



# Metro Transit Facilities Energy Conservation



## Transportation Committee

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Presented by

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Metro Transit, Engineering and Facilities



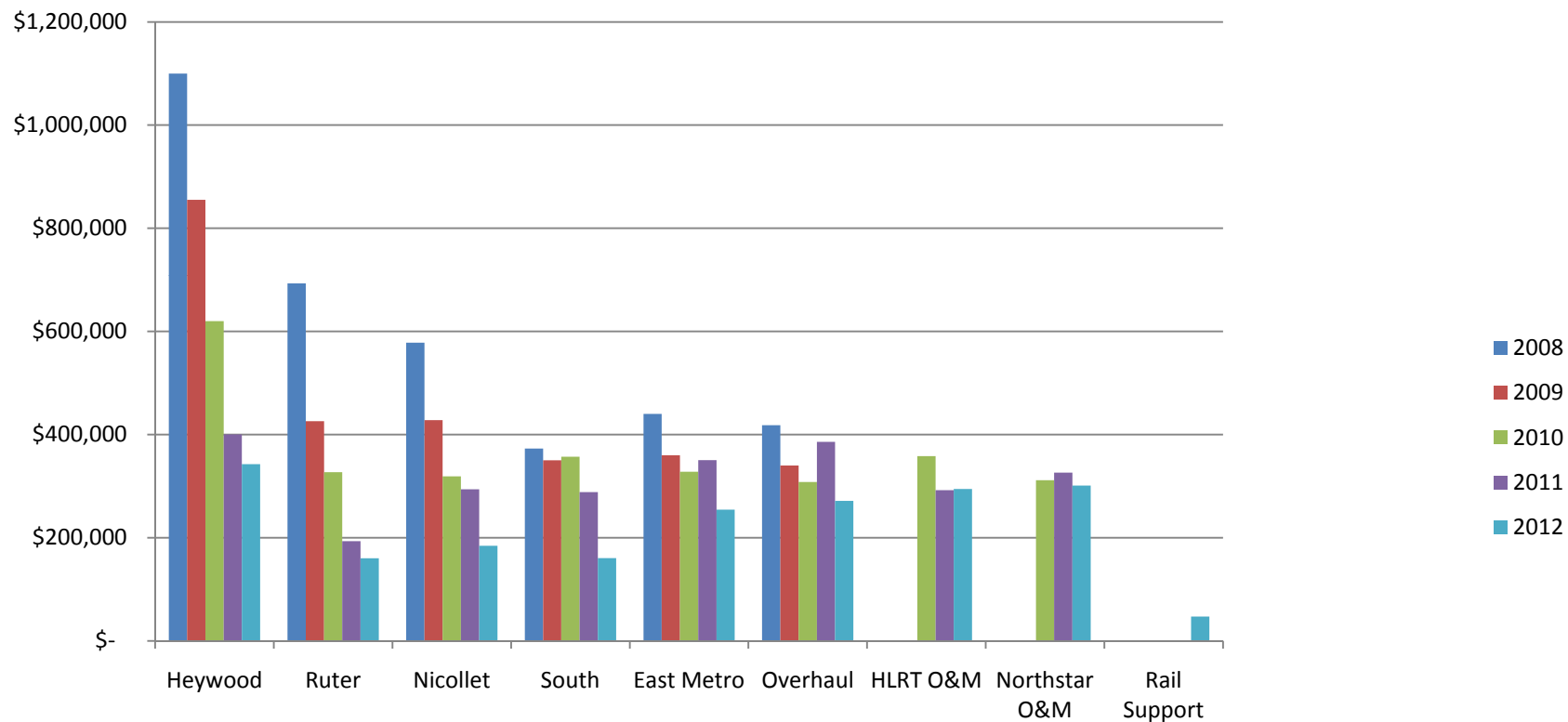
## Transit Energy Costs

	Goal	Target Reduction	Actual Use	Actual Reduction
2008	---	5%	\$5,600,000	---
2009	\$5,300,000	5%	\$4,650,000	17%
2010	\$4,600,000	18%	\$4,200,000	25%
2011	\$3,900,000	30%	\$3,655,000	34%
2012	\$3,700,000	34%	\$3,305,000	41%
2013	\$3,700,000	34%	Adding CCLRT O&M and P&R	

- Numbers based on 2008 Energy Cost of \$5,600,000
- Excludes LRT Traction Power

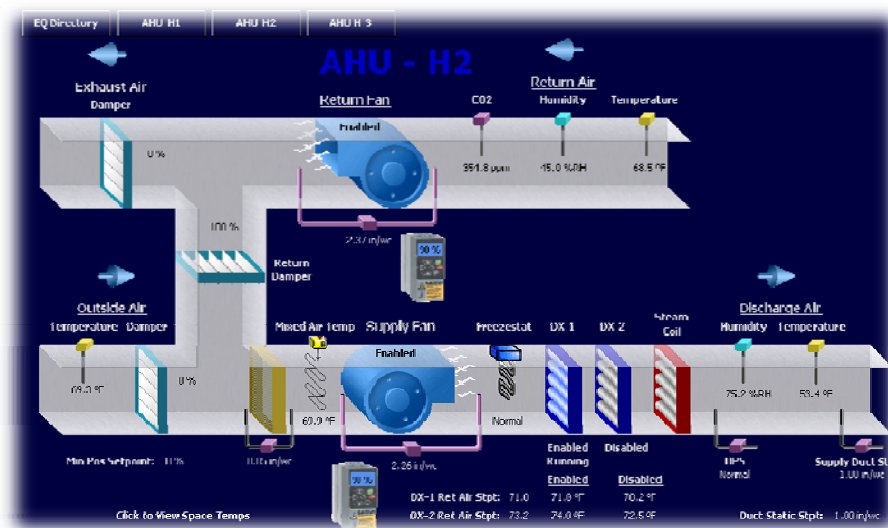


# Energy Cost by Year



## 2012 Accomplishments

- Nic-OHB-South retrofits projected \$370K savings, realized \$420K first full year
- Transit facility savings part of Governor Dayton's Continuous Improvement Award for Met Council



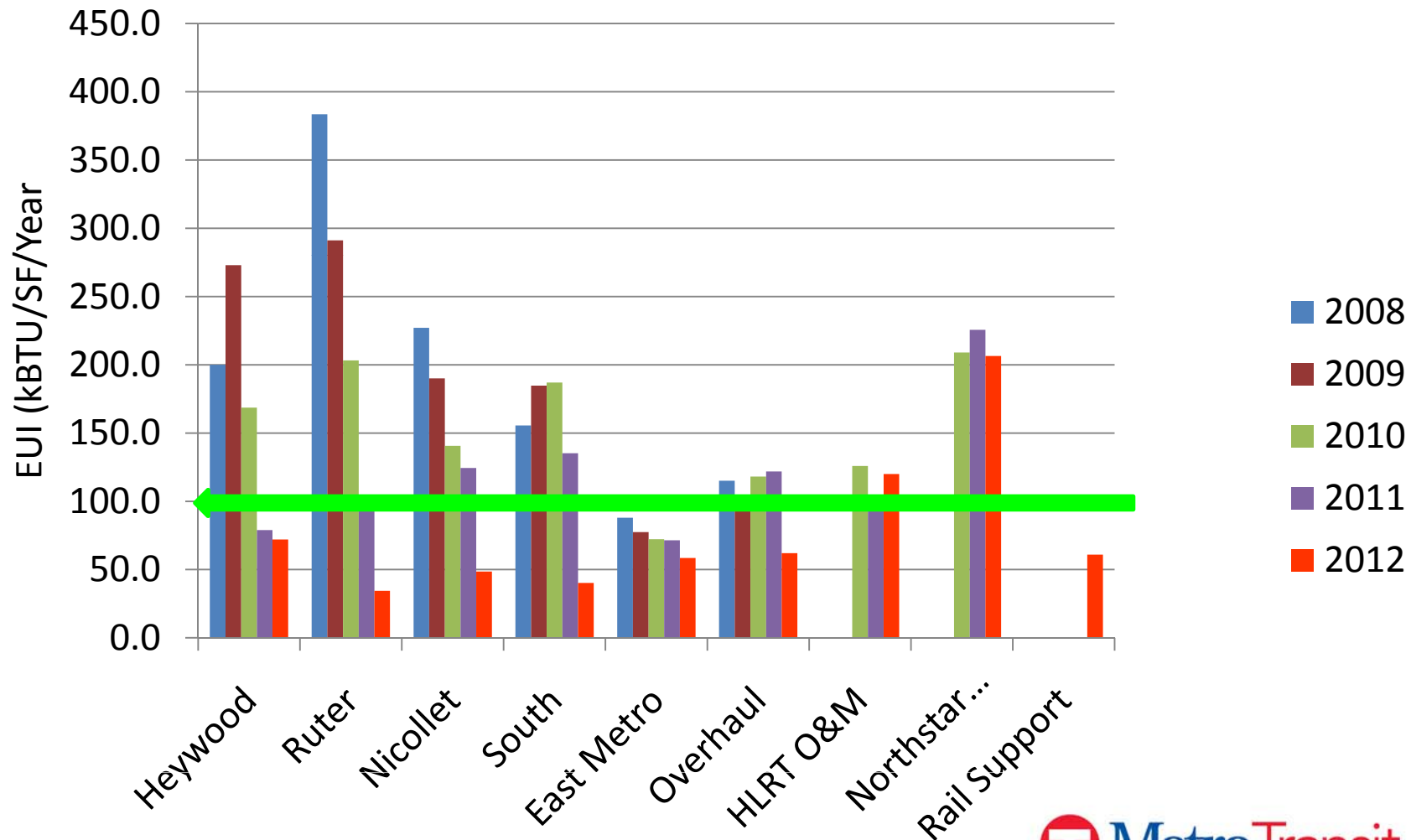
**Mechanical Equipment Computer Display and Control**

## Energy Use Intensity

- Minnesota B3 Benchmarking Program
- EUI = Energy Use Intensity (kBtu/Sq. Ft./Year)
  - 107 EUI for maintenance repair building
  - 115 EUI for an office building
  - 50 EUI for parking garage

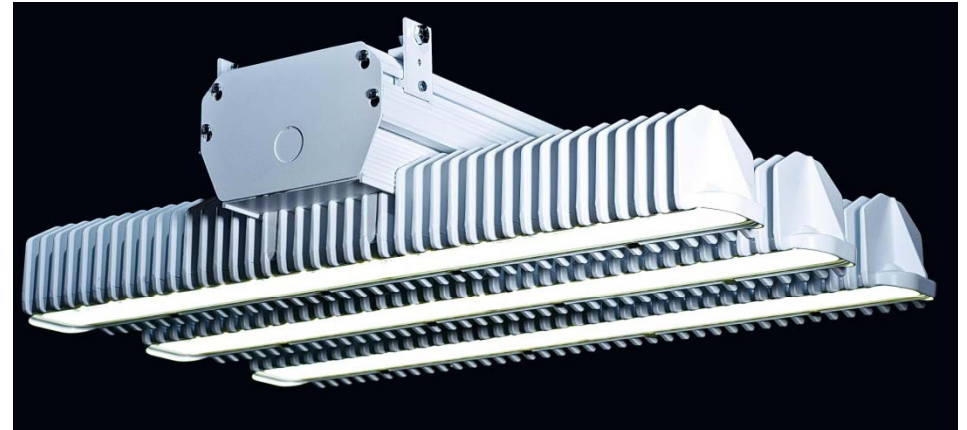


# Energy Use Intensity

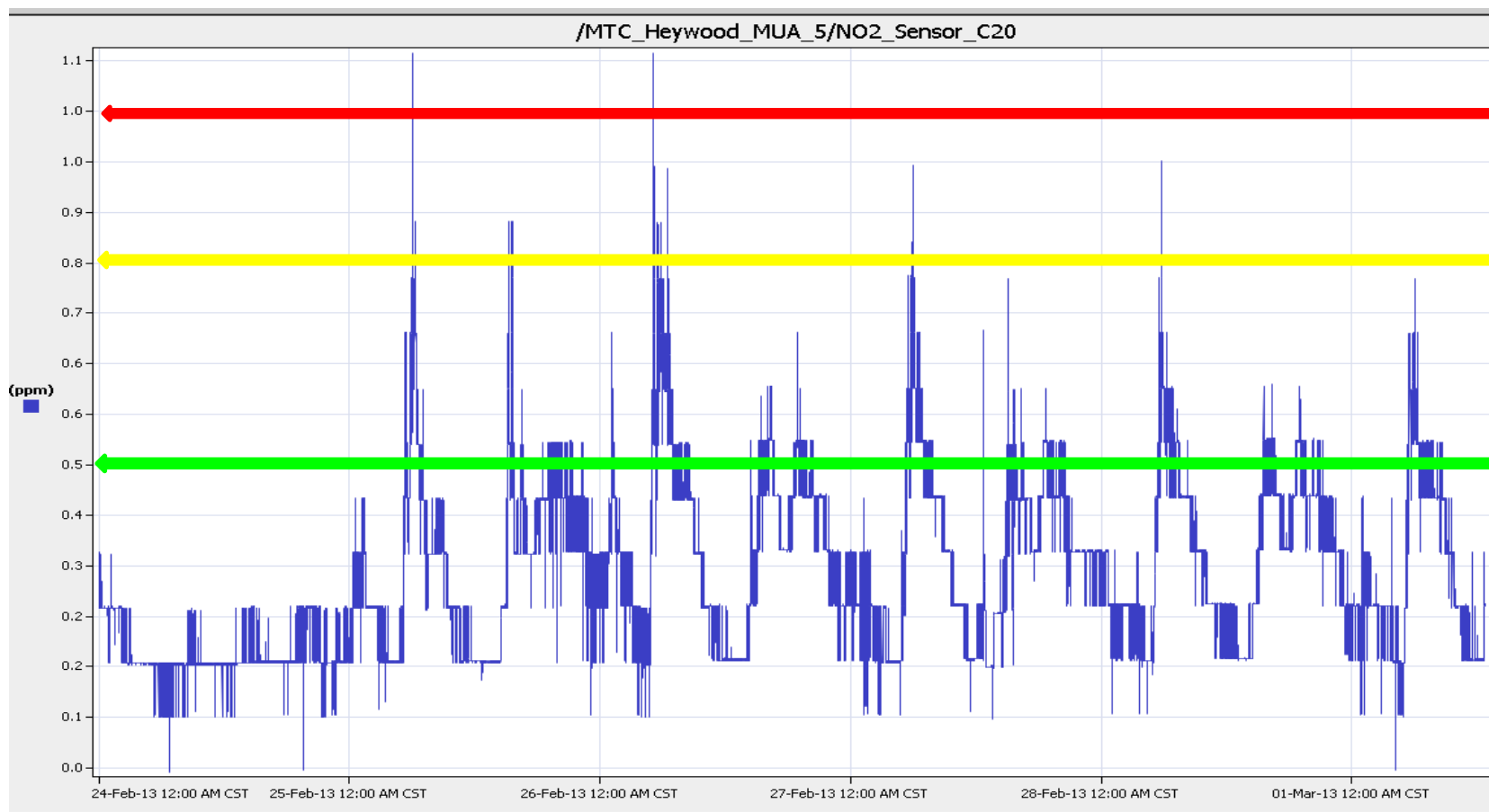


## 2013 Projects

- Big Lake Lighting Retrofit, converting to LED
- Big Lake Mechanical Upgrades to tighten up heating system
- Exterior of support facilities to LED



# Indoor Air Quality



- Real time monitoring and data logging





## Solar Power

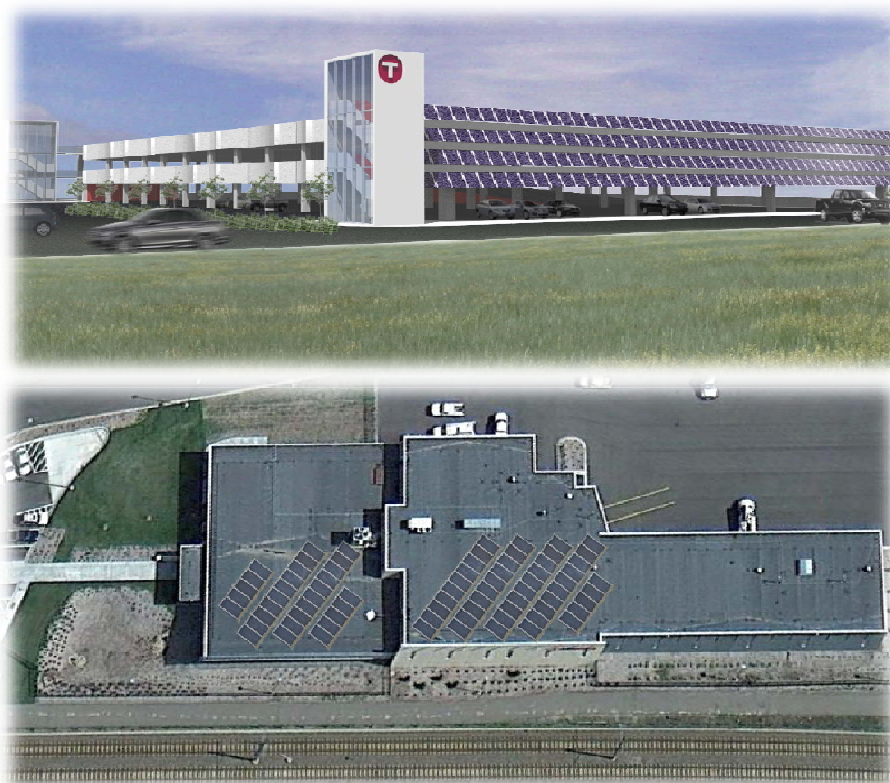
2012

Franklin Ave Shelters



2013

610 & Noble P&R  
Rail Support Facility



## 2013 Energy Goals

- Achieve 2013 utility cost of \$3.7 million.
  - Adding CCLRT O&M, Transfer Road, 2 P&R Ramps
- Lower average EUI of 80 kbtu/sf/yr.
- Roll out Energy Conservation Program.
- Sustainability Plan:
  - 2015 Goal of 40% reduction in energy used
  - 2020 Goal of 50% reduction in energy used

## Questions?



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