

DECISION MAKING DURING A CRISIS



Presenters:

Andrew P. Flanagan, Town Manager, Andover MA

**Andrew W. Maylor, Comptroller of the Commonwealth of Massachusetts
former Town Manager, North Andover**

Dan Rivera, Mayor, City of Lawrence

THE EVENT

THE MERRIMACK VALLEY GAS DISASTER

At approximately 4:06 pm on Thursday September 13, 2018 a work crew reconnected a replaced section of gas main in the south section of Lawrence, Massachusetts. Due to an engineering design error, the reconnection resulted in the over pressurization of approximately 45 miles of gas lines covering a 5 square mile radius in 3 communities; Andover, Lawrence and North Andover, Massachusetts.

The Impact

- *More than 75,000 residents were asked to evacuate their homes*
- *There were more than 100 fires, one tragic death, many injuries and dozens of destroyed and seriously damaged homes*
- *Hundreds of calls were received by the respective 911 centers*



The Response – the first 72 hours

Date	Description of Events	Stats
Thursday September 13, 2018	<ul style="list-style-type: none">Residents voluntarily evacuated their homesSome residents turned off their own gasUpon identification of the impacted area, officials turned off gas at impacted homesElectricity cut as a precautionHighway off-ramps closedEmergency Management teams were mobilized and shelters were opened	<p>8,570 gas meters impacted 6,660 homes impacted More than 40,000 residents w/o gas More than 60,000 without electricity</p>



The Response – the first 72 Hours



The Response – the first 72 Hours



The Response – the first 72 Hours



Mutual Aid Assistance

- 180 Fire Departments from 3 states
- Over 660 law enforcement units
- 54 EMS units

NORTH LAWRENCE

SHOWCASE
CINEMAS

I-495
EXIT 42

LAWRENCE...
POWER TURNED OFF

NORTH ANDOVER...
POWER TURNED OFF

NEWS
CENTER
MAINE

LIVE
SKYEYE

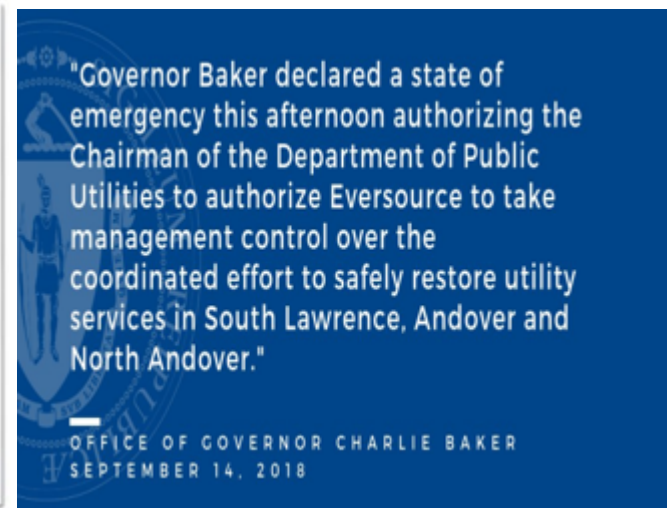
BREAKING
NEWS

Power will be shut off to all of
Lawrence, Andover and North Andover

WDBZ
4
CBS

The Response – the first 72 hours

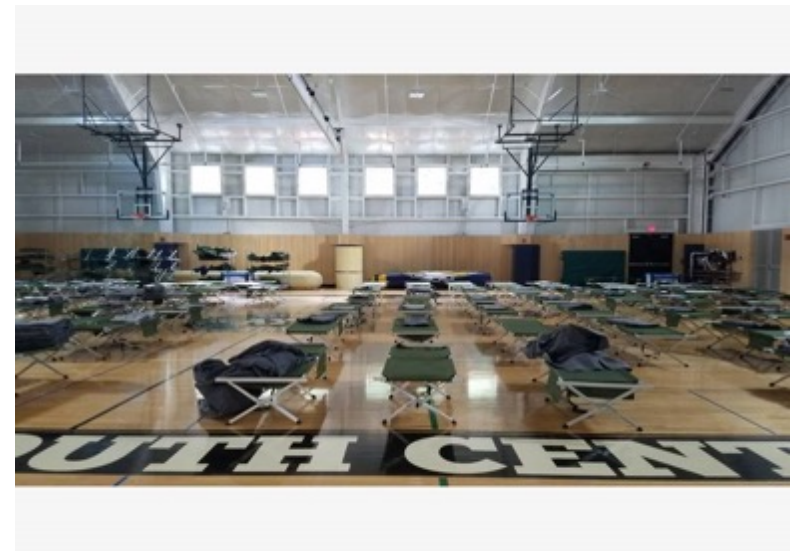
Date	Description of Events	Stats
Friday September 14, 2018	<ul style="list-style-type: none">• Streets identified as “Impacted” or “Non-impacted”• Gas techs begin shutting off all meters on the Impacted Streets (approx., 2am)• State of emergency declared; Eversource put in charge of the impacted area shutoff operation (late afternoon)• Inspections begin to clear streets enabling residents to return home	Residents with electricity cleared to return home



The Response – the first 72 hours

Date	Description of Events	Stats
Saturday September 14, 2018	<ul style="list-style-type: none">• Non-impacted / impacted areas continue to be cleared for residents to return home• Electricity restored for some• Inspections of Public Schools begins	8,527 meters inspected
Sunday September 15, 2018	<ul style="list-style-type: none">• Non-impacted / impacted areas continue to be cleared for residents to return home• Electricity restored for some• Inspections of Public Schools completed	100% cleared to return home 100% homes re-energized

The Response – the first 72 hours



The Restoration

- Navy Captain Joe Albanese, Ret., appointed by Governor Baker as Chief Recovery Officer
- Beginning 9/24 Columbia Gas and contracted construction teams began the massive restoration process in all three communities
- **“Relight” date set for November 19, 2018**
 - The effort ultimately replaced the 45-mile, cast iron and bare steel distribution system with state-of-the-art infrastructure and safety features such as excess flow valves that automatically shut off gas flow if a service line is damaged or broken
 - Replace of all gas appliances
 - Inspect all work for code compliance



The Restoration – Operation Assessment

PATH TO SERVICE RESTORATION

MAKING YOUR HOME OR BUSINESS “HOUSE READY”

- ❑ **Assessment**
A team will visit your home or business to assess your natural gas appliances and piping and review options.
- ❑ **Repairs and Installation**
Upon completion of repairs, we will test natural gas lines for safety, install appliances and you will receive warranty information.

MAKING YOUR HOME OR BUSINESS “GAS READY”

- ❑ **Main Line Replacement**
The main gas line that brings gas into the area has been replaced on your street.
- ❑ **Service Line Replacement**
The line connecting your home or business to the main line has been replaced.
- ❑ **Meter Installation**
The gas meter that measures gas and regulates flow into your home or business has been installed.

NATURAL GAS SERVICE RELIGHT

To restore natural gas service to your home or business, all **work inside and outside must be completed**.

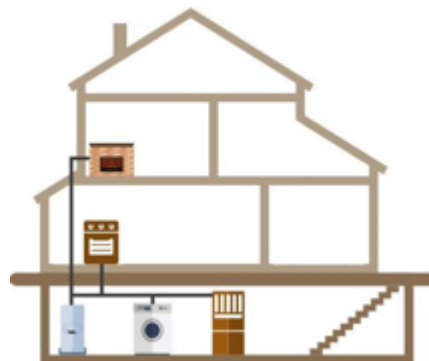
You may hear the terms **House Ready** and **Gas Ready**.

House Ready means all work inside your home or business is complete and tested, with at least one appliance available for relight.

Gas Ready means all work outside your home or business has been completed.

Once Gas Ready and House Ready, a Columbia Gas representative will visit your home or business, perform final safety checks and restore your natural gas service.

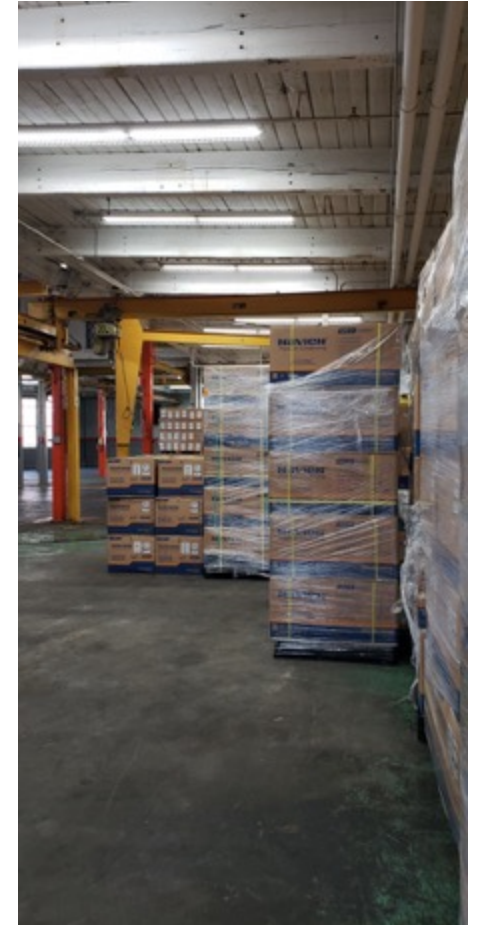
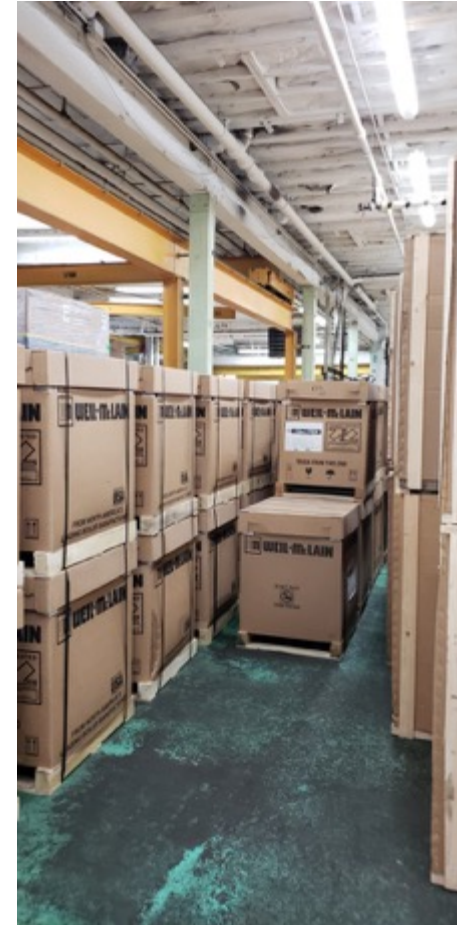
‘House Ready’ = Inside Work by Installation Teams



Work inside your home or business is completed, safety checked and available to relight.

The Restoration – Operation Assessment

- First step, teams visited every impacted residence/business to do a full assessment and determine what appliances need to be replaced or repaired. Each assessment took several hours.
 - Assessors, Electricians, Linguists
 - It took several weeks for all assessments to be completed
 - Coordination of assessment was a challenge



The Restoration – Staffing/Labor

- Employment Center opened to manage staffing needs
- Gas Main Construction Crews – in-street
 - 110 crews at peak – 4 to 10 per crew
- Plumbers/Gas fitters – in-house
 - 1,250 at peak from 13 states
 - State had to determine reciprocity standards
- Code Inspectors from 40 Massachusetts Municipalities
 - Coordination
 - Compensation
- Total labor force working on Restoration exceeded 3,000



The Restoration – Other Services

- Showering locations identified
- Claims Processes
 - Claims Centers
 - Mobile Customer Service Centers
 - In-house Claims Representatives
- Operation Temporary Heat
 - Hot Plates
 - Space Heaters



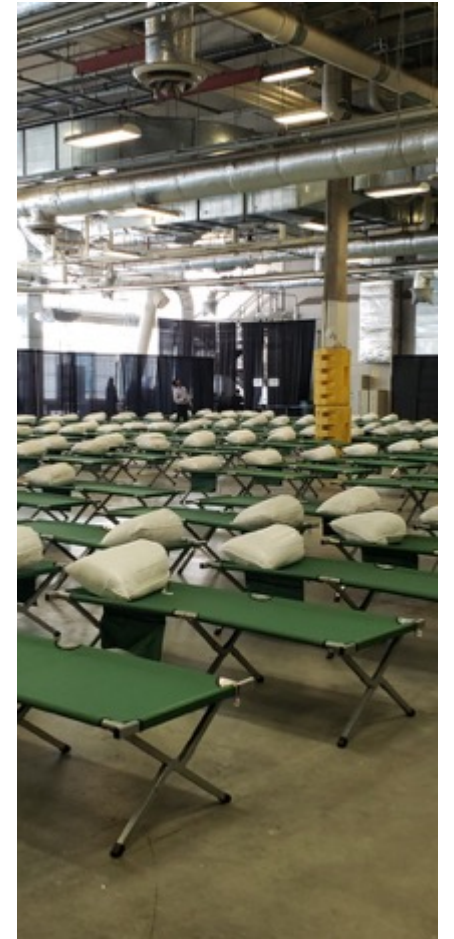
The Restoration – Other Services

- Appliances - Repair vs Replace
- Gifts, Donations, NGOs
 - Donations came from many sources
 - Two \$10 million funds were established
 - One for impacted residents
 - One for impacted businesses



The Restoration – Housing

- A comprehensive housing plan had to be established to provide displaced residents with a place to live
- Temperature was unusually mild for several weeks after the event
 - Average temperature in September was 68 degrees, 3 degrees above normal
- The concerns related to a change in temperature and the challenges of at-risk populations
 - Average temperature in November was 40 degrees, 1.6 degrees below normal
 - Earlier than normal snowfall



The Restoration – Alternative Housing Stats

Shelter Type	Available as of Oct. 8, 2018	Progress Update
Hotels	3,015 rooms	4,750 within 30 miles
Apartments	164 apartments	250
RVs	400 secured	On three sites by 10/17
Congregate Shelter	250 beds	1,000 by 10/10



The Restoration – Worst Case Scenario

- **“Columbia Gas likely to miss Nov. 19 deadline”**
– Eagle Tribune October 25, 2018
- **“Attorney General Calls 1-Month Gas Restoration Delay ‘Unacceptable’ ”** – NBCBoston October 26, 2018
- **“Months after Massachusetts gas explosions, normalcy far off”** – Boston.com December 14th
- **“Gas Recovery will extend into fall 2019”** – Eagle Tribune December 17, 2018



The Restoration – Communications

- Columbia Gas had no defined communications strategy
- Three communities chose to replicate all communications
- No single platform was effective
- Public vs Private approach to communication
- Extensive press coverage
- Sample website communications string
 - <https://www.cityoflawrence.com/718/Lawrence-Gas-Emergency>



Post Restoration

- Federal Hearing held to discuss causes and regulatory requirements
- Municipalities settled claims with Columbia Gas - \$80 million
- Roadway repaving will take 3 to 5 years
- Impacted public spaces will take 12 to 24 months to repair
- Class action lawsuits settled - \$143 million
- Phase II - Remaining appliances installed August 2019
- Back to business events were held

Total cost of the disaster has exceeded \$1.4 billion





THANK YOU

Questions?