



PASQUO VOLUNTEER FIRE
DEPARTMENT COMMUNITY
RISK REDUCTION PLAN



Pasquo Volunteer Fire Department is a small volunteer department that serves just over 2,000 residents. Figure 1 shows the response area of the department with each shape indicating a portion of a Census Block Group and the associated risk as well as dots representing structure fires. For the purposes of this plan, risk is a combination of education, income and housing values. This plan will be divided up into what areas this department can improve on and the solutions.

Data Improvement

One of the biggest challenging in conducting analysis of the fire problem in Pasquo is that there are missing, critical data elements that don't tell us the cause and magnitude of fires that are occurring. Of the 60 fires reported during the 2013 to 2017 period, the cause could not be determined for 18 of them or 30% of them.

Those 18 fires accounted for 54% of the loss that occurred during those five years. This means that the cause for the Department's most destructive fires is not being caught.

Causes are unknown for a majority of the fires in the northern and southern portion of the fire response district (figure 3, figure 4).

In order to fix the issue with data quality the following solutions will be implemented:

- The Chief will review each structure fire report to ensure that all information is being captured, specifically; equipment involved, heat source, item first ignited, and factors contributing to ignition.
- Staff who are most likely to respond to a structure fire have FF245 – Initial Fire Investigation for First Responders paid for in full by the Department. This course is offered at TFACA and details can be found at <https://www.tn.gov/commerce/tfaca/fire-program/nfa-sponsored-classes/ff245.html>. Registration comes at a cost of \$51 per person. Recouping the cost will be done through an additional fundraising event in October of this year. In the coming years, costs can be covered through grants such as FEMA's SAFER and FP&S grants.
- Monthly staff meetings will be a time where incidents are discussed and those who have done an exceptional job will be recognized.

Canvas High Risk Areas

Pasquo Volunteer will partner with the State Fire Marshal's Office to **install smoke alarms, educate citizens on ways to reduce fire risk and perform home safety inspections**. This program comes at no cost to the department. The only requirement are that all alarms are accounted for, alarms are installed in residential homes, and installations are done within a certain timeframe of receiving the alarms. The goal is to complete these canvases by June 30 of 2019.

The response area of Pasquo Volunteer encompasses roughly 2,000 buildings, both residential and nonresidential. Because resources are not limitless, the scope of this program will be limited to those homes at highest risk.

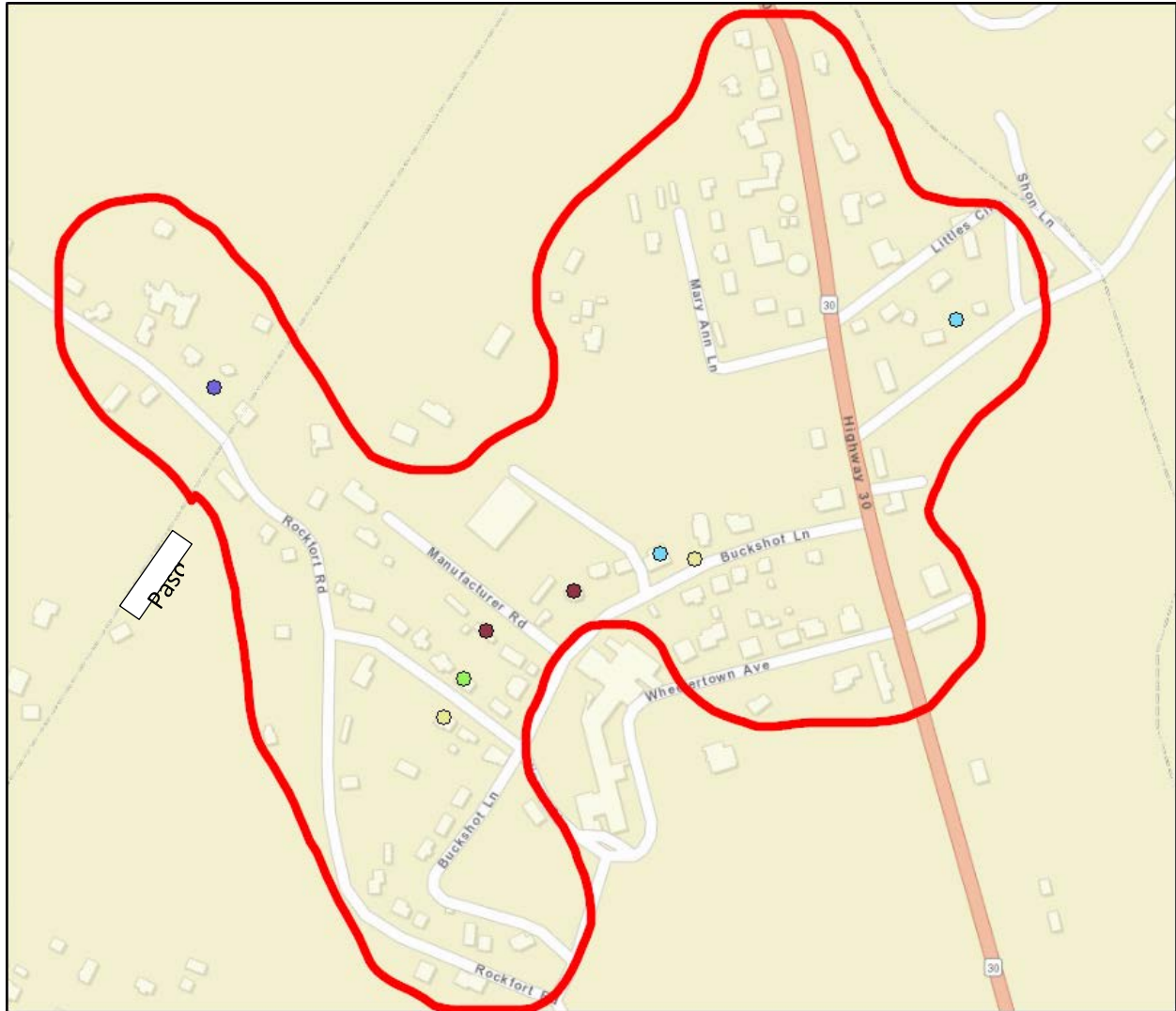
The following outlines the method for identifying these homes.

- The best predictor of where fires will occur is where fires have occurred, thus these areas will be targeted first.

- Using our volunteer's knowledge of the response area and satellite imagery we will limit the canvases to low income residential areas. Income is a risk factor and low income households are less likely to have the resources to afford smoke alarms.

The areas identifies are the following:

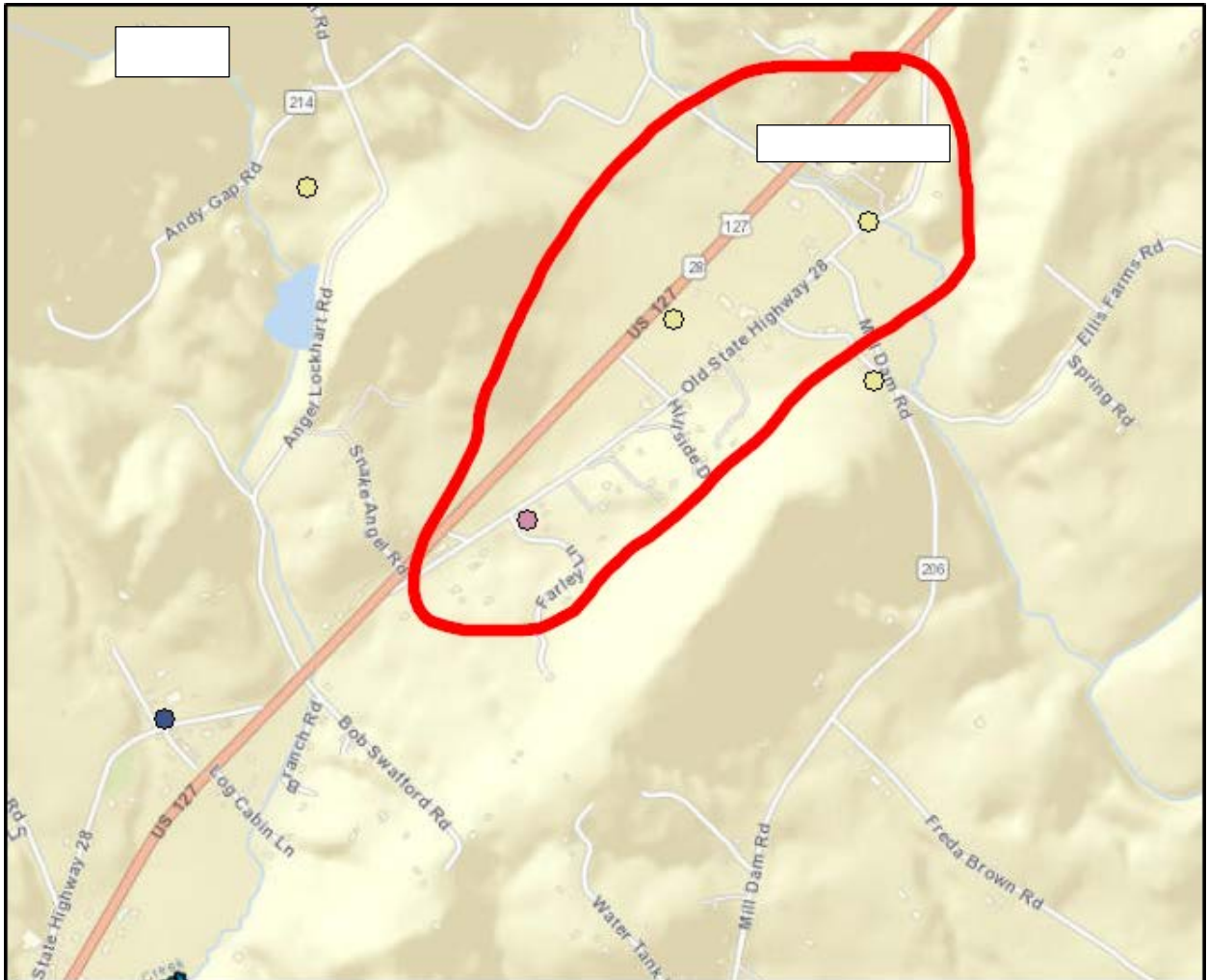
- Seven fires have occurred in and around Buckshot Lane, as such, we will target approximately 100 homes in and around this area.



- The region around Newby Loop and Old State Highway 28 has experienced five structure fires. This area isn't as densely populated thus the scope of homes will be limited to the approximately 30 homes present in this region.



- In the northern region of the response area, there have been five structure fires along US 127 and Old State Highway 28. In this region there are approximately 50 homes.



Focus on Codes

Over the past four years there have been four major fires that have resulted in \$136,000 of the total \$753,000 in property damage that were caused by Electrical Malfunction.

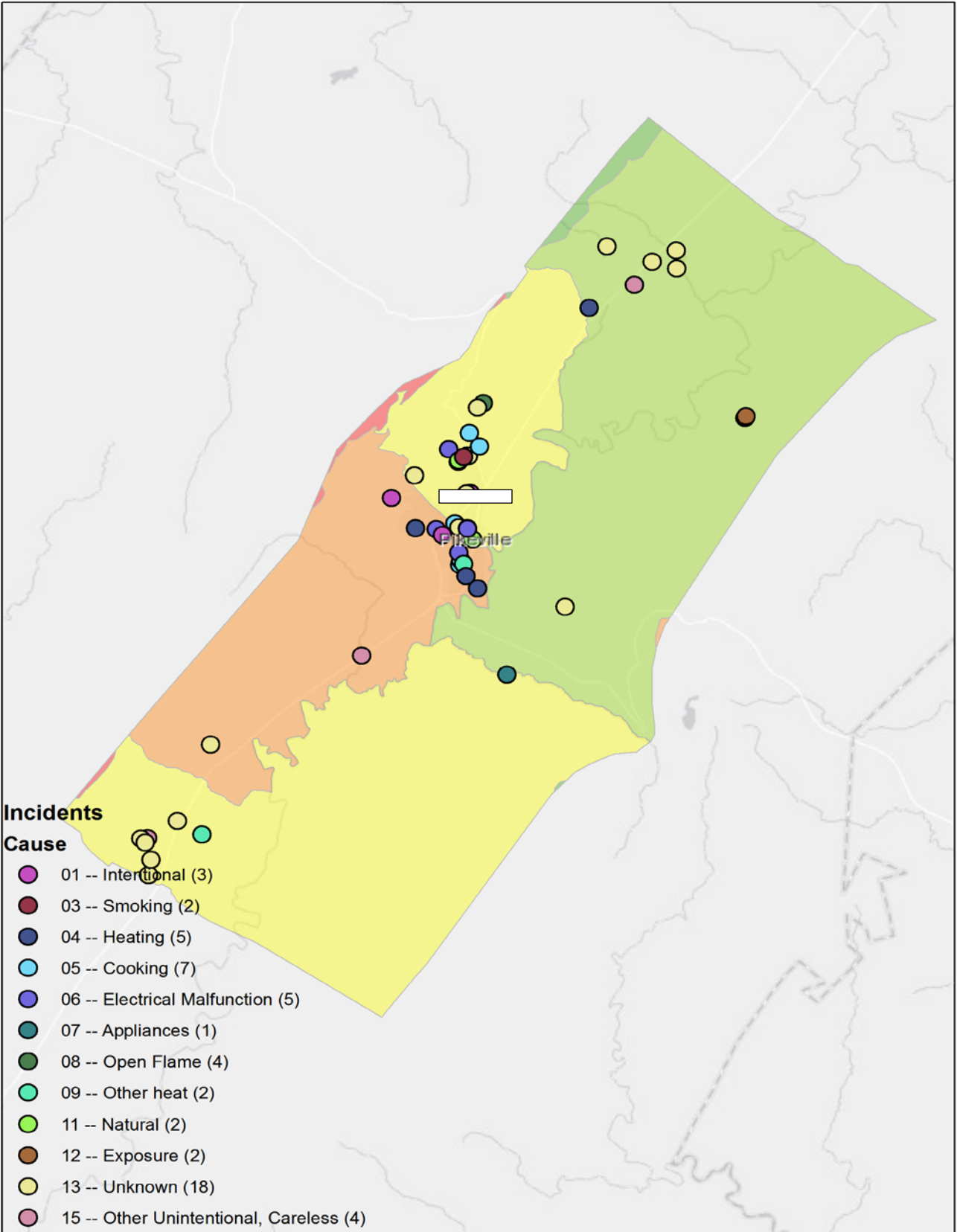
One of the ways we can reduce electrical fires is to ensure that our fire inspectors are fully trained and that the latest code is adopted.

The residential code of Pasquo falls under whatever code is currently adopted by the State of Tennessee. Typically, certain portions of the code are excluded.

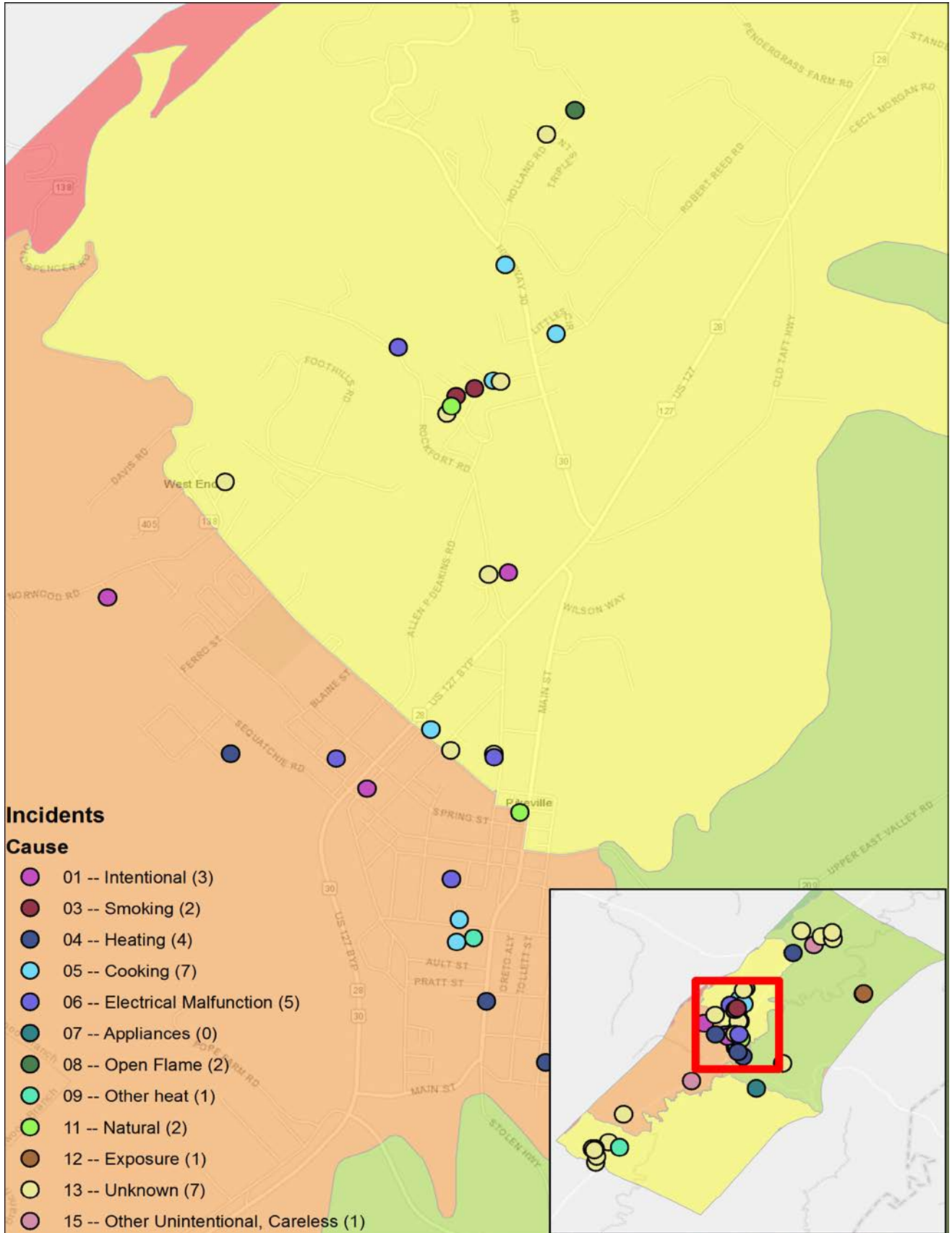
The action plan is as follows:

- Determine what training the city of Pasquo can pay for our inspectors to attend.
- Perform an impact analysis of adopting additional codes that may help in assisting in the prevention of electrical fires.

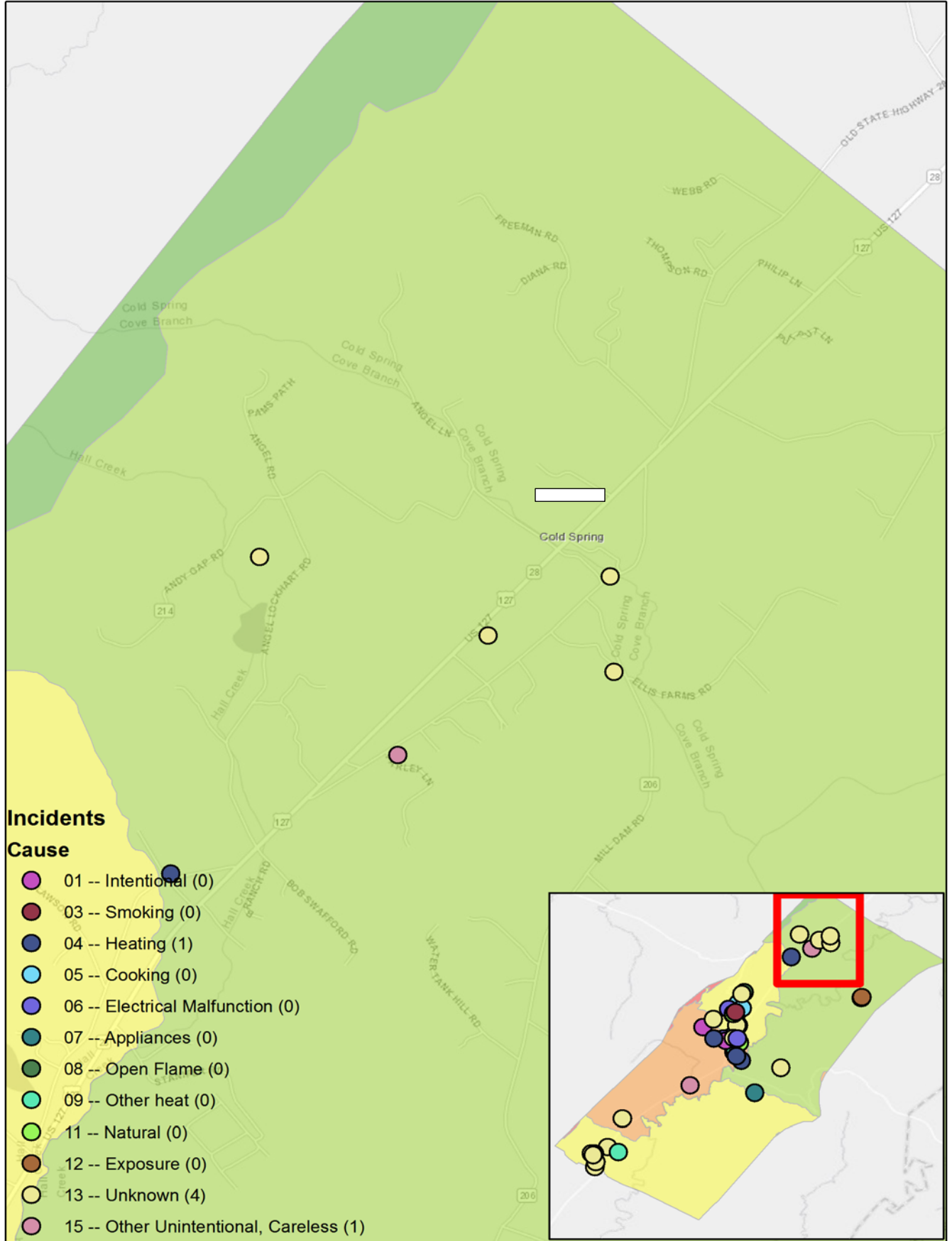
Pasquo Volunteer Fire Department District



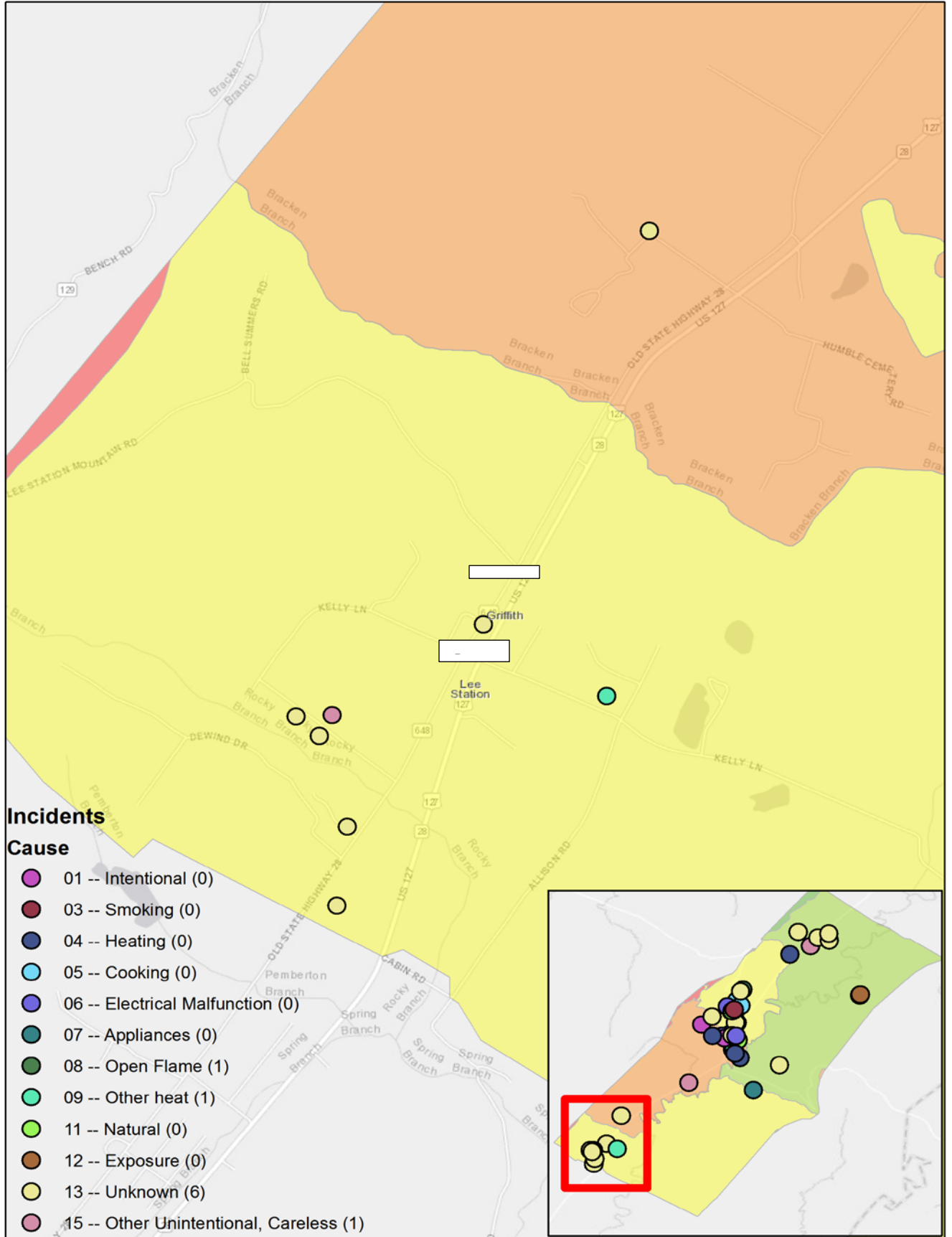
Middle



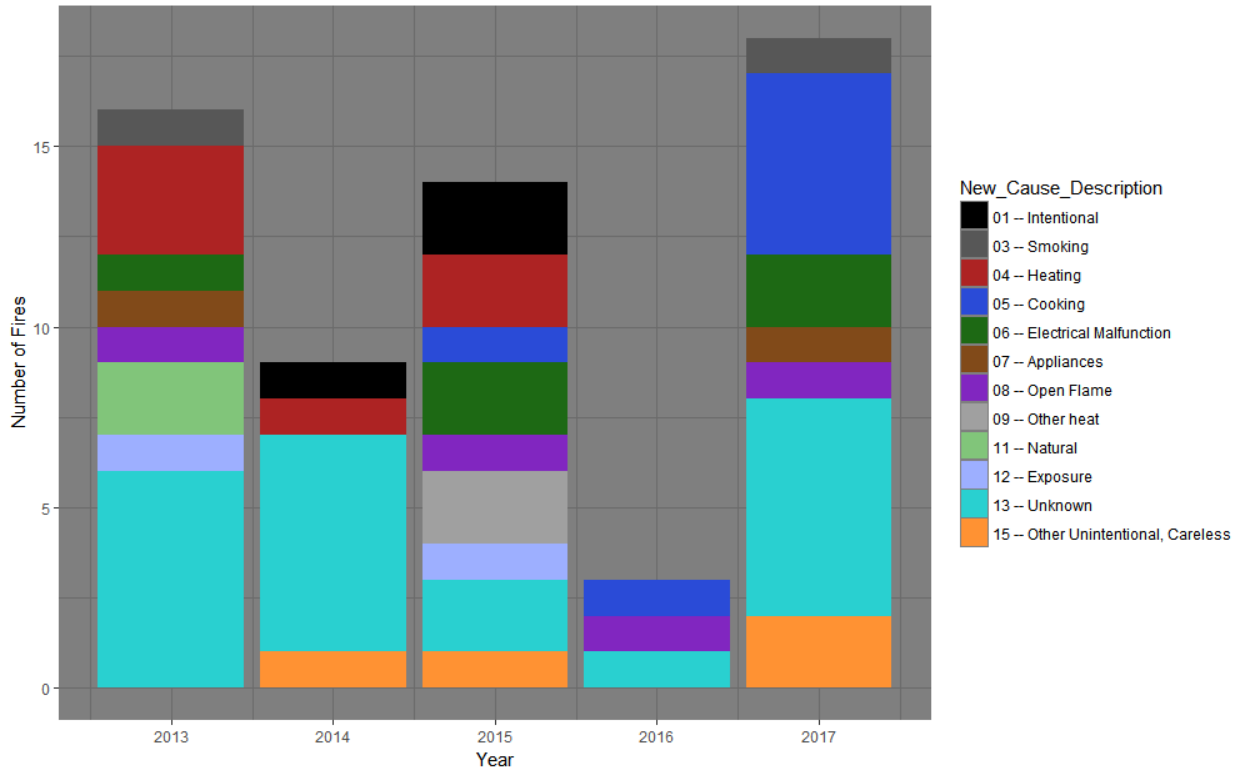
North



South



Number of Fires



Cost Per Fire

