



Better Buildings Neighborhood Program
Multi-family/ Low Income Peer Exchange Call: *Information
Technology Tools for Multi-family Building Programs*

Call Slides and Discussion Summary

March 15, 2012

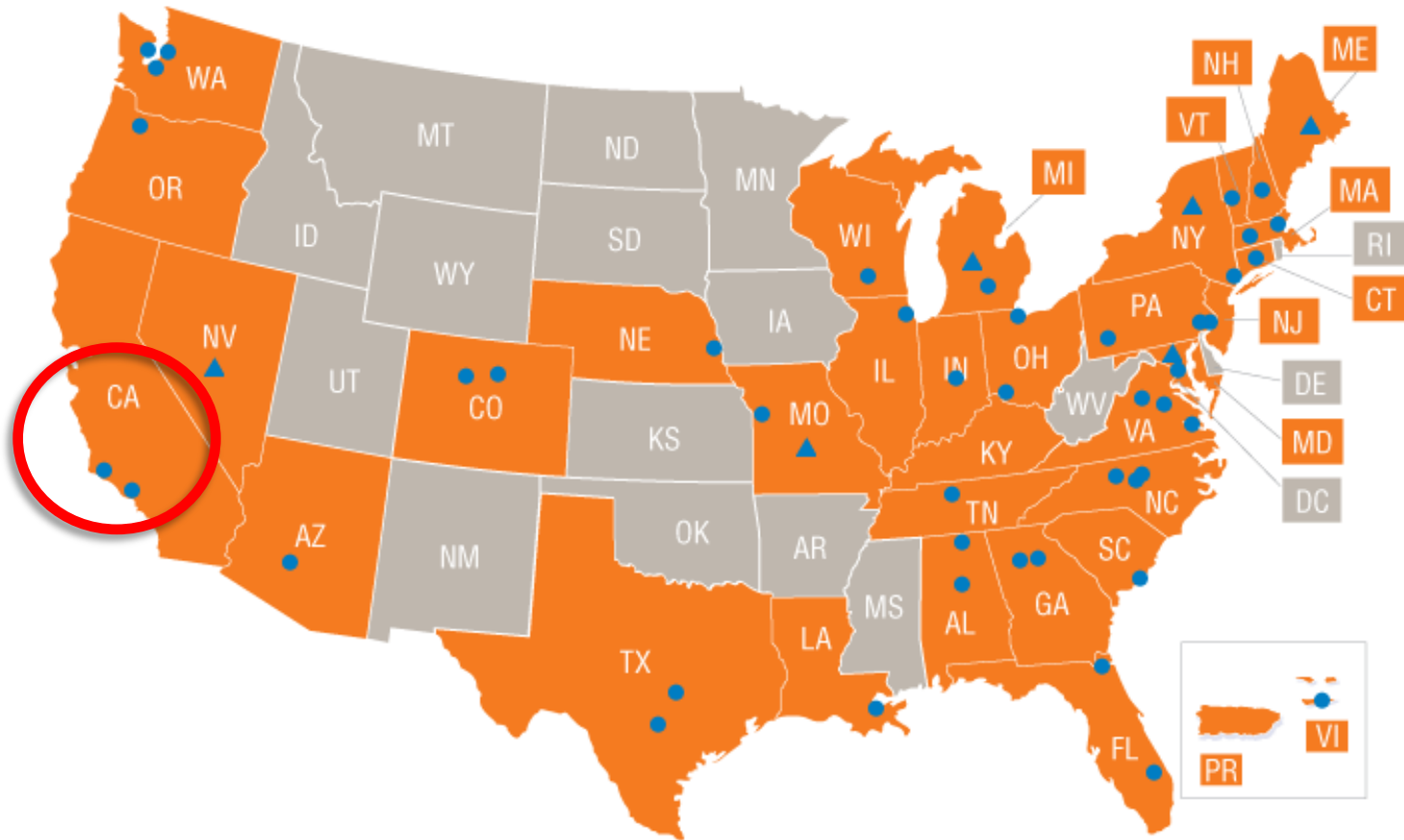
- Call Logistics and Attendance
 - What information technology tools is your program using for project information, marketing, assessment, tracking or evaluation? What do you wish you had?
- Program Experience and Lessons:
 - Heather Larson, StopWaste.org, Energy Upgrade California
 - Adam Palmer, Eagle County, Colorado
- Discussion:
 - What multi-family tools have programs developed and what benefits can they provide?
 - How can tools be adapted for other programs?

Participating Programs



- Austin, TX
- Bainbridge Island, WA
- Chicago, IL
- Eagle County, CO
- Kansas City, MO
- Los Angeles County, CA
- Maine
- Seattle, WA
- Southeast Community Consortium
- Toledo, OH

Energy Upgrade California



CA Multifamily IT Tools

BBP Peer Exchange Call

March 15th, 2012



Integrated Tools for Multifamily Portfolios

- EUC MF web-portal:
<https://multifamily.energyupgradeca.org>
- MF Funding Finder Navigation Tool
 - Guidance on upgrade approach & measures
 - Connect to applicable rebates & incentives
- MF Tracking System
 - Utility usage analysis
 - Interface with EPA portfolio Manager
 - Track upgrades & program participation
 - Property owners
 - Program Administrators
 - Auditors/Raters

Introductions: Project(s) Team

- Initial tool development funded by California Energy Commission & State Energy Program
- Project Lead = StopWaste
 - Green Building in Alameda County
- Technical Consultants
 - Heschong Mahone Group
 - Renewable Funding
 - Performance Systems Development

Why develop these tools?

- Various stakeholder meetings in 2009-10 with:
 - Multifamily Property Owners & Managers
 - Raters/Auditors
 - Program Administrators
 - MF HERCC
- Identified the need to:
 - Link owners to appropriate program(s)
 - Post-ARRA replaces 1-on-1 TA
 - Plan & Track Up-grades over time
 - Establish consistent data protocols
 - Leveraging programs
 - Reporting & Evaluation

Asset Management IT tools

Navigate

- Programs/Rebates
- Approach/Measures
- Resources
- Professionals

Benchmark

- EPA Portfolio Manager
- ABS
- MF specific analysis

Track Upgrades & Programs

- Utility
- Local Government
- GreenPoint Rated

Quantify

- Pre & Post Savings

Funding Finder Navigation Tool

https://multifamily.energyupgradeca.org/properties/37/incentives#

Heather Larson - Outlook Web ... Multifamily | Energy Upgrade... x

Multifamily Program

energy upgrade CALIFORNIA

Getting an Upgrade **Funding Finder** Local Assistance Login to Manage Properties

Funding Finder Property List > 1537 webster

Property Utilities Planned Upgrades Envelope HVAC & Hot Water Lighting Appliances Efficiency Property Summary

Recommended Retrofit Approach: Whole Building Save for later

Opportunities for improvement

- Envelope
- HVAC
- Domestic Hot Water
- Lighting and Appliances
- Solar PV
- Green Options

16 incentives available for your property* [Printable View](#)

Show 10 entries Search:

Incentive Name	Expiration Date
Appliance Recycling Program	12/31/2012
Bay Area Multifamily Retrofit Loan Fund	03/31/2012 ⚠
California Utility Allowance Calculator	
Commercial Calculated Incentives	12/31/2012

Track Portfolio Performance

- Analyze energy usage
 - Integrated with EPA Portfolio Manager
 - Compare building/portfolio to peers
 - Quantify pre & post-retrofit savings
 - Upload modeled energy analysis from software tools
- Track measure installation & participation in upgrade programs
 - Local Government, Utility & GreenPoint Rated
 - Program Administrator interface
 - Workflow & Reporting

Software Modifications

- PSD's Pre-existing Building Performance Compass Tool is being customized with features such as:
 - Integration to Funding Finder
 - Support for multiple user roles
 - CA programs workflow tracking & reporting
 - T-24 part 6 ACM (HERS II) software uploads

MF EUC IT Tools Release Timeline (2012)

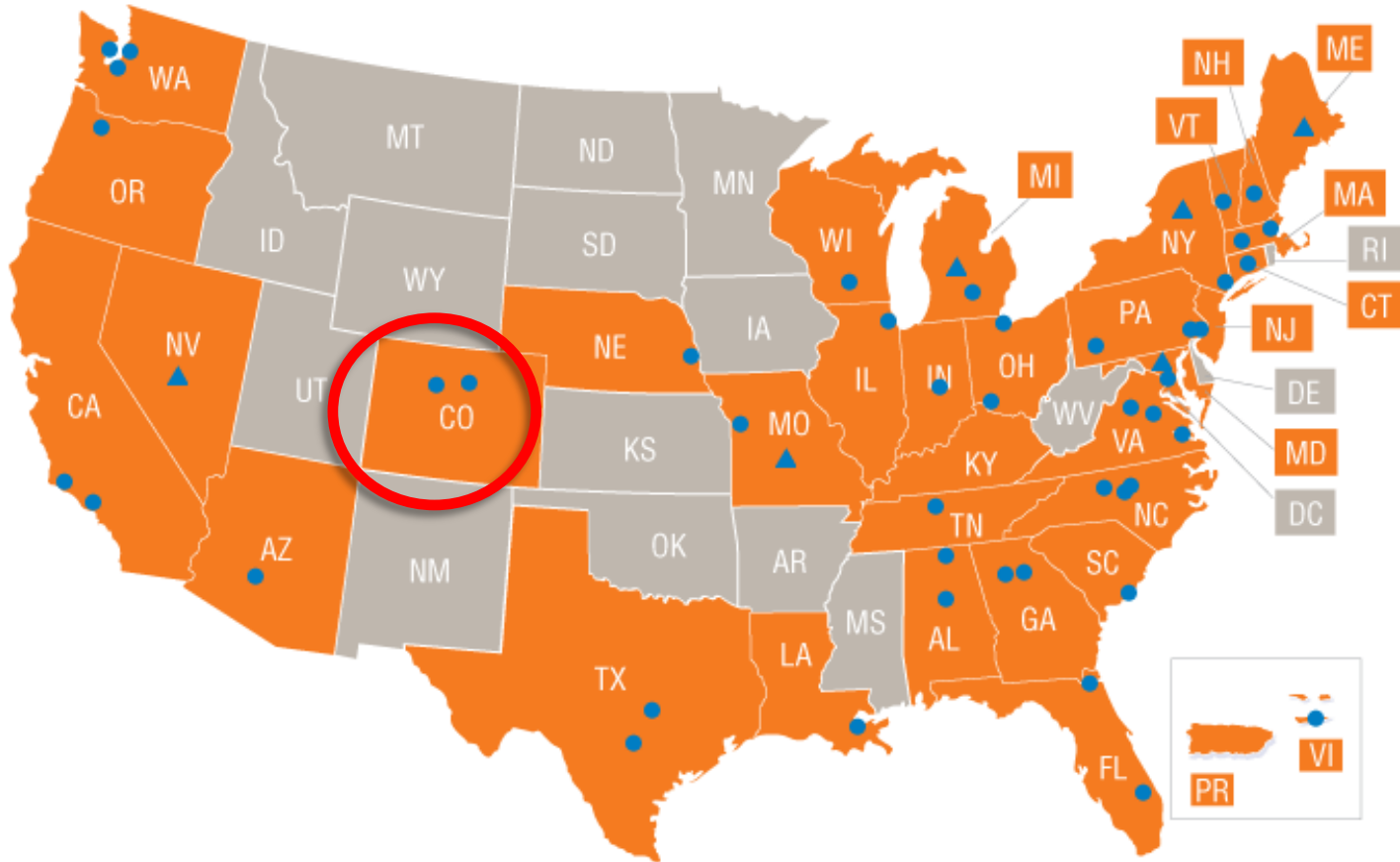
- **March 1:** MF Web Portal & Funding Finder launch
- **March 27:** MF Tracking System launch
 - Includes Funding Finder Integration
- **April 30:** Tracking System Enhanced Release
 - Includes improved API exchange with EPA Portfolio Manager
- **April/May:** Property Owner workshops throughout CA
- **May Onwards:** Use of tools by various programs throughout CA for program Technical Assistance, Administration & Reporting

California's Experience



- The tracking system was built off of a pre-existing platform and customized to meet California's needs. It would cost \$30,000 per year if they did not build it and just paid the licensing fee.

Eagle County, CO



Energy Smart Colorado Multi-Family/Neighborhood IT Tools



March 15, 2012

Energy Smart Business



EnergySmart
BUSINESS

Energy Wise Business



EnergyWise
BUSINESS

Energy Smart School



EnergySmart
SCHOOL

Energy Smart Neighborhood



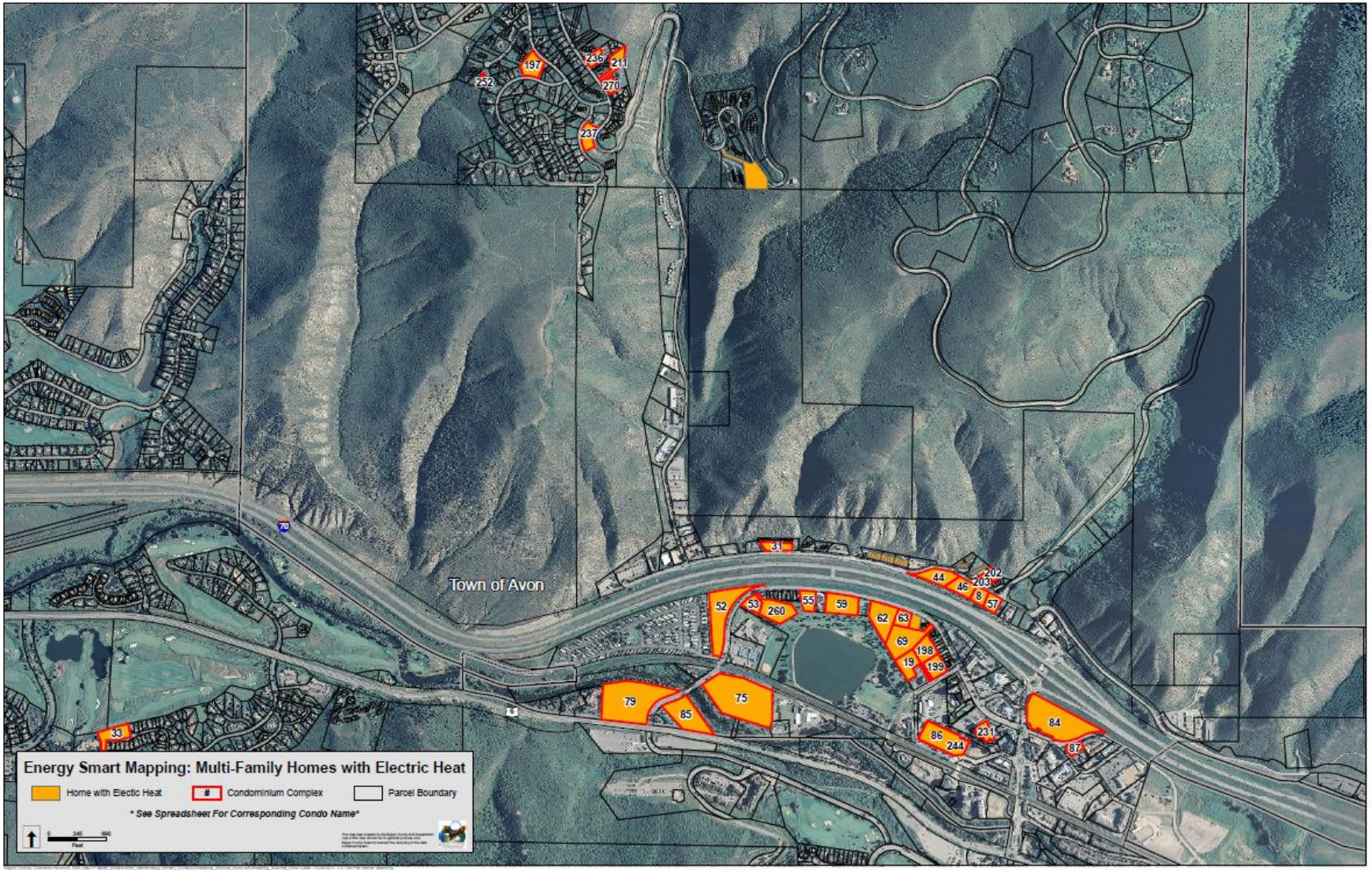
EnergySmart
NEIGHBORHOOD



Energy Smart Multi-Family Protocol

- Residential vs. Mixed Use/Commercial
- Residential: 5 to 10% unit sample
- Mixed Use/Commercial: simplified TEA
- No owner cost to assessments
- Residential: driven by rebates
- Commercial/mixed use: driven by information/education

"Improvements with good ROI shouldn't need a rebate, just education." --Auden Schendler

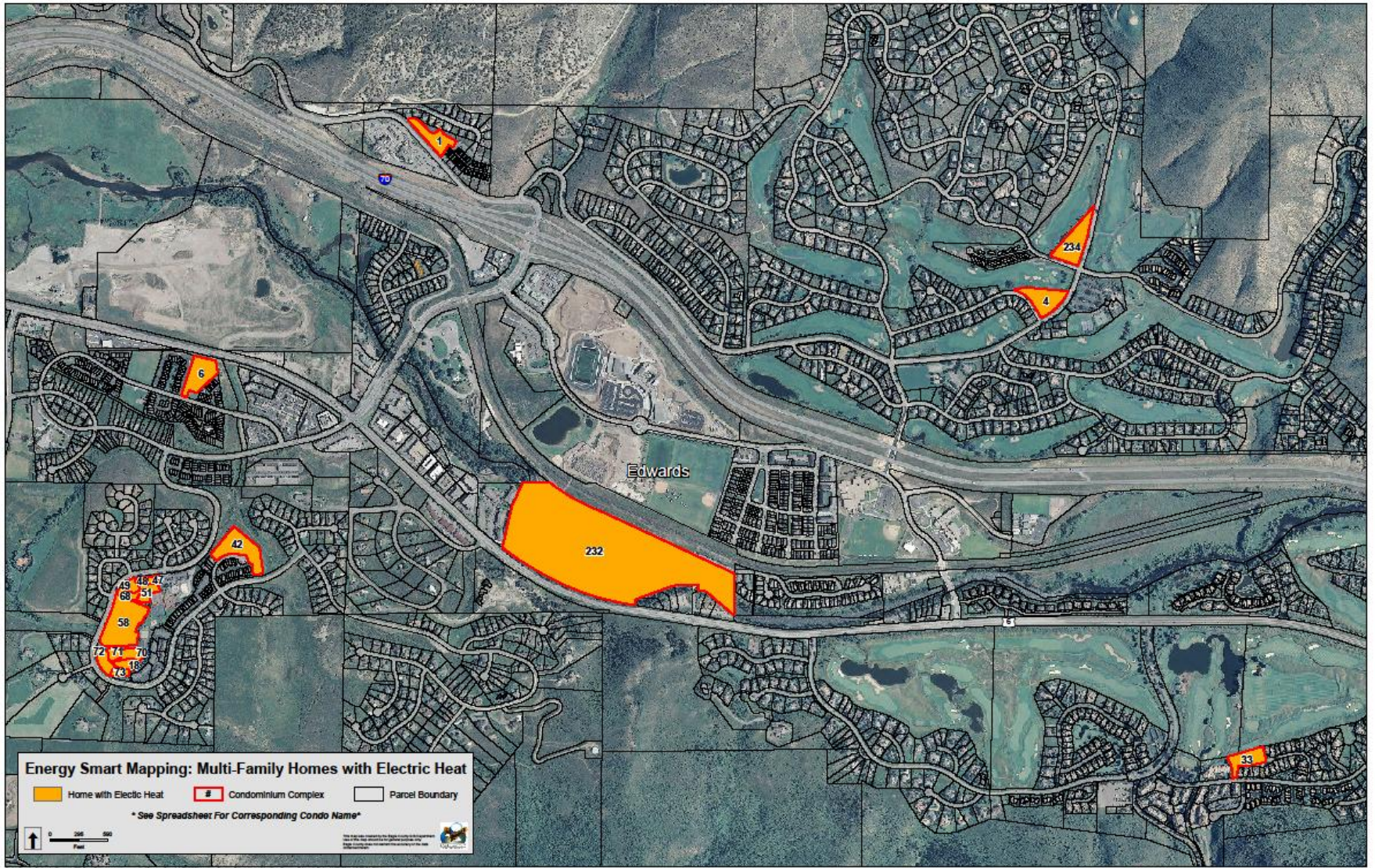


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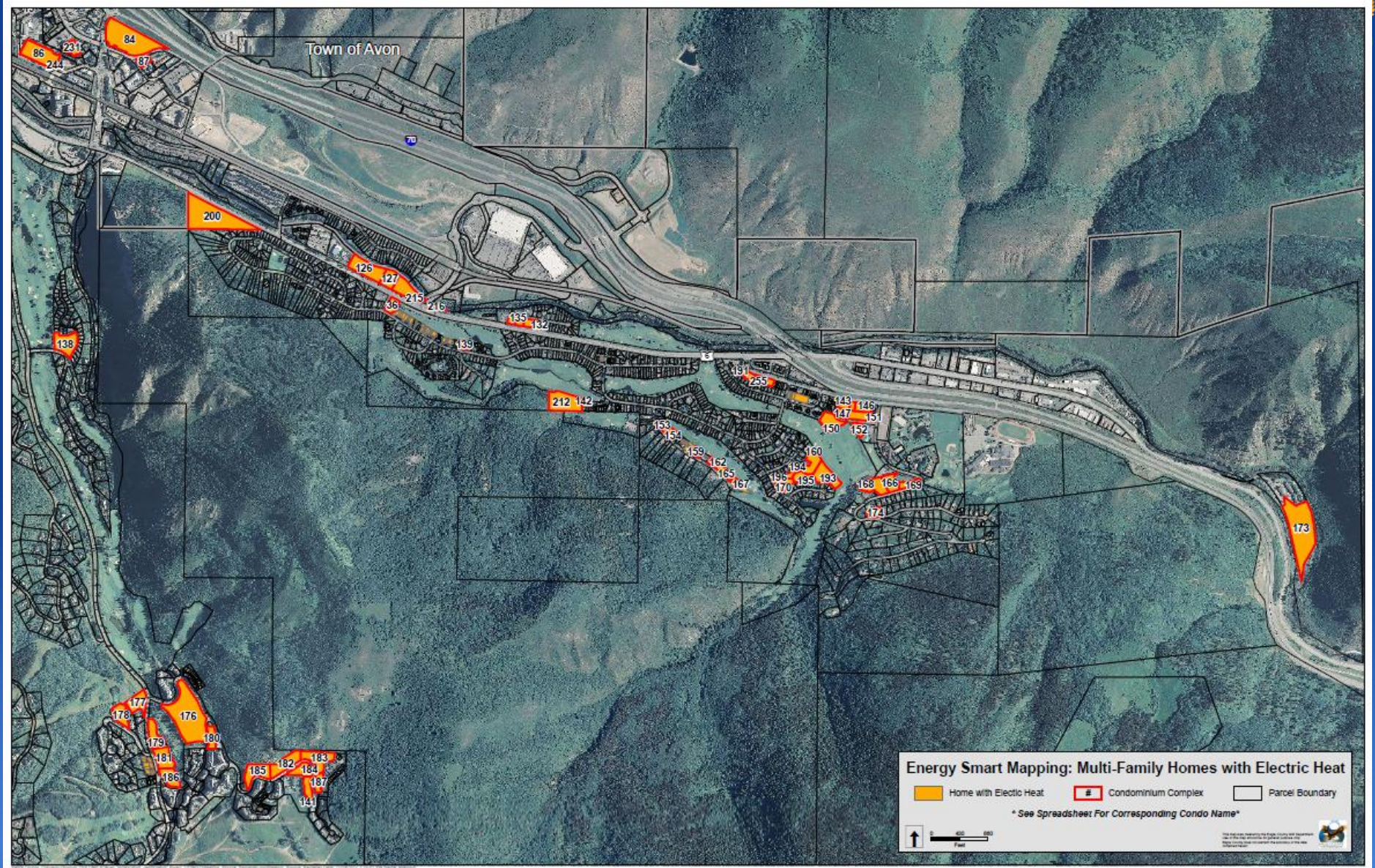




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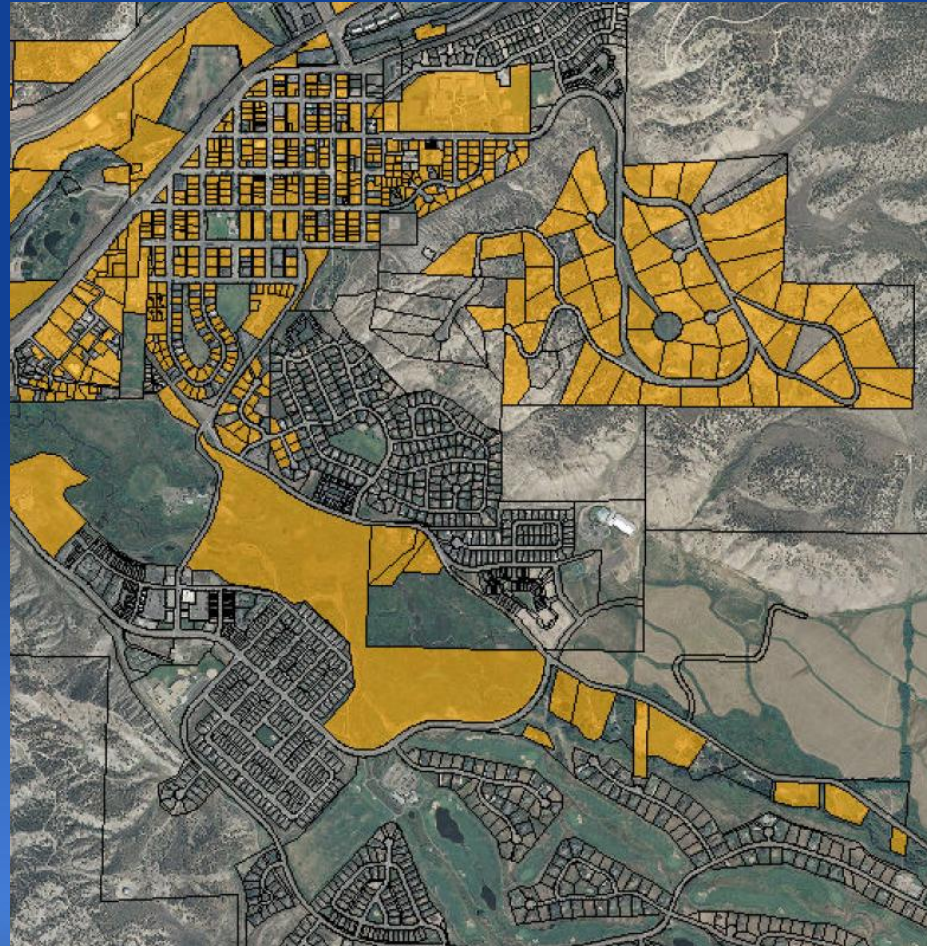
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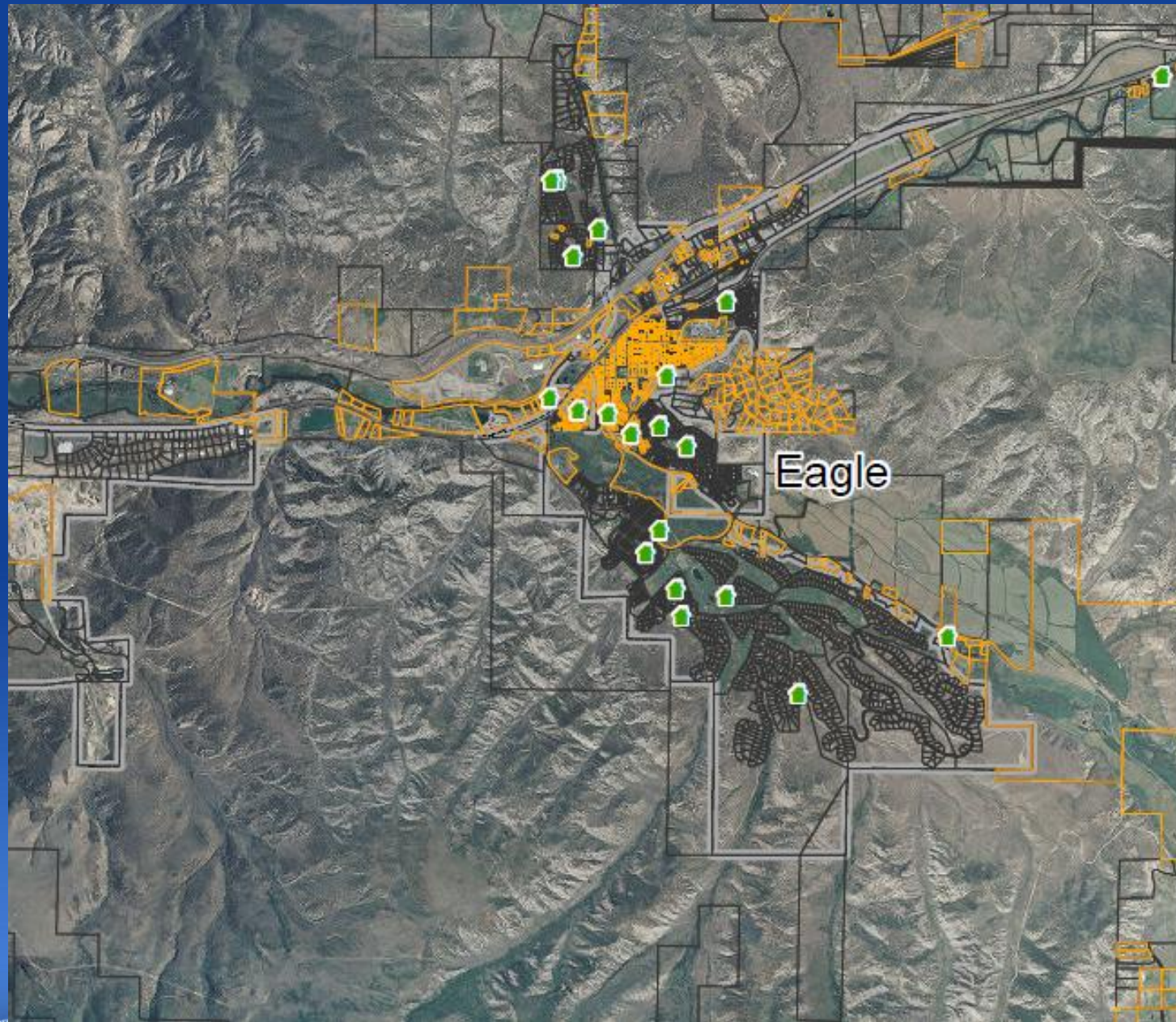
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GIS Mapping pre-1990 construction



3/15/2012



3/15/2012



Symbiotic Engineering

- Cross references Holy Cross Energy electricity use data with Assessor data
- Electricity use, intensity, use by building type, year of construction, etc.
- Great data
- Messaging challenge



YES\$

YOU CAN SAVE MONEY
On Your Energy Bills



The Villas of Brett Ranch are saving money and energy thanks to Energy Smart Colorado



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Property Managers & HOA's: Is your money going through the roof?



Many multi-family complexes in Eagle County are already saving money and energy thanks to Energy Smart Colorado.



EnergySmart
NEIGHBORHOOD

Attention Property Managers & Multi-Family Homeowners Associations

Your multi-family neighborhood may be eligible for rebates of 20% of your efficiency upgrades up to \$25,000!

LEVERAGE YOUR RESERVES!

- Accelerate plans for those capital improvement projects and take advantage of these funds while they are available.
- Need new insulation? Programmable thermostats? Lighting? Furnace or water heater? Caulking or other air sealing?
- Want to reduce maintenance costs and monthly energy bills?

We can help you get an assessment and provide you with energy saving solutions, today!

Your home owners will thank you!

Act now as there are limited funds for a limited time.

Call Your Eagle County Energy Smart Colorado Resource Center: 970.328.8777

business card here



EnergySmart
COLORADO

EnergySmartColorado.com

- Technical Energy Audits can be expensive and thus a cost barrier to making improvements. Colorado is working with one of their energy analysts to create a simplified protocol that has some engineering level analysis but focuses on providing the owner with the necessary information to show ROI.
- Colorado used their assessor's database to obtain heating type information. The GIS department could then cross-reference properties that are coded as multi-family and use electric heat. Not all counties may have the same level of information available in their assessor's data. In Colorado's case, this information was publicly available.

Colorado: Lessons Learned



- Residential units tend to be drawn to the program by the rebates. Commercial mixed use buildings tend to be drawn more by the information and education opportunity.

DOE Seeks Industry Feedback on Voluntary Standard Work Specifications for Energy Upgrades in Multifamily Housing--March 12, 2012

- The Energy Department invites manufacturers of energy-efficient products, public housing authorities, industry stakeholders involved in the development, finance, and maintenance of multifamily properties, and others in the home performance industry to review and comment on "Standard Work Specifications for Multifamily Energy Upgrades." Developed under DOE's Guidelines for Home Energy Professionals project, the specifications are voluntary guidelines that outline minimum requirements for high-quality energy upgrades in multifamily homes. The industry review period will remain open through May 4, 2012.

Guidelines website: http://www1.eere.energy.gov/wip/retrofit_guidelines.html

Online commenting tool: <http://nrel.pnnl.gov/forum.php>

Discussion

- What multi-family tools have programs developed and what benefits can they provide?
- How can tools be adapted for other programs?

Discussion and Lessons Learned

- Austin, TX is using NEAT software to do energy analysis for multi-family properties by unit as it was familiar to the auditors in the WAP program. They have found that it overpredicts and are looking into alternative software options such as REM/Design.
- Kansas City, MO is using TREAT software for multi-family and single family properties as their partners were already using this tool.
- The level of detail in property record information varies between states. Some records are still on paper and not readily available in an electronic format for easier access or use in GIS work.
- Chicago is using GIS to visually identify homes with particular characteristics based on some limited assessor's data. They are mapping out potential and past projects.

Discussion and Lessons Learned

- Most projects were treating each multi-family unit separately for calculation of energy savings. For example, Kansas City looks at the individual units which makes it easier to use some of the tools and lowers costs to allow retrofits of more units. In general, treating the units separately versus a multi-family building as a single project may not be the most accurate way to reflect the energy savings.

Potential Future Call Topics

- Strategies to Address Split Incentives in Multi-family Buildings
- Multi-family Assessment Strategies and Tools
- Moving Low-Income and Multi-family Customers from Audits to Upgrades
- Using Social Media for Multi-family and Low Income Outreach