



City of Durham's Neighborhood Energy Retrofit Program

May 20, 2011

City-County Sustainability Office

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*Aaron Milano, City of Durham
Energy Program Specialist*



Durham, NC Overview

- “Bull City” | City of Medicine
- Population 225,000
- Duke University/NCCU
- Research Triangle Park
- Old Housing Stock



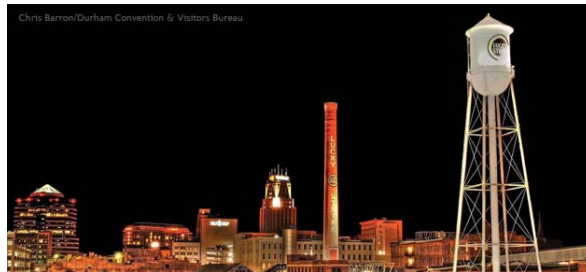
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EPA RTP Campus



Chris Barron/Durham Convention & Visitors Bureau





Neighborhood Energy Retrofit Program

- Neighborhood Organization
- Trained Contractors
- Limited scope of work
- QA
- M&V
- DIY & Basic Energy Education

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Building Demand for Neighborhood-based Energy Retrofits

- **Define** program identity
- **Empower** core neighborhood leaders
- **Simplify** retrofit process
- **Provide** education, training, & outreach

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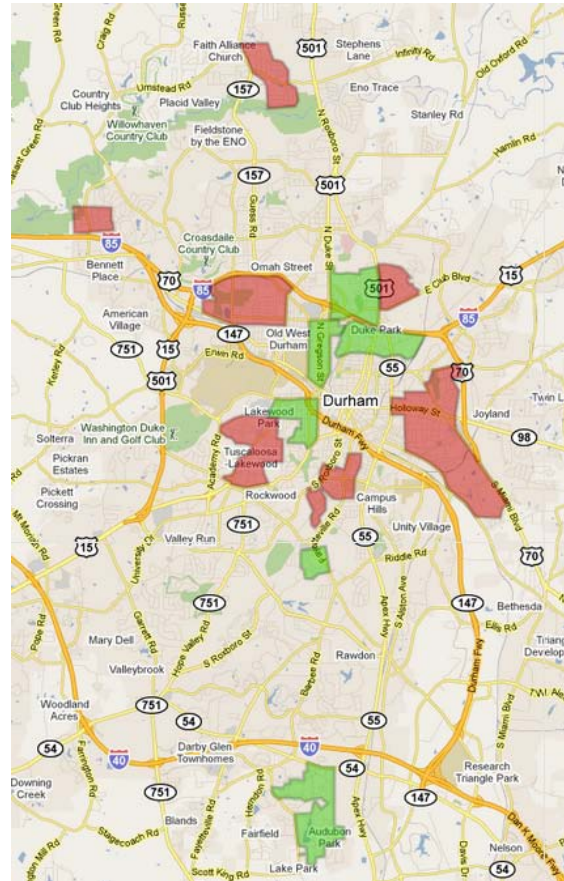


Neighborhoods

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DURHAM



1869
CITY OF MEDICINE

My Neighbors

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Our Homes

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Why is this important?

- Over 100 volunteers (4,000+ hours)
- Pride & Ownership of program
- Over 740 participants
- Over 100 workshops in past year (on-going)
- Established Networks

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Why is this important?

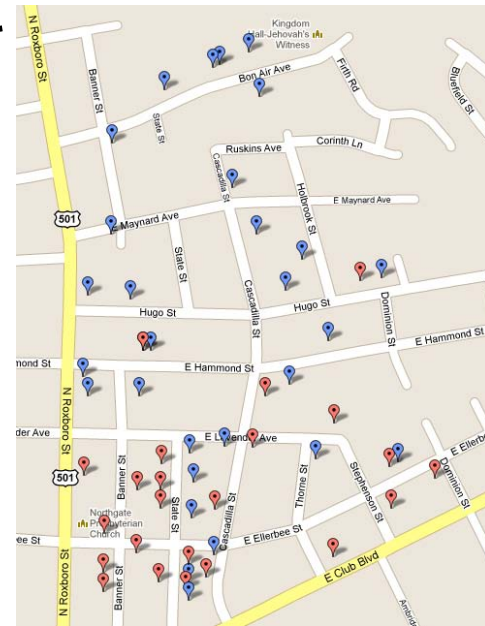
It creates Demand!

- Community buzz about program
- “Neighbor is doing it” effect
- High program visibility

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How many people have had a contractor like this one?

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How did we get there?

Partnering organizations

- RFP for Community Outreach and Education
- RFP for Technical Assistance and Education

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How did we get there?

Internal Support

- Web Development
- Neighborhood Knowledge
- Administrative
- Inspections
- Brand Recognition

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How did we get there?

Volunteer Leaders

- Neighborhood Applications
 - Required 4 committed volunteers
- Treat with Respect
- Make it Fun
- Well-equipped (training materials, instructions, etc)
- Listen to ideas & incorporate them



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What we have to show for it?

- Over 700 participant applications
- 100 homes already retrofit
- >\$20,000 private funds leveraged (\$184,000 anticipated)
- >10 FTEs created
- Excitement about energy conservation
- On-going efforts/outreach
- Anticipated 20% Energy Savings

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Financial Impacts

- Average Retrofit Cost: \$1,150
- Average Homeowner Contribution: \$250
- Administrative Costs:
 - First 350 homes: \$1,000/home (program/material development, outreach, data analysis, training)
 - Second 350 homes: \$275/home (outreach & training)
- Inspections: \$150-\$200/home

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Challenges

- Many Tiers of Communication
- Timing/Delays
- Volunteer Morale
- “What’s my status?”
- Disqualified Homes



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Driving Demand Lessons Learned

- Core Volunteers
- Fun & Engaging
- Concentrated Efforts
- Effective Branding
- Timing
- Managing Expectations

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