### **Grant Funded**

Department of Energy & Environment grant to Steven Winter Associates, Inc. awarded on July 20<sup>th</sup>, 2015

**Project Description** 

Develop and manage an energy and water efficiency competition for multifamily rental housing



Source: http://cdnassets.hw.net/ee/82/909ebd37477cbbfeb444d1d e5f5b/ra020501081h1-tcm48-290219.jpg

### Phase I Activities

- Survey
- Technology Research
- Competition Toolkit
- Recommend Pilot Sites
- Strategic Plan



Source: http://cdnassets.hw.net/ee/82/909ebd37477cbbfeb444d1d e5f5b/ra020501081h1-tcm48-290219.jpg

## Survey

- 3 types distributed: Resident, Manager, Owner
- Online tool and paper
- August 24 September 18
- Outreach to 155 multifamily owners, managers, and membership groups

About 1	ne and my apartment
1. My building i	
	ss/Building Name
City	State
2. Do you own o	or rent? *
O Own	
O Rent	
	n an apartment building?
For the purposes o	f this survey an apartment building is considered a building with 4 units or more)
U Yes	

## SURVEY RESULTS

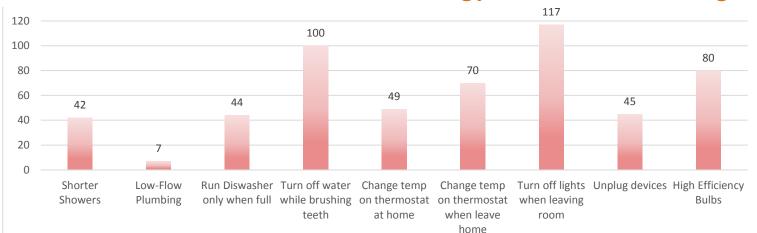
- 127 resident responses
- 12 managers and 2 owners representing 58 buildings
- Incentives
  - Drinks with Tommy Wells!
- Barriers
  - Upfront cost of improvements
  - Split incentive

45% of residents agree they would pay more for an apartment with energy and water efficiency features

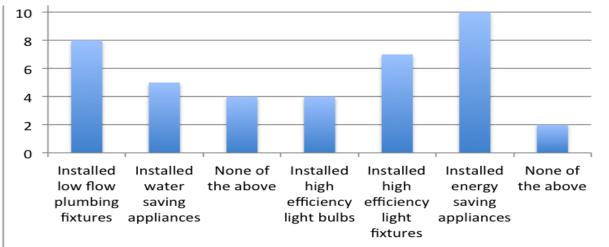


### SURVEY RESULTS

### Resident Actions to Reduce Energy and Water Usage



#### Manager Actions to Reduce Energy and Water Usage





### **TECHNOLOGY & VISUALIZATION TOOL**

		Aquicore	Energy Score Cards	GreenPSF	Greenprint	Lucid Building OS	Portfolio Manager	WegoWise
Integration with Portfolio Manager		Ø	V	V	V		V	
Reports on Water Usage		$\square$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Automatically imports utility data			V			V		V
Reporting	Variety	$\checkmark$					$\checkmark$	V
	Alerts	$\square$	$\checkmark$			V		V
	Customizable	$\checkmark$				$\checkmark$		
Benchmarking Capability	Normalized	$\checkmark$				V	$\checkmark$	V
	Database							V
	Real Time	$\checkmark$				V		
User Friendly Interface	Interfaces	$\checkmark$				$\checkmark$		
	Social Media	V		$\checkmark$		V		
	Competition	$\checkmark$				$\checkmark$		
Multifamily Experience			<u>N</u>	<u>ର</u>	<u>ର</u>		<b>N</b>	1 1 1 1
Total (Maximum 14)		11	8	6	6	11	6	9
Price (Per Building/Year)		\$5000-+	\$500	Free		\$5000-\$10000	Free	\$120-300

ENERGY AND WATER REDUCTION

# **Competition Toolkit**

- Competition how-to guidebook
- Engagement and planning tools
- Education and activities to run 6 month competition



## **Competition Pilot**

- Select pilot participants from survey respondents
- Focus on building to building energy and water reduction
- Establish building engagement teams of residents and management
- Customize toolkit with building specific details
- Run 6 month competition with regular education and ongoing activities to reinforce behavior change
- Monitor energy and water usage before, during and after competition to assess effectiveness of activities

### Strategic Plan : Toolkit

- Scale to District wide competition platform including condos, co-ops and dorm
- Pilot a competition pairing physical upgrades with behavior change
- Develop behavior based efficiency incentives
- Engage managers and staff with trainings and best practices on building level improvements, and ongoing operations and maintenance

### **Strategic Plan : Policy**

- Consider existing District regulations and their current and potential impact on energy and water reduction in multifamily buildings
- Research national and international successful policy models
- Engage an advisory board to direct research and draft voluntary and mandatory regulation changes