

The Greening of Las Vegas

Las Vegas is probably one of the last American cities that would conjure an image of wise resource use and sustainable living. First, there's the matter of a sprawling metropolis in the sensitive Mojave ecosystem. Second, the demands of a resort city put extraordinary strain on energy and water resources in a basin that receives about 4 inches of annual rainfall and regularly exceeds 100 degrees (F) in the summer. "Green development," it seems, has best been defined by the hue of the manicured fairways at the dozens of luxury golf resorts. Change is happening, though. These extreme conditions of both culture and climate have sparked an impressive movement towards green urban design and architecture.

Taking the "LEED"

In 2005, the Nevada State Legislature passed a bill offering deep tax breaks to developers that built "green." The legislature adopted the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) code as the standard. Primarily aimed at commercial developers, the new law allowed up to a 50% reduction of property taxes on LEED certified development for 10 years, with possibilities of sales tax refunds on construction materials. Casino/Resort developers were among the first to realize that this law opened the door for millions of dollars of savings in short-term taxes and long-term energy costs. MGM's massive CityCenter complex and Las Vegas Sands Corp.'s Palazzo were two of the more notable new Strip developments designed to LEED code after this law took effect.

In 2007, the Legislature amended the law once it became apparent that the surge of LEED development exceeded expectations. New developments can still receive 10-year abatements on property tax, but it is capped at 35% for LEED platinum certification. This figure is still relatively radical, and more

than offsets the approximate 5-10% budget increase for building to LEED standards.

In 2008, it was announced that the Union Park development, a 61-acre public-private infill development in Downtown Las Vegas, would be a pilot study for the LEED-Neighborhood Development rating system. LEED-ND is heavily influenced by New Urbanist ideals like compactness, mixed land uses, and accessibility to transit. Union Park, a legacy of the vision of Las Vegas Mayor Oscar Goodman, is being hailed as the spark that will ignite a renaissance of sustainable downtown redevelopment.



Roof eaves at the Springs Preserve's Desert Living Center restrict summer sunlight from hitting south-facing walls, but allow the benefits of light and heat in the winter, when the angle of the sun is lower. The ornamental arrows depict the angle of sun at summer and winter solstice.

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of The Strip, combines a preservation/museum project with a showcase of desert-specific green building design. Its Desert Living Center is a campus of 5 buildings and an outdoor garden/classroom that is certified LEED platinum. Each building highlights an array of innovative use in building materials (like straw bale walls), energy use (passive evaporative cooling instead of air conditioning), or finishing touches (bamboo floors, salvaged timber beams). The jewel of the center is the "Sustainability Gallery," a mock-up of an average Las Vegas house outfitted with the latest sustainable products and systems. Other on-site facilities include a branch of the Clark County library specializing in green building literature, a "dialogue center" that serves as a meeting place for do-it-yourself green builders, and an organic vegetable garden that doubles as a source of food for the cafeteria and an outdoor cooking classroom.

Conclusion

Despite an image steeped in wasteful excess, Las Vegas is emerging as one of the country's leading cities for green development. Las Vegas has never shied away from building tear-downs or remodels. With generous tax incentives, local political enthusiasm, and even a resource center for homeowners and residential developers, future new and re-development promises to redefine "green." ■

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An Eye Towards the Future

The innovations of The Strip properties or Union Park are either hidden, in development, or hard to translate from the commercial/institutional venue to a residential development. The Springs Preserve, a 180-acre cultural resource center just off

NOTE: A field trip to the Springs Preserve for a tour of their state-of-the-art campus will be offered during the 2009 Annual Meeting. Watch for details on the AAG website and in the AAG Newsletter.