



Colorado Springs Utilities

It's how we're all connected

Public Safety Education & Outreach

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- **Founded 1924, community-owned, 4 services, 1,895 employees**
- **Colorado Springs population: 426,881**
- **El Paso County: 2130 square miles**
- **Colorado Springs: 200 square miles**
- **Electric service area 475 square miles**
- **Gas service area 527 square miles**
- **205,000 natural gas customers**
- **221,796 electric customers**
- **5 military bases**

Student Safety Education

- Educating for almost 40 years
- 2017 APPA Community Service Award
- Almost 350 annual gas and electric safety presentations
- Requests via www.csu.org Salesforce
- Interactive: Inquiry activities, multiple learning modalities
- Goals: align to standards, increase knowledge, behavior change
- Component of Gas Public Awareness



SafetyCircuit: Electric Safety and You

3rd - 6th grade



Grade specific emphasis:

3rd grade – Injury prevention, personal safety knowledge and skills

4th grade – Forms & sources of energy, electrical circuits, injury prevention

5th grade – Earth systems science, non-renewable energy, injury prevention

6th grade – Physical science, forms and sources of energy, injury prevention

Electric SAFETY EDUCATION

SafetyCircuit: Electric Safety and You

3rd - 6th grade students

Our experienced professionals use a live electric demonstration board in your classroom to illustrate how the safe use of electricity can affect all aspects of our daily activities. Presentation inquiry activities, vocabulary and content are designed to align with CDE Academic Standards and are adjusted to each grade level.

The presentation is 50 minutes with a minimum class size of 15 and maximum of 60. Multiple presentation sessions are available. The demonstration requires a 10-foot space near an electrical outlet. Program emphasizes the Comprehensive Health standard to apply personal safety knowledge and skills to prevent unintentional injury.

To schedule a presentation:

Contact Jane Zook at 668-8386 or email: jzook@csu.org



Your Nose Knows!

Natural Gas Safety

3rd - 5th grade



Grade specific emphasis:

3rd grade – States of matter, personal safety knowledge, injury prevention

4th grade – Physical science, forms of energy, personal safety and injury prevention

5th grade – Earth systems science, non-renewable energy, injury prevention

Natural Gas SAFETY EDUCATION

Your Nose Knows! Natural Gas Safety

3rd - 5th grade students

Our professionals discuss the origins of natural gas from fossils, the natural gas system and how it is used in our homes today. A simulator and flame is used to demonstrate a controlled natural gas explosion. The presentation has an emphasis on the three S's of natural gas safety: sight, smell and sound; as well as actions to take if students detect natural gas in their home or school.

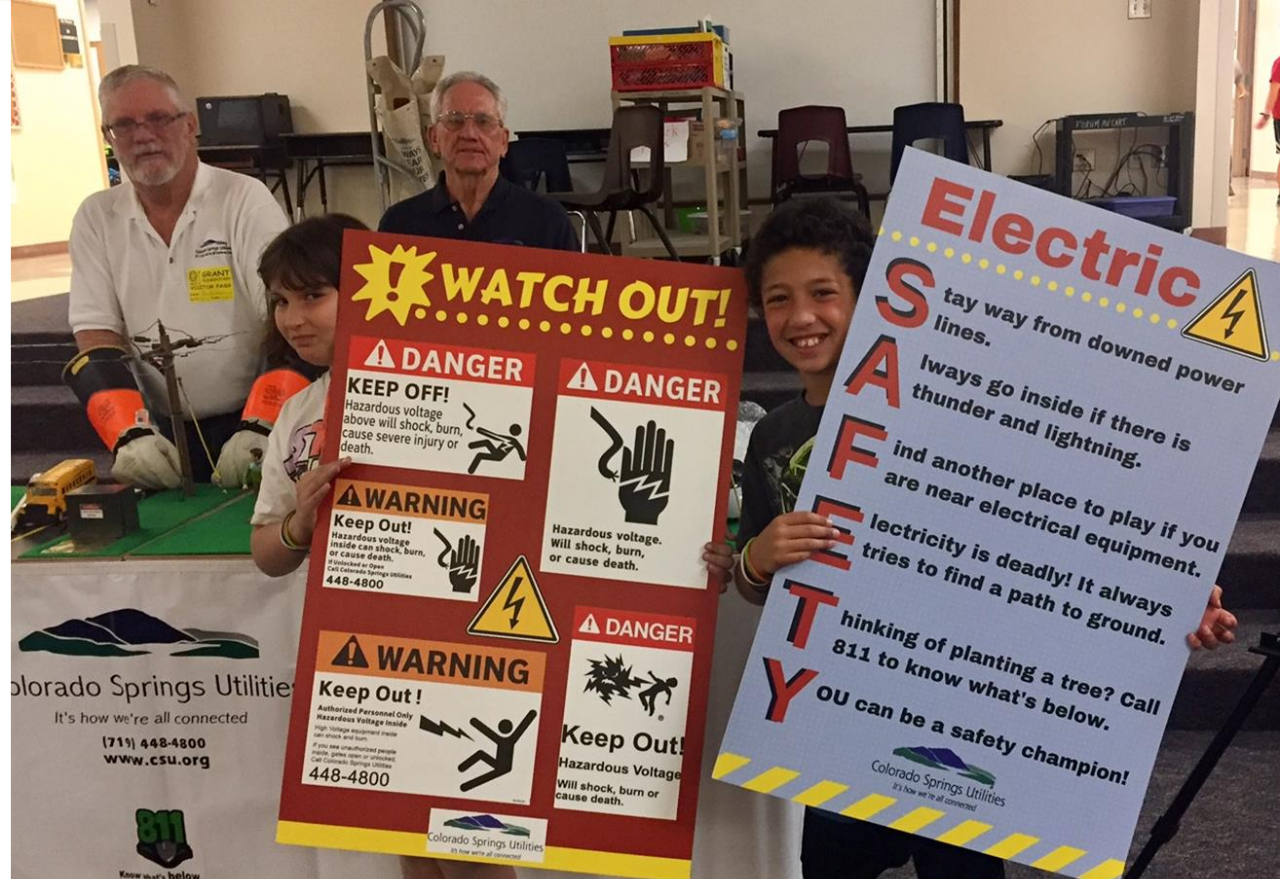
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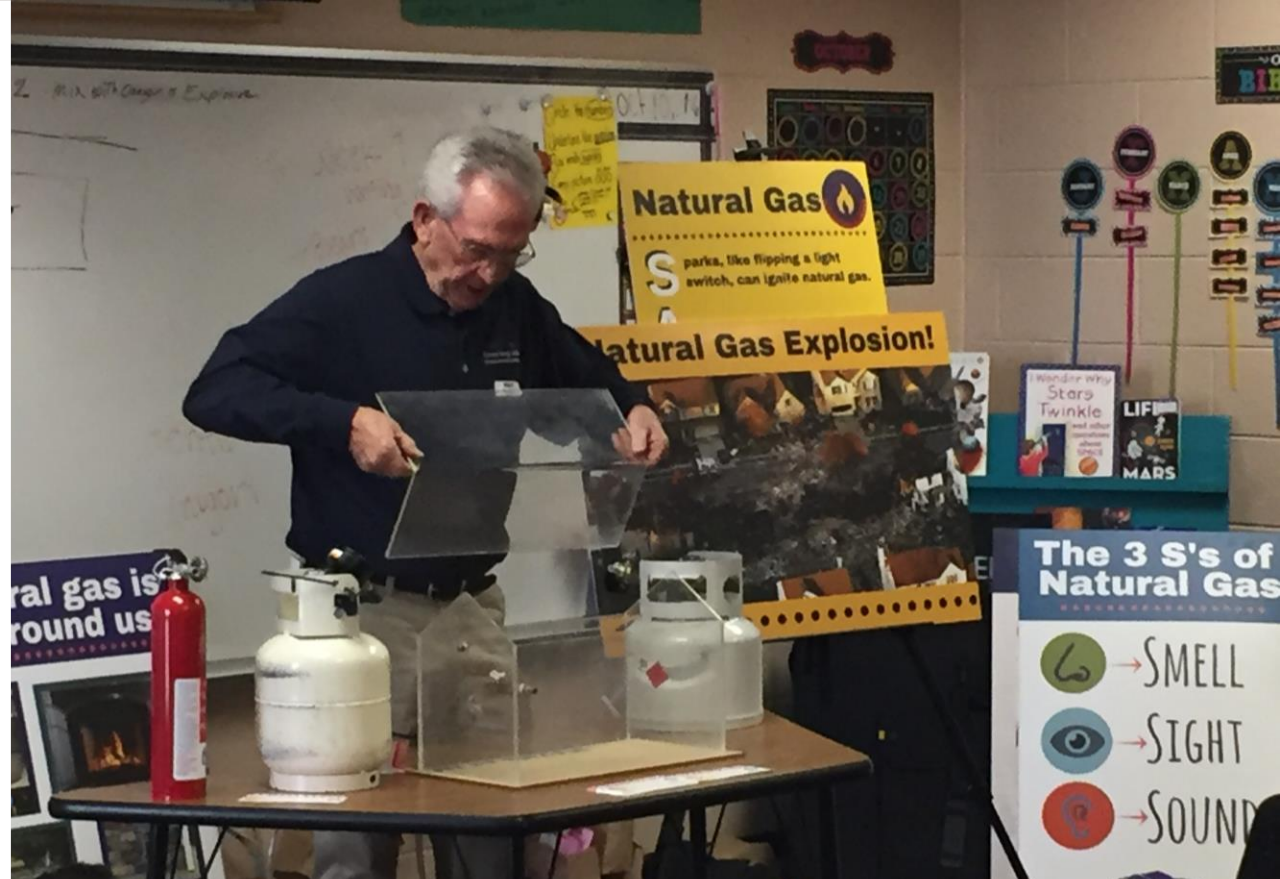
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Colorado Springs Utilities



SafetyCircuit: Electric Safety & You



Your Nose Knows! Natural Gas Safety

Natural Gas Safety

YOUR NOSE KNOWS: If you smell gas, exit fast!

Complete these natural gas safety activities, have a grown-up sign, then return to your teacher.

Know the "three s's"

Did you know your senses can detect a gas leak? If you suspect a leak, leave the area immediately and call 911, then call us at 448-4800.

S _____ (rotten eggs)

S _____ (brown grass)

S _____ (hissing)

NATURAL GAS IS:



PARENT & GUARDIAN ENGAGEMENT

States of Matter (draw)

Matter is the "stuff" of the universe. It is the stuff that make up all physical things. Everyday things have four states of matter.



SOLID

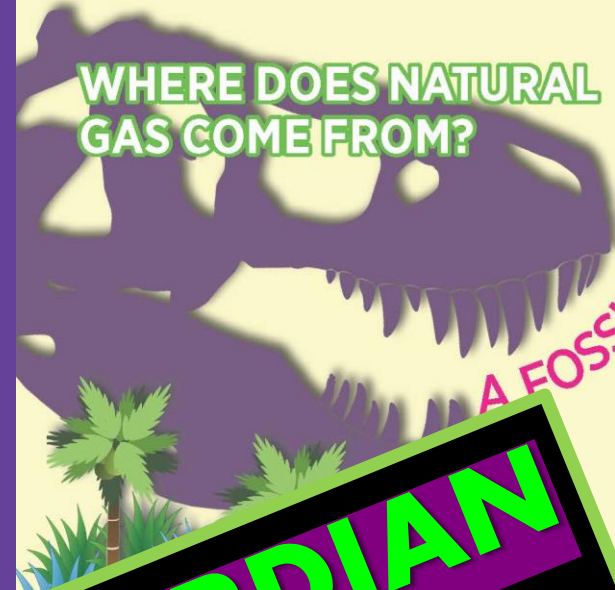
LIQUID

GAS

- gas fireplace
- cooking
- flushing the toilet

Adult Signature: _____

WHERE DOES NATURAL GAS COME FROM?



A FOSSIL FUEL

comes from deep underground rock formations. Fossil fuels are used as energy to cook, heat homes and generate electricity.

FOSSIL FUELS (fill in the blanks):

- 1 are _____
- 2 come from the _____
- 3 formed from _____ dead plants and animals

_____ posing _____ non-renewable _____ ground

Planting a tree? Building a fence? Installing a mailbox? Call or click 811 before you dig to locate underground lines such as water, wastewater, electric and natural gas pipes.



Know what's below. Call before you dig.

Fill in the words:

e _ _ _ **c** _ _ _ **c**

g _ _ _

w _ _ _ **r**

w _ _ _ **e** **w** _ _ _ **r**

DID YOU KNOW?

Every 6 minutes an underground utility line is damaged because someone didn't call 811!

- Do you have a carbon monoxide alarm? _____
- What is the phone number for emergencies? _____
- What should you do if you smell gas? _____
- What phone number should you call before you dig? _____

1.) You should have an alarm near your sleeping area. 2.) 911 3.) exit fast, call 911. 4.) 811

Electric Safety

Play it safe around electricity!

Complete these natural gas safety activities, have a grown-up sign, then return to your teacher.



INDOOR ELECTRICAL SAFETY

Circle the problem areas in the scene above and fill in the blanks:

- ✓ Never put _____, drinks or other liquids on or near electrical equipment.
- ✓ Never remove bread stuck in a _____ while it is plugged in.
- ✓ Keep space _____ THREE feet away from anything flammable, like curtains.
- ✓ Damaged electrical _____ are dangerous.

Word Bank: cords heaters toaster water



Know what's below.
Call before you dig.

Planting a tree? Building a fence? Installing a mailbox?

Call or click 811 before you dig to locate underground lines such as water, wastewater, electric and natural gas pipes.

Fill in the words:

e _ _ _ c _ _ _ c
 g _ _ _
 w _ _ _ _ r
 w _ _ _ e w _ _ _ r

Adult Signature: _____

OUTDOOR ELECTRICAL SAFETY



Circle the dangerous areas in the scene above and fill in the blanks:

- ✓ Lightning is deadly! When thunder roars, go _____!
- ✓ Never climb trees near _____. Contact with a line is dangerous and deadly.
- ✓ Do not climb on electric _____ marked with a warning sign.
- ✓ Stay far away from a _____ line or supporting wire near a power line.

Word Bank: equipment indoors downed power lines

TRUE or FALSE

CIRCLE ONE:

1. T / F: Electricity travels at the speed of light, more than 186,000 miles per second!
2. T / F: It is okay to stand on electric utility boxes.
3. T / F: A spark of static electricity can measure up to 3000 volts.
4. T / F: Electricity takes the easiest path to the ground.
5. T / F: Electricity can be made from wind, water and the sun.
6. T / F: Climbing trees near power lines is okay if the tree isn't too tall.
7. T / F: Water and electricity are a good mix if the water is warm.
8. T / F: It is dangerous to plug too many things into one electric outlet.

Answers: 1) T 2) F 3) T 4) T 5) T 6) F 7) F 8) T

Renewable and Non-renewable Energy

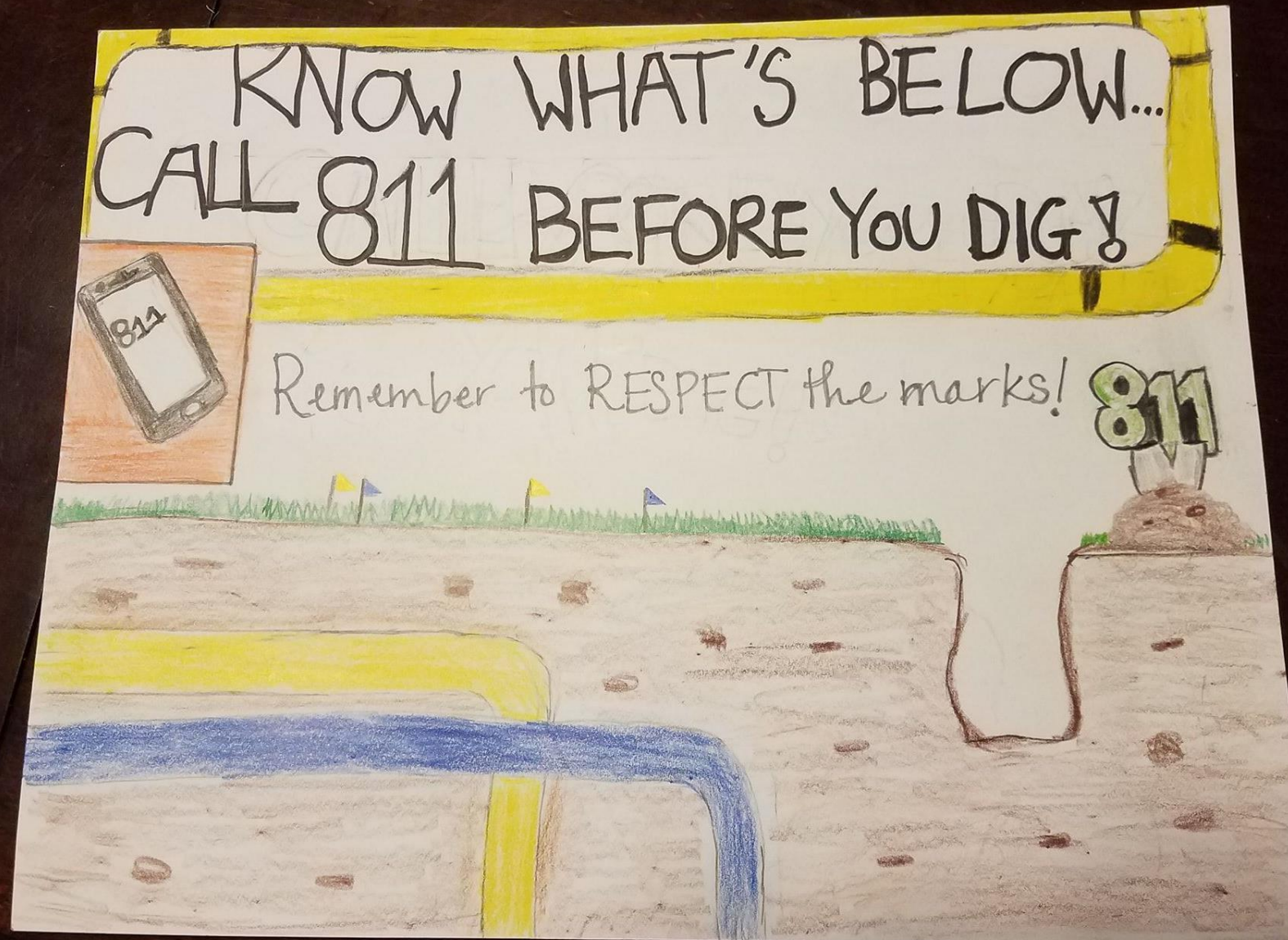
Non-renewable energy resources are available in limited supply and take a long time to regenerate. Renewable resources are replaced over short periods of time naturally.

Place an "N" next to the non-renewable resources and an "R" next to the renewable resources.



Why we do what we do!

- Inform public about their community-owned utility
- Teach safety behaviors at a young age
- Encourage “each one teach one” philosophy
- Engage parents and guardians
- Empower any age group with tools to be safer





First Responder Awareness



Community Events

- 811 Before You Dig
- Landscaping
- CO Alarms
- Home Safety
- Natural Gas
- Electric





Public Safety Awareness & Outreach Background

- What exists
- What we are creating
- Grassroots
- 2020 strategic plan

Stakeholder Audiences



**Elected
Officials**



**Students
&
Educators**



**First
Responders**



**Business
Customers**



**Affected
Public**



**Professional
Excavators &
Contractors**

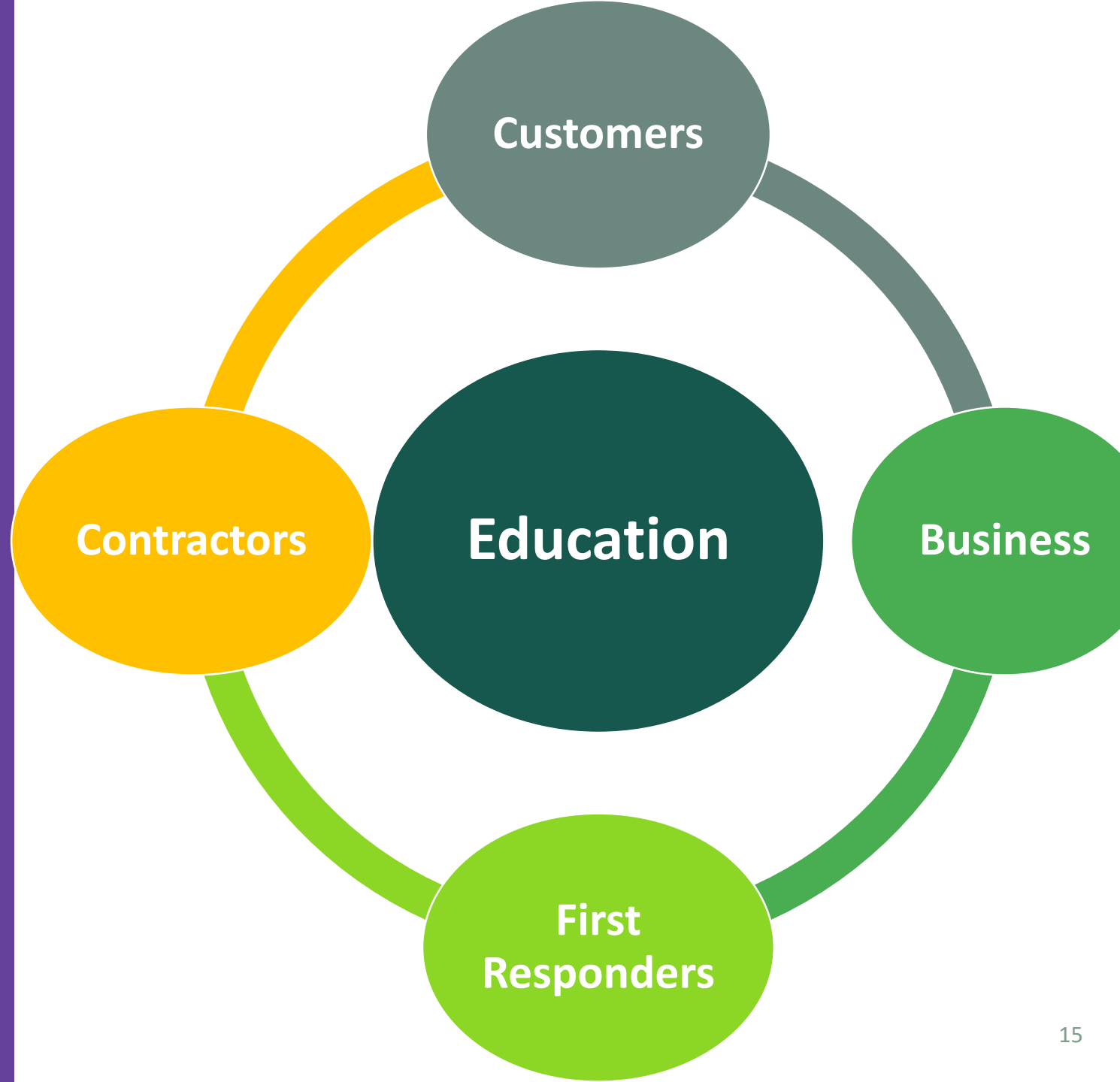
Public Safety Awareness Goals

- Provide education to our community on electric and natural gas safety awareness, to prevent injuries, reduce incidents and save lives.
- Meet Gas Public Safety Awareness compliance initiatives.
- Work with Communications Team to leverage safety education messaging.
- Engage with the customer on home safety tips and improvements.
- Establish Colorado Springs Utilities as a leader in public safety education.



More than Messaging

- Behavior change through engagement
- Provide integral public awareness programs
- Educate, engage public and customers
- Work with stakeholders such as first responders, contractors, elected officials and business customers
- Demonstrate commitment to consistent messaging





Damage Prevention Program

811 Before You Dig

History

- Enhanced in 2003 to educate homeowners and professional contractors on 811 and safe digging practices, and enforce civil penalties who fail to call for locates.
- Enhanced Excavator Education – First line of defense
 - Monthly Damage Prevention Seminars
 - Excavator Handbooks - handed out by internal crews, Regional Building, at sponsored events
 - Annual Excavator Communication – Tri-fold flyer
 - Attendance at local trade shows
 - Pre excavation site visits – Damage Investigators visit known excavation sites to answer questions and provide additional information.
 - All locators well-versed in state excavation requirements





Education Topics

- What is excavation?
- 811 Before You Dig Process
- What do the marks mean?
- How long is my ticket valid?
- Safe excavation practices
- How do I escalate problems?
- State Law

State Law & Civil Penalties



- Up to \$5000 for first offense
- Up to \$25,000 for second or third offense within 12 month period
- Up to \$75,000 for fourth and subsequent offenses within 12 month period
- Factors to consider
 - Damage history
 - Severity of damage – Injuries? Property damage?
 - Severity of negligence
 - Cooperativeness of excavator
- First offense penalty of \$5000 can be reduced to \$1000 if excavator attends educational Damage Prevention Seminar
- Deferral Program - \$1000 fine can be deferred for 3 months if excavator has no previous “at fault” damages to CSU infrastructure for last 4 years

New legislation: State Bill 18-167

State Safety Commission

- 15 appointed stakeholder representatives
- Review complaints from stakeholders

Enforce provisions in the law:

- Imposing monetary penalties
- Mandating safety education
- Advising on Best Practices and policies to enhance safety
- Has the authority to fine any stakeholder who does not comply with the state One Call Law

