

**Article ? – Install a fire suppression sprinkler system at Danville Elementary School**

Shall the voters of the Timberlane Regional School District raise and appropriate up to **\$450,000** for the installation of a fire suppression sprinkler system in the Danville Elementary School. This funding would be combined with the \$250,000 appropriated at last year's (2015) school district meeting for a total project cost of \$700,000. (MAJORITY VOTE REQUIRED)

Total Project Cost:	\$700,000
Amount appropriated in 2015, but not spent	- \$250,000
Amount to be raised by taxation:	<b>\$450,000</b>

*Recommended by the School Board ?-?-?*

*Recommended by the Budget Committee ?-?-?*

[Intent: To install a new fire suppression sprinkler system at Danville Elementary School. Pollard Elementary, Atkinson Academy, Timberlane Regional High School, the Performing Arts Center and Timberlane Regional Middle School already have sprinkler systems, but Danville Elementary does not. The \$450,000 requested this year will be combined with the \$250,000 previously appropriated for this purpose, but not spent, for a total project cost of \$700,000.

This new sprinkler system will allow for a property insurance discount and will help protect the school interior, supplies and equipment in the case of a building fire.

According to the National Fire Protection Association "In educational properties, direct property damage per reported fire was 62% lower when wet pipe sprinklers were present, compared to fires with no automatic extinguishing equipment present." AND "93% of fires in these properties were confined to the room of origin" AND "Over half of the structure fires in these properties (53%) occurred between the hours of 9 a.m. and 3 p.m."

Like the other district towns, Danville relies primarily on call/volunteer firefighters. In the case of a fire, especially during the school day, the Fire Department would be low on responders. A sprinkler system is going to protect the property and contents until the Fire Department arrives. It also provides a level of safety for the firefighters who are going into the building, as well as for the occupants, by keeping the fire contained and by minimizing the generation of hazardous smoke. In addition, a fire in a sprinklered building is generally held to the area of origin, which will reduce the cost of any required repairs and cleanup.

**QUESTION- Is the proposed system dry pipe or wet pipe?**

A **wet pipe sprinkler system** is a sprinkler system employing automatic sprinkler heads attached to a piping system containing water and connected to a water supply so that water discharges immediately from sprinklers opened by heat from a fire.

A **dry pipe sprinkler system** is sprinkler system employing automatic sprinklers that are attached to a piping system containing air or nitrogen under pressure, the release of which (as from the opening of a sprinkler) permits the water pressure to open a valve known as a dry pipe valve, and the water then flows into the piping system and out the opened sprinklers.

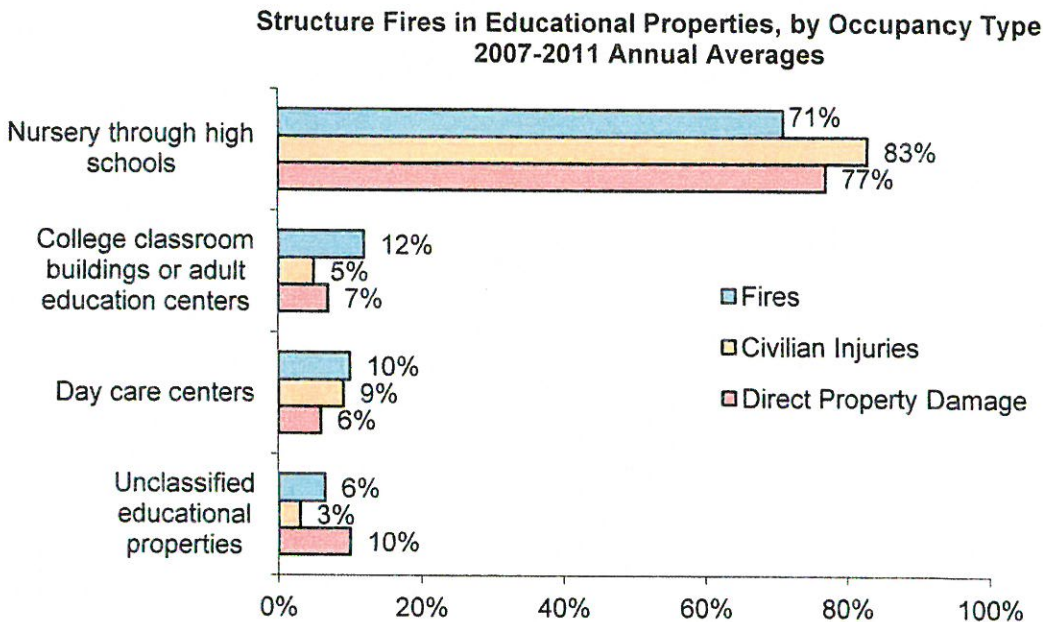
Dry pipe sprinkler systems are installed in areas where wet pipe systems may be inappropriate such as areas where freezing temperatures might be expected.

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## Structure Fires in Educational Properties Fact Sheet

U.S. fire departments responded to an estimated average of **5,690** structure fires in educational properties in 2007-2011, annually. These fires caused annual averages of **85** civilian fire injuries and **\$92 million** in direct property damage. An average of one death occurred in daycare properties.

The majority of fires and losses in educational properties were in nursery through high schools



**In 2007-2011 36% of structure fires in educational properties occurred in structures with automatic suppression systems present.**

- During 2007-2011, where automatic suppression equipment was present and known, 89% of systems in structure fires in these properties were sprinklers.
- 87% of systems operated when the fire was large enough to activate them.
- In educational properties, direct property damage per reported fire was 62% lower when wet pipe sprinklers were present, compared to fires with no automatic extinguishing equipment present

*These estimates are derived from the U.S. Fire Administration National Fire Incident Reporting System (NFIRS) Version 5.0 and NFPA's annual fire department experience survey. Educational property includes Preschool through high schools, adult education centers, and day-care centers.*

Source: *Structure Fires in Educational Properties*, Richard Campbell, September 2013

# Educational Property Structure Fires by Facility Type

*The following estimates are annual averages for 2007-2011*

## Day Care Centers

- **580** structure fires
- **1** civilian death
- **8** civilian injuries
- **\$6** million in direct property damage
- **Leading Causes**
  - Cooking equipment
- **Area of Origin**
  - Kitchen or cooking area
  - Bathroom
- **Item 1st Ignited**
  - Cooking materials including food
- **91%** of fires in these properties were confined to the room of origin
- **Peak Times**
  - Weekdays
  - 10 a.m.-1 p.m.

## Preschools through Grades 12

- **4,060** structure fires
- **70** civilian injuries
- **\$70** million in direct property damage
- **Leading Causes**
  - Half were intentionally set
  - Cooking equipment
  - Playing with heat source
- **Area of Origin**
  - Lavatory
  - Kitchen or cooking area
- **Item 1st Ignited**
  - Trash or rubbish
  - Cooking materials including food
  - Magazine, newspaper, or writing paper.
- **93%** of fires in these properties were confined to the room of origin
- **Peak Times**
  - Weekdays
  - 8 a.m. - 4 p.m.

## College Classroom Buildings and Adult Ed. Centers

- **700** structure fires
- **4** civilian injuries
- **\$7** million in direct property damage
- **Leading Causes**
  - Cooking equipment
  - Intentional
- **Area of Origin**
  - Kitchen or cooking area
  - Lavatory or bathroom
  - Laboratory
- **Item 1st ignited**
  - Cooking materials, including food
  - Rubbish, trash, or waste
- **94%** of fires in these properties were confined to the room of origin
- **Peak Times**
  - Weekdays
  - 10 a.m - 8 p.m

**Article ? – Replace (restore?) the brickwork at Timberlane Regional High School**

Shall the voters of the Timberlane Regional School District raise and appropriate up to \$395,000, by withdrawing that amount from the existing School Building Construction, Reconstruction, Capital Improvements and Land Purchase Capital Reserve Fund? (MAJORITY VOTE REQUIRED)

Total Project Cost:	\$395,000
Amount to be withdrawn from Capital Reserve Fund	- \$395,000
Amount to be raised by taxation:	\$0

*Recommended by the School Board ?-?-?*

*Recommended by the Budget Committee ?-?-?*

[Intent: To replace and repair (“re-point”) the brickwork on the high school gymnasium exterior wall, to replace related damaged flashing, to paint the damaged interior walls and to repair the damaged floor surface due to leakage. This has been a growing problem for five (5) years and continued delay will only increase the total repair cost.