

United Way of Larimer County Community Services Center

Case Study

GIVE. ADVOCATE. VOLUNTEER.
LIVE UNITED™



United Way of Larimer County Community Services Building 424 Pine Street



GIVE. ADVOCATE. VOLUNTEER.
LIVE UNITED™



Non-profit Community Services Center

- 20,000 square feet:
 - 8,000 sq ft, Teaching Tree Early Childhood Learning Center
 - 12,000 sq ft, offices for Disabled Resource Services, Women's Resource Center, United Way of Larimer County

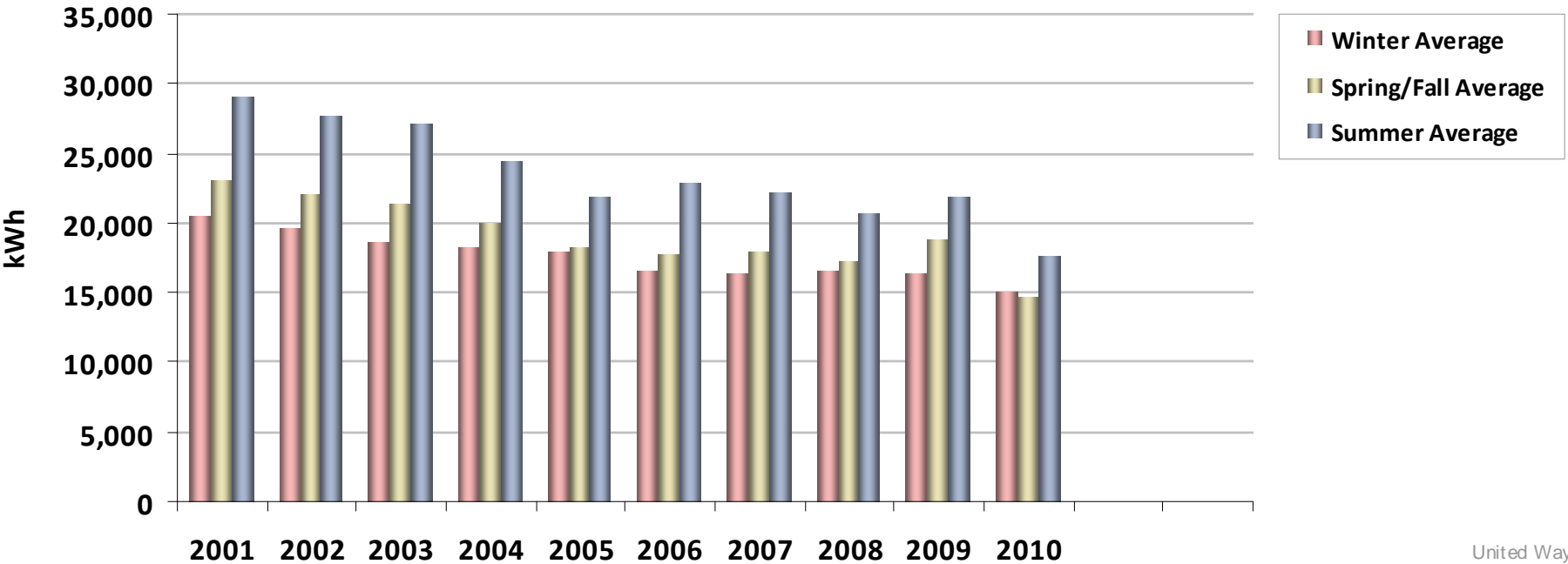
GIVE. ADVOCATE. VOLUNTEER.
LIVE UNITED™



2001 – 2010 Electric Use Downward trend



Average Monthly Electric Use Breakdown



United Way

GIVE. ADVOCATE. VOLUNTEER.
LIVE UNITED™



Existing practices

- Solar shades
- Efficient lighting
- Programmable thermostats with setbacks
- HE clothes washers, gas
- Carpet with recycled content
- Recycled furniture

GIVE. ADVOCATE. VOLUNTEER.
LIVE UNITED™



Steps taken to reduce electric use

- 1999, LED exit lights
- 2004-2005, lighting retrofit throughout
- 2004, engineer reduced cooling load calculations for new rooftop units
- 2005, sunscreens for offices south facing windows
- 2005, new controls for HVAC system
- 2006, new split system for one story part of office building

GIVE. ADVOCATE. VOLUNTEER.
LIVE UNITED™



Additional steps

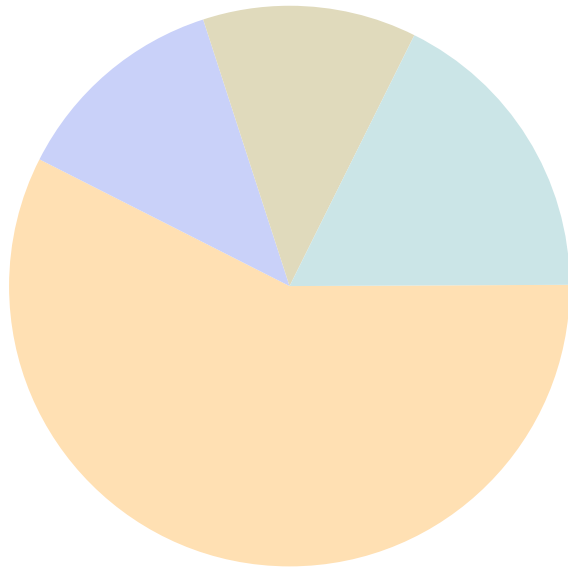
- 2007, replaced old windows with low-E glass
- 2009, sunscreens built for Teaching Tree and office building upper windows
- 2009, new photocell for Teaching Tree exterior lights
- 2009, converted clothes dryers connections from electric to gas

GIVE. ADVOCATE. VOLUNTEER.
LIVE UNITED™



Electric is highest cost utility due to cooling load

Billed Cost Breakdown
(Oct 2009 to Sep 2010)



Type	Monthly Average	Annual Total	
Electric	1,090.21	13,082.54	58%
Water	236.80	2,841.55	12%
Wastewater	234.03	2,808.36	12%
Stormwater	334.29	4,011.48	18%
Total	1,895.33	22,743.93	



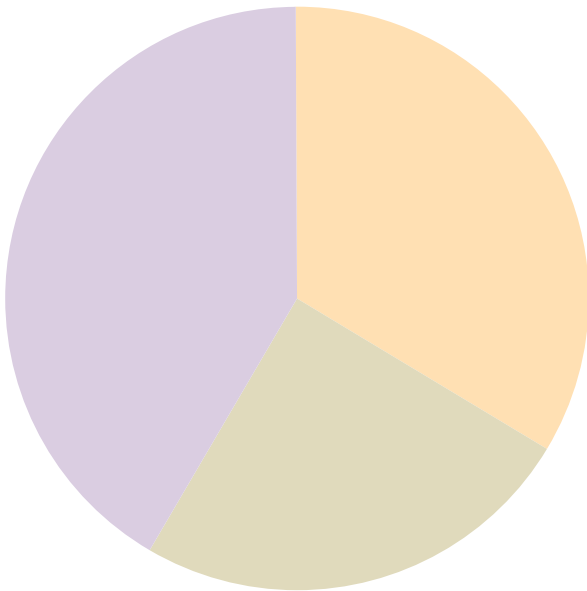
United Way

GIVE. ADVOCATE. VOLUNTEER.
LIVE UNITED™



Next step – better controls to address the coincident peak demand problem

Electric Cost Breakdown
(Nov 2009 to Oct 2010)



Rate Component	Monthly Average	Annual Total	
Usage	\$375.78	\$4,133.58	34%
Facility Demand	\$275.16	\$3,026.71	25%
Coincident Peak Demand	\$465.85	\$5,124.36	42%
Total	\$1,116.79	\$12,284.65	

- Usage is the total amount of electricity used within the billing period
- Facility demand is the highest average rate or speed at which electricity is used for any one-hour period during the billing month
- Coincident peak demand is the average facility demand during the hour that Fort Collins Utilities' wholesale electricity supplier experiences its monthly peak demand.

United Way

GIVE. ADVOCATE. VOLUNTEER.
LIVE UNITED™



More steps

- 2010, replacing incandescent fixtures with LED exterior light fixtures
- 2010, upgrading programmable controls for HVAC equipment
- 2010, United Way/Teaching Tree became 200th Climate Wise Partners

GIVE. ADVOCATE. VOLUNTEER.
LIVE UNITED™



Phiferglass Sunscreen Material



GIVE. ADVOCATE. VOLUNTEER.
LIVE UNITED™



Use resources

- City of Fort Collins and Platte River Power Authority, Rocky Mountain chapter, International Facility Management Association
- Attend information programs
- Use specialist staff help
- Ability to qualify for incentives confirms the validity of the project
- Invest in long term improvements that solve the problems

GIVE. ADVOCATE. VOLUNTEER.
LIVE UNITED™

