



MULTI FAMILY RETROFITS

Cutting Energy Costs In MF Buildings

Bernice Radle - Energy Consultant/Project Manager

Case Study – Horizon Realty

- ❑ Privately owned
- ❑ Mainly Low income residents
- ❑ Master Metered buildings
- ❑ Historic Preservation

A MAINTENANCE NIGHTMARE!



MF Buildings



Wasted Energy



Financing and Incentives

NYSERDA – New York State Energy Research and Development Authority

- Multi Family Performance Program
- Reduce Energy Consumption by a minimum of 20 percent

NYSERDA INCENTIVES

- 4 incentives which help pay for the energy reduction audit and retrofit
- Loan program – buys down by 4 percentage points

CJ Brown Energy –Energy Engineering Firm

- did the energy audits on all 15 buildings

Overall Projections

- 16 Buildings/ 350 Units
- 2 Million Dollar Retrofit
- \$1.25 Million of Loans
- Total Energy Savings – 35 %
- Total Monthly Cost Savings- Approx \$18,000

It's not impossible to invest in upgrades and save money at the same time!

197 North St – Existing Conditions



197 North – Work Scope

ERP Scope of Work

- -Window Replacement
- -Boiler Replacement
- -DHW Replacement
- -Low Flow Devices
- -Refrigerator Replacement
- -Air Sealing/ Attic Insulation

- Total Investment: \$239,017
- Total Incentive:\$134,180
- Total Energy Savings: 48%
- Total Annual Savings: \$25,397

197 North – Current Conditions



575 Colvin Ave – Existing Conditions



575 Colvin Avenue – Work Scope

- -Window Replacement
- -Back Door Replacement
- -Boiler Replacement
- -Attic Insulation
- -Wall Insulation
- -Basement Insulation
- -Glass Block Basement Windows

- Total Investment : \$144,442
- Total Incentive: \$36,000
- Total Projected Energy Savings:45 %
- Total Annual Savings: \$9,292

575 Colvin –Current Conditions



247 W Utica St – Existing Conditions



247 W Utica St – Work Scope

- -Window Replacement
- -Hot Air Furnace Replacements
- -Air Sealing
- -Pipe Insulation
- -Low Flow Devices

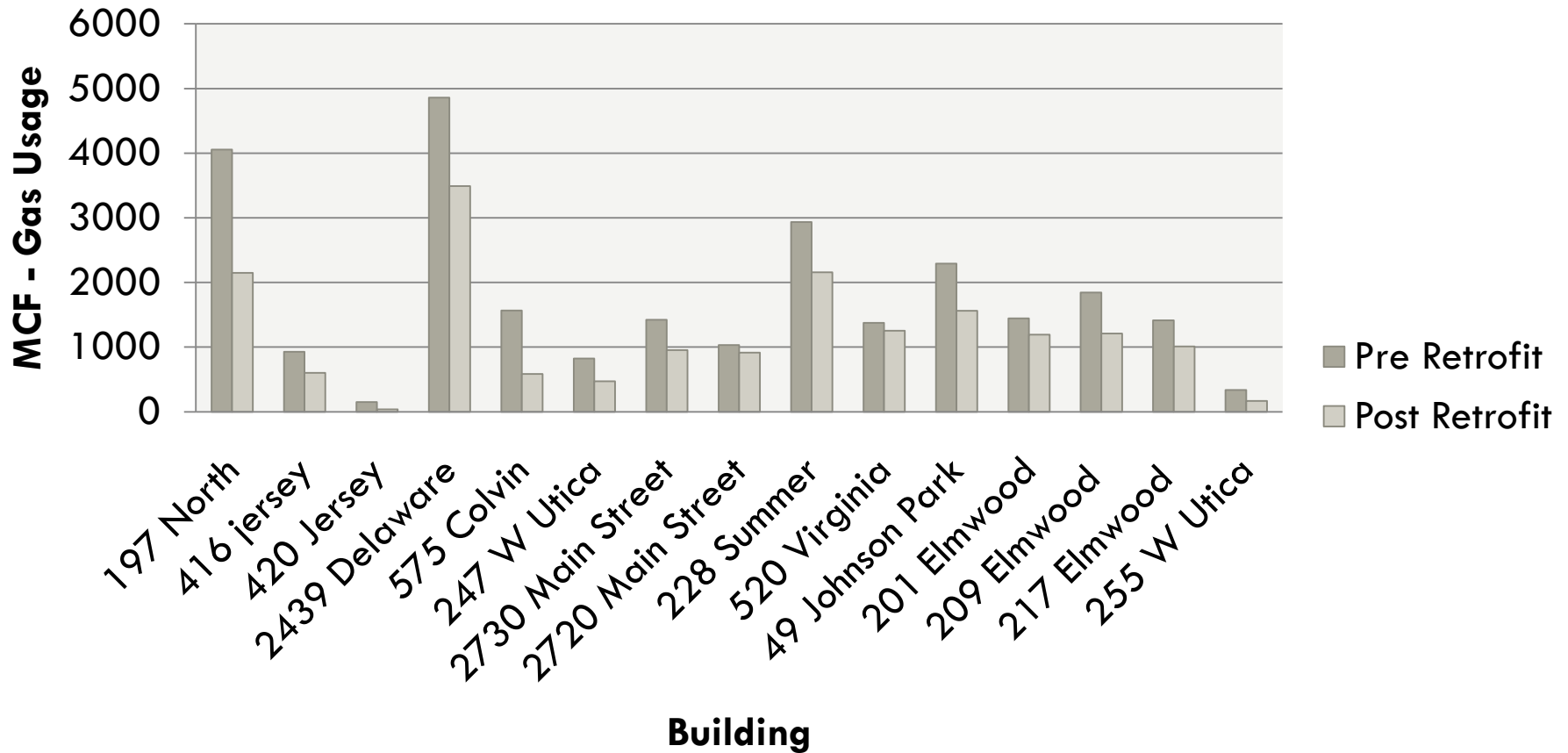
- Total Investment: \$69,038
- Total Incentive: \$36,680
- Total Energy Savings: 46%
- Total Annual Savings : \$8,677

247 W Utica – Current Conditions



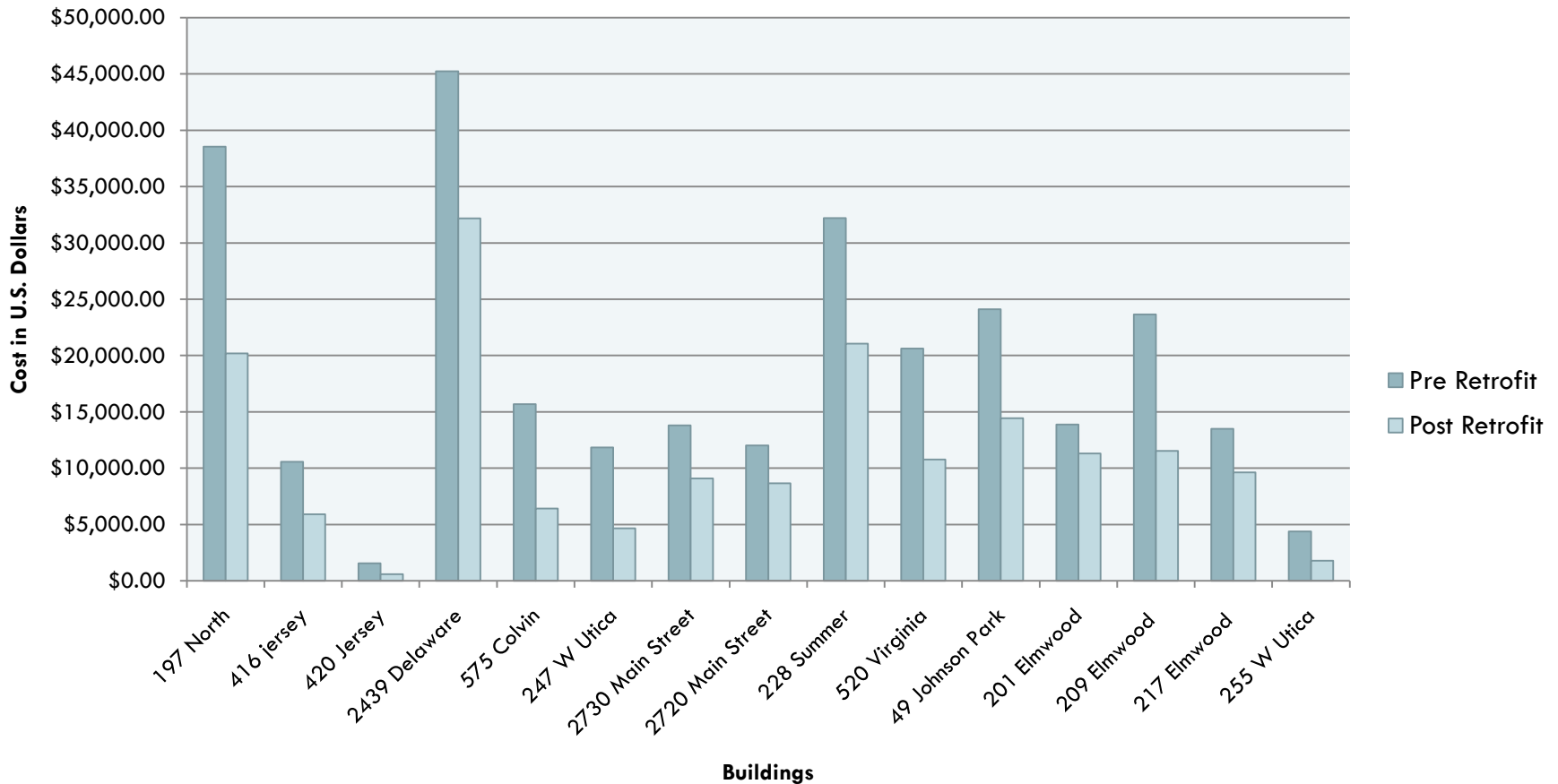
Gas Usage Results

Gas Usage - Pre vs. Post Retrofit



Cost Savings – 2009 Vs. 2010

Cost of Natural Gas 2009 Vs. 2010



Results!

- Already reducing our monthly energy costs
- Decrease in Maintenance costs and demand
- Increased property value and appeal
- Healthier environment for the tenants

QUESTIONS?

Thank you!

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