



## The GREEN Sheet

### **POLICIES & PLANS**

- The city manager issued "Sustain Las Vegas" Policy #CM302 in July 2007, which states:
  - The city of Las Vegas is committed to incorporating consideration for long-term community sustainability as it prepares plans, makes procurements, enacts legislation, builds projects, manages budgets and conducts daily operations.
  - The goal of these efforts is to properly balance consideration of the environment, economic conditions and social issues to create a livable, healthy and stable community for future generations.
  - Through its actions, the city of Las Vegas will support and encourage citizens, businesses and other local governments to consider sustainability as an element in their own activities.
- The Planning and Development Department's Sustainability Plan issued in June 2007 sets a target reduction of 150,336 pounds of carbon dioxide in fiscal year 2007-2008 including:
  - 123,458 lbs of CO2 from electricity conservation.
  - 11,646 lbs of CO2 from paper conversion and reduction.
  - 15,432 lbs of CO2 from vehicle conversion (to hybrids or more efficient vehicles) and a reduction in overall mileage.
  - These targets will be achieved through:
    - ❖ Reducing paper consumption.
    - ❖ Reducing energy usage.
    - ❖ Increasing recycling.
    - ❖ Increasing vehicle efficiency.
    - ❖ Increasing Club Ride car and vanpooling participation.
- The City Council on May 16, 2007, adopted the Kyle Canyon Development Standards and Design Guidelines, which were negotiated based on the standards and guidelines of the Kyle Canyon Gateway Area resolution.
- These city's strategic plan priorities advance sustainability:
  - Create, integrate and manage orderly and sustainable development and growth of the community.
  - Support and encourage sustainability, livability and pride in the city's neighborhoods.
  - Promote healthy lifestyles for all segments of the community.



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- 🌀 The City Council adopted the Small Wind Energy Ordinance (Ordinance No. 5885, 2006-79) in January 2007, which provides an opportunity for small wind energy systems as a conditional use within certain residential zones.
- 🌀 The City Council adopted the Union Park Design Standards (Ordinance No. 5874, 2006-68), which integrates the design standards into other provisions of the Downtown Overlay District.
- 🌀 The city published “Sustainable Las Vegas” in November 2006, a chronicle of the city’s current and proposed sustainable initiatives and actions at various levels within the organization.
- 🌀 The City Council adopted the Green Building Resolution (R-81-2006) in October 2006, creating the city of Las Vegas’ residential green building program, which encourages builders to implement green building practices in partnership with the Green Building Partnership.
  - The city will use its best efforts to ensure buildings built by or for the city are built to U.S. Green Building Council’s (USGBC) Leadership in Energy and Environmental Design (LEED) Silver level or other equivalent standard set by the Nevada State Office of Energy.
  - Beginning in 2008, the city will dedicate 25 percent of any increase in the total of franchise fees collected from providers of electricity, gas and solid waste collection services over the total collected in 2007, not to exceed \$2.5 million per year, to cover any increased costs associated with constructing new city buildings or renovating and maintaining existing buildings to the USGBC LEED Silver level or equivalent.
- 🌀 The city adopted the 2006 International Energy Conservation Code, (Ordinance No. 5882; 2006-76) which provides low energy standards for additions, alterations, renovations or repairs.
- 🌀 The City Council adopted the Climate Protection Resolution (R-57-2006) in August 2006 in support of government action to reduce global warming.
- 🌀 The City Council adopted the Traditional Neighborhood Development land-use category, which established the Traditional Development zoning district (Ordinance No. 5811, 2005-69) in January 2006, which allows for compact, diverse, pedestrian-friendly and mixed-use neighborhoods.
- 🌀 The City Council resolved to establish sustainable development guidelines for the Kyle Canyon Gateway Area in December 2004 to be used as the foundation of future negotiation and planning of a sustainable master planned community (Resolution 76-2004).
- 🌀 The City Council adopted the Transportation Trails Element of the Las Vegas 2020 Master Plan in January 2002, which guides the development of non-motorized transportation within the city and is coordinated and



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integrated with the Southern Nevada Regional Transportation Commission plans.

### **ENERGY & RESOURCE CONSERVATION**

-  The city educates employees and the citizens of Las Vegas on energy conservation.
-  The city has changed its lighting practices for public buildings, streetlights, parks and traffic signals by installing more energy efficient technologies (e.g., compact fluorescents and Light Emitted Diodes [LED]). A lifecycle cost analysis determined that the city's \$1.77 million cost to convert was effective for both costs and energy consumption.
-  The city eliminated mercury vapor lamps and installed energy saving high-pressure sodium lamps.
-  The city installed solar-powered crosswalk signals.
-  The city employs electric powered Segways for traffic enforcement.
-  A city-wide paper recycling program reduces tree harvesting, thus sustaining the forests' conversion of carbon dioxide (CO<sub>2</sub>) to oxygen and reducing greenhouse gases in the atmosphere.
-  The city uses light sensors in City Hall, fire stations and recreational facilities.
-  The city developed an emergency/priority action plan to address energy shortages.
-  The conversion from Cathode Ray Tube (CRT) computer monitors to Liquid Crystal Display (LCD) monitors has resulted in an estimated reduction in power consumption of 2.8 million watts per day.
-  The city converted the use of paper documentation for City Council meetings to electronic Web access, saving the city 2.4 tons of paper in the first year. This will be expanded to the Planning Commission meetings beginning September 2007.
-  The City Clerk's office and the Planning and Development Department converted the public hearing notification process from letters and envelopes to a postcard system saving \$24,000 per year in material, labor and equipment costs.

### **AIR QUALITY & TRANSPORTATION**

-  All unpaved roads with traffic counts exceeding 75 vehicles per day were paved by July 2001.
-  The city assisted on several air quality studies; providing locations for monitoring equipment and assisting with project funding.



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-  The city's water pollution control facility was equipped with controls designed to achieve the lowest possible emission rates, increasing plant capacity by 33 percent while decreasing emissions by 50 percent.
-  The city improved vehicle access and circulation in the downtown area by using computer simulation modeling to evaluate traffic signal timing and cycle length, and to evaluate the effect of several traffic diversion alternatives.
-  The city is requiring new street sweepers to meet California's stringent standards to reduce airborne dust particles.
-  The city dedicated the first municipal hydrogen fueling station in 2002.
-  The city purchased B20 Bio-diesel fuel, Bi-fueled Compressed Natural Gas (CNG) and gasoline vehicles.
-  The city has a three-year lease with Honda for a fuel cell car and a two-year lease for two hydrogen powered Ford buses. Las Vegas is the first city in the world testing these technologies in an arid climate.
-  Approximately 87 percent of the city's non-emergency fleet is running on alternative fuels. The city's procurement policies favor the purchase of vehicles that run on alternative fuels and/or use hybrid-electric technology.
-  The city promotes the development of mass transit options including: light rail, monorail, Bus Rapid Transit, and a Super Speed Train connecting Las Vegas with Primm, Nev., Barstow and Anaheim, Calif.
-  The city is submitting an application for vanpool lease grants for the Regional Transportation Commission.
-  The city provides incentives and subsidies for commute to work alternatives other than driver-only personal vehicle, earning designation as one of the "Best Workplaces for Commuters" by the U.S. Environmental Protection Agency.
-  The city is expanding use of Internet technologies for public research, payment services and obtaining forms.

### **Water & Sewer**

-  As of 2006, more than 700 homes built in the city were in the Southern Nevada Water Authority's (SNWA) Water Smart Program.
-  Turf grass in the city parks has been converted to synthetic turf with the following results:
  - Total water district rebates to date: \$255,131.
  - Total amount converted in square feet: 292,298.
  - Annual water savings: \$45,644.



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-  Irrigation controls throughout the city have been set to SNWA watering restrictions, outmoded irrigation sprinklers have been converted to water efficient models and conventional landscaping has been converted to xeriscape landscaping to conserve water.
-  The city provides reclaimed grey water to local golf courses from its main water treatment facility and from two satellite water resource centers, conserving potable water.
-  The waste treatment plant processes generate methane gas, which is captured and used to operate the system's two digester gas blower engines, saving more than \$1,300 per engine per day in electrical energy cost in peak summer season.
-  The city is treating more than 70 million gallons of wastewater each day, most of which is returned to the Colorado River for return flow credits. Approximately 6-7 million gallons are used for irrigation in peak season.
-  The city received the 2005 Gold Peak Performance Award from the National Association of Clean Water Agencies for the sixth consecutive year of compliance with the National Pollutant Discharge Elimination System.
-  Each of the planned 17,000 homes in Kyle Canyon will be developed to the standards of the SNWA Water Smart Program.
-  Using trenchless technology, the city has rehabilitated more than 15 miles of sewer interceptors. This technology reduces the costs and energy used with the traditional "dig and replace" maintenance.

### **Green House Gas Emissions**

-  The city will complete its first International Council for Local Environmental Initiatives (ICLEI) assessment from city operations in August 2007.

### **Green BUILDING**

-  The city is a member of the U.S. Green Building Council (SGBC).
-  The City Council resolved that the construction of all new public facilities by or for the city will meet or exceed the standards of the USGBC Leadership in Energy and Environmental Design (LEED) Silver rating scale or its equivalent.
-  The city allocated up to \$2.5 million annually from any incremental increase in franchise fee receipts to offset increased costs attributed to meeting these standards.
-  The city formed a strategic alliance with the Green Building Partnership (Southern Nevada Home Builders Association and the Green Building Partnership) and has incorporated its program's criteria and certification in



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the city's Green Building Program to encourage residential builders to adopt and expand green building practices. Program homes will:

- Use recycled and renewable materials and supplies and employ stringent waste management practices.
- Achieve an energy efficiency rate 15 percent greater than city code.
- Meets water efficiency standards that meet or exceed the Water Smart Home program of the Southern Nevada Water Authority.
- Achieve indoor environmental quality through enhanced ventilation and moisture management.
- Require builder-provided homeowner education about recycling, transit, household maintenance and resource conservation.

 Nevada Energy Star Partners are currently developing more than 50 active subdivisions in the city.

 Notable LEED registered buildings in Las Vegas:

- Molasky Corporate Center.
- Lied Animal Shelter.
- Las Vegas Springs Preserve.

### **Open Space, Parks & Recreation**

 The city actively promotes the creation and maintenance of open space through the implementation of the Conservation, Parks and Recreational Trails Elements of the Las Vegas Master Plan 2020.

 The city adopted the Northwest Open Space Plan in January 2005 to protect non-programmed and programmed open space for the:

- Preservation of natural resources.
- Outdoor recreation.
- Preservation of historic and cultural property.
- Protection of scenic landscapes.
- Protection of public health, safety and welfare.



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- With the recent acquisition of the Floyd Lamb Park at Tule Springs the city now meets the ratio of 3 acres of park land per 1,000 residents, the goal established by the Southern Nevada Regional Planning Coalition (SNRPC):

Current Park Service Levels		
TYPE OF PARK	Total Acres	Acres/1,000 population
City Parks	1,745.4	3.0
School Parks	819.9	1.4
Private Parks	380.6	0.06
Private Golf Courses	1,837.7	3.1
Public Golf Courses	642.2	1.1
Park Service Levels, city of Las Vegas, Totals	4,595.4	9.2

- The acquisition of Floyd Lamb Park at Tule Springs will:
- Place 2,065 acres into the city's open space inventory.
  - Add 20 miles of trail for a variety of users to the city's trail system.
  - Preserve cultural and historic resources.
  - Adopt riparian detention basin design, environmental enhancement areas, in lieu of concrete, thus sustaining the natural water filtration system of the Upper Basin Wash to the city's water conservation and quality efforts.
  - Protect the park's ecosystem and the fauna and flora habitats.
- The city is recognized as a "Tree City USA" by the national Arbor Day Foundation.

### RECYCLING

- The city has established a recycling program for most departments.

### Community Achievements

- Mayor Oscar B. Goodman launched the annual Mayor's Urban Design Awards in 2006 to recognize projects that foster the city's commitment to sustainability and livability.
- The World Market Center in the Union Park District has implemented several "green" programs:
- The first phase of World Market Center's on-site recycling center and refuse system was launched prior to the Winter 2007 Market and more than 70 percent of all refuse was recycled.



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- During a six-week period, the World Market Center recycled 350 tons of cardboard alone.
- World Market Center is being applauded for its environmentally conscious efforts by the Sustainable Furniture Council (SFC), a non-profit industry association.
- The SFC and World Market Center launched the "Living Green" exhibit at the July 2007 market, displaying sustainable products
- 🌿 The Molasky Corporate Center, opening August 2007, will feature an interactive display of the sustainable design, construction and operating methods, systems and practices that led to their pending Gold LEED certification.
- 🌿 Union Park, a 61-acre mixed use development in the heart of downtown Las Vegas, has been accepted into the USGBC's national pilot program for LEED Neighborhood Development.

### ***What's Next***

- 🌿 A joint workshop training session on sustainability for the City Council and Planning Commission will be held on August 27, 2007.