

Epworth United Methodist Church Green Team



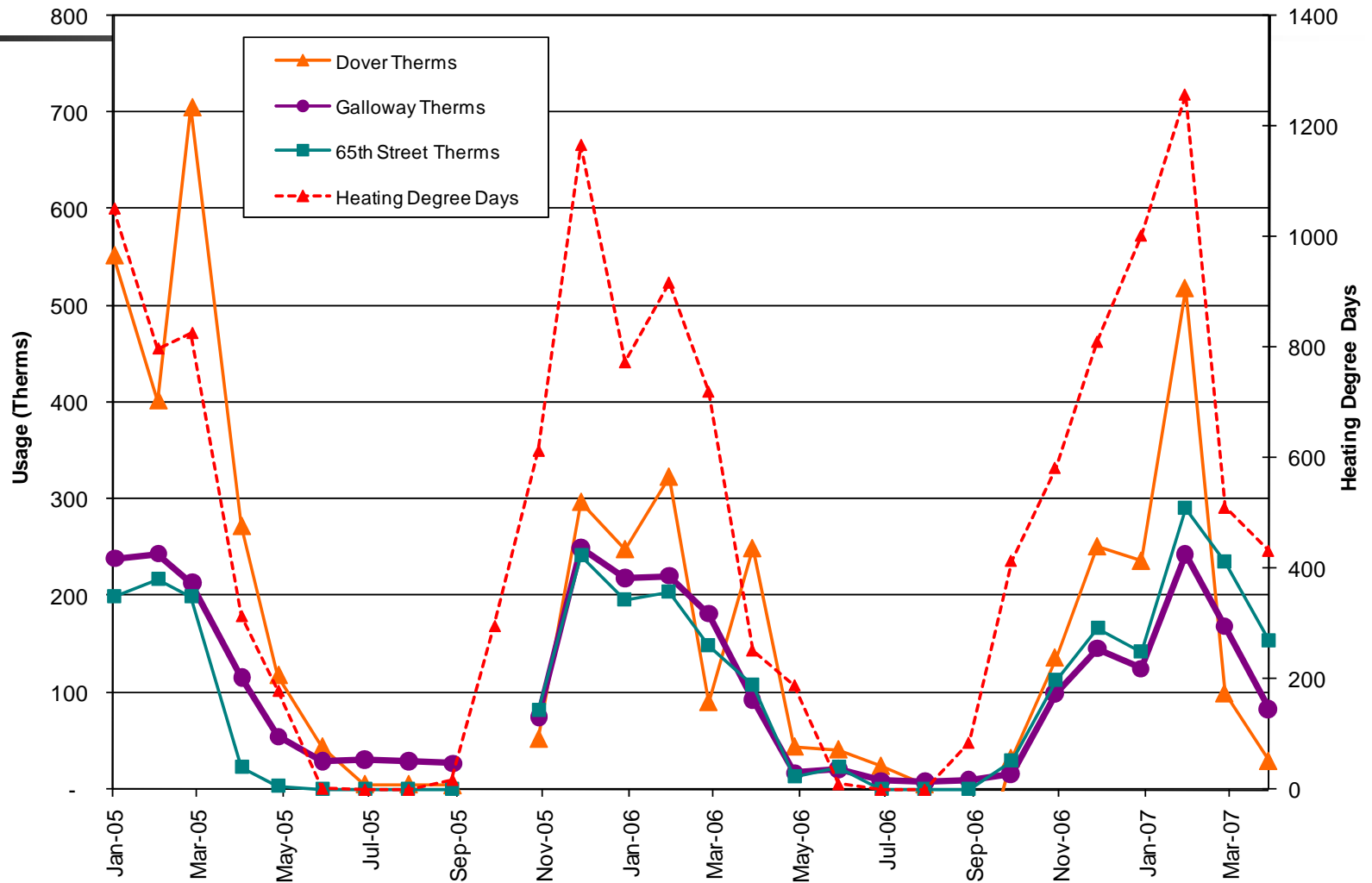
Saving Energy & Saving Money
Third Green Congregations Workshop
Jodi Perras
January 31, 2009



Epworth UMC Green Team

- Formed Dec. 4, 2006, through a charter approved by church council
- Expected Results:
 - Examine church operations and activities
 - Increased environmentally friendly operation of the church
 - Increased environmental stewardship by church members and friends
 - Environmental awareness and outreach to the community
- First tasks included review of energy bills

Energy Audit – Gas (2005-06)





Dover House





Dover House – Rear View





Problems Identified

- Less than 2 inches of insulation in attic
- Large, drafty windows/sliding doors with aluminum frames
- Programmable thermostat not programmed



Front Window



Rear Sliding Door





Window Insulation

- Shrink & Seal Window Kit (3 @ \$6 each)
- Clear tape (\$3)
- Door draft dodgers (3 @ \$10)
- Hair dryer (loan)
- Scissors (on hand)
- **Total Cost: approx. \$51**





How It's Done

- Attach two-sided tape to window frame
- Attach plastic to tape
- Blow with dryer until plastic shrinks tight
- Time: 30 minutes-1 hour per window
- Inspect regularly





Door Draft Dodger





Programmable Thermostat

- New in 2005 or 2006
- Apparently never programmed – or programming was lost
- Programmed to match typical use of building





Attic Insulation Costs

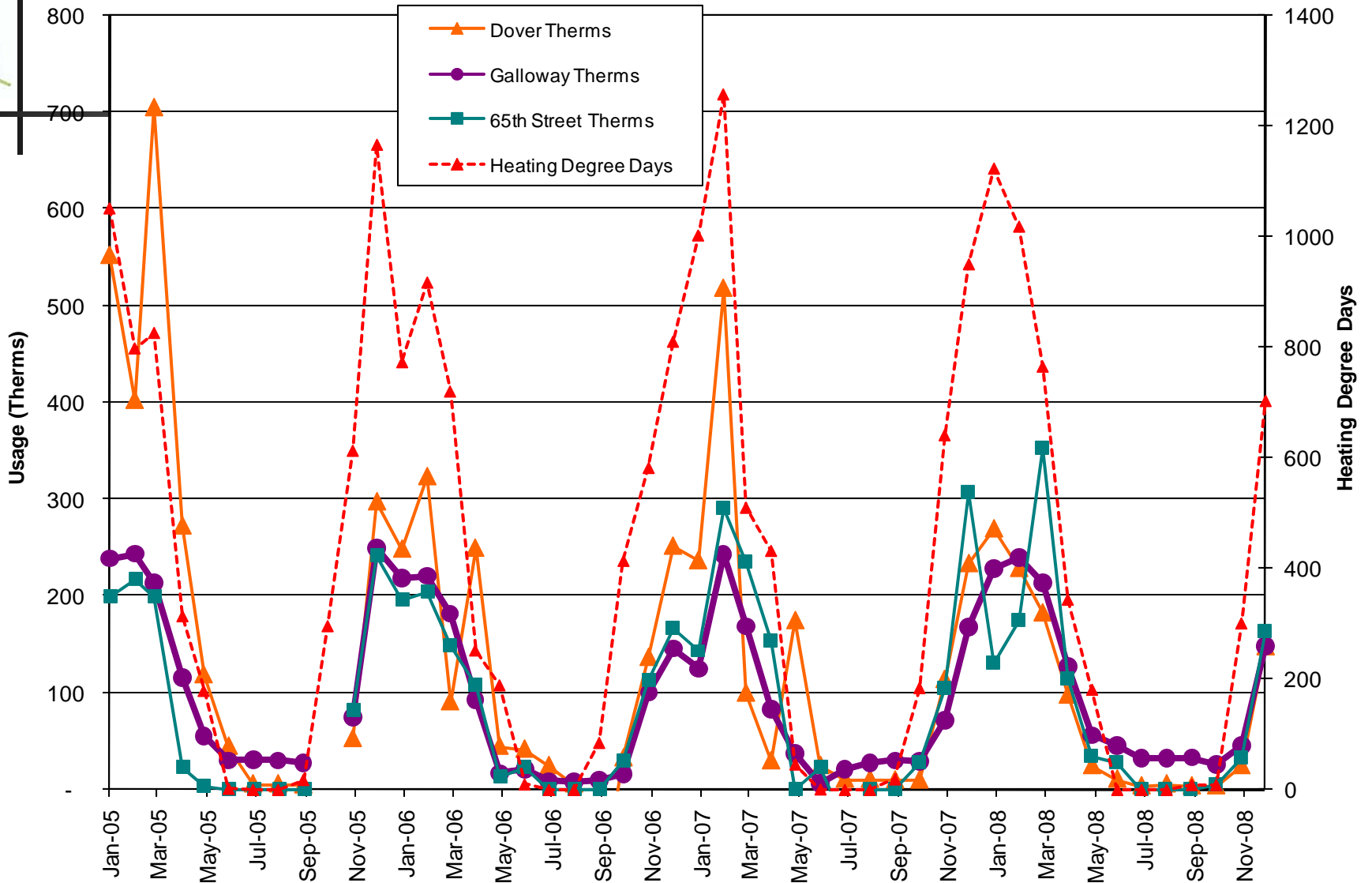


- Contractor Estimates: \$1,300 - \$2,400
- Trustees spent several months arguing whether to insulate attic

■ **Do-It-Ourselves Approach**

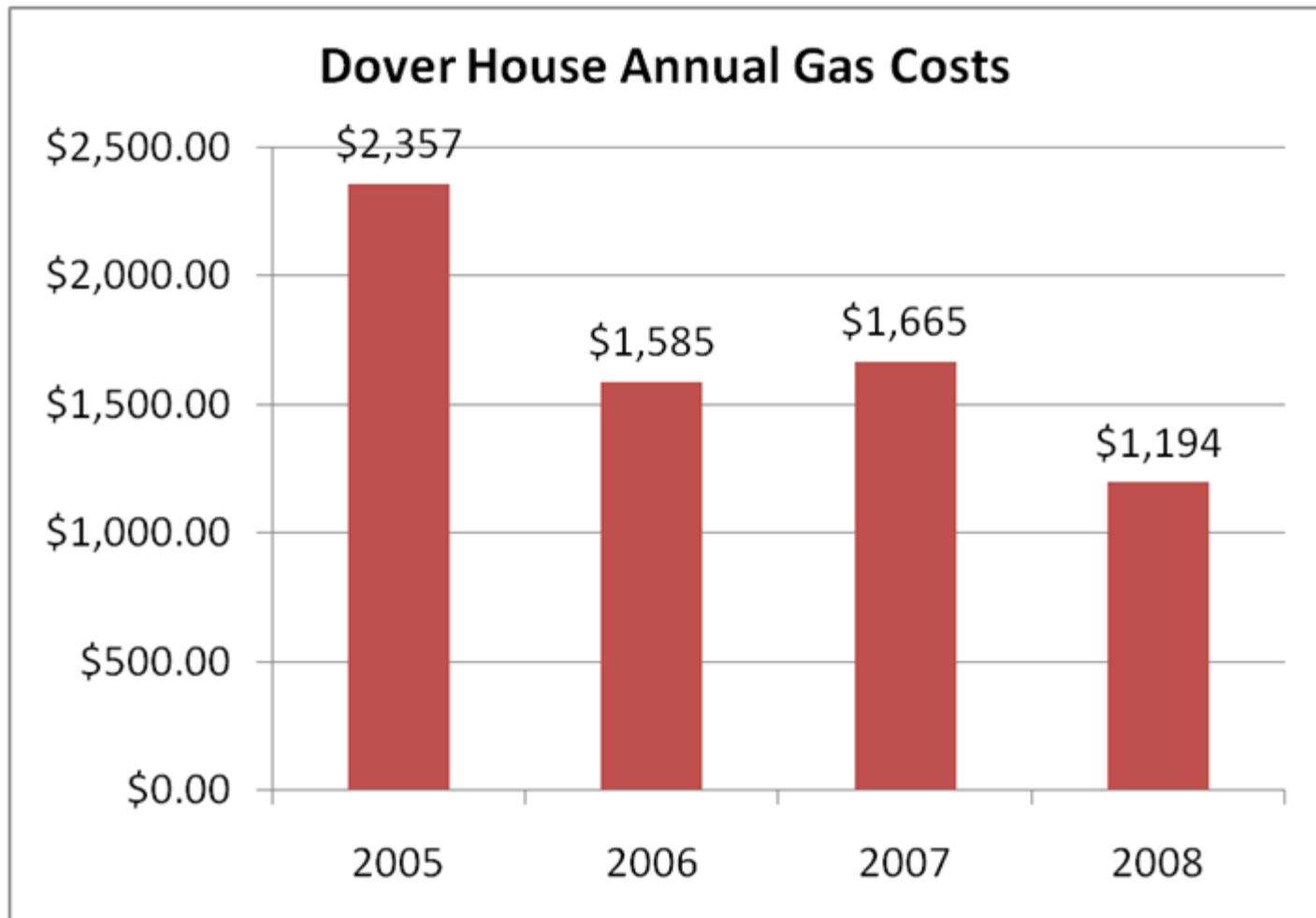
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|--------------------------------|--------------|
| ■ Materials & Rental Equipment | \$700 |
| ■ Labor (mostly volunteer) | <u>\$200</u> |
| ■ Total | \$900 |

Gas Usage 2005-2008





Natural Gas Costs – 2005-08



Energy Audit – Electricity (2005-08)

