

# Potential Natural Gas Expansion Town of Simsbury

Board of Selectmen Meeting  
October 15, 2014



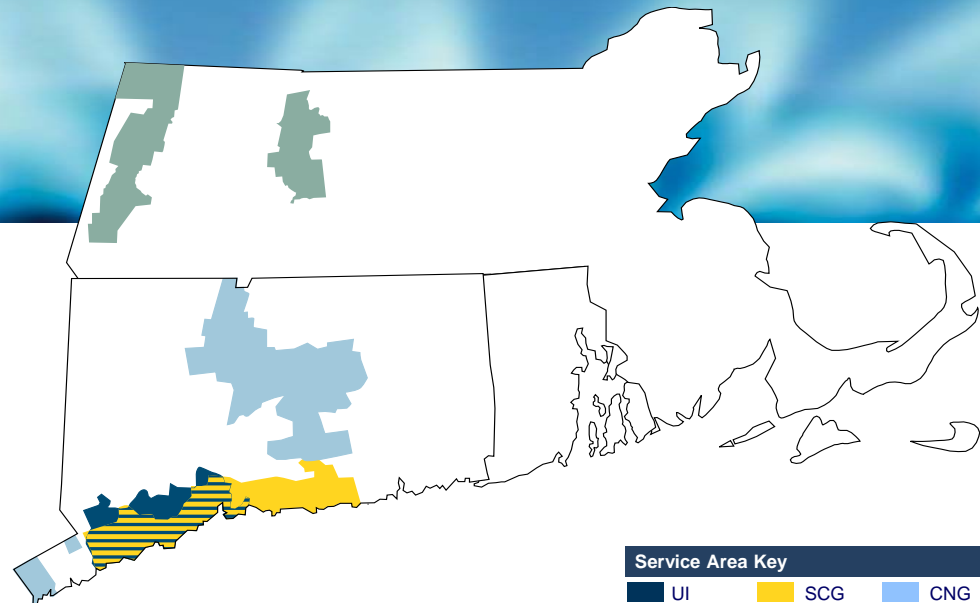
UIL HOLDINGS CORPORATION



# Agenda

- Our Company
- Natural Gas Expansion Plan
- Why Natural Gas?
- Use of Non Firm Margin
- Projects in Simsbury – Current and Proposed
- What Residents need to know
- Coordination with Town
- Questions

# UIL Holdings Corporation



## The United Illuminating Company (UI)

- ❑ Service territory: 335 sq miles
- ❑ ~321,000 customers
- ❑ 17 communities
- ❑ 50% interest in GenConn Energy LLC



## Southern Connecticut Gas (SCG)

- ❑ Service territory: 512 sq miles from Westport, CT to Old Saybrook, CT
- ❑ ~183,000 customers
- ❑ 2,281 miles of mains with ~133,000 services
- ❑ 24 communities



## Connecticut Natural Gas (CNG)

- ❑ Service territory: 716 sq miles - Greater Hartford-New Britain & Greenwich
- ❑ ~165,000 customers
- ❑ 2,022 miles of mains with ~126,000 services
- ❑ 22 communities

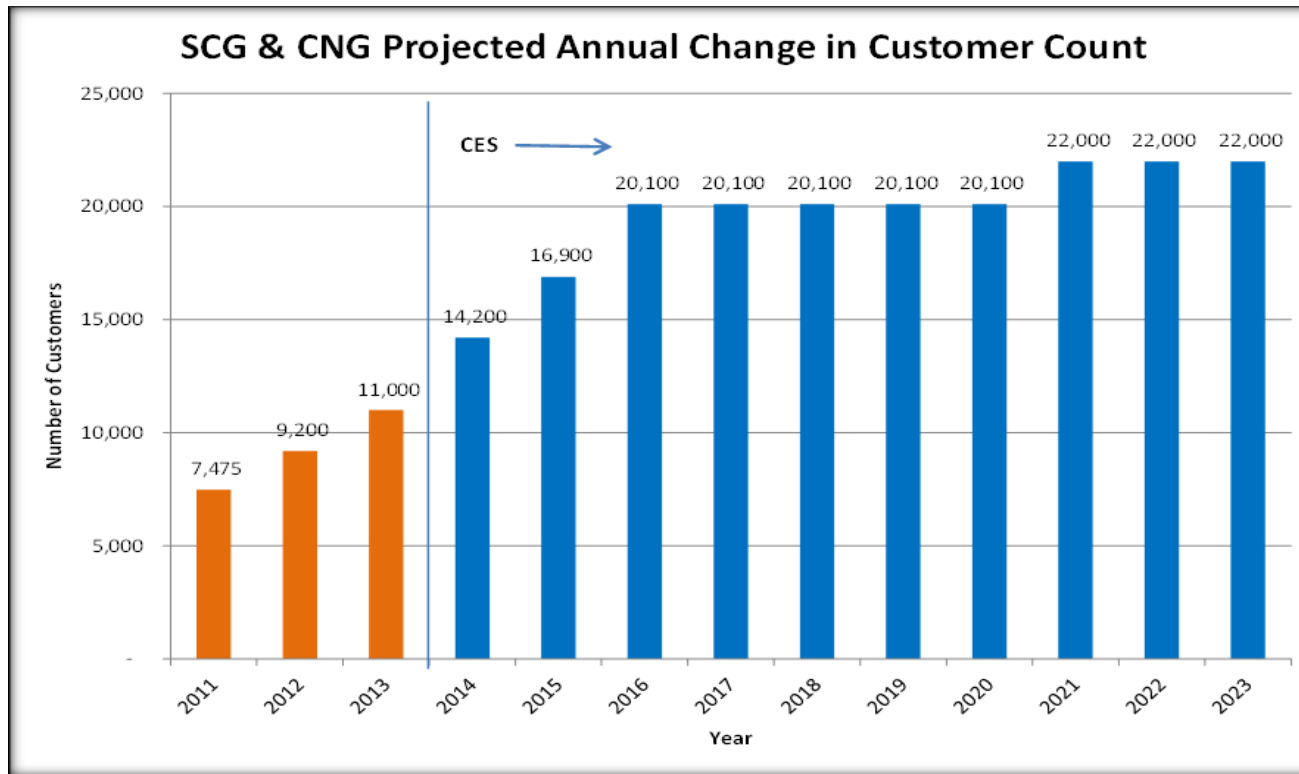


## Berkshire Gas Company (Berkshire)

- ❑ Service territory: 738 sq miles in Western MA including Pittsfield and North Adams
- ❑ ~37,000 customers
- ❑ 744 miles of mains with ~31,000 services



# Natural Gas Expansion Plan



Year->	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Total
<b>Residential</b>											
On Main Residential	3,800	5,100	6,900	8,100	10,700	12,100	12,800	14,900	14,900	14,900	104,200
Low Use Residential	4,700	4,700	4,700	4,600	2,300	1,200	500	200	200	100	23,200
Off Main Residential	3,800	4,100	4,500	3,900	3,900	3,900	4,000	4,100	4,300	4,400	40,900
<b>Commercial &amp; Industrial</b>											
On Main C&I	700	800	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	9,500
Low Use C&I	1,100	1,900	1,900	1,400	-	-	-	-	-	-	6,300
Off Main C&I	100	300	1,100	1,100	2,200	1,900	1,800	1,800	1,600	1,600	13,500
<b>Total # of Customers</b>	<b>14,200</b>	<b>16,900</b>	<b>20,100</b>	<b>20,100</b>	<b>20,100</b>	<b>20,100</b>	<b>20,100</b>	<b>22,000</b>	<b>22,000</b>	<b>22,000</b>	<b>197,600</b>

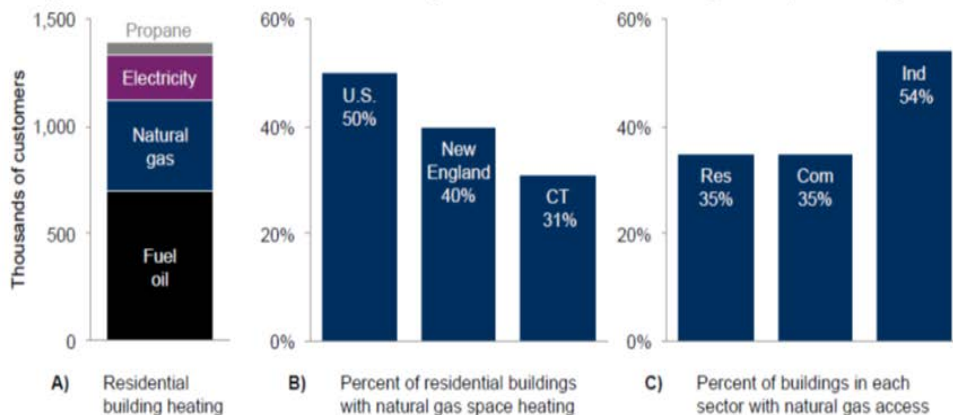
# The Region and Natural Gas Expansion

“Expanded use of low cost natural gas” in Connecticut

- Increase Competitiveness and economic growth
- Level the playing field – Commercial and Industrial
- In heating and industrial manufacturing, CT significantly lags surrounding states in the utilization of natural gas

30-35% - Connecticut  
47% - Massachusetts  
48% - Rhode Island  
40+% - New England  
50% - US

(A) Relatively few Connecticut homes are heated using natural gas. (B) The percentage of Connecticut homes heated by natural gas is lower than that of the New England region and the U.S. average. (C) A large portion of Connecticut buildings in all three sectors do not have natural gas access — i.e., do not use gas for space heating or otherwise.



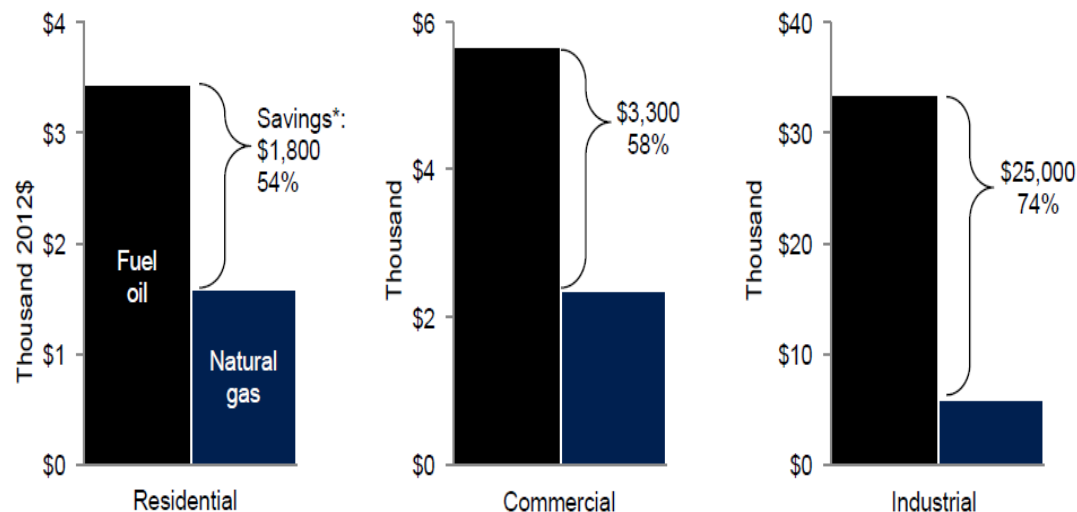
Source: U.S. EIA, “State Energy Data System”; U.S. EIA, Residential Energy Consumption through 2010; and Connecticut Department of Economic and Community Development, Expanding Natural Gas.

# Expansion Plan Benefits

Converting 280K residents and business to Natural Gas

- \$2.8 billion savings over the next 20 yrs.
- Offers about 50% heating cost savings all sectors
- Job creation - Statewide 7,000

**FIGURE 5: Average annual savings from heating with natural gas instead of fuel oil, by sector**



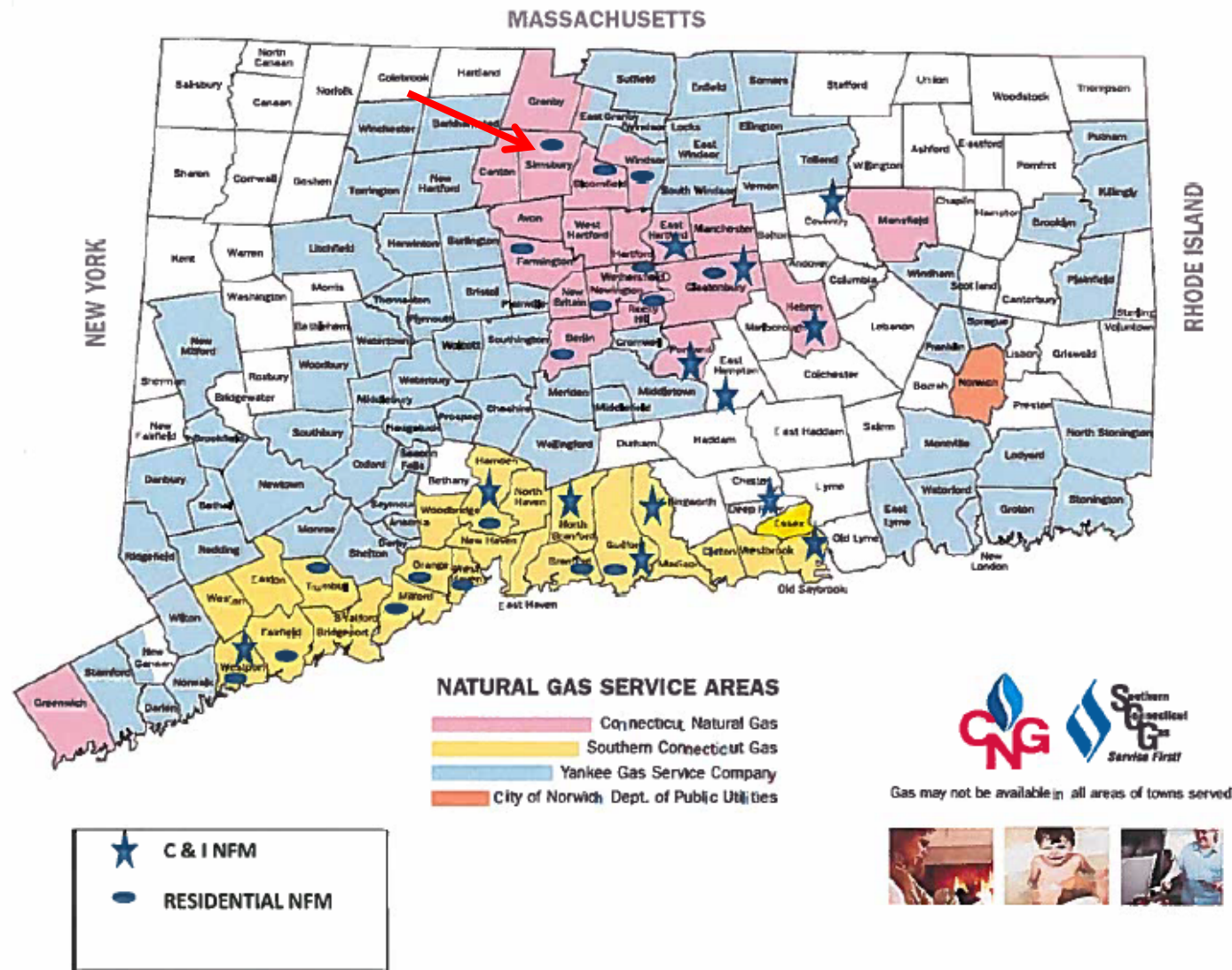
Source: U.S. EIA. 2012. AEO 2012 Early Release - Supplemental tables for regional detail, Table 11, New England. \* Savings based on the differential in average fuel prices for the period 2012-2032.



# Expansion Plan Decision

- Changes to the **Hurdle Rate Model**
- **Use of Non-Firm Margin (NFM)** – used to further offset the cost of expansion and help shield existing customers from bearing the cost
- Authority grants \$2 million in NFM for both CNG and SCG
  - Short-term projects have been identified and are moving forward
  - Long term projects are being considered for the 2015 construction season
- **Municipal / Societal Benefits** – allows the use of additional NFM to offset expansion costs for municipal projects and those that provide economic development benefits

# Non-Firm Margin Projects





# Benefits of Natural Gas

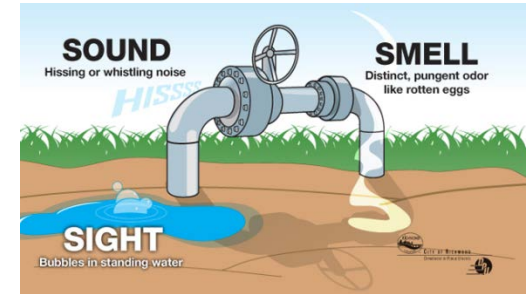
- **Affordable** – About half the price of oil and a multitude of energy-efficient gas appliances available for continued savings.
- **Convenient** – America's most dependable energy source, piped directly to your home, so it's there when you need it.
- **Domestic** - Over 90% of natural gas used in the US comes from North America.
- **Environmentally Friendly** – Cleanest-burning fossil fuel around, making it better for the environment than other fuels.
- **Versatile** - Ideal for home heating, hot water, cooking, and clothes drying. It'll even run a cozy fireplace in the winter and your grill in the summer.

# Demand is Strong

- Nationally - 65 million homes
- Connecticut - more than half million homes
- SCG & CNG - 13,000 switched in 2013
- Provide cleaner, cheaper and more reliable energy
- Move to natural gas creates construction jobs
- Municipalities are in a more competitive posture for retaining and attracting businesses
- Residents and businesses are interested in lowering their energy costs

# Natural Gas Safety

- Highly regulated
- Lighter than air
- Strong distinct smell
- CNG surveys the entire main distribution each year
- Service lines every three years
- High tech flexible plastic is used - corrosion resistant
- Visit [www.cngcorp.com](http://www.cngcorp.com) for more tips



***Currently there are 1.4 million miles of natural gas pipeline and is the nation's safest energy delivery system, according to U.S. government statistics.***

# Basic Gas Main Construction

## Basic Information about Construction

- Call Before You Dig is contacted and all utilities are marked
- Permits from the State and Town
- Easements (if required)
- The typical width of a trench is 18 to 24 inches
- Gas pipe is buried 30 to 36 inches
- Gas main can not be in a shared trench with other utilities
- Utilities can share in the cost of road restoration



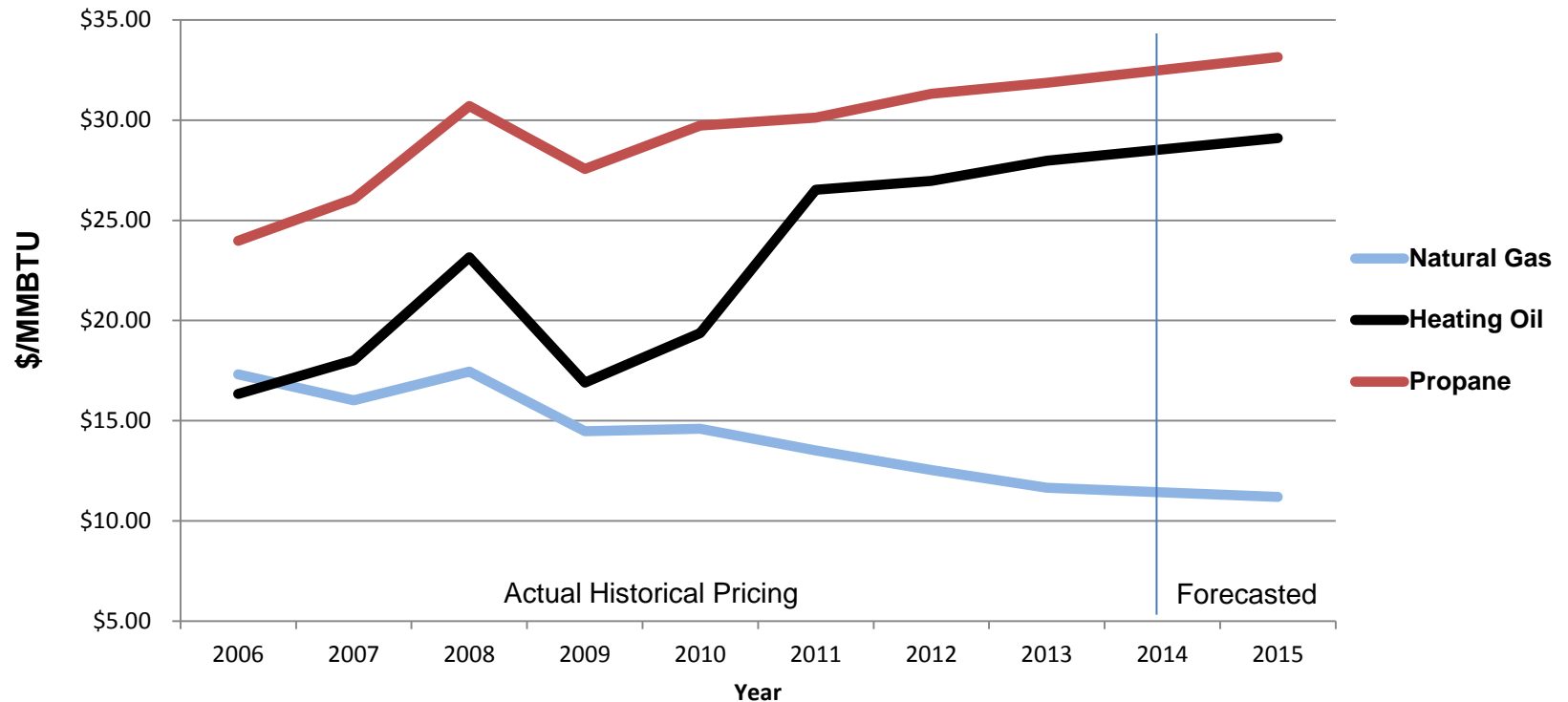
# Gas Main Construction





# Historical Pricing

## Residential Average Retail Energy Prices (CT)



# Current Natural Gas in Simsbury

57.3 Miles of Main

2,800 locations on main

1,900 CNG Customers

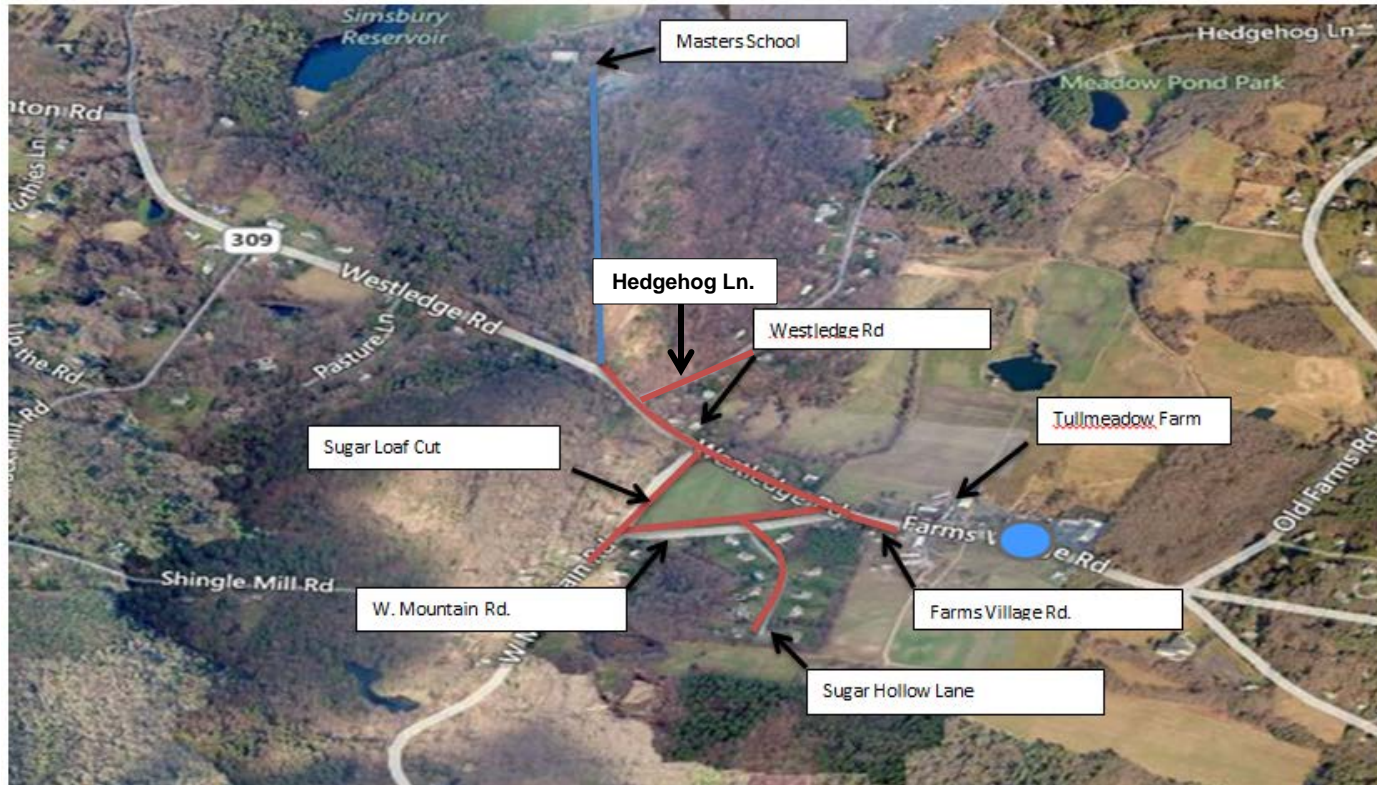
900 Prospects on Main

68% Saturation

# Current Projects In Simsbury

Project Name	Main Length (ft.)	Status
Carson Way	1,100	Installed May, 2014
Tulmeadow Farm Phase 1	800	Installed August, 2014
Farms Village Rd/ Westledge Rd. Area	6,150	Pending Installation, 2014
Woodland St.	660	Pending Installation, 2014
Tootin Hills School/Town Highway Department	5,400	Pending Installation, 2015
Somerset Lane	1,100	Project Being Pursued, 2015
Tariffville Expansion	15,800	Project Under Evaluation
Masters School	2,600	Project Under Evaluation

# Farms Village Rd/ Westledge Rd. Area



- 265 Farms Village Rd
- 112 -121 Hedgehog Lane
- 1-11 Sugar Hollow Lane

- 7,15 Sugar Loaf Cut
- 18 -36 West Mountain Rd
- 1-39 Westledge Rd

# About the Project

- September 11th – presentation at Apple Barn
- 6,150' of new gas main required
- 33 homes on proposed main extension
- \$ 469,000 Total Project Cost
- \$ 117,000 Non Firm Margin
- 28 - Total Homes needed within 5 years
- 17 - Homes required to sign agreements to move forward
- \$1,952.00 – CIAC per home

***NOTE: As of 10/14/2014 19 completed contracts. 3 pending appointments. Projected start date - mid-November.***

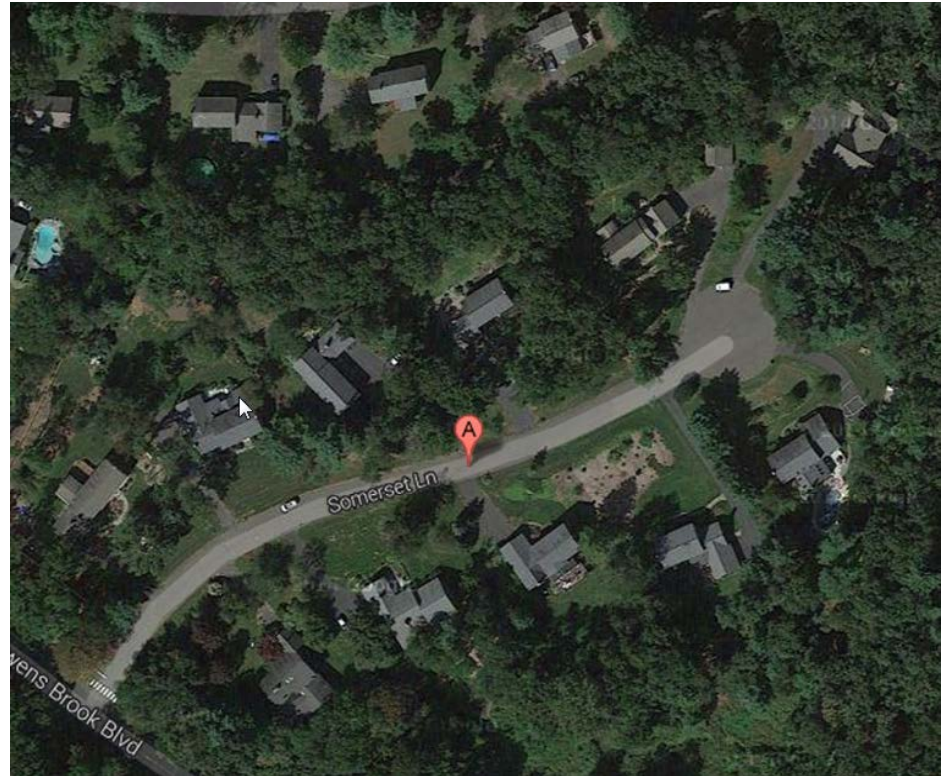


# Somerset Lane Project

## Details of the Project

- 8 homes signed a petition requesting natural gas
- Main extension 1,150 feet
- 11 homes on proposed main extension
- \$114,283 Total Project Cost
- \$28,570 Non Firm Margin
- \$1,740 CIAC per home
- 7 homes needed to move forward

**NOTE: As of 10/14/2014 project has estimated cost. Will have firm estimate from engineering.**



# Hot Spots under Review

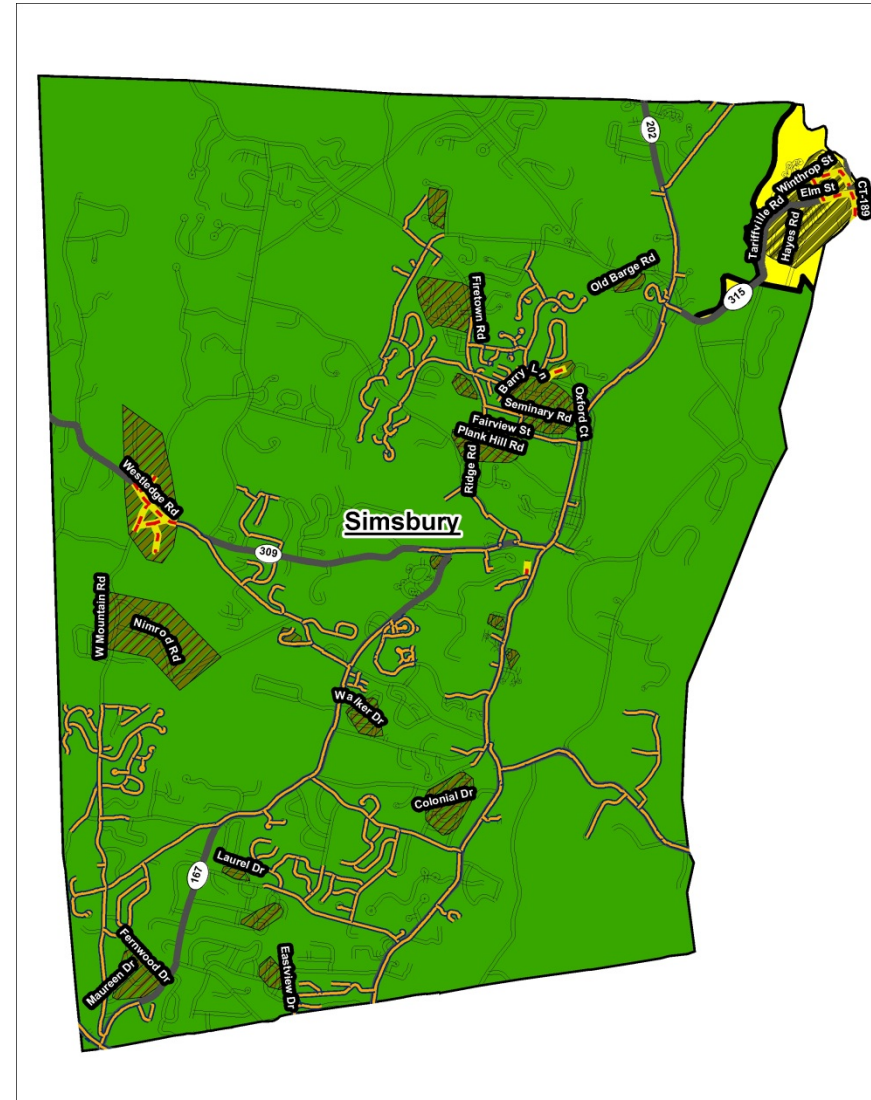
## Natural Gas Opportunity by Customer Segment

Segment A (On-Main/Low Use) ———

Segment B (Gas Prospects) 

Segment C (C&LM Referrals) ———

***NOTE: Our Business Development Department continues to work on reviewing all of the municipalities we serve.***



# Determine the feasibility

**Can we bring gas to a neighborhood?**

1. Conduct a survey
2. How many are interested along the route?
3. How much gas (revenues) will each house use?
4. What is the cost of extending the gas main?

***These results will determine whether we are allowed to install a gas main extension at little or no cost to those interested.***



# Will you pay a CIAC?

1. We are required by state regulatory policy to recover specified costs associated with installing new gas main in a street from the customers using that main.
2. Under our current regulatory model, we provide gas service to new customers without charge when the anticipated use of gas is sufficient to cover the construction costs.
3. In cases where the construction costs are not met, the potential customer(s) would be required to pay a contribution in aid of construction (CIAC).

# Site Visits

**Yes!** If there is enough interest, a gas company representative will schedule a site visit with our technical planner to determine the service line routing, meter location and identify any customer contributions (if applicable) as required by regulatory policies.

We will also inform potential customers about:

- Installation costs, processes and timelines
- Current rebates and financing options
- The Authorized Dealers who can provide conversion cost estimates
- Service Level Agreement is signed – 180 days from service install
- Customer is responsible to select, purchase and have all natural gas appliances installed



# Potential Savings – Oil

[Your Account](#)[Your Home](#)[Your Business](#)[Usage and Safety](#)[Giving Back](#)[For Suppliers and Partners](#)[Our Company](#)

## your home energy calculator

### Your Home

[Natural Gas Appliances  
Services](#)  
[Rates and Regulations](#)

### ► Convert to Natural Gas

[Benefits](#)  
[Interested?](#)  
[Is Natural Gas On  
My Street?](#)  
[Get Service](#)  
[Choosing a  
Contractor](#)  
[Account  
Representatives](#)  
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Incentives](#)

### ► Energy Calculator

[Natural Gas  
Appliances](#)  
[Natural Gas FAQ](#)  
[Energy Conservation](#)  
[Energy Assistance](#)

Use the energy calculator specific to your current home heating fuel type to determine how much you can save if you Go Natural Gas!

You can also utilize our [Cost to Switch](#) worksheet to help calculate any costs associated with installing new natural gas equipment.

[Oil Calculator](#)[Propane Calculator](#)

### FUEL COST COMPARATOR Natural Gas vs. Oil

Number of gallons of oil used in the last year:	<input type="text" value="1000"/>
Average price per gallon of oil*:	<input type="text" value="\$ 3.69"/>
Projected annual cost of oil:	<input type="text" value="\$ 3690.00"/>
Projected monthly cost of oil:	<input type="text" value="\$ 307.50"/>
Natural gas equivalent cost per gallon**:	<input type="text" value="\$ 2.20"/>
Estimated annual cost of natural gas:	<input type="text" value="\$ 2200.00"/>
Estimated monthly cost of natural gas:	<input type="text" value="\$ 183.33"/>
Estimated projected annual savings using natural gas:	<input type="text" value="\$ 1490.00"/>
Estimated projected monthly savings using natural gas:	<input type="text" value="\$ 124.17"/>

# Potential Savings – Propane

[Your Account](#)[Your Home](#)[Your Business](#)[Usage and Safety](#)[Giving Back](#)[For Suppliers and Partners](#)[Our Company](#)

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[Oil Calculator](#)[Propane Calculator](#)

### FUEL COST COMPARISON Natural Gas vs. Propane

Number of gallons of propane used in the last year:	1000
Average price per gallon of propane*:	\$ 3.90
Projected annual cost of propane:	\$ 3900.00
Projected monthly cost of propane:	\$ 325.00
Natural gas equivalent cost per gallon**:	\$ 1.43
Estimated annual cost of natural gas:	\$ 1430.00
Estimated monthly cost of natural gas:	\$ 119.17
Estimated projected annual savings using natural gas:	\$ 2470.00
Estimated projected monthly savings using natural gas:	\$ 205.82999999999998

# Financing – 0% on-bill

## LOAN PAY BACK CALCULATOR

**Need to finance your new equipment?** Use the loan calculator below to determine your new monthly costs.

Amount Financed:	<input type="text" value="\$ 7500"/>	
Annual Percentage Rate (APR):	<input type="text" value=".01"/>	%
Term (in Years):	<input type="text" value="6"/>	
Monthly Periodic Rate	<input type="text" value="0.000008333333333333"/>	
Monthly Payments	<input type="text" value="72"/>	
Minimum Payment:	<input type="text" value="\$ 104.20"/>	

Reset Loan Calculator

With your monthly savings of: \$

And a monthly loan fee of: \$

You will **save** approximately \$

each month on your energy bill until your loan is paid off.

*(A negative value indicates an additional amount over and above the "Projected monthly cost of oil for the term of the loan.")*

# Facilitate Gas Expansion

- Municipalities look to their facilities for potential conversion
- Identify Top 5 expansion projects for Years 1-3
- Coordinate Paving Schedules
- Fast track Permitting Process
- Financial Contribution from Simsbury
  - Optional Tax Incentives
    - Tax Exemption
    - Tax abatements
    - Fixed assessment (stabilization)
    - Contribution in Aid of Construction
- Assistance with paving and road restoration
- Need Community Champions –
- Host Community Outreach Events/Meetings

# Can I get Natural Gas?

**CNG Website** –demonstrate how quickly a homeowner can learn if they are on main or off main.

The link to our website is [www.cngcorp.com](http://www.cngcorp.com)

1. Click on “Natural Gas Locator”
2. Put in your town and address.
3. Confirm the house is yours.
4. A message appears with respect to your availability for natural gas.



# For More Information

- [www.cngcorp.com](http://www.cngcorp.com)
  - Financing
  - Available Incentives & Rebates
    - Manufacturer Rebates
    - CNG Rebates
    - C&LM Rebates
  - Contractor Network

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**Questions?**