# City of Henderson – Phase 1

### Robert A. Swadell Justice Facility & Whitney Ranch Recreational Center

- □ Savings supports the project costs of \$3 million in a 10-year finance term
- □ Cash contribution of \$840,000 at a 4.35% finance rate
- □ 41% energy reduction

### Project goals:

- Reduce operating expenses
- Upgrade the physical plant
- Address operating issues
- Extend the building's useful life
- Improve HVAC, maintenance, electrical, plumbing
- Upgrade City's traffic signals (64 intersections)
- Removed an emission source from the facility
- Enhanced reliability by installing a modular heating system
- Provided long-term, non-obsolescent assets that continue to deliver cash flow and reliability benefits beyond term for debt service



Type of Pollution	Reduction /Year
Greenhouse Gases (CO <sub>2</sub> )	4,192,255 Pounds
Nitrogen Oxides (NO <sub>x</sub> )	5,078 Pounds
Sulfur Dioxide (SO <sub>2</sub> )	3,563 Pounds
Toxic Metals Pollution	Reduction/Year
Mercury (Hg)	5,546 Milligrams



# City of Henderson – Phase 2



#### City-wide Energy Performance Contract

- □ \$17.5 Million Project
- ☐ Financed by Bank of America at 4.89% for 15 years
- □ Projected Savings of \$1.6 million
- ☐ 18% projected energy savings
  City-wide measures include:
  - Lighting and water conservation retrofits
  - Boiler and chiller replacements
  - Direct digital energy management system
  - Variable frequency drives
  - Pulse powered cooling tower water treatment
  - Vending machine controls
  - Retrofitting over 26,000 street lights with induction lighting technology
  - Ultra-violet pool water treatment

We believe that this is the <u>largest ever street lighting retrofit project of its kind in North America</u>. The induction lighting is expected to <u>reduce energy consumption by approximately 65%</u> and increase the lamp life by almost seven times its current life expectancy.

