

City of Carrington Fire Department: Community Risk Reduction Plan

Risk Assessment

The Community Risk Assessment provided by the Tennessee State Fire Marshal's Office identified cooking as the leading cause of structure fires in Carrington. There were 13 cooking fires compared to just 4 electrical distribution fires, the second leading cause. Because this was the leading cause of structure fires, we felt that it was important to develop strategies to mitigate that risk.

By examining fire incidents from 2009-2017, the City of Carrington Fire Department identified two hot spots for residential cooking fires. The fires were frequently occurring in residential units that are owned by the City of Carrington housing authority. During this 9-year period, there were 14 cooking fires in city housing authority units alone that resulted in \$5,000 in property loss.

Strategies

Because the dwellings are owned by the City of Carrington, we have the opportunity to use more intervention that might be possible with privately-owned homes. We propose installing 60 sets of temperature limiting control (TLC) electric stove burners to replace the existing burners in the dwellings. TLC burners shut off when the temperature reaches 700 degrees Fahrenheit, which is below the ignition point for most cooking oils and clothing.

Worcester FD (MA) implemented a similar plan and reduced the call volume from stovetop fires by 97% in their city housing authority. We expect to reduce cooking fires by at least 50% in dwellings owned by the Carrington Housing Authority.

TLC burners cost \$200 per set. The total cost of purchasing 60 sets will be \$12,000. To cover the costs of the project, we plan to apply for a federal Fire Prevention and Safety grant. The burners will be installed by two staff members with Fire and Life Safety Educator certifications. Carrington FD will also work with students at Bryan College and other volunteer organization.

Evaluation

In the year after the TLC burners have been installed, Carrington FD will review the call volume due to cooking fires and, in particular, stovetop fires to see if there has been a reduction in incidents, dollar loss, and injuries. We will also track the total number of residents that receive cooking fire safety education and the number of hours dedicated to the project. If the project is a success, we will seek additional funding to install TLC burners in all dwellings owned by the Carrington Housing Authority.