LOUDOUN COUNTY'S ENERGY EFFICIENCY AND CONSERVATION BLOCK GRANT PROGRAM



## HARMONY PARK & RIDE

In August, 2011, the Harmony Park & Ride lot at Scott Jenkins Memorial Park in Hamilton, VA opened. Using funds from the Energy Efficiency and Conservation Block Grant (EECBG), Loudoun County installed 48 solar arrays and LED lights along with 5 Electric Vehicle Charging Stations (EVCS), which are all available to the public.

## Environmental Impact

- The traditional lighting design would include 32 sodium vapor lights. By installing 32 LED lights instead, we reduce carbon emissions by 47,300 lbs.
  - A 47,300 lb. reduction in emissions is the equivalent of taking 4 cars off of the road or planting 6 acres of trees.
- Electric cars lead to 35 to 60% less carbon dioxide pollution than the CO2 pollution from the oil of a conventional car.
- Annual kwh reduction= 22,560 kwh
- Current annual cost of solar LED lights under net metering agreement with Dominion= \$0

## Economic Impact

- Project budget \$300,000
- Created 4 jobs for the duration of the project
- Excess solar energy produced will be sold back to the grid, helping to offset the costs of maintaining the facility.
- LED lights offer an extended life and low maintenance costs as compared to traditional sodium vapor lights.
- The cost to fully charge an electric vehicle at the Harmony Park & Ride is \$1.44, as opposed to \$50+ to fill up a tank with regular unleaded gasoline.
- Annual savings = \$6,000

## LOUDOUN COUNTY ENERGY EFFICIENCY AND CONSERVATION BLOCK GRANT (EECBG)

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