



# MBTA TIGGER Project

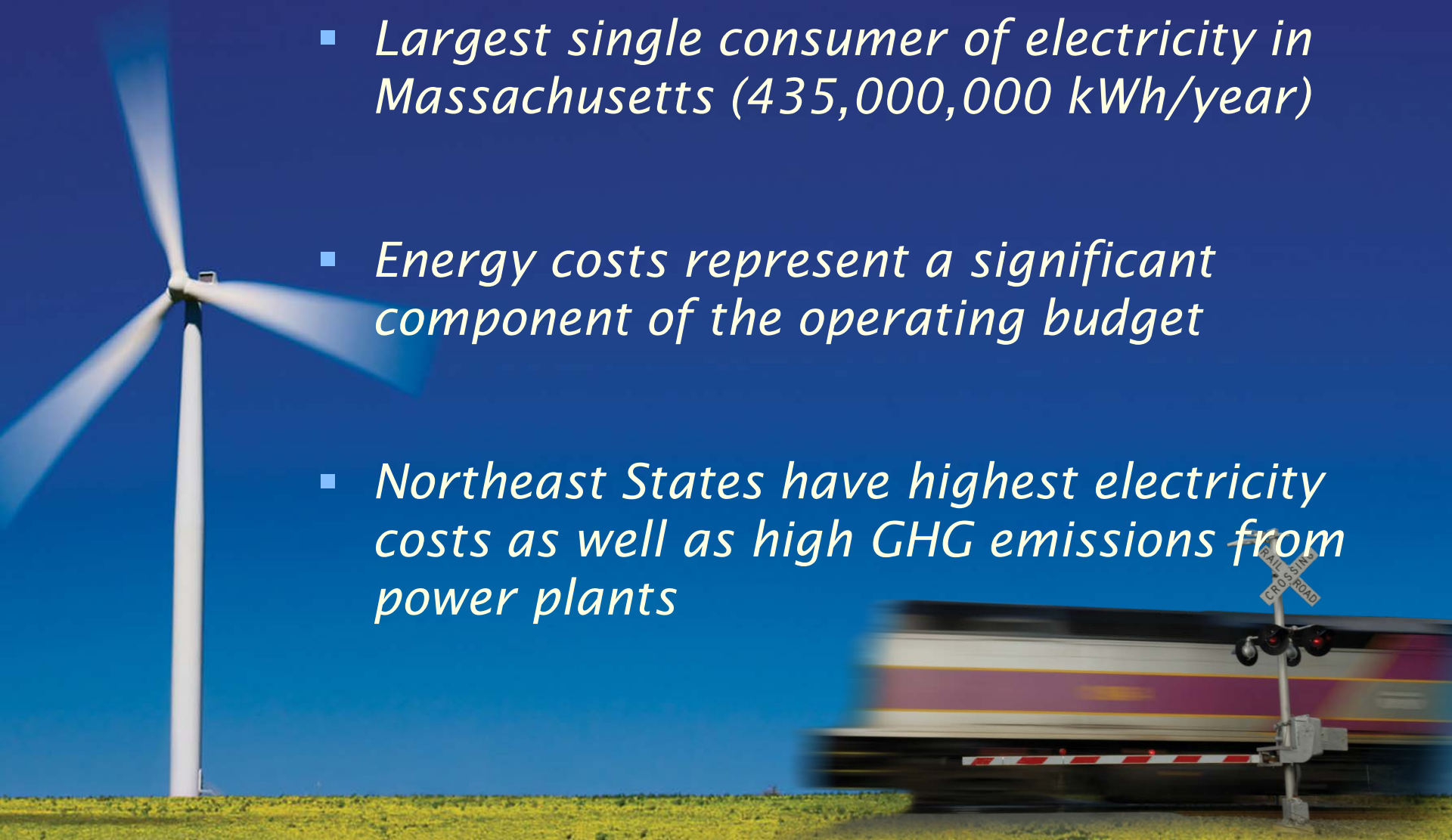
APTA Sustainability  
Conference  
August 2, 2011





## *Reduction in Energy Consumption*

- *Largest single consumer of electricity in Massachusetts (435,000,000 kWh/year)*
- *Energy costs represent a significant component of the operating budget*
- *Northeast States have highest electricity costs as well as high GHG emissions from power plants*





# *MBTA TIGGER APPLICATION*

*Energy Efficiency and the Yearly  
Operation of Renewable Energy*

*EEYORE*







# *Elements of TIGGER Proposal*

- *Developed a Proposal for a bundle of Renewable Energy Projects:*
  - *Three Wind Turbines*
  - *Three Solar/PV Sites*
  - *Electric Vehicle Charging Stations*
  - *10 MW of Generating Capacity*





# *MBTA Wind Energy Projects*

- *Kingston Wind 100kW – Fall 2011*
  - *Projected production: 161,000 kWh/yr*
  - *Approximately 65% of the electricity needs of the facility*
- *Bridgewater Wind 600kW – Spring 2012*
  - *Projected production: 945,000 kWh/yr*
  - *Production will exceed demand – excess power returned to the grid*
- *Anticipated Annual Savings of Two Projects -- \$100,000/year*





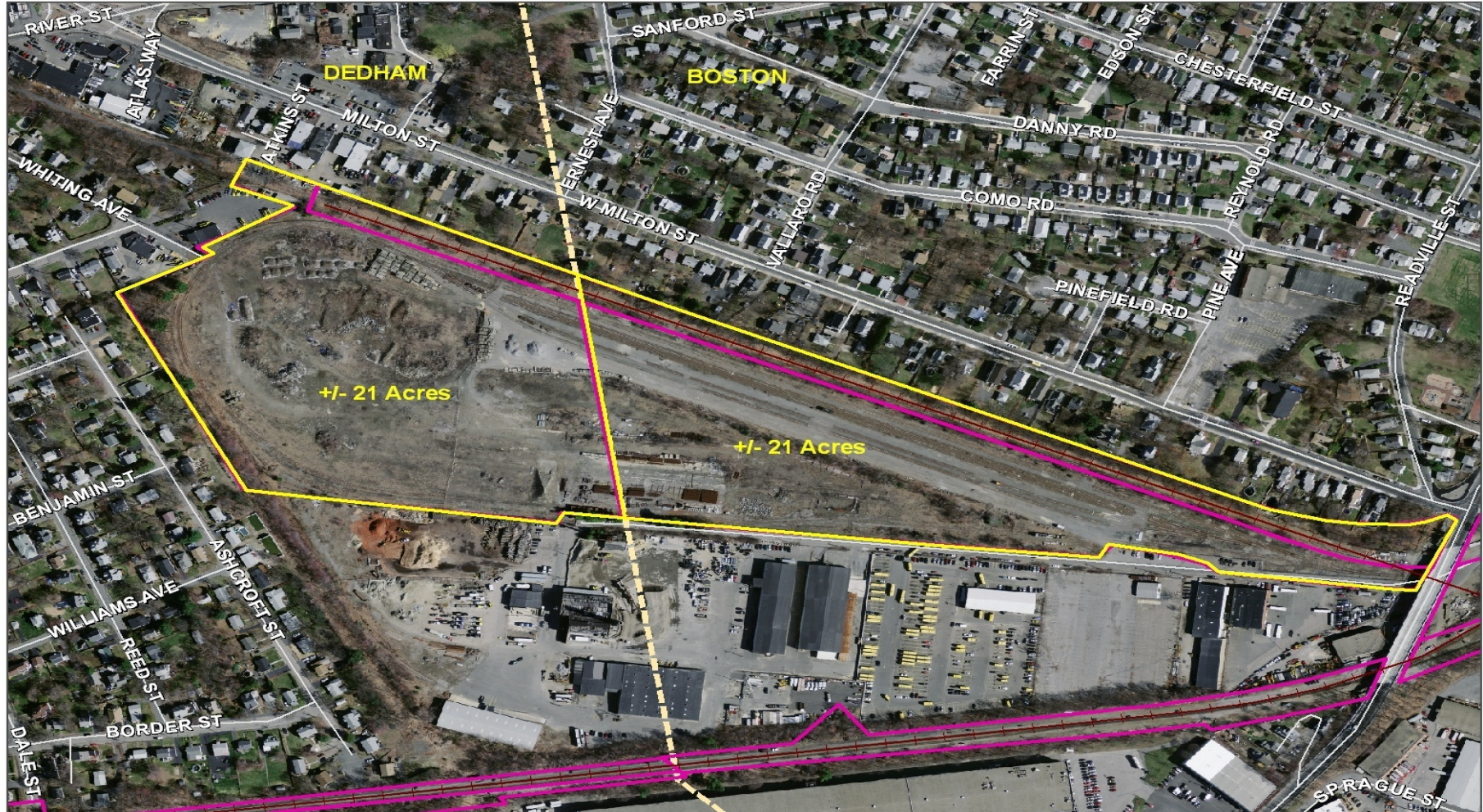
# *Commuter Rail Maintenance Facility*







# Readville Yard 5



Readville Yard  
Dedham & Boston, MA

● MBTA Rail Station  
—+— MBTA Rail Line

▭ MBTA Owned Property  
- - - Town Lines

0 120 240 480 720

**TRA**  
Transit Realty Associates

June 2011/JJ  
Base Map Source:







# *Third Party Solar Projects*

- *Maximize the value of our real estate assets by making them available for private solar developers*
- *Enter into a financial arrangement with the developer*
  - *Purchase the electricity at lower cost*
  - *Lease payment for the use of the land*







# *Renewable Energy Purchase*

- *MBTA Power Purchase*
  - *For the 1<sup>st</sup> time, MBTA is seeking an option for including Renewable Energy*
    - *Standard Energy Portfolio*
    - *Alternative Pricing for 15%, 20%, and 25% Renewables*
    - *Will be the MBTA's most progressive energy procurement to date*





# *Contact Information*

*Andrew D. Brennan*

*Director of Environmental Affairs*

*MBTA*

*617-222-3126*

*abrennan@mbta.com*

