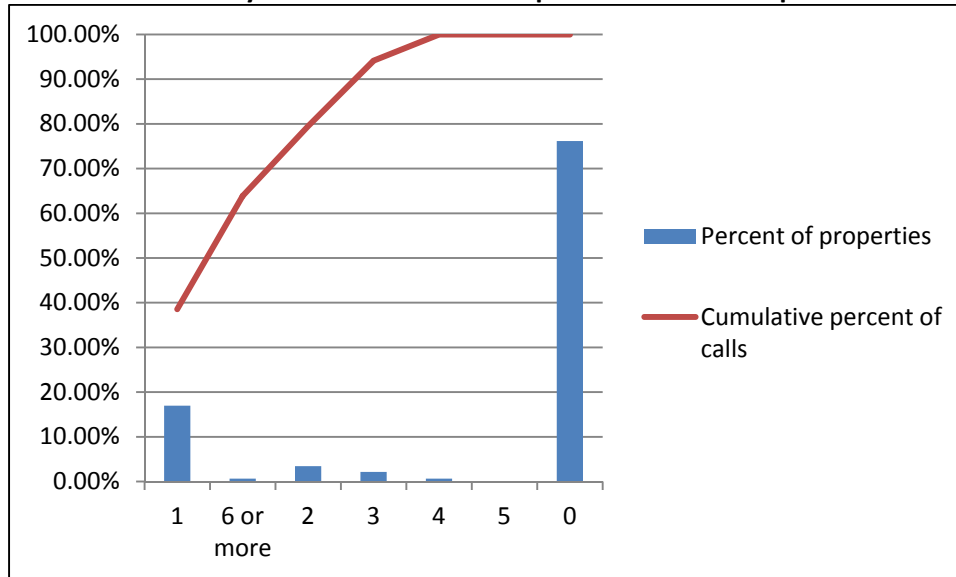
SOURCE: OCA analysis of 311 data for CY 2011 for sampled residential properties.

EXHIBIT 8
Distribution of 911 Calls Among Sampled Residential Properties

311 Calls per Property	Number of Properties	Percent of Properties	Percent of 311 Calls
0	333	71.46%	0.00%
1	82	17.60%	30.60%
2	21	4.51%	15.67%
3	13	2.79%	14.55%
4	4	0.86%	5.97%
5	6	1.29%	11.19%
6 or more	7	1.50%	22.01%
Total	466	100.00%	100.00%

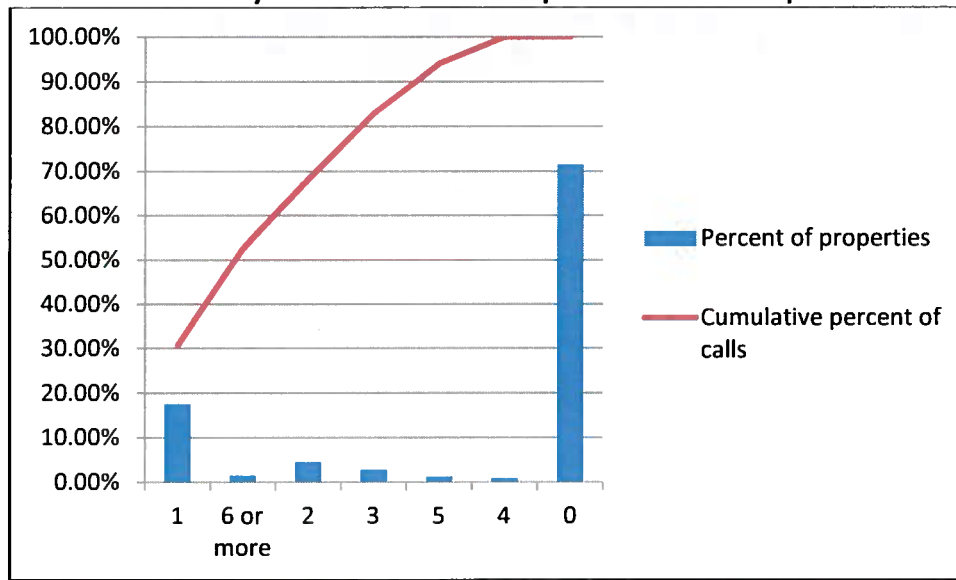
SOURCE: OCA analysis of 911 data for CY 2011 for sampled residential properties.

EXHIBIT 9
Pareto Analysis of 311 Calls for Sampled Residential Properties



SOURCE: OCA analysis of 311 call data for CY 2011 for sampled residential properties.

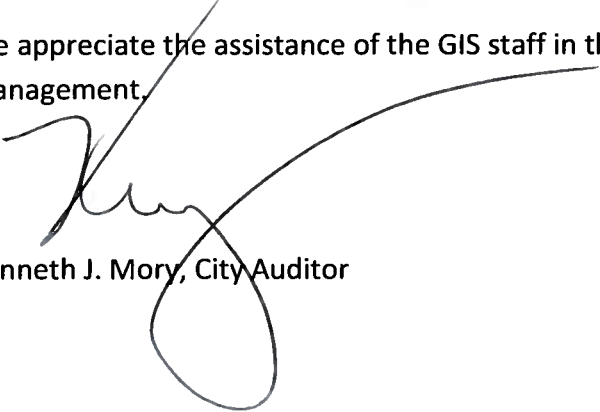
EXHIBIT 10
Pareto Analysis of 911 Calls for Sampled Residential Properties



SOURCE: OCA analysis of 911 call data for CY 2011 for sampled residential properties.

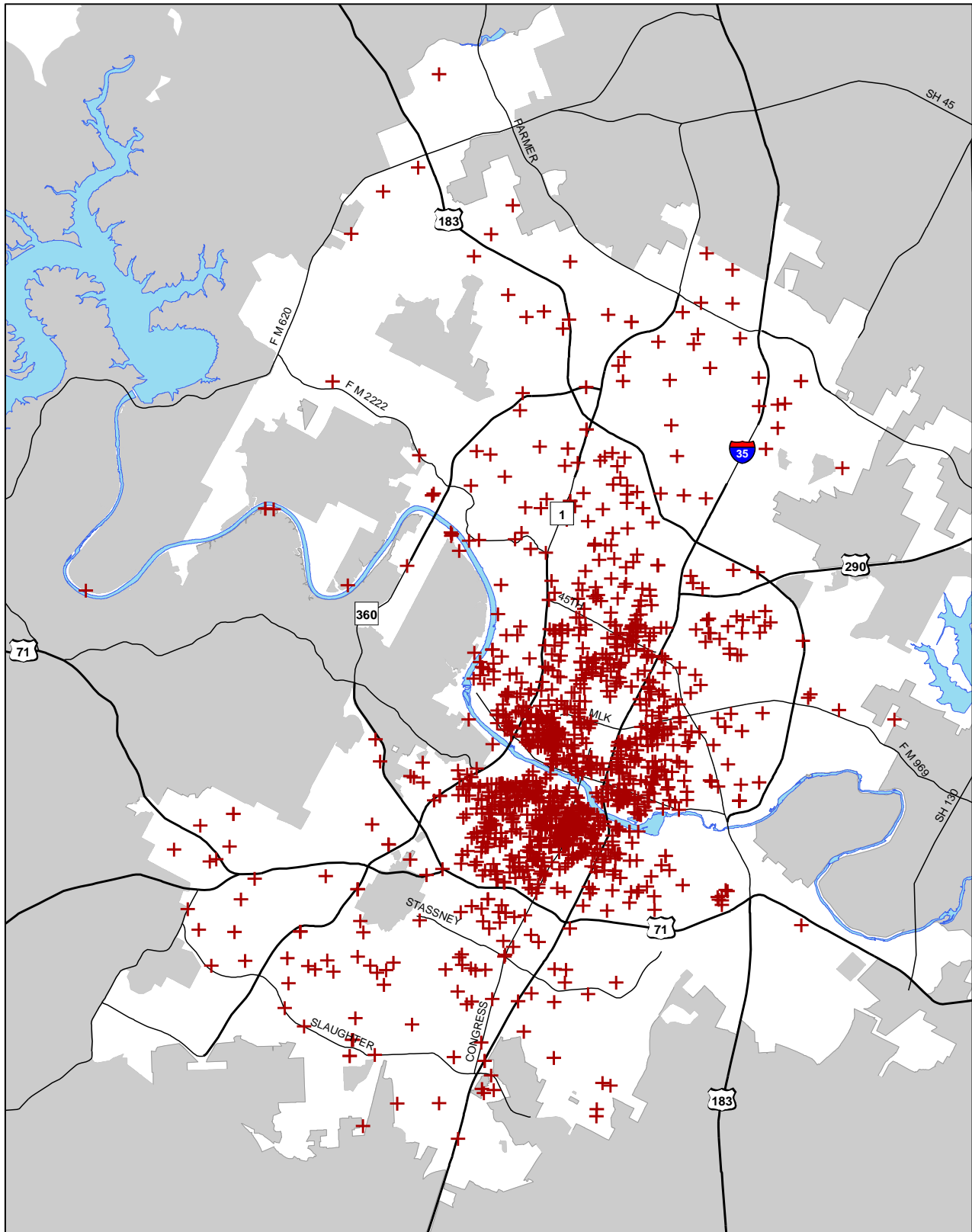
For the properties with higher than average 311 and 911 use, geographic distribution is similar between STRs and residential properties (see Attachment B).

We appreciate the assistance of the GIS staff in the Office of Communications and Technology Management.



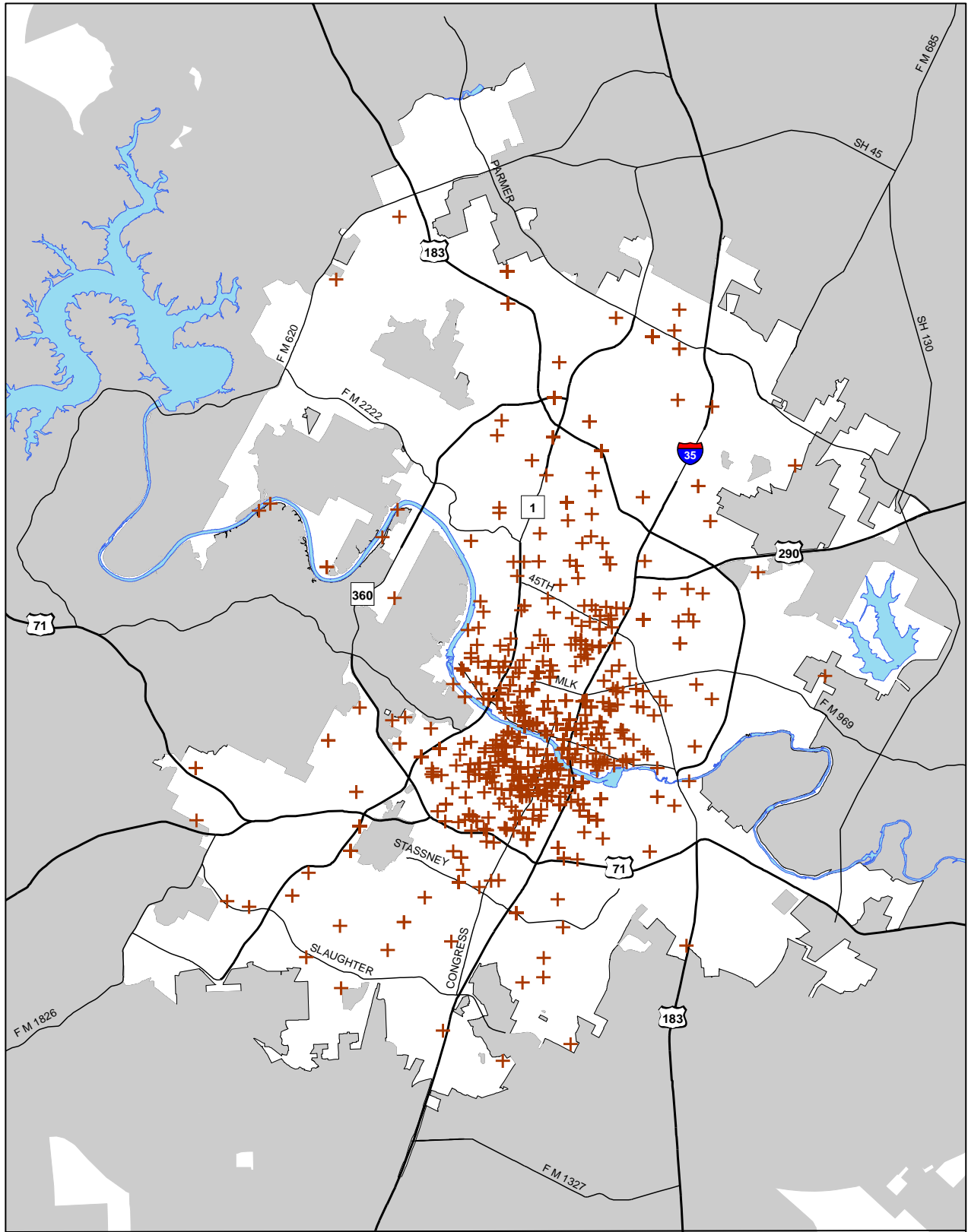
Kenneth J. Mory, City Auditor

Short-term Rentals Identified in Prior Audit



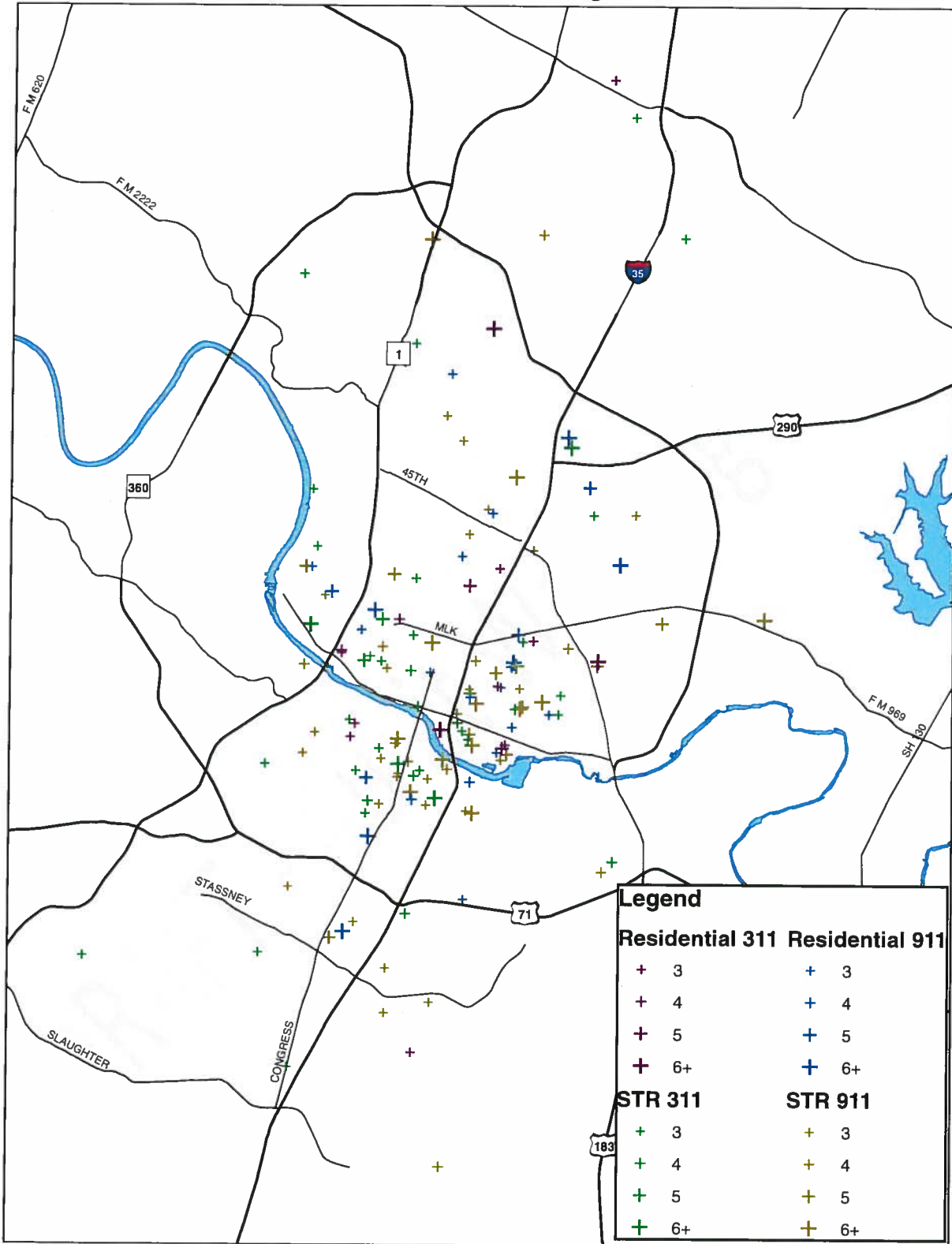
SOURCE: OCA analysis of website data (Feb-Apr 12), City/State registration data (4Q 2011), and TCAD ownership data (Mar-Apr 12).

Residential Properties Selected for Sample



SOURCE: OCA analysis of STR and residential properties.

Geographic Distribution of Above-Average 311 and 911 Users



SOURCE: OCA Analysis of 311 and 911 data for CY 2011.