Transportation and Air Quality

Connecting Communities and Reducing Pollution

When operational in December 2008, the 20-mile METRO Light Rail system will connect Valley cities and help to reduce congestion and pollution. An additional 37 miles of extensions have been approved and funded.

Eco-friendly transit options also include the efficient Bus Rapid Transit (RAPID) service, which offers direct commuter service every 10 minutes from various Valley locations during rush hour. The entire bus fleet offers bike racks, allowing passengers alternative transportation for commuting.

The city also has invested more than $33 million in alternative fuel programs since 1994, and has approximately 1,400 light-duty alternative fuel vehicles in its fleet. All 500 city buses use clean burning or alternative fuels. In addition, 195 taxicabs, 90 shuttle vans, 98 buses and 186 fleet vehicles use alternative fuels at Phoenix Sky Harbor International Airport. The AZ Clean Cities Program recognizes Phoenix as a "Clean Air Champion" for its use of alternative fuels.

Additionally, the city has aggressive programs to reduce air pollution, including more than 500 miles of bike lanes, traffic-light synchronization, computerized traffic monitoring, and dust control programs. From 1999 to 2006, the city invested nearly $18 million in dust control programs, including paving unpaved roads, applying asphalt treatments to alleys, conducting dust training, using dust-efficient street sweepers, and stabilizing 12 acres on the banks of the Salt River.

Energy and Green Buildings

Conserving Energy and Building Sustainably

Phoenix has a long-standing commitment to energy conservation and has been an active participant in energy conservation, energy efficiency and environmental preservation. The city considers Energy Star standards when purchasing office equipment, has replaced more than 8,400 incandescent traffic signals with light emitting diodes (LED) to reduce energy use by 90 percent, utilizes innovative district cooling technologies to conserve energy at downtown city facilities, and adopted energy building construction standards that can result in up to 40 percent energy reductions. Since the late 1970s, Phoenix's Energy Conservation program has saved the city more than $75 million.

In the past five years, the city has invested more than $20 million for housing modernization projects that include energy-efficient upgrades. The city's grant program assists homeowners and renters with implementing energy conservation measures. For example, at the Matthew Henson HOPE VI project, 356 old and obsolete public housing units were demolished and replaced with 611 state-of-the-art, energy-efficient housing units that incorporate green building concepts and environmentally friendly design.

In June 2005, the City Council adopted a policy that all new city buildings would be constructed to the basic Leadership in Energy and Environmental Design (LEED) standards. As of 2007, city-owned green buildings include Fire Station 50, Desert Broom Library, Cesar Chavez Library, Glenrosa Service Center, Phoenix Convention Center West Building, Rio Salado Audubon Center and the ASU School of Nursing Phase II.

The city partnered with local utilities to develop joint and independent solar photovoltaic (PV) projects on parking areas, shade canopies, parks facilities, and buildings including the Pecos Community Center and the Phoenix Convention Center. The collective output of all of the city's solar projects is 259,000 kWh annually.

Historic Preservation

Preserving the Past while Planning for the Future

The city has more than 8,000 properties registered on the Phoenix Historic Property Register and provides exterior rehabilitation assistance to owners of historic homes listed on the register. This Valley Forward award-winning program has helped more than 300 individual property owners rehabilitate existing historic homes, and has revitalized several large inner-city historic neighborhoods.

The Demonstration Project Program has helped find new uses for vacant historic buildings downtown, including the Title and Trust Building, which is now the Orpheum Lofts, and the old Phoenix Union High School, which was transformed into the University of Arizona Medical School.

Water Resources

Conserving Water and Ensuring a Sustainable Water Supply

Phoenix is a national leader in the utilization of long-term sustainable water sources in an arid environment. Long-term planning and strategy, aquifer management, research, drought management and conservation outreach are all important components to the city's water planning programs.

The city's Water Conservation Program was established in 1986 and includes extensive public education activities, plumbing retrofit initiatives, and water use efficiency requirements for new development. City operations use many approaches to conserve water including reclaimed water, central irrigation controls, use of synthetic turf, xeriscaping, and innovative water collection devices.

Additionally, Phoenix's award-winning restoration projects help preserve the city's riparian areas. The 595-acre Rio Salado Habitat Restoration Project, which once was a deteriorated dumping site along the Salt River, is being transformed into a native wetland with riparian habitats, a lush riparian corridor of streams, wetlands, trees, and desert grasslands. Phoenix's Tres Rios Project includes future restoration of 1,500 acres for native riparian habitat, water quality improvement, flood damage reduction, recreation, and environmental education. This area is home to many birds, reptiles, javelinas and other native animals. Tres Rios is a nationally recognized area and hosts many school tours, scouting activities, and Audubon Society gatherings and reflects an effective and sustainable approach to water reclamation and river restoration.

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Phoenix: A Sustainable City

protecting the environment today for a healthy tomorrow

Phoenix demonstrates its commitment to environmental stewardship through sustainability programs that have helped us to thrive in our unique and beautiful desert environment. Phoenix has long been recognized as an environmental leader in the state and is now gaining national attention as a sustainability champion with its many award-winning and innovative programs.

The Phoenix Mayor and City Council and city management are committed to reducing air pollution and greenhouse gases, conserving energy and water resources, providing recreational opportunities, preserving open space and wildlife, and restoring blighted land and riparian habitat.

The city has more than 70 sustainability programs that are summarized at **phoenix.gov/sustainability**. Here is a snapshot of selected programs that help protect our environment.

Environmental Leadership

Involving the Community to Plan for the Future

Since 1987, the citizen-based Environmental Quality Commission has helped guide the development of Phoenix's environmental programs and policies including the city's General Plan. In 2002, Phoenix voters approved an enhanced general plan that was expanded to focus on the environment and protect natural resources. This comprehensive document serves as the blueprint for sustainability and responsible growth.

The award-winning Phoenix Brownfields Land Recycling program has restored more than 270 acres of contaminated property to productive use, created more than 3,000 jobs, and resulted in $264 million of private investment. And, the Brownfields Job Training Program trains students as environmental technicians and helps place them in entry-level environmental jobs.

Additionally, the city's Infill program, which promotes development in the heart of the city to reduce air pollution and conserve energy, has assisted more than 4,100 housing units since 1995.

Climate Change Protection

Committed to Reducing Greenhouse Gases

In 2007, the city began a program to reduce greenhouse gas emissions from city operations. Phoenix has joined the national Cities for Climate Protection Program and served on the Governor's Climate Change Advisory Group. The city also is partnering with Arizona State University to research Urban Heat Island mitigation strategies.

Parks

Preserving Open Space and Providing Recreational Opportunities

Since 1924, Phoenix has dedicated efforts to increase open space, protect wildlife and enhance trails throughout the city.

Aided by watchful and involved residents, successful bond issues have led to the acquisition of 30,000 acres, including South Mountain Park/Preserve, the largest municipal park in the country. North and South Mountain parks have extensive trail systems, environmental education centers, and ranger-led outdoor programs to allow visitors to gain new insight into the richness and diversity of the Sonoran Desert ecosystem.

In addition, the Phoenix Urban Forestry Program provides educational information to increase awareness of proper planting and tree-care practices, reaching more than 5,300 students annually. Phoenix has been designated a "Tree City USA" for 20 years and recently received a Sterling Award from the National Arbor Day foundation for its Urban Forestry Program.

METRO light rail and the city recently received an award from the Environmental Protection Agency, which honored the 20-mile project for its smart growth efforts and pollution reduction initiative.

The city partnered with SRP on the Pecos Park and Ride facility to provide solar modules on top of parking shade canopies, generating enough energy to power 13 area homes for a year.

Reach 11, a recreation haven with lighted soccer fields and 8 miles of multi-use trails, also serves as a water retention facility to protect the Central Arizona Project canal from flood damage.

Library patrons exit Desert Broom Library, which was designed to co-exist in harmony with its natural surroundings. The project has received LEED certification as a sustainable building by the United States Green Building Council.

Camp Colley, located in the mountains of central Arizona, is a city-owned and operated outdoor wilderness camp for youth. Electricity is primarily supplied by a solar system, wetland plants are used to clean wastewater, and the youth conduct conservation projects such as removing non-native and invasive plants and animals.

Recycling

Conserving and Reusing Precious Resources

In 1990, the city launched Phoenix Recycles, an award-winning residential curbside recycling program, which now reaches 340,000 households and annually diverts 126,000 tons of trash. Materials are collected weekly and sorted at the city's Materials Recovery Facilities before being sold in commodity markets. The program's educational activities include presentations at schools and community events and regular outreach to Phoenix residents.

In 1988, the city began a Household Hazardous Waste collection program where residents can drop off certain unwanted materials at various city locations. In 2006, more than 11,000 residents contributed 66,000 gallons of paint, antifreeze and other waste, 3,203 tires and 1,777 batteries. Phoenix also collects small electronics and appliances for recycling, and the green waste collected from residents is turned into mulch used for composting.

In 1964, the city pioneered the technology to recycle tires and turn them into rubberized asphalt. Since 1988, the city has completed 1,700 miles of rubberized asphalt roads, using 2.3 million tons of rubberized asphalt and an estimated 8 million recycled tires.

Pollution Prevention

Buying Environmentally Friendly Products

In 1994, the city's Pollution Prevention Program was created to reduce the environmental impacts of city operations. City contracts include requirements for products that are more recyclable, energy efficient, safer, and are made from recycled materials. In 2007, the city purchased energy efficient computers which reduces energy by the equivalent of the annual electricity use of 2,767 U.S. households, winning a national Green Electronics Champions award.